



**NATIONAL ACCREDITATION  
BOARD FOR HOSPITALS AND  
HEALTHCARE PROVIDERS**

# **NABH Accreditation Standards for Dental Healthcare Service Providers (DHSP)**

**3<sup>rd</sup>  
EDITION**  
APRIL - 2023



**QUALITY : SAFETY : WELLNESS**





# **National Accreditation Board For Hospitals and Healthcare Providers (NABH)**

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NABH Accreditation Standards for Dental Healthcare Service Providers  
(3rd Edition) April 2023





## National Accreditation Board for Hospitals & Healthcare Providers (NABH)

Awarded by ISQua EEA  
following an independent assessment  
against the  
Guidelines and Standards for  
External Evaluation Organisations,  
5th Edition

The period of Accreditation for this Organisation  
June 2022 is from June 2026  
until



Prof Jeffrey Braithwaite, President



Ms Elaine O'Connor, Head of Operations



# CEO Foreword

It is my pleasure and pride to release the 3rd Edition of Dental Healthcare Service Provider Accreditation Standard of the National Accreditation Board for Hospital and Healthcare Providers. Over the years, successive NABH standards have brought about a significant change in the approach by the healthcare units in managing and delivering healthcare services to the patients. NABH standards focus on patient safety and the quality of the delivery of services by the Dental Healthcare Service Provider in the changing healthcare environment.

This edition has some changes that were incorporated to accommodate the suggestions made by various stakeholders. For the first time, there are core objective elements related to the Patient Safety Goals that have to be complied with mandatorily irrespective of the compliance with other elements.

Without being prescriptive, the objective elements remain informative and guide the organization in conducting its operations with a focus on patient safety.

There are 466 objective elements, including 82 core ones, which will be assessed during the final assessment of dental facilities, 43 more at the surveillance assessment and 15 more at the re-accreditation. Whereas, dental clinics have 416 objective elements, including 77 core objective elements, 34 more at the surveillance assessment and 10 more at the re-accreditation. This will help the dental healthcare service providers in stepwise progression to a mature quality system covering the full accreditation cycle.

The scoring methodology is changed to a graded system to help recognise even progressive efforts by the organization in the implementation of standards. The chapter on Continuous Quality Improvement is now replaced with Patient Safety and Quality to increase the focus on this aspect of healthcare. Each chapter has a bibliography for reference, and this will provide organizations with a resource for taking quality beyond the requirements of the objective elements.

In view of these, I expect that dental healthcare service providers will indeed benefit from the efforts of the technical committee which developed this standard for National Accreditation Board for Hospital and Healthcare Providers.

Jai Hind



**Dr Atul Mohan Kochhar**

CEO NABH



# ACKNOWLEDGEMENTS

I acknowledge the contributions of the following in preparing this 3rd Edition of NABH Accreditation Standards for Dental Healthcare Service Providers (DHSP).

Dr. Mahesh Verma, Chairman NABH, has been the guiding light throughout the development of 3rd Edition of NABH Accreditation Standards for Dental Healthcare Service Providers (DHSP). I thank him for his active participation, support and invaluable suggestions despite of his busy schedule.

I sincerely thank Dr Ravi P Singh, Secretary General of Quality Council of India for his guidance and continuous support by making adequate resources available for this process.

I thank all board members of NABH in giving significant suggestions for betterment of the standards and the respective guidebooks.

The Technical Committee of NABH worked relentlessly and meticulously to accommodate the best practices in Dental Healthcare, referred to innumerable references and incorporated suggestions made by all of the stakeholders in bringing this standard to reality. It was, indeed, a mammoth task. I profoundly thank all the members for playing a pivotal role in the development of the 3rd Edition of NABH Accreditation Standards for Dental Healthcare Service Providers (DHSP).

I thank all our Passionate Assessors, Dentists, and Dental technicians who gave us extensive feedback to improve upon the standards and their exhaustive interpretation.

I thank the officers at NABH Secretariat for working round the clock, to complete the work within time.

It is entirely due to the overwhelming participation, dedication, and diligence of all concerned that we could present these standards in the current detail and format.

To all of you a sincere, heartfelt and, profound – Thank you.



**Dr Atul Mohan Kochhar**

CEO, NABH



# INTRODUCTION

Dental Health Care Service Providers (DHSP) Standards, are meant for the Dental Institutions / Hospitals / Centres / Clinics which have a desire to implement quality system to improve quality and patient safety. These standards can be used by the DHSP to enter the realm of systematic quality management across a healthcare organization.

The standards cover the vitals of quality and safety management, and would facilitate in delivering high quality care.

The NABH dental standards have been laid down keeping the Indian ethos and working environment in mind. The main focus of the standards is on quality and safe patient care, knowledge updation, trained staff and environment safety.

Keeping in view the requirements of the system and for the convenience, the accreditation standards for DHSPs have been divided into two sections for the following categories:

## **Section A:**

DHSPs associated with hospitals without inpatient facility.

DHSPs associated with hospitals/educational Institutes & standalone DHSPs with inpatient facility.

## **Section B:**

DHSPs with 1-15 chairs.

The compliance with these standards will indicate that the DHSP is patient, staff and environment friendly. The applicant organization will be evaluated on their compliance to these standards.





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## About NABH

National Accreditation Board for Hospitals and Healthcare Providers (NABH) is a constituent board of the Quality Council of India (QCI), set up to establish and operate accreditation programs for healthcare organisations. NABH has been established with the objective of enhancing the health system & promoting continuous quality improvement and patient safety. The board, while being supported by all stakeholders, including industry, consumers, government, has full functional autonomy in its operation.

NABH provides accreditation to hospitals in a non-discriminatory manner regardless of their ownership, size, and degree of independence.

International Society for Quality in Healthcare (ISQua) has accredited NABH.

**Vision:** To be apex national healthcare accreditation and quality improvement body, functioning at par with global benchmarks.

**Mission:** To operate accreditation and allied programs in collaboration with stakeholders focusing on patient safety and quality of healthcare based upon national/international standards, through process of self and external evaluation.

### NABH Activities:

**NABH Accreditation Programmes:** NABH offers accreditation to Hospitals, Small Healthcare Organisations/Nursing Homes, Blood Banks, Eye Care hospitals/clinics, Oral Substitution Therapy Centres, Community Health Centres/Primary Health Centres, Ayush (Ayurveda, Homeopathy, Unani, Siddha and Yoga and Naturopathy) hospitals, Medical Imaging Services, Dental Centres, Allopathic Clinics, Ethics Committees and Panchkarma Clinics.

**NABH Certification Programmes:** NABH offers certification to Medical Laboratory, Nursing Excellence, Emergency Department, Entry Level for Hospitals, Entry Level Ayush Hospitals and Entry Level Ayush Centres.

**NABH Empanelment:** NABH offers empanelment program for CGHS, ECHS and Medical Value Travel Facilitator (MVTF)

**NABH International:** NABH has started its operations overseas under NABH International (NABH I). It offers all accreditation programs as being offered in India. The program is unique as in addition to the accreditation standards it requires compliance with local regulatory requirements.

**Training & Education:** NABH conducts Education/Interactive Workshops, Awareness Programmes, and Programme on Implementation (POI) on a regular basis.

# Scope and Purpose of the Standards

## SCOPE OF THE STANDARDS

These standards are applicable for health care organization willing for Dental health care service providers (DHSP) accreditation program provided that health care organization fulfils the following requirements:

- The health care organization is currently in operation as a healthcare provider.
- The organisation commits to comply with NABH standards and applicable legal/statutory/regulatory requirements.

These standards are to be used by the whole organisation and not for a specific service within the organisation. Organisations may have different services and it is equally applicable to all services and both public and private hospitals.

## PURPOSE OF THE STANDARDS

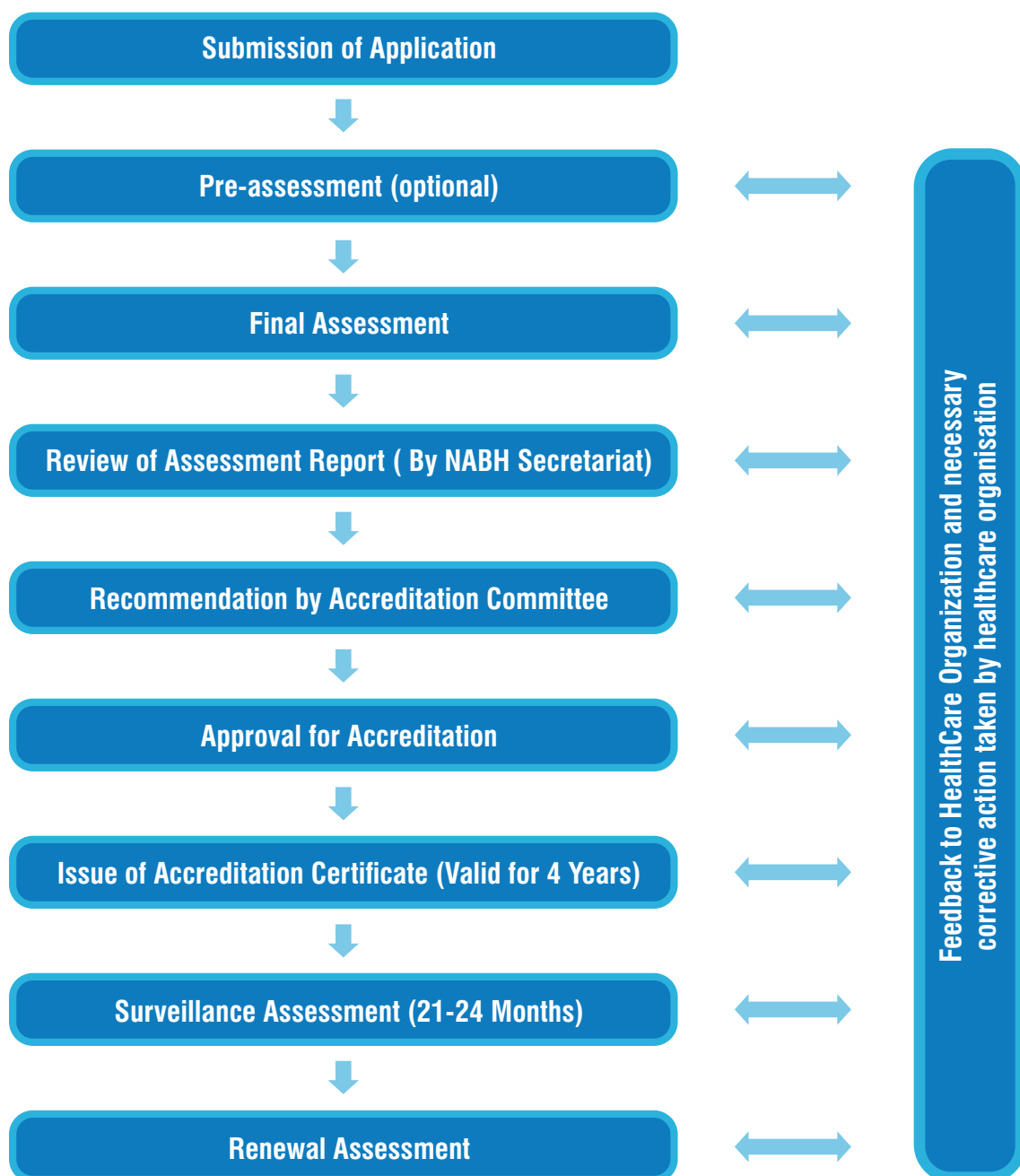
**The aim of the standards is to achieve an acceptable level of performance with a view to:**

- Improve public trust and community confidence that the organisation is concerned for patient safety and the quality of care;
- Ensure that they listen to patients and their families, respect their rights, and involve them in the care process as partners;
- Ensure that they provide a safe and efficient work environment that contributes to staff satisfaction and improves overall professional development;
- Provide an objective system of empanelment by insurance companies and other third parties.

**In addition, these standards can also be used to:**

- Guide the efficient and effective management of a Dental Hospitals and clinics;
- Guide the organisation in the delivery of patient care services and in their efforts to improve the quality and efficiency of those services;
- Review the important functions of an Dental hospitals and clinics;
- Provide an opportunity to explore compliance expectations of standards and the additional requirements related to safety and regulation.

# Overview of the NABH Accreditation Process



\* For Renewal Assessment, the accredited hospital must apply six months prior to the expiry of the validity of accreditation

# How to read the standard?

The standard focuses on the key points required for providing patient-centred, safe, high-quality care. The interests of various stakeholders have been incorporated into the standard. They provide a framework for quality assurance and quality improvement. The focus is on patient safety and quality of patient care. It sets forth the basic standards that organisations must achieve to improve the quality of care. The requirements have been divided into ten chapters. The first five chapters are “patient centric” and the last five chapters are “organization centric”. The ten chapters are:

1. Access, Assessment and Care of Patient (AAC)
2. Care of Patients (COP)
3. Management of Medication (MOM)
4. Patient Rights and Education (PRE)
5. Infection Prevention and Control (IPC)
6. Patient Safety and Quality Improvement (PSQ)
7. Responsibility of Management (ROM)
8. Facility Management and Safety (FMS)
9. Human Resource Management (HRM)
10. Information Management System (IMS)

Every chapter begins with an 'intent'. The intent states the broad requirements of what the organisation needs to put in place and implement to improve the quality of care. This is followed by the 'summary of standards' which lists all the standards of that chapter. The standards and objective elements are explained after the summary. A list of references is provided at the end of all chapters.

## WHAT IS A STANDARD?

A standard is a statement of expectation that defines the structures and processes that must be substantially in place in an organisation to enhance the quality of care. The standards are numbered serially, and a uniform system is followed for numbering. The first three letters reflect the name of the chapter and the number following this reflects the order of the standard in the chapter. For example, AAC.1. would mean that it is the first standard of the chapter titled 'Access, Assessment and Care of patient'.

## WHAT IS AN OBJECTIVE ELEMENT?

It is that component of standard which can be measured objectively on a rating scale. Acceptable compliance with objective elements determines the overall compliance with a standard. The objective element is scored during assessments to arrive at the compliance. The objective element is numbered alphabetically in a serial order. For example, AAPC.1.c. would mean that it is the third objective element of the first standard of the chapter titled 'Access, Assessment, and Care of patient'.

## WHAT IS AN INTERPRETATION?

The interpretation provides guidance on what the organisation needs to do to ensure that the requirement(s) of the objective element is met. Where applicable, it provides references and suggests a specific methodology that the organisation needs to adhere to. The word 'shall/should' or 'will/would' is used to reflect a mandatory requirement. The interpretation also lists out desirable aspects for the organisation to implement, and the word 'can/could' is used to reflect this. During scoring, the desirable aspects are not considered, and they are only used to reflect on the overall achievement of the standard, which is reflected in the assessment report. At places, the interpretation would not be specific and would have used the words like 'adequate/appropriate'. This has been done keeping in mind the diverse nature of healthcare delivery and adhering to the intent of this standard which is to improve the quality of healthcare and at the same time, be feasible. The expectation is that whenever such a phrase has been used in the interpretation/objective element, the organisation shall base its practice on evidence-based/best practice. In some places, the interpretation has listed out examples. The examples are only illustrative in nature, and the organisation has the liberty to decide what/how to implement. However, the requirement of the objective element would have to be adhered.

## CORE OBJECTIVE ELEMENT

Certain standards in the standard have been designated as Core Standard. These are standards that the organisation should have in place to ensure the quality of care or the safety of people within the organisation. CORE has been used to identify such standards.

## LEVELS

The rest of the standards have been divided into three levels, namely commitment, achievement, and excellence. This has been done keeping in mind the fact that quality is a journey and that accredited organisations need to improve constantly. Most of the objective elements would be at the commitment level, and these would form the basis for accreditation at the end of the final assessment. The level of compliance with the standards placed at the achievement and excellence level would also count towards continued accreditation.

## OTHER SECTIONS INCLUDED IN THE STANDARD BOOK

- About NABH
- Scope and purpose of the standards
- Overview of the NABH accreditation process
- Abbreviations
- Glossary
- Index

**In the book, certain objective elements require mandatory system documentation. The same have been identified by the \* (asterisk) mark.** A detailed guide on documentation is provided in the next section.



# System Documentation

## INTRODUCTION

Documentation for systems is complicated and best left to specialists in this line, is a perception that is wrongly carried by even the organisations which have well established, functioning, and externally assessed quality systems. It is a notion that is far removed from the truth. An attempt is made here to clear the concepts of documentation and make it simple enough to be carried out by the staff who is responsible for executing various tasks in the organisation without depending on anyone else. This will keep the documentation closer to reality and flexible in the hands of the organisation and will also reduce the dependence on external sources for creating documents that are many times far removed from reality.

## WHY DO WE NEED DOCUMENTATION?

The fundamental purpose of documentation is the standardisation of actions across various departments and functional units in the organisation. Documentation is required for clarity on actions, continuity of systems, and information on the established system that is common to all levels of staff. Therefore the documentation has various components:

- **Operation System Documentation:** It defines the procedures and processes that are required to be carried out in a standardised manner.
- **Quality system documentation:** The actions that are specifically required for activities that are related to the quality system and are not covered under operation system documentation
- **Specialised documents:** Safety System Documentation, business continuity documentation etc.

## TYPE OF DOCUMENTS

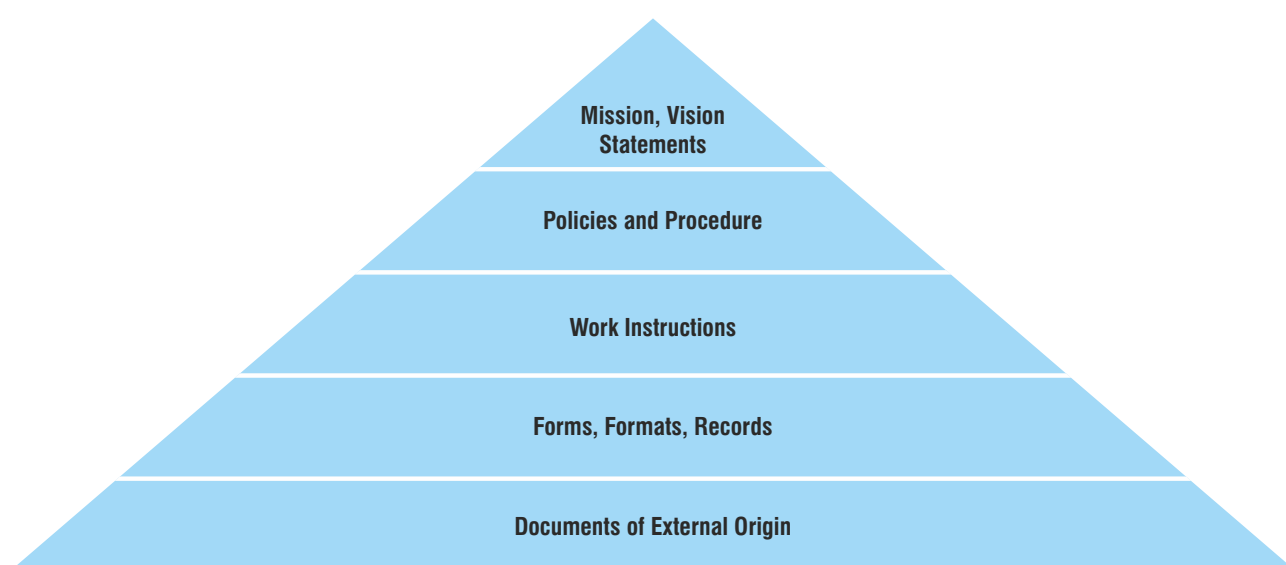
From the top level of planning to the level of maintaining records of activities, the documentation follows a general principle as below:

1. **Policy Documents:** Mission statement, vision statement, strategic plans and policies which transcend time and act as guidance in the changing scenarios of the operational, legal, technologically changing environment in which the organisation conducts its activities are policy documents. They are the principles on which planning is based while adapting to changes.
2. **System Documentation:** Operational and quality system documentation to carry out activities in conformance with the mission and vision statement. This includes what is commonly known as Standard Operating Procedures or SOPs.
3. **Work Instructions:** These are instructions in a detailed manner for executing tasks, including the physical steps to be carried out.

4. **Forms and Formats:** These are various forms and formats to capture information as a record of the execution of various activities. Records are filled forms. The forms, formats, and records can be in a physical or electronic form. These can be entries as numerical, text, image, sound, etc.

Many organisations add a fifth category to this as externally acquired documents such as licenses, statutory clearances, legal contracts and memoranda of understanding, etc.

**The documentation structure, if visualised as a pyramid, appears as below:**



**Vision Statement:** Vision statement defines the direction that the organisation wants to chart.

**Mission Statement:** Mission statement defines the purpose for which the organisation exists.

**Policies:** These are statements that transcend time to decide on the way the activities of the organisation shall be executed. These statements connect mission and vision statements with the processes and procedures of the organisation. These may change over a relatively moderate time frame of a few years. Whenever these are developed or altered, they will always be guided by the mission and value statements forming a link between the mission and value statements and the actions on the ground which are documented through the standard operating procedures.

**Standard Operating Procedures:** These documents define the steps that will be carried out to complete tasks or parts of tasks. These are also known as Operations Documentation or Operations Manual. They can be in the form of multiple manuals specific to departments, or a group of related tasks and will have documentation for the processes and procedures related to the concerned department, a section or activity. The term standard refers to its being standardised for the time being and does not mean that it cannot be altered. Most organisations which actively followed systems will address review of these documents for correctness and adaptation at least once a year and sometimes even twice a year. It is essential that these documents are kept relevant to the requirements of alteration to processes and procedures that are necessary from time to time due to the improvements, change in technology, and changes to statutory norms, etc. The term standard, therefore, refers to its current relevance rather than its permanent nature and everlasting non-alterability. This is important to understand because many organisations are reluctant to alter these documentations mistaking the word standard for unalterable, sometimes even after their processes have changed.

**Forms and formats:** Capture of information in a complete and relevant manner must be done in a standardised manner. This is achieved through various forms and formats to maintain the records of activities. The forms can be a single page, multipage or a register in which entries are made. The purpose can be from just capturing whether an activity was carried out to a very elaborate capture of values related to many parameters related to the activity. An example of the former is tick marking when some action was carried out and an example of the latter being an elaborate record of the initial assessment of a patient on arrival to the ward. Records are filled forms and formats. Forms and formats can be altered through the set alteration process, but records cannot be altered. Forms, formats, and registers are also a part of the system of controlled documents and must have their identity. It is not always necessary to number each form, and this will depend on whether the organisation wants to assign a separate identity to each filled form which is rarely required.

**Documents of external Origin:** For the sake of making the documentation system inclusive, some organisations include documents of external origin in their documentation system. These are licenses, statutory documents, memoranda of understanding with various organisations, etc. and are not alterable.

**Temporary Document:** Many notes, documents, records get created in an informal manner during the execution of processes. These help in reducing errors or are intermediaries to further calculations. These are not necessarily maintained in a set format and can be rough entries on notepads, diaries, etc. They need not be preserved if the information content does not have lasting importance and the final entry is anyway going to be made in a set format. Such documents do not form a part of the formal documentation system.

## DOCUMENTATION RELATED TO PROCESSES AND PROCEDURES

The documentation related to processes and procedures deals with operating procedures, quality system procedures, safety procedures, etc. These documents are commonly known as Standard Operating Procedures or SOPs. This can be documented as steps which are numbered or bulleted or in the format of flow charts. Flowcharts use a method of commonly recognised symbols, such as a circle or ellipse for start or end of the process, rectangle for activity, diamond for a decision making step, picture of rolled partially document for the steps where documentation is necessary, etc. Most word processing software applications have these symbols inbuilt for use.

### Which processes should be documented?

Organisations sometimes fall into a dilemma about the extent of documentation that should be followed.. Though the list is not exhaustive, the following processes and procedures require documentation:

- Procedures which are required to be followed uniformly at various locations across the organisation;
- Procedures which are required to be followed uniformly across time;
- Procedures which, if not followed uniformly and correctly will increase the risk to patients, staff or visitors;
- Procedures which, if not followed uniformly, can lead to serious consequences concerning the loss of material, time, physical damage, equipment, etc.;
- Procedures which are complicated leading to either missing of some steps or risk of variation in their execution;
- Procedures which are required to be followed uniformly in spite of high turnover of human resources;
- Procedures which are specific to the organisation as against procedures which are universally accepted or that are part of standard curricula of those professionals who carry out these procedures.

## How to develop documentation that is easy to follow?

The following steps can help in developing documentation that is easy to follow:

- Providing a clear plan of documentation architecture. This can be as a print map or in electronic form;
- Using a uniform format to ensure uniformity in visual appearance of documents to cover their appearance, fonts, symbols, page layout, etc.;
- Adding colour codes, font changes for different documents;
- Participation of staff that is involved in carrying out the activities in the development process for documentation;
- Using the same language and structure as per the users;
- Using a direct form of speech (active) than the indirect form (passive);
- Providing chapter index or index of words;
- Sequencing activities as per their actual sequence of execution in real time;
- If necessary replicate the documentation related to specific processes and procedures within all relevant documents with a clear reference to the original document;
- Making relevant documents available at the location of use;
- Keeping relevant documents available all days of the year and all times of day and night as per the requirements of execution of the activities;
- Removing obsolete documents from all locations, other than those retained for archiving.

## Controlled Documents

As mentioned above, documents bring uniformity and clarity for execution of activities in the organisation. It is, therefore, imperative that they are not altered without the knowledge of the creator or the staff who is specifically authorised for this purpose. Such documents are known as controlled documents. All types of documents described above come under this category, except for temporary documents.

### Characteristics of controlled documents:

- Each document is named;
- The purpose of the document is defined;
- There is a date of creation of the document;
- There is a date of approval of the document;
- There is a date of review of the document;
- There may be a date of expiry of the document;
- Signatory for creation is defined;
- Signatory for approval is defined;
- The signatory for alterations is defined (this may be the same or different from the creator);
- Each page is numbered;
- The document may have a number assigned to it.

This information about the identity of the document may be contained in the form of a box(control box) or otherwise at the top of the document This information is an integral part of each controlled document. The designation of authorised staff for preparation/review/release or issue of the document with the corresponding signature is maintained at the bottom of the page. The dates related to the document may be mentioned at the beginning page of the document and may not be there on each page, though most organisations put it on each page. The alphanumeric identity, if assigned to these documents must form a system that may include department, a section of the department, purpose or activity referred in the document, version number of the document, page number. The purpose of this exercise is to create a unique identity for each page of the controlled document. It is not mandatory to have an expiry date for the document.

**An example of the control box at the top is given below:**

Name of Organisation	Document Code	Date of Issue	Date of next revision / validity

**A similar box appears at the bottom of the page for the signatory, an example of which is given below:**

Authorised by: Designation	Issue No./Version No./	Issued by: Designation
Signature		Signature

### Body of document

There are many formats for the documentation of contents. One of them is given below:

Name of the document

Purpose of the process that is documented

Start point

End point

Procedure:

Step 1: XXXXXXXXXXXXX

Step 2: XXXXXXXXXXXXX

Step 3: XXXXXXXXXXXXX

Step n: XXXXXXXXXXXXX

Related records

Related documents

## Manuals

One category of controlled documents is manuals. Manuals are documents that are used by various departments as against the SOPs which pertain to a particular department. Some of the examples of manuals are which deal with various specific functions such as infection control, safety, quality, etc. If the departmental SOPs are vertical and restricted to a particular department, then the manuals are horizontal and are used across many departments. The format of a manual is similar to the SOPs but has reference to or duplication of departmental SOPs that have relevance to the subject of the manual, and are required to be duplicated for coherence and completeness.

## Scoring

The objective elements stated in the standards are scored during the assessment. The same should also be used for scoring during the self-assessment. This scoring is to be done using a five-point scale. When applying a score, the following rationale to determine the level of compliance shall be used.

Score	Rationale
1	No compliance <ul style="list-style-type: none"> <li>No systems in place and there is no evidence of working towards implementation</li> <li>None or little (<math>\leq 20\%</math>) of the samples meet the requirement(s) of the objective element</li> <li>Non-conformity exists</li> </ul>
2	Poor compliance <ul style="list-style-type: none"> <li>Elementary (limited) systems in place and there is some evidence of working towards implementation</li> <li>Minimal (between 21-40%) of the samples meet requirement(s) of the objective element</li> <li>Non-conformity exists</li> </ul>
3	Partial compliance <ul style="list-style-type: none"> <li>Systems are partially in place, and there is evidence of working towards implementation</li> <li>Some (between 41-60%) of the samples meet the requirement(s) of the objective element</li> <li>Non-conformity exists</li> </ul>
4	Good compliance <ul style="list-style-type: none"> <li>Systems are in place, and there is evidence of working towards implementation</li> <li>The majority (between 61-80%) of the samples meet the requirement(s) of the objective element</li> <li>Non-conformity could exist</li> </ul>
5	Full compliance <ul style="list-style-type: none"> <li>Systems are in place, and there is evidence of implementation across the organisation</li> <li>Almost all (between 81-100%) of the samples meet the requirement(s) of the objective element</li> <li>No Non-conformity</li> </ul>

The basis for scoring shall be implementation. However, if there is inadequate/ inappropriate system documentation, the score could be downgraded by one.

## Not Applicable (NA) Criteria

There could be a few standards/objective elements that may not be applicable to some organisations. A standard/objective element may be described as not applicable when the statement/content of the element would never occur in the organisation. The organisation has to identify such standard/objective element before the assessment and inform the NABH secretariat of the same. During the assessment, the assessment team shall discuss the same with the organisation and a final list shall be arrived at.

# Accreditation Decision and Maintenance of same

After the completion of the final assessment, the assessment team submits the report and the score sheet to the National Accreditation Board for Hospitals and Healthcare Providers (NABH). The organisation is expected to submit an action plan with timelines for rectifying the identified non-conformities. The action plan is reviewed by the assessment team, and a comment is placed indicating acceptance or non-acceptance.

The accreditation committee reviews the assessment report, the score sheet and the submitted action plan with timelines and the assessment team's comments regarding the same. Following the review, a decision is taken.

## Accreditation decision criteria following the final assessment

For an organisation to be accredited by NABH, an overall compliance rate of at least 80% must be achieved, and the following rules must be met:

1. The score for every core objective element must not be less than 4.
2. No individual standard should have more than one objective element scored as 2 or less.
3. The average score for individual standards must not be less than 4.
4. The average score for an individual chapter must not be less than 4.
5. Every objective element with a score of 3 or below should have an accepted action plan with timelines;

**Note:** The cumulative score obtained for all objective elements is considered for calculating the overall compliance. At the end of the Final assessment, only the objective elements marked as 'core and commitment' level are considered for scoring. Hence, the overall compliance of 80% corresponds to a score of numerator (408x4) and denominator (408x5) i.e.  $1632/2040 = 80\%$ . In case of the not applicable objective element(s), the scoring is modified accordingly by excluding them from the numerator and denominator.

## Award

If the organisation meets the criteria listed above, the organisation will be awarded accreditation status for four years with effect from the date of the Accreditation Committee meeting when the result is formally approved.

## Maintaining the award

The standards are designed to measure and support the continual improvement of an organization's operation. Continuing accreditation status will be subject to the outcome of the surveillance assessment and the re- accreditation assessment. The criteria for maintaining accreditation following these assessments are listed below.



## ACCREDITATION DECISION CRITERIA FOLLOWING THE SURVEILLANCE ASSESSMENT

For an organisation to continue to be accredited by NABH, an overall compliance rate of at least 80% must be achieved, and the following rules must be met:

1. Overall compliance rate of at least 80% for objective elements at 'commitment' level.
2. Overall compliance rate of at least 80% for objective elements at 'achievement' level.
3. Improvement in the score of objective elements from the previous assessment, which were scored as 2 or less.
4. The score for every core objective element must not be less than 4.
5. No individual standard should have more than one objective element scored as 2 or less.
6. The average score for individual standards must not be less than 4.
7. The average score for an individual chapter must not be less than 4.
8. Every objective element with a score of 3 or below should have an accepted action plan with timelines.

**Note:** The cumulative score obtained for all objective elements is considered for calculating the overall compliance. At the end of the surveillance assessment, only the objective elements marked at 'core', 'commitment' and 'achievement' level are considered for scoring. The compliance of 80% of the 'core' and 'commitment' corresponds to a score of numerator (408x4) and denominator (408x5) i.e.  $1632/2040 = 80\%$ . In addition to the 'core' and 'commitment', the compliance of 80% of the achievement level corresponds to the score of numerator (43x4) and denominator (43x5) i.e.  $172/215 = 80\%$ . Hence, the cumulative score for 'core', 'commitment' and 'achievement' for surveillance assessment corresponds to the numerator (451x4) and denominator (451x5) i.e.  $1804/2255 = 80\%$ . In case of the not applicable objective element(s), the scoring is modified accordingly by excluding them from the numerator and denominator.

## ACCREDITATION DECISION CRITERIA FOLLOWING THE RE-ASSESSMENT

For an organisation to continue to be accredited by NABH, an overall compliance rate of at least 80% must be achieved, and the following rules must be met:

1. Overall compliance rate of at least 80% for objective elements at 'commitment' level.
2. Overall compliance rate of at least 80% for objective elements at 'achievement' level.
3. Overall compliance rate of at least 80% for objective elements at 'excellence' level.
4. Improvement in the score of objective elements from the previous assessment, which were scored as 2 or less.
5. The score for every core objective element must not be less than 4.
6. No individual standard should have any objective element scored as 2 or less.
7. The average score for individual standards must not be less than 4.
8. The average score for an individual chapter must not be less than 4.
9. Every objective element with a score of 3 or below should have an accepted action plan with timelines.

**Note:** The cumulative score obtained for all objective elements is considered for calculating the overall compliance. At the end of the re-accreditation assessment, all the objective elements marked at 'core', 'commitment', 'achievement' and 'excellence' level are considered for scoring. The compliance of 80% of the 'core' and 'commitment' corresponds to a score of (408x4) and denominator (408x5) i.e.  $1632/2040 = 80\%$ . In addition to the 'core' and 'commitment', the compliance of 80% of the achievement level corresponds to the score of numerator (43x4) and denominator (43x5) i.e.  $172/215 = 80\%$  and compliance of 80% of the excellence level, corresponds to score of numerator (15x4) and denominator (15x5) i.e.  $60/75 = 80\%$ . Hence, the cumulative score for 'core', 'commitment', 'achievement' and 'excellence' for re-accreditation assessment corresponds to the numerator (466x4) and denominator (466x5) i.e.  $1864/2330 = 80\%$ . In case of the not applicable objective element(s), the scoring is modified accordingly by excluding them from the numerator and denominator.

The table below summarises the accreditation decision criteria.

	Final	Surveillance	Re-accreditation
Overall compliance (cumulative score)	$\geq 80\%$	$\geq 80\%$	$\geq 80\%$
Commitment (cumulative score)	$\geq 80\%$	$\geq 80\%$	$\geq 80\%$
Achievement (cumulative score)	NA	$\geq 80\%$	$\geq 80\%$
Excellence (cumulative score)	NA	NA	$\geq 80\%$
Core Objective (individual objective element score)	$\geq 4$	$\geq 4$	$\geq 4$
Average score for individual standard	$\geq 4$	$\geq 4$	$\geq 4$
Average score for individual chapter	$\geq 4$	$\geq 4$	$\geq 4$
Improvement in the score of objective elements that have been scored $\leq 2$ in the previous assessment	NA	Required	Required
Individual standard with objective elements $< 2$ (number)	1	1	1
Closure for Objective elements with a score of $\leq 3$	Required	Required	Required

**NA = Not Applicable**

## SUMMARY OF CHAPTERS, STANDARDS AND OBJECTIVE ELEMENTS

### Section A- Accreditation Standards for Dental Hospitals and Educational Institutions

	Standard	Objective Elements	Core	Commitment	Achievement	Excellence
AAC	15	76	5	63	6	2
COP	11	49	7	37	5	0
MOM	9	52	12	34	4	2
PRE	8	46	10	32	4	0
IPC	6	41	13	25	2	1
PSQ	5	29	4	19	5	1
ROM	5	27	3	15	6	3
FMS	6	35	9	20	3	3
HRM	11	63	10	46	5	2
IMS	7	39	8	27	3	1
Total	83	466	82	326	43	15

### Section B- Accreditation Standards for Dental Clinics

	Standard	Objective Elements	Core	Commitment	Achievement	Excellence
AAC	14	67	4	57	5	1
COP	9	43	5	35	3	0
MOM	9	49	12	31	4	2
PRE	8	46	10	32	4	0
IPC	6	39	13	24	1	1
PSQ	5	29	4	19	5	1
ROM	5	22	3	13	2	3
FMS	6	33	8	16	3	2
HRM	11	57	10	43	4	0
IMS	7	36	8	25	3	0
Total	80	416	77	295	34	10

## SUMMARY OF CHANGES

### Section A- Accreditation Standards for Dental Hospitals and Educational Institutions

3rd Edition DHSP Hospitals	2nd Edition DHSP Hospitals	Remarks
AAC.1.	AAC1	Change in language
AAC.1.a	AAC1.1	Language of the objective element and interpretation modified to make it clear
AAC.1.b.		New objective element
AAC.1.c.	AAC1.3	Language of the objective element and interpretation modified to make it clear
	AAC1.3	Deleted
AAC.2.	AAC2	Change in language
AAC.2.a.	AAC2.1	Language of the objective element and interpretation modified to make it clear
AAC.2.b.		New objective element
AAC.2.c.	AAC2.4	Language of the objective element and interpretation modified to make it clear
AAC.2.d.		New objective element
	AAC2.2	Deleted
	AAC2.3	Deleted
AAC.3.	AAC3	Change in language
AAC.3.a.	AAC3.1	Language of the objective element and interpretation modified to make it clear
AAC.3.b.	AAC3.2	Language of the objective element and interpretation modified to make it clear
AAC.3.c.	AAC3.3	Language of the objective element and interpretation modified to make it clear
AAC.4.	AAC4	Change in language
AAC.4.a.	AAC4.1	Language of the objective element and interpretation modified to make it clear
AAC.4.b.	AAC4.2	Language of the objective element and interpretation modified to make it clear

AAC.4.c.	AAC4.3	Language of the objective element and interpretation modified to make it clear
AAC.4.d.	AAC4.6	Language of the objective element and interpretation modified to make it clear
	AAC4.4	Deleted
	AAC4.5	Deleted
AAC.5.	AAC6	Change in language
AAC.5.a.	AAC6.1	Language of the objective element and interpretation modified to make it clear
AAC.5.b.		New objective element
AAC.5.c.	AAC6.2	Language of the objective element and interpretation modified to make it clear
AAC.5.d.	AAC6.3	Language of the objective element and interpretation modified to make it clear
	AAC5	Deleted
	AAC5.1	Deleted
	AAC5.2	Deleted
	AAC5.3	Deleted
	AAC5.4	Deleted
AAC.6.	COP6	Change in language
AAC.6.a.	COP6.1	Language of the objective element and interpretation modified to make it clear
AAC.6.b.		New objective element
AAC.6.c.		New objective element
AAC.6.d.	COP6.2	Language of the objective element and interpretation modified to make it clear
AAC.6.e.	COP6.3	Language of the objective element and interpretation modified to make it clear
AAC.6.f.	COP6.4	Language of the objective element and interpretation modified to make it clear
AAC.6.g.	COP6.5	Language of the objective element and interpretation modified to make it clear
AAC.6.h.	COP6.6	Language of the objective element and interpretation modified to make it clear

AAC.6.i.	COP6.8	Language of the objective element and interpretation modified to make it clear
AAC.7.		New standard
AAC.7.a.		New objective element
AAC.7.b.		New objective element
AAC.7.c.		New objective element
	AAC7.1	Deleted
AAC.8.		New standard
AAC.8.a.		New objective element
AAC.8.b.		New objective element
AAC.8.c.		New objective element
AAC.8.d.		New objective element
	AAC8.2	Deleted
	AAC8.3	Deleted
AAC.9.	AAC9	Change in language
AAC.9.a.		New objective element
AAC.9.b.		New objective element
AAC.9.c.	AAC7.2	Language of the objective element and interpretation modified to make it clear
AAC.9.d.	AAC7.3	Language of the objective element and interpretation modified to make it clear
AAC.9.e.	AAC7.4	Language of the objective element and interpretation modified to make it clear
AAC.9.f.	AAC7.5	Language of the objective element and interpretation modified to make it clear
AAC.9.g.	AAC7.6	Language of the objective element and interpretation modified to make it clear
	AAC9	Deleted
	AAC9.2	Deleted
	AAC9.3	Deleted
	AAC9.4	Deleted
	AAC9.5	Deleted
AAC.10.	AAC8	Change in language

AAC.10.a.	AAC8.1	Language of the objective element and interpretation modified to make it clear
AAC.10.b.		New objective element
AAC.10.c.	AAC8.4	Language of the objective element and interpretation modified to make it clear
AAC.10.d.	AAC8.5	Language of the objective element and interpretation modified to make it clear
AAC.10.e.	AAC9.1	Language of the objective element and interpretation modified to make it clear
	AAC10.4	Deleted
AAC.11.	AAC10	Change in language
AAC.11.a.	AAC10.1	Language of the objective element and interpretation modified to make it clear
AAC.11.b.	AAC10.2	Language of the objective element and interpretation modified to make it clear
AAC.11.c.		New objective element
AAC.11.d.	AAC10.3	Language of the objective element and interpretation modified to make it clear
AAC.11.e.	AAC10.5	Language of the objective element and interpretation modified to make it clear
AAC.11.f.	AAC10.6	Language of the objective element and interpretation modified to make it clear
AAC.11.g.		New objective element
AAC.11.h.	AAC10.7	Language of the objective element and interpretation modified to make it clear
	AAC11.2	Deleted
	AAC11.3	Deleted
AAC.12.	AAC11	Change in language
AAC.12.a.	AAC11.1	Language of the objective element and interpretation modified to make it clear
AAC.12.b.		New objective element
AAC.12.c.		New objective element
AAC.12.d.	AAC11.4	Language of the objective element and interpretation modified to make it clear
AAC.12.e.	AAC11.5	Language of the objective element and interpretation modified to make it clear

AAC.12.f.	AAC12.1	Language of the objective element and interpretation modified to make it clear
	AAC12	Deleted
	AAC12.2	Deleted
	AAC12.3	Deleted
	AAC12.4	Deleted
	AAC12.5	Deleted
	AAC12.6	Deleted
	AAC12.7	Deleted
AAC.13.	IMS5	Change in language
AAC.13.a.	IMS5.1	Language of the objective element and interpretation modified to make it clear
AAC.13.b.	IMS5.2	Language of the objective element and interpretation modified to make it clear
AAC.13.c.	IMS5.3	Language of the objective element and interpretation modified to make it clear
AAC.13.d.	IMS5.4	Language of the objective element and interpretation modified to make it clear
AAC.13.e.		New objective element
AAC.13.f.		New objective element
AAC.14.		New standard
AAC.14.a.	IMS6.1	Language of the objective element and interpretation modified to make it clear
AAC.14.b.		New objective element
AAC.14.c.	IMS6.2	Language of the objective element and interpretation modified to make it clear
AAC.14.d.	IMS6.3	Language of the objective element and interpretation modified to make it clear
AAC.14.e.	IMS6.4	Language of the objective element and interpretation modified to make it clear
AAC.14.f.	IMS6.5	Language of the objective element and interpretation modified to make it clear
AAC.15.		New standard



AAC.15.a.		New objective element
AAC.15.b.		New objective element
AAC.15.c.		New objective element
AAC.15.d.		New objective element
COP1.	COP2	Change in language
COP1.a.	COP2.1	Language of the objective element and interpretation modified to make it clear
COP1.b.		New objective element
COP1.c.	COP2.2	Language of the objective element and interpretation modified to make it clear
COP1.d.		New objective element
	COP1	Deleted
	COP1.1	Deleted
	COP1.2	Deleted
	COP1.3	Deleted
	COP1.4	Deleted
	COP1.5	Deleted
COP2.	COP3	Change in language
COP2.a.	COP3.1	Language of the objective element and interpretation modified to make it clear
COP2.b.	COP3.2	Language of the objective element and interpretation modified to make it clear
COP2.c.	COP3.4	Language of the objective element and interpretation modified to make it clear
COP2.d.	COP3.6	Language of the objective element and interpretation modified to make it clear
COP2.e.	COP3.7	Language of the objective element and interpretation modified to make it clear
	COP2.3	Deleted
	COP2.4	Deleted
	COP2.5	Deleted
COP3.	COP4	Change in language

COP3.a.	COP4.1	Language of the objective element and interpretation modified to make it clear
COP3.b.		New objective element
COP3.c.		New objective element
COP3.d.	COP4.3	Language of the objective element and interpretation modified to make it clear
COP3.e.	COP4.4	Language of the objective element and interpretation modified to make it clear
COP3.f.	COP4.5	Language of the objective element and interpretation modified to make it clear
COP3.g.	COP4.2	Language of the objective element and interpretation modified to make it clear
	COP3.3	Deleted
	COP3.5	Deleted
COP4.	COP5	Change in language
COP4.a.		New objective element
COP4.b.		New objective element
COP4.c.	COP5.1	Language of the objective element and interpretation modified to make it clear
COP4.d.	COP5.2	Language of the objective element and interpretation modified to make it clear
COP4.e.		New objective element
COP5.		New Standard
COP5.a.		New objective element
COP5.b.		New objective element
COP5.c.		New objective element
	COP5.3	Deleted
COP6.	COP7	Change in language
COP6.a.		New objective element
COP6.b.	COP7.3	Language of the objective element and interpretation modified to make it clear
COP6.c.		New objective element
COP6.d.		New objective element

	COP6.7	Deleted
COP7.	COP8	Change in language
COP7.a.	COP8.1	Language of the objective element and interpretation modified to make it clear
COP7.b.		New objective element
COP7.c.	COP8.2	Language of the objective element and interpretation modified to make it clear
	COP7.1	Deleted
	COP7.2	Deleted
	COP7.4	Deleted
COP8.	COP9	Change in language
COP8.a.		New objective element
COP8.b.		New objective element
COP8.c.	COP9.1	Language of the objective element and interpretation modified to make it clear
COP8.d.	COP9.2	Language of the objective element and interpretation modified to make it clear
COP8.e.	COP9.4	Language of the objective element and interpretation modified to make it clear
COP8.f.	COP9.5	Language of the objective element and interpretation modified to make it clear
COP8.g.	COP9.6	Language of the objective element and interpretation modified to make it clear
COP8.h.	COP9.7	Language of the objective element and interpretation modified to make it clear
	COP8.3	Deleted
COP9.	COP10	Change in language
COP9.a.	COP10.1	Language of the objective element and interpretation modified to make it clear
COP9.b.	COP10.3	Language of the objective element and interpretation modified to make it clear
COP9.c.		New objective element
COP9.d.	COP10.5	Language of the objective element and interpretation modified to make it clear

COP9.e.	COP10.6	Language of the objective element and interpretation modified to make it clear
COP9.f.	COP10.7	Language of the objective element and interpretation modified to make it clear
COP9.g.	COP10.8	Language of the objective element and interpretation modified to make it clear
COP9.h.		New objective element
COP9.i.	COP10.9	Language of the objective element and interpretation modified to make it clear
COP10.	COP11	Change in language
COP10.a.	COP11.1	Language of the objective element and interpretation modified to make it clear
COP10.b.	COP11.2	Language of the objective element and interpretation modified to make it clear
COP10.c.	COP11.3	Language of the objective element and interpretation modified to make it clear
COP10.d.	COP11.4	Language of the objective element and interpretation modified to make it clear
COP10.e.	COP11.6	Language of the objective element and interpretation modified to make it clear
COP10.f.	COP11.8	Language of the objective element and interpretation modified to make it clear
COP10.g.	COP11.7	Language of the objective element and interpretation modified to make it clear
	COP10.2	Deleted
	COP10.4	Deleted
COP11.	COP12	Change in language
COP11.a.	COP12.1	Language of the objective element and interpretation modified to make it clear
COP11.b.		New objective element
COP11.c.	COP12.2	Language of the objective element and interpretation modified to make it clear
	COP11.5	Deleted
	COP13	Deleted
	COP13.1	Deleted
	COP13.2	Deleted

	COP13.3	Deleted
	COP13.4	Deleted
	COP13.5	Deleted
	COP13.6	Deleted
MOM.1.		New objective element
MOM.1.a.	MOM1.3	Language of the objective element and interpretation modified to make it clear
MOM.1.b.	MOM1.4	Language of the objective element and interpretation modified to make it clear
MOM.1.c.		New objective element
MOM.1.d.		New objective element
MOM.1.e.		New objective element
MOM.1.f.	MOM1.5	Language of the objective element and interpretation modified to make it clear
	MDM1	Deleted
	MDM1.2	Deleted
	MDM1.3	Deleted
	MIE1	Deleted
	MIE1.1	Deleted
	MIE1.2	Deleted
	MIE1.3	Deleted
	MIE1.4	Deleted
	MOM1.1	Deleted
	MOM1.2	Deleted
MOM.2.	MOM1	Change in language
MOM.2.a.		New objective element
MOM.2.b.	MOM1.6	Language of the objective element and interpretation modified to make it clear
MOM.2.c.	MOM2.5	Language of the objective element and interpretation modified to make it clear
MOM.2.d.		New objective element

MOM.2.e.	MOM1.7	Language of the objective element and interpretation modified to make it clear
MOM.2.f.		New objective element
MOM.2.g.	MOM1.8	Language of the objective element and interpretation modified to make it clear
	MDM2.4	Deleted
	MDM2.5	Deleted
	MDM2.6	Deleted
	MDM2.7	Deleted
	MDM2.7	Deleted
	MDM2.8	Deleted
	MDM2.9	Deleted
	MIE2	Deleted
	MIE2.1	Deleted
	MIE2.2	Deleted
	MIE2.3	Deleted
	MIE2.4	Deleted
	MIE2.5	Deleted
MOM.3.		New standard
MOM.3.a.		New objective element
MOM.3.b.		New objective element
MOM.3.c.		New objective element
MOM.3.d.		New objective element
MOM.3.e.	MOM2.4	Language of the objective element and interpretation modified to make it clear
MOM.3.f.		New objective element
MOM.3.g.		New objective element
MOM.3.h.		New objective element
	MDM3.2	Deleted

MOM.4.	MOM2	Change in language
MOM.4.a.	MOM2.1	Language of the objective element and interpretation modified to make it clear
MOM.4.b.	MOM2.2	Language of the objective element and interpretation modified to make it clear
MOM.4.c.	MOM2.3	Language of the objective element and interpretation modified to make it clear
MOM.5.	MOM3	Change in language
MOM.5.a.	MOM3.1	Language of the objective element and interpretation modified to make it clear
MOM.5.b.	MOM3.2	Language of the objective element and interpretation modified to make it clear
MOM.5.c.	MOM3.3	Language of the objective element and interpretation modified to make it clear
MOM.5.d.	MOM3.4	Language of the objective element and interpretation modified to make it clear
MOM.5.e.	MOM2.6	Language of the objective element and interpretation modified to make it clear
	MOM5	Deleted
	MOM5.1	Deleted
	MOM5.2	Deleted
MOM.6.	MOM4	Change in language
MOM.6.a.	MOM4.1	Language of the objective element and interpretation modified to make it clear
MOM.6.b.	MOM4.2	Language of the objective element and interpretation modified to make it clear
MOM.6.c.	MOM4.3	Language of the objective element and interpretation modified to make it clear
MOM.6.d.	MOM4.4	Language of the objective element and interpretation modified to make it clear
MOM.6.e.	MOM4.5	Language of the objective element and interpretation modified to make it clear
MOM.6.f.		New objective element
MOM.6.g.	MOM4.6	Language of the objective element and interpretation modified to make it clear
	MOM6.5	Deleted

MOM.7.	MOM6	Change in language
MOM.7.a.	MOM6.1	Language of the objective element and interpretation modified to make it clear
MOM.7.b.		New objective element
MOM.7.c.	MOM6.2	Language of the objective element and interpretation modified to make it clear
MOM.7.d.	MOM6.3	Language of the objective element and interpretation modified to make it clear
MOM.7.e.	MOM6.4	Language of the objective element and interpretation modified to make it clear
MOM.7.f.		New objective element
	MOM7	Deleted
	MOM7.1	Deleted
	MOM7.2	Deleted
	MOM7.3	Deleted
MOM.8.	MDM3	Change in language
MOM.8.a.	MDM3.1	Language of the objective element and interpretation modified to make it clear
MOM.8.b.		New objective element
MOM.8.c.		New objective element
MOM.8.d.	MDM3.3	Language of the objective element and interpretation modified to make it clear
MOM.8.e.		New objective element
MOM.9.	MDM2	Change in language
MOM.9.a.	MDM2.1	Language of the objective element and interpretation modified to make it clear
MOM.9.b.		New objective element
MOM.9.c.	MDM2.2	Language of the objective element and interpretation modified to make it clear
MOM.9.d.	MDM2.3	Language of the objective element and interpretation modified to make it clear
MOM.9.e.		New objective element
PRE.1.	PRE1	Change in language
PRE1.a.	PRE1.1	Language of the objective element and interpretation modified to make it clear



PRE1.b.	PRE1.2	Language of the objective element and interpretation modified to make it clear
PRE1.c.		New objective element
PRE1.d.	PRE1.4	Language of the objective element and interpretation modified to make it clear
	PRE1.3	Deleted
PRE.2.	PRE2	Change in language
PRE.2.a.	PRE2.1	Language of the objective element and interpretation modified to make it clear
PRE.2.b.	PRE2.2	Language of the objective element and interpretation modified to make it clear
PRE.2.c.	PRE2.3	Language of the objective element and interpretation modified to make it clear
PRE.2.d.	PRE2.4	Language of the objective element and interpretation modified to make it clear
PRE.2.e.	PRE2.5	Language of the objective element and interpretation modified to make it clear
PRE.2.f.		New objective element
PRE.2.g.	PRE2.6	Language of the objective element and interpretation modified to make it clear
PRE.2.h.	PRE2.8	Language of the objective element and interpretation modified to make it clear
PRE.2.i.		New objective element
PRE.2.j.	PRE2.9	Language of the objective element and interpretation modified to make it clear
PRE.2.k.		New objective element
PRE.2.l.		New objective element
	PRE2.7	Deleted
PRE.3.	PRE3	Change in language
PRE.3.a.		New objective element
PRE.3.b.		New objective element
PRE.3.c.		New objective element
PRE.3.d.		New objective element
PRE.3.e.		New objective element
PRE.3.f.		New objective element

	PRE3.1	Deleted
	PRE3.2	Deleted
PRE.4.		New standard
PRE.4.a.	PRE3.3	Language of the objective element and interpretation modified to make it clear
PRE.4.b.		New objective element
PRE.4.c.	PRE3.4	Language of the objective element and interpretation modified to make it clear
PRE.4.d.	PRE3.5	Language of the objective element and interpretation modified to make it clear
PRE.4.e.		New objective element
	PRE4.3	Deleted
	PRE4.6	Deleted
	PRE4.7	Deleted
PRE.5.	PRE4	Change in language
PRE.5.a.	PRE4.1	Language of the objective element and interpretation modified to make it clear
PRE.5.b.	PRE4.2	Language of the objective element and interpretation modified to make it clear
PRE.5.c.	PRE4.3	Language of the objective element and interpretation modified to make it clear
PRE.5.d.	PRE4.5	Language of the objective element and interpretation modified to make it clear
PRE.5.e.		New objective element
PRE.6.	PRE5	Change in language
PRE.6.a.	PRE5.1	Language of the objective element and interpretation modified to make it clear
PRE.6.b.	PRE5.2	Language of the objective element and interpretation modified to make it clear
PRE.6.c.	PRE5.3	Language of the objective element and interpretation modified to make it clear
PRE.6.d.	PRE5.4	Language of the objective element and interpretation modified to make it clear
PRE.7.		New standard
PRE.7.a.		New objective element

PRE.7.b.		New objective element
PRE.7.c.		New objective element
PRE.7.d.		New objective element
PRE.7.e.		New objective element
PRE.8.		New standard
PRE.8.a.		New objective element
PRE.8.b.		New objective element
PRE.8.c.		New objective element
PRE.8.d.		New objective element
PRE.8.e.		New objective element
IPC.1.	IC1	Change in language
IPC.1.a.	IC1.1	Language of the objective element and interpretation modified to make it clear
IPC.1.b.		New objective element
IPC.1.c.		New objective element
IPC.1.d.		New objective element
IPC.1.e.	IC1.2	Language of the objective element and interpretation modified to make it clear
IPC.1.f.	IC1.3	Language of the objective element and interpretation modified to make it clear
IPC.1.g.		New objective element
IPC.1.h.		New objective element
IPC.1.i.		New objective element
IPC.2.	IC7	Change in language
IPC.2.a.	IC7.1	Language of the objective element and interpretation modified to make it clear
IPC.2.b.	IC7.2	Language of the objective element and interpretation modified to make it clear
IPC.2.c.	IC7.3	Language of the objective element and interpretation modified to make it clear
IPC.2.d.	IC7.5	Language of the objective element and interpretation modified to make it clear

IPC.2.e.	IC4.1	Language of the objective element and interpretation modified to make it clear
IPC.2.f.	IC4.2	Language of the objective element and interpretation modified to make it clear
IPC.2.g.		New objective element
IPC.2.h.	IC1.3	Language of the objective element and interpretation modified to make it clear
	IC2	Deleted
	IC2.1	Deleted
	IC2.2	Deleted
	IC2.3	Deleted
	IC2.4	Deleted
	IC2.5	Deleted
	IC2.6	Deleted
	IC2.7	Deleted
	IC2.8	Deleted
	IC2.9	Deleted
	IC2.11	Deleted
IPC.3.		New standard
IPC.3.a.		New objective element
IPC.3.b.		New objective element
IPC.3.c.		New objective element
IPC.3.d.		New objective element
IPC.3.e.		New objective element
IPC.3.f.		New objective element
IPC.3.g.		New objective element
IPC.4.		New Standard
IPC.4.a.	IC2.10	Language of the objective element and interpretation modified to make it clear

IPC.4.b.		New objective element
IPC.4.c.		New objective element
IPC.4.d.	IC6 IC6.1 IC6.2 IC6.3	Language of the objective element and interpretation modified to make it clear
	IC4	Deleted
IPC.5.	IC3	Change in language
IPC.5.a.	IC3.1	Language of the objective element and interpretation modified to make it clear
IPC.5.b.	IC3.2	Language of the objective element and interpretation modified to make it clear
IPC.5.c.	IC3.3	Language of the objective element and interpretation modified to make it clear
IPC.5.d.		New objective element
IPC.5.e.	IC3.4	Language of the objective element and interpretation modified to make it clear
IPC.5.f.		New objective element
IPC.5.g.		New objective element
IPC.5.h.		New objective element
IPC.6.	IC5	Change in language
IPC.6.a.	IC5.1	Language of the objective element and interpretation modified to make it clear
IPC.6.b.		New objective element
IPC.6.c.	IC5.2	Language of the objective element and interpretation modified to make it clear
IPC.6.d.	IC5.3	Language of the objective element and interpretation modified to make it clear
IPC.6.e.		New objective element
	IC6.4	Deleted
	IC6.5	Deleted
	IC6.6	Deleted
	IC6.7	Deleted

	IC7.4	Deleted
PSQ.1.	CQI1	Change in language
PSQ.1.a.	CQI1.1	Language of the objective element and interpretation modified to make it clear
PSQ.1.b.	CQI1.3	Language of the objective element and interpretation modified to make it clear
PSQ.1.c.	CQI1.4	Language of the objective element and interpretation modified to make it clear
PSQ.1.d.		New objective element
PSQ.1.e.	CQI1.6	Language of the objective element and interpretation modified to make it clear
PSQ.1.f.	CQI1.7	Language of the objective element and interpretation modified to make it clear
PSQ.1.g.		New objective element
	CQI1.2	Deleted
	CQI1.5	Deleted
PSQ.2.	CQI2	Change in language
PSQ.2.a.		New objective element
PSQ.2.b.	CQI2.2	Language of the objective element and interpretation modified to make it clear
PSQ.2.c.	CQI2.7	Language of the objective element and interpretation modified to make it clear
PSQ.2.d.		New objective element
PSQ.2.e.		New objective element
PSQ.2.f.	CQI2.9	Language of the objective element and interpretation modified to make it clear
PSQ.2.g.		New objective element
PSQ.2.h.		New objective element
	CQI2.1	Deleted
	CQI2.3	Deleted
	CQI2.4	Deleted
	CQI2.5	Deleted
	CQI2.6	Deleted

	CQI2.8	Deleted
PSQ.3.	CQI4	Change in language
PSQ.3.a.		New objective element
PSQ.3.b.	CQI4.1	Language of the objective element and interpretation modified to make it clear
PSQ.3.c.		New objective element
PSQ.3.d.		New objective element
	CQI3	Deleted
	CQI3.1	Deleted
	CQI3.2	Deleted
	CQI3.3	Deleted
	CQI3.4	Deleted
	CQI3.5	Deleted
	CQI3.6	Deleted
	CQI3.7	Deleted
	CQI3.8	Deleted
	CQI3.9	Deleted
PSQ.4.	CQI5	Change in language
PSQ.4.a.		New objective element
PSQ.4.b.	CQI5.1	Language of the objective element and interpretation modified to make it clear
PSQ.4.c.	CQI5.2	Language of the objective element and interpretation modified to make it clear
PSQ.4.d.	CQI5.3	Language of the objective element and interpretation modified to make it clear
PSQ.4.e.	CQI5.4	Language of the objective element and interpretation modified to make it clear
PSQ.4.f.	CQI5.5	Language of the objective element and interpretation modified to make it clear
	CQI4.2	Deleted
	CQI4.3	Deleted

PSQ.5.	CQI6	Change in language
PSQ.5.a.		New objective element
PSQ.5.b.	CQI6.2	Language of the objective element and interpretation modified to make it clear
PSQ.5.c.	CQI6.3	Language of the objective element and interpretation modified to make it clear
PSQ.5.d.	CQI6.4	Language of the objective element and interpretation modified to make it clear
	CQI6.1	Deleted
ROM.1.	ROM1	Change in language
ROM.1.a.		New objective element
ROM.1.b.	ROM1.1	Language of the objective element and interpretation modified to make it clear
ROM.1.c.	ROM1.2	Language of the objective element and interpretation modified to make it clear
ROM.1.d.	ROM1.4	Language of the objective element and interpretation modified to make it clear
ROM.1.e.	ROM1.5	Language of the objective element and interpretation modified to make it clear
ROM.1.f.	ROM1.6	Language of the objective element and interpretation modified to make it clear
ROM.1.g.		New objective element
ROM.1.h.		New objective element
ROM.1.i.		New objective element
	ROM1.3	Deleted
	ROM1.7	Deleted
	ROM1.8	Deleted
	ROM1.9	Deleted
ROM.2.	ROM3	Change in language
ROM.2.a.	ROM3.1	Language of the objective element and interpretation modified to make it clear
ROM.2.b.	ROM3.2	Language of the objective element and interpretation modified to make it clear
ROM.2.c.	ROM3.3	Language of the objective element and interpretation modified to make it clear



ROM.2.d.	ROM3.5	Language of the objective element and interpretation modified to make it clear
	ROM2	Deleted
	ROM2.1	Deleted
	ROM2.2	Deleted
	ROM2.3	Deleted
	ROM2.4	Deleted
ROM.3.	ROM4	Change in language
ROM.3.a.	ROM4.1	Language of the objective element and interpretation modified to make it clear
ROM.3.b.	ROM4.2	Language of the objective element and interpretation modified to make it clear
ROM.3.c.		New objective element
	ROM3.4	Deleted
	ROM3.6	Deleted
ROM.4.		New standard
ROM.4.a.		New objective element
ROM.4.b.		New objective element
ROM.4.c		New objective element
ROM.4.d.		New objective element
ROM.4.e.		New objective element
ROM.5.	ROM5	Change in language
ROM.5.a.	ROM5.1	Language of the objective element and interpretation modified to make it clear
ROM.5.b.	ROM5.3	Language of the objective element and interpretation modified to make it clear
ROM.5.c.	ROM5.4	Language of the objective element and interpretation modified to make it clear
ROM.5.d.		New objective element
ROM.5.e.		New objective element
ROM.5.f.		New objective element
	ROM5.2	Deleted

FMS.1.	FMS2	Change in language
FMS.1.a.	FMS2.6	Language of the objective element and interpretation modified to make it clear
FMS.1.b.		New objective element
FMS.1.c.	FMS2.7	Language of the objective element and interpretation modified to make it clear
FMS.1.d.	FMS2.8	Language of the objective element and interpretation modified to make it clear
FMS.1.e.		New objective element
FMS.1.f.		New objective element
	FMS1	Deleted
	FMS1.1	Deleted
	FMS1.2	Deleted
	FMS1.3	Deleted
FMS.2.		New objective element
FMS.2.a.	FMS2.5	Language of the objective element and interpretation modified to make it clear
FMS.2.b.	FMS2.3	Language of the objective element and interpretation modified to make it clear
FMS.2.c.	FMS2.4	Language of the objective element and interpretation modified to make it clear
FMS.2.d.	FMS4.1	Language of the objective element and interpretation modified to make it clear
FMS.2.e.	FMS4.2	Language of the objective element and interpretation modified to make it clear
FMS.2.f.	FMS4.3	Language of the objective element and interpretation modified to make it clear
FMS.2.g.		Deleted
	FMS2.1	Deleted
	FMS2.2	Deleted
	FMS2.9	Deleted
	FMS2.10	Deleted
	FMS2.11	Deleted
FMS.3.		New standard

FMS.3.a.		New objective element
FMS.3.b.		New objective element
FMS.3.c.		New objective element
FMS.3.d.		New objective element
FMS.3.e.		New objective element
FMS.3.f.		New objective element
FMS.4.	FMS3	Change in language
FMS.4.a.	FMS3.1	Language of the objective element and interpretation modified to make it clear
FMS.4.b.	FMS3.2 FMS3.3	Language of the objective element and interpretation modified to make it clear
FMS.4.c.	FMS3.5	Language of the objective element and interpretation modified to make it clear
FMS.4.d.		New objective element
FMS.4.e.	FMS3.4	Language of the objective element and interpretation modified to make it clear
FMS.4.f.		New objective element
FMS.4.g.		New objective element
FMS.5.	FMS4	Change in language
FMS.5.a.		New objective element
FMS.5.b.		New objective element
FMS.5.c.		New objective element
FMS.5.d.	FMS4.4	Language of the objective element and interpretation modified to make it clear
FMS.5.e.	FMS4.5	Language of the objective element and interpretation modified to make it clear
FMS.6.	FMS5	Change in language
FMS.6.a.	FMS5.1	Language of the objective element and interpretation modified to make it clear
FMS.6.b.	FMS5.2	Language of the objective element and interpretation modified to make it clear

FMS.6.c.	FME5.3	Language of the objective element and interpretation modified to make it clear
FMS.6.d.	FMS5.4	Language of the objective element and interpretation modified to make it clear
HRM.1.	HRM1	Change in language
HRM.1.a.	HRM1.1	Language of the objective element and interpretation modified to make it clear
HRM.1.b.		New objective element
HRM.1.c.		New objective element
HRM.1.d.	HRM1.2	Language of the objective element and interpretation modified to make it clear
HRM.1.e.	HRM1.3	Language of the objective element and interpretation modified to make it clear
HRM.1.f.		New objective element
HRM.1.g.		New objective element
HRM.2.		New standard
HRM.2.a.		New objective element
HRM.2.b.		New objective element
HRM.2.c.		New objective element
HRM.2.d.		New objective element
	HRM2.3	Deleted
	HRM2.4	Deleted
HRM.3.	HRM2	Change in language
HRM.3.a.		New objective element
HRM.3.b.	HRM2.1	Language of the objective element and interpretation modified to make it clear
HRM.3.c.	HRM2.2	Language of the objective element and interpretation modified to make it clear
HRM.3.d.		New objective element
HRM.3.e.		New objective element
HRM.3.f.		New objective element
HRM.3.g.	HRM2.5	Language of the objective element and interpretation modified to make it clear

HRM.3.h.		New objective element
HRM.4.	HRM3	Change in language
HRM.4.a.	HRM3.1	Language of the objective element and interpretation modified to make it clear
HRM.4.b.		New objective element
HRM.4.c.		New objective element
HRM.4.d.	HRM3.2	Language of the objective element and interpretation modified to make it clear
HRM.4.e.		New objective element
HRM.4.f.		New objective element
	HRM4.4	Deleted
HRM.5.	HRM4	Change in language
HRM.5.a.	HRM4.1	Language of the objective element and interpretation modified to make it clear
HRM.5.b.	HRM4.2	Language of the objective element and interpretation modified to make it clear
HRM.5.c.	HRM4.3	Language of the objective element and interpretation modified to make it clear
HRM.5.d.		New objective element
HRM.5.e.		New objective element
HRM.5.f.		New objective element
HRM.5.g.		New objective element
HRM.6.	HRM5	Change in language
HRM.6.a.	HRM5.1	Language of the objective element and interpretation modified to make it clear
HRM.6.b.	HRM5.2	Language of the objective element and interpretation modified to make it clear
HRM.6.c.		New objective element
HRM.6.d.	HRM5.3	Language of the objective element and interpretation modified to make it clear
HRM.6.e.	HRM5.4	Language of the objective element and interpretation modified to make it clear
	HRM6	Deleted
	HRM6.1	Deleted

	HRM6.2	Deleted
	HRM6.3	Deleted
	HRM6.4	Deleted
	HRM6.5	Deleted
	HRM6.6	Deleted
HRM.7.	HRM7	Change in language
HRM.7.a.		New objective element
HRM.7.b.		New objective element
HRM.7.c.	HRM7.1	Language of the objective element and interpretation modified to make it clear
HRM.7.d.		New objective element
HRM.7.e.		New objective element
HRM.7.f.	HRM7.3	Language of the objective element and interpretation modified to make it clear
	HRM7.2	Language of the objective element and interpretation modified to make it clear
HRM.8.		New standard
HRM.8.a.		New objective element
HRM.8.b.	HRM8.2 HRM8.4	Language of the objective element and interpretation modified to make it clear
HRM.8.c.	HRM8.3	Language of the objective element and interpretation modified to make it clear
HRM.8.d.		New objective element
HRM.8.e.		New objective element
HRM.9.	HRM9	Change in language
HRM.9.a.	HRM9.1	Language of the objective element and interpretation modified to make it clear
HRM.9.b.	HRM9.2	Language of the objective element and interpretation modified to make it clear
HRM.9.c.	HRM9.3	Language of the objective element and interpretation modified to make it clear
HRM.9.d.		New objective element

HRM.10.	HRM10	Change in language
HRM.10.a.	HRM10.1	Language of the objective element and interpretation modified to make it clear
HRM.10.b.	HRM10.2	Language of the objective element and interpretation modified to make it clear
HRM.10.c.	HRM10.3	Language of the objective element and interpretation modified to make it clear
HRM.10.d.		New objective element
HRM.10.e.		New objective element
HRM.10.f.		New objective element
HRM.11.	HRM11	Change in language
HRM.11.a.	HRM11.1	Language of the objective element and interpretation modified to make it clear
HRM.11.b.		New objective element
HRM.11.c.		New objective element
HRM.11.d.		New objective element
HRM.11.e.	HRM11.2	Language of the objective element and interpretation modified to make it clear
	HRM12	Deleted
	HRM12.1	Deleted
	HRM12.2	Deleted
	HRM12.3	Deleted
IMS.1.	IMS1	Change in language
IMS.1.a.	IMS1.1	Language of the objective element and interpretation modified to make it clear
IMS.1.b.	IMS1.2	Language of the objective element and interpretation modified to make it clear
IMS.1.c.		New objective element
IMS.1.d.		New objective element
IMS.1.e.		New objective element
IMS.1.f.		New objective element
	IMS1.3	Deleted
IMS.2.	IMS2	Change in language

IMS.2.a.	IMS2.1	Language of the objective element and interpretation modified to make it clear
IMS.2.b.		New objective element
IMS2.c.		New objective element
IMS.2.d.	IMS2.4	Language of the objective element and interpretation modified to make it clear
IMS.2.e.		New objective element
	IMS2	Deleted
	IMS2.1	Deleted
	IMS2.2	Deleted
	IMS2.3	Deleted
	IMS2.4	Deleted
IMS.3.	IMS3	Change in language
IMS.3.a.	IMS3.1	Language of the objective element and interpretation modified to make it clear
IMS.3.b.	IMS3.2	Language of the objective element and interpretation modified to make it clear
IMS.3.c.	IMS3.3	Language of the objective element and interpretation modified to make it clear
IMS.3.d.	IMS3.4	Language of the objective element and interpretation modified to make it clear
IMS.3.e.	IMS3.5	Language of the objective element and interpretation modified to make it clear
IMS.3.f.	IMS3.6	Language of the objective element and interpretation modified to make it clear
	IMS3.7	Deleted
IMS.4.	IMS4	Change in language
IMS.4.a.	IMS4.1	Language of the objective element and interpretation modified to make it clear
IMS.4.b.		New objective element
IMS.4.c.	IMS4.2	Language of the objective element and interpretation modified to make it clear
IMS.4.d.		New objective element



IMS.4.e.	IMS4.3	Language of the objective element and interpretation modified to make it clear
IMS.4.f.	IMS4.4	Language of the objective element and interpretation modified to make it clear
IMS.5.	IMS7	Change in language
IMS.5.a.	IMS7.1	Language of the objective element and interpretation modified to make it clear
IMS.5.b.		New objective element
IMS.5.c.		New objective element
IMS.5.d.	IMS7.5	Language of the objective element and interpretation modified to make it clear
IMS.5.e.	IMS7.6	Language of the objective element and interpretation modified to make it clear
IMS.6.		New standard
IMS.6.a.		New objective element
IMS.6.b.		New objective element
IMS.6.c.		New objective element
IMS.6.d.	IMS8.1	Language of the objective element and interpretation modified to make it clear
	IMS6.6	Deleted
IMS.7.	IMS9	Change in language
IMS.7.a.	IMS9.1	Language of the objective element and interpretation modified to make it clear
IMS.7.b.	IMS9.2	Language of the objective element and interpretation modified to make it clear
IMS.7.c.	IMS9.3	Language of the objective element and interpretation modified to make it clear
IMS.7.d.	IMS9.4	Language of the objective element and interpretation modified to make it clear
IMS.7.e.	IMS9.5	Language of the objective element and interpretation modified to make it clear
IMS.7.f.		New objective element
IMS.7.g.	IMS9.6	Change in language
	IMS7.2	Deleted
	IMS7.3	Deleted
	IMS7.4	Deleted
	IMS8	Deleted
	IMS8.1	Deleted
	IMS8.2	Deleted

## Section B- Accreditation Standards for Dental Clinics

3 Edition DHSP Clinic	2 Edition DHSP Clinic	Remarks
AAC.1.	ACC1	No change
AAC.1.a.	AAC1.1	Language of the objective element and interpretation modified to make it clear
AAC.1.b.		New objective element
AAC.1.c.	AAC1.2	Language of the interpretation modified to make it clear
	AAC1.3	Deleted
AAC.2.	AAC2	No change
AAC.2.a.	AAC2.1 AAC2.2	Language of the objective element and interpretation modified to make it clear
AAC.2.b.		New objective element
AAC.2.c.	AAC2.3	Language of the interpretation modified to make it clear
AAC.2.d.		New objective element
AAC.3.	AAC3	No change
AAC.3.a.	AAC3.1 AAC3.4	Language of the objective element and interpretation modified to make it clear
	AAC3.2	Deleted
AAC.3.b.	AAC3.3	Language of the objective element and interpretation modified to make it clear
AAC.4.	ACC4	Change in language
AAC.4.a.	AAC4.1 AAC4.2	Language of the objective element and interpretation modified to make it clear
AAC.4.b.		New objective element
AAC.4.c.		New objective element
AAC.4.d.	AAC4.3 AAC4.4	Language of the objective element and interpretation modified to make it clear
AAC.5.		New standard

AAC.5.a.		New objective element
AAC.5.b.		New objective element
AAC.5.c.		New objective element
AAC.5.d.		New objective element
	AAC5.1	Deleted
AAC.6.		New standard
AAC.6.a.		New objective element
AAC.6.b.		New objective element
AAC.6.c.		New objective element
AAC.6.d.	COP3.1	Language of the objective element and interpretation modified to make it clear
AAC.6.e.	COP3.2	Language of the objective element and interpretation modified to make it clear
AAC.6.f.		New objective element
AAC.6.g.	COP3.3	Language of the objective element and interpretation modified to make it clear
AAC.6.h.	COP3.4	Language of the objective element and interpretation modified to make it clear
AAC.6.i.		New objective element
	AAC6.2	Deleted
AAC.7.		New standard
AAC.7.a.		New objective element
AAC.7.b.		New objective element
AAC.7.c.		New objective element
	AAC7.2	Deleted
	AAC7.4	Deleted
	AAC7.5	Deleted
AAC.8.		New standard
AAC.8.a.		New objective element
AAC.8.b.		New objective element
AAC.8.c.		New objective element
AAC.8.d.		New objective element

AAC.9.	AAC5	Change in language
AAC.9.a.		New objective element
AAC.9.b.		New objective element
AAC.9.c.		New objective element
AAC.9.d.		New objective element
AAC.9.e.	AAC5.2	Language of the objective element and interpretation modified to make it clear
AAC.9.f.		New objective element
AAC.9.g.	AAC5.3	Language of the objective element and interpretation modified to make it clear
AAC.10.		New standard
AAC.10.a.		New objective element
AAC.10.b.		New objective element
AAC.10.c.		New objective element
AAC.10.d.		New objective element
AAC.10.e.		New objective element
AAC.11.	AAC6	No change
AAC.11.a.	AAC6.1	Language of the objective element and interpretation modified to make it clear
AAC.11.b.		New objective element
AAC.11.c.		New objective element
AAC.11.d.		New objective element
AAC.11.e.		New objective element
AAC.11.f.		New objective element
AAC.11.g.		New objective element
AAC.11.h.	AAC6.3	Language of the objective element and interpretation modified to make it clear
AAC.12.	AAC7	Change in language
AAC.12.a.		New objective element
AAC.12.b.		New objective element
AAC.12.c.	AAC7.3	Language of the objective element and interpretation modified to make it clear

AAC.12.d.		New objective element
AAC.12.e.		New objective element
AAC.12.f.	AAC7.1	Language of the objective element and interpretation modified to make it clear
AAC.13.		New standard
AAC.13.a.		New objective element
AAC.13.b.		New objective element
AAC.13.c.		New objective element
AAC.13.d.		New objective element
AAC.13.e.		New objective element
AAC.13.f.		New objective element
AAC.14.		New standard
AAC.14.a.		New objective element
AAC.14.b.		New objective element
AAC.14.c.		New objective element
COP1.	COP1	Change in language
COP1a.		New objective element
COP1.b.		New objective element
COP1.c.		New objective element
COP1.d.	COP1.3	Language of the interpretation modified to make it clear
	COP1.1	Deleted
	COP1.2	Deleted
	COP1.4	Deleted
	COP1.5	Deleted
	COP1.6	Deleted
	COP1.7	Deleted
COP2.	COP2	Change in language
COP2.a.		New objective element
COP2.b.	COP2.2	Language of the objective element and interpretation modified to make it clear

COP2.c.		New objective element
	COP2.1	Deleted
	COP2.3	Deleted
	COP2.4	Deleted
COP3.		New standard
COP3.a.		New objective element
COP3.b.		New objective element
COP3.c.		New objective element
COP3.d.		New objective element
COP3.e.		New objective element
COP3.f.		New objective element
COP3.g.		New objective element
	COP3.5	Deleted
COP4.		New standard
COP4.a.		New objective element
COP4.b.		New objective element
	COP4.3	Deleted
COP5.		New standard
COP5.a.		New objective element
COP5.b.		New objective element
	COP5.3	Deleted
COP6.	COP4	No change
COP6.a.	COP4.1	Language of the objective element and interpretation modified to make it clear
COP6.b.		New objective element
COP6.c.	COP4.2	Language of the objective element and interpretation modified to make it clear
COP7.	COP5	Change in language
COP7.a.		New objective element
COP7.b.		New objective element

COP7.c.	COP5.1	Language of the objective element and interpretation modified to make it clear
	COP5.2	Deleted
	COP5.4	Deleted
	COP5.5	Deleted
	COP5.6	Deleted
	COP5.7	Deleted
COP8.		New standard
COP8.a.		New objective element
COP8.b.		New objective element
COP8.c.		New objective element
COP8.d.		New objective element
COP8.e.		New objective element
COP8.f.		New objective element
COP8.g.		New objective element
COP9.		New standard
COP9.a.		New objective element
COP9.b.		New objective element
COP9.c.		New objective element
MOM.1.		New standard
MOM.1.a.		New objective element
MOM.1.b.		New objective element
MOM.1.c.		New objective element
MOM.1.d.		New objective element
MOM.1.e.		New objective element
MOM.1.f.		New objective element

	MDM1.1	Deleted
	MDM1.2	Deleted
	MIE1	Deleted
	MIE1.1	Deleted
	MIE1.2	Deleted
	MIE1.3	Deleted
	MIE1.5	Deleted
	MOM1.1	Deleted
MOM.2.	MDM2	Change in language
MOM.2.a.	MDM2.2	Language of the objective element and interpretation modified to make it clear
MOM.2.b.	MDM2.3	Language of the objective element and interpretation modified to make it clear
MOM.2.c.		New objective element
MOM.2.d.		New objective element
MOM.2.e.	MDM2.5 MOM1.2	Language of the objective element and interpretation modified to make it clear
MOM.2.f.	MDM2.6 MOM1.3	Language of the objective element and interpretation modified to make it clear
MOM.2.g.		New objective element
	MDM2.1	Deleted
	MDM2.4	Deleted
	MDM2.8	Deleted
MOM.3.		New standard
MOM.3.a.		New objective element
MOM.3.b.		New objective element
MOM.3.c.		New objective element
MOM.3.d.		New objective element
MOM.3.e.		New objective element
MOM.3.f.		New objective element



MOM.3.g.		New objective element
MOM.3.h.		New objective element
	MDM3.2	Deleted
	MOM3	Deleted
	MOM3.1	Deleted
	MOM3.2	Deleted
MOM.4.	MOM2	New standard
MOM.4.a.	MOM2.1	Language of the objective element and interpretation modified to make it clear
MOM.4.b.		New objective element
	MOM2.2	Deleted
MOM.5.		New standard
MOM.5.a.	MDM2.7	Language of the objective element and interpretation modified to make it clear
MOM.5.b.		New objective element
MOM.5.c.		New objective element
MOM.5.d.		New objective element
MOM.5.e.		New objective element
MOM.6.		New Standard
MOM.6.a.	MOM1.4	Language of the objective element and interpretation modified to make it clear
MOM.6.b.		New objective element
MOM.6.c.		New objective element
MOM.6.d.		New objective element
MOM.6.e.	MOM1.5	Language of the objective element and interpretation modified to make it clear
MOM.7.		New standard
MOM.7.a.		New objective element
MOM.7.b.		New objective element
MOM.7.c.		New objective element
MOM.7.d.		New objective element
MOM.7.e.		New objective element

MOM7.f.		New objective element
MOM.8.	MDM3	Change in language
MOM.8.a.	MDM3a	Language of the objective element and interpretation modified to make it clear
MOM.8.b.		New objective element
MOM.8.c.		New objective element
MOM.8.d.	MDM3.3	Language of the objective element and interpretation modified to make it clear
MOM.8.e.		New objective element
MOM.9.		New standard
MOM.9.a.		New objective element
MOM.9.b.		New objective element
MOM.9.c.		New objective element
MOM.9.d.	MIE1.4	Language of the objective element and interpretation modified to make it clear
MOM.9.e.		New objective element
PRE.1.	PRE1	Change in language
PRE.1.a.	PRE1a	Language of the objective element and interpretation modified to make it clear
PRE.1.b.		New objective element
PRE.1.c		New objective element
PRE.1.d.	PRE1.3	Language of the objective element and interpretation modified to make it clear
	PRE1.2	Deleted
PRE.2.	PRE2	Change in language
PRE.2.a.	PRE2.1	Language of the objective element and interpretation modified to make it clear
PRE.2.b.	PRE2.2	Language of the objective element and interpretation modified to make it clear
PRE.2.c.	PRE2.3	Language of the objective element and interpretation modified to make it clear
PRE.2.d.	PRE2.4	Language of the objective element and interpretation modified to make it clear

PRE.2.e.	PRE2.5	Language of the objective element and interpretation modified to make it clear
PRE.2.f.		New objective element
PRE.2.g.	PRE2.6	Language of the objective element and interpretation modified to make it clear
PRE.2.h.	PRE2.8	Language of the objective element and interpretation modified to make it clear
PRE.2.i.		New objective element
PRE.2.j.	PRE2.9	Language of the objective element and interpretation modified to make it clear
PRE.2.k.		New objective element
PRE.2.l.		New objective element
	PRE2.7	Deleted
PRE.3.		Change in language
PRE.3.a.		New objective element
PRE.3.b.		New objective element
PRE.3.c.		New objective element
PRE.3.d.		New objective element
PRE.3.e.		New objective element
PRE.3.f.		New objective element
	PRE3.1	Deleted
	PRE3.2	Deleted
PRE.4.	PRE3	Change in language
PRE.4.a.	PRE3.3	Language of the objective element and interpretation modified to make it clear
PRE.4.b.		New objective element
PRE.4.c.	PRE3.4	Language of the objective element and interpretation modified to make it clear
PRE.4.d.	PRE3.5	Language of the objective element and interpretation modified to make it clear
PRE.4.e.		New objective element
	PRE4.2	Deleted
PRE.5.	PRE4	Change in language

PRE.5.a.		New objective element
PRE.5.b.		New objective element
PRE.5.c.		New objective element
PRE.5.d.	PRE4.1	Language of the objective element and interpretation modified to make it clear
PRE.5.e.		New objective element
PRE.6.	PRE6	Change in language
PRE.6.a.	PRE6.1	Language of the objective element and interpretation modified to make it clear
PRE.6.b.	PRE6.2	Language of the objective element and interpretation modified to make it clear
PRE.6.c.	PRE6.3	Language of the objective element and interpretation modified to make it clear
PRE.6.d.	PRE6.4	Language of the objective element and interpretation modified to make it clear
PRE.7.		New standard
PRE.7.a.		New objective element
PRE.7.b.		New objective element
PRE.7.c.		New objective element
PRE.7.d.		New objective element
PRE.7.e.		New objective element
PRE.8.		New standard
PRE.8.a.		New objective element
PRE.8.b.		New objective element
PRE.8.c.		New objective element
PRE.8.d.		New objective element
PRE.8.e.		New objective element
IPC.1.		New standard
IPC.1.a.		New objective element
IPC.1.b.		New objective element
IPC.1.c.		New objective element
IPC1.d		New objective element

IPC.1.e.		New objective element
IPC.1.f.		New objective element
IPC.1.g.		New objective element
IPC.1.h.		New objective element
IPC.1.i.		New objective element
	IC1	Deleted
	IC1.1	Deleted
	IC1.2	Deleted
IPC.2.		New standard
IPC.2.a.		New objective element
IPC.2.b.		New objective element
IPC.2.c.		New objective element
IPC.2.d.		New objective element
IPC.2.e.		New objective element
IPC.2.f.		New objective element
IPC.2.g.		New objective element
	IC2	Deleted
	IC2.1	Deleted
	IC2.2	Deleted
	IC2.3	Deleted
	IC2.4	Deleted
	IC2.5	Deleted
	IC2.6	Deleted
	IC2.7	Deleted
	IC2.8	Deleted
	IC2.9	Deleted
	IC2.10	Deleted
	IC2.11	Deleted
	IC2.12	Deleted

IPC.3.		New standard
IPC.3.a.		New objective element
IPC.3.b.		New objective element
IPC.3.c.		New objective element
IPC.3.d.		New objective element
IPC.3.e.		New objective element
IPC.3.f.		New objective element
IPC.4.a.		New objective element
IPC.4.b.		New objective element
IPC.4.c.		New objective element
IPC.4.d.		New objective element
	IC4	Deleted
	IC4.1	Deleted
	IC4.2	Deleted
	IC4.3	Deleted
	IC4.4	Deleted
	IC4.5	Deleted
	IC4.6	Deleted
IPC.5.	IC3	Change in language
IPC.5.a.	IC3.1	Language of the objective element and interpretation modified to make it clear
IPC.5.b.	IC3.2	Language of the objective element and interpretation modified to make it clear
IPC.5.c.	IC3.3	Language of the objective element and interpretation modified to make it clear
IPC.5.d.		New objective element
IPC.5.e.	IC3.4	Language of the objective element and interpretation modified to make it clear
IPC.5.f.		New objective element
IPC.5.g.		New objective element
IPC.5.h.		New objective element

IPC.6.		New standard
IPC.6.a.		New objective element
IPC.6.b.		New objective element
IPC.6.c.		New objective element
IPC.6.d.		New objective element
IPC.6.e.		New objective element
PSQ.1.	CQI1	Change in language
PSQ.1.a.		New objective element
PSQ.1.b.	CQI1.2	Language of the objective element and interpretation modified to make it clear
PSQ.1.c.		New objective element
PSQ.1.d.		New objective element
PSQ.1.e		New objective element
PSQ.1.f.	CQI1.4	Language of the objective element and interpretation modified to make it clear
PSQ.1.g.		New objective element
	CQI1.1	Deleted
	CQI1.3	Deleted
PSQ.2.	CQI2	Change in language
PSQ.2.a.	CQI2.1	Language of the objective element and interpretation modified to make it clear
PSQ.2.b.		New objective element
PSQ.2.c.		New objective element
PSQ.2.d.	CQI2.2	Language of the objective element and interpretation modified to make it clear
PSQ.2.e.		New objective element
PSQ.2.f.		New objective element
PSQ.2.g.		New objective element
PSQ.2.h.		New objective element
	CQI2.3	Deleted
PSQ.3.		New standard
PSQ.3.a.		New objective element

PSQ.3.b.		New objective element
PSQ.3.c.		New objective element
PSQ.3.d.		New objective element
PSQ.4.		New standard
PSQ.4.a.		New objective element
PSQ.4.b.		New objective element
PSQ.4.c.		New objective element
PSQ.4.d.		New objective element
PSQ.4.e.		New objective element
PSQ.4.f.		New objective element
PSQ.5.		New standard
PSQ.5.a.		New objective element
PSQ.5.b.		New objective element
PSQ.5.c.		New objective element
PSQ.5.d.		New objective element
ROM.1.	ROM1	No change
ROM.1.a.	ROM1.1	Language of the objective element and interpretation modified to make it clear
ROM.1.b.		New objective element
ROM.1.c.		New objective element
ROM.1.d.		New objective element
ROM.1.e.		New objective element
ROM.1.f.		New objective element
ROM.1.g.		New objective element
	ROM1b	Deleted
	ROM1c	Deleted
ROM.2.	ROM2	Language of the objective element and interpretation modified to make it clear
ROM.2.a.	ROM2.2	Language of the objective element and interpretation modified to make it clear
ROM.2.b.		New objective element



ROM.2.c.	ROM2.3	Language of the objective element and interpretation modified to make it clear
ROM.2.d.	ROM2.4	Language of the objective element and interpretation modified to make it clear
	ROM2.1	Deleted
ROM.3.		New standard
ROM.3.a.		New objective element
ROM.3.b.		New objective element
	ROM3.1	Deleted
ROM.4.		New standard
ROM.4.a.		New objective element
ROM.4.b.		New objective element
ROM.4.c.		New objective element
ROM.4.d.		New objective element
ROM.5.		New standard
ROM.5.a.		New objective element
ROM.5.b.	ROM3.2	Language of the objective element and interpretation modified to make it clear
ROM.5.c.	ROM3.3	Language of the objective element and interpretation modified to make it clear
ROM.5.d.		New objective element
FMS.1.	FMS	Change in language
FMS.1.a.		New objective element
FMS.1.b.		New objective element
FMS.1.c.		New objective element
FMS.1.d.	FMS3.4	Language of the objective element and interpretation modified to make it clear
FMS.2.		New Standard
FMS.2.a.	FMS1.3	Language of the objective element and interpretation modified to make it clear
FMS.2.b.	FMS1.1	Language of the objective element and interpretation modified to make it clear
FMS.2.c.	FMS1.2	Language of the objective element and interpretation modified to make it clear

FMS.2.d.	FMS2.2	Language of the objective element and interpretation modified to make it clear
	FMS2.3	Deleted
	FMS2.4	Deleted
FMS.2.e.		New objective element
FMS.3.		New standard
FMS.3.a.		New objective element
FMS.3.b.		New objective element
FMS.3.c.		New objective element
FMS.3.d.		New objective element
FMS.3.e.		New objective element
FMS.4.		New Standard
FMS.4.a.	FMS2.1	Language of the objective element and interpretation modified to make it clear
FMS.4.b.		New objective element
FMS.4.c.		New objective element
FMS.4.d.		New objective element
FMS.4.e. FMS.4.f.	FMS3.3	Language of the objective element and interpretation modified to make it clear
FMS.4.g.		New objective element
FMS.5.	FMS2	Change in language
FMS.5.a.	FMS2.5	Language of the objective element and interpretation modified to make it clear
FMS.5.b.		New objective element
FMS.5.c.		New objective element
FMS.5.d.		New objective element
FMS.6.	FMS3	Change in language
FMS.6.a.	FMS3.1	Language of the objective element and interpretation modified to make it clear
FMS.6.b.		New objective element
FMS.6.c.	FMS3.2	Language of the objective element and interpretation modified to make it clear

FMS.6.d.		New objective element
HRM.1.	HRM1	No change
HRM1.a.	HRM1.1	Language of the objective element and interpretation modified to make it clear
HRM.1.b.		New objective element
HRM.1.c.	HRM1.2	Language of the objective element and interpretation modified to make it clear
HRM.1.d.		New objective element
HRM.1.e.		New objective element
	HRM1.3	Deleted
HRM.2.		New standard
HRM.2.a.		New objective element
HRM.2.b.		New objective element
HRM.2.c.		New objective element
HRM.2.d.		New objective element
	HRM2.2	Deleted
	HRM2.3	Deleted
	HRM2.4	Deleted
HRM.3.	HRM2	Change in language
HRM.3.a.		New objective element
HRM.3.b.	HRM2.1	Language of the objective element and interpretation modified to make it clear
HRM.3.c.		New objective element
HRM.3.d.		New objective element
HRM.3.e.		New objective element
HRM.3.f.	HRM2.5	Language of the objective element and interpretation modified to make it clear

	HRM3.3	Deleted
	HRM3.5	Deleted
HRM.4.	HRM3	Change in language
HRM.4.a.	HRM3.1	Language of the objective element and interpretation modified to make it clear
HRM.4.b.		New objective element
HRM.4.c.	HRM3.2	Language of the objective element and interpretation modified to make it clear
HRM.4.d.		New objective element
HRM.4.e.		New objective element
HRM.5.		New standard
HRM.5.a.		New objective element
HRM.5.b.		New objective element
HRM.5.c.		New objective element
HRM.5.d.		New objective element
HRM.5.e.		New objective element
HRM.5.f.		New objective element
HRM.6.		New standard
HRM.6.a.	HRM3.4	Language of the objective element and interpretation modified to make it clear
HRM.6.b.		New objective element
HRM.6.c.		New objective element
HRM.6.d.		New objective element
HRM.6.e.		New objective element
HRM.7.		New standard
HRM.7.a.		New objective element
HRM.7.b.		New objective element
HRM.7.c.		New objective element
HRM.7.d.		New objective element
HRM.7.e.		New objective element
HRM.7.f.		New objective element

HRM.8.		New standard
HRM.8.a.		New objective element
HRM.8.b.		New objective element
HRM.8.c.		New objective element
HRM.8.d.		New objective element
HRM.8.e.		New objective element
HRM.9.	HRM4	Change in language
HRM.9.a.	HRM4.1	Language of the objective element and interpretation modified to make it clear
HRM.9.b.		New objective element
HRM.9.c.	HRM4.2	Language of the objective element and interpretation modified to make it clear
HRM.9.d.	HRM4.3	Language of the objective element and interpretation modified to make it clear
HRM.10.	HRM5	Change in language
HRM.10.a.		New objective element
HRM.10.b.	HRM5.1	Language of the objective element and interpretation modified to make it clear
HRM.10.c.	HRM5.2	Language of the objective element and interpretation modified to make it clear
HRM.10.d.		New objective element
HRM.10.e.		New objective element
HRM.10.f.		New objective element
HRM.11.		New standard
HRM.11.a.		New objective element
HRM.11.b.		New objective element
HRM.11.c.		New objective element
HRM.11.d.		New objective element
HRM.11.e.		New objective element
IMS.1.		New standard

IMS.1.a.		New objective element
IMS.1.b.		New objective element
IMS.1.c.		New objective element
IMS.1.d.		New objective element
	IMS1.2	Deleted
IMS.2.		New standard
IMS.2.a.		New objective element
IMS.2.b.		New objective element
IMS.2.c.		New objective element
IMS.2.d.		New objective element
IMS.2.e.		New objective element
	IMS2.2	Deleted
IMS.3.	IMS1	No change
IMS.3.a.	IMS1.1	Language of the objective element and interpretation modified to make it clear
IMS.3.b.		New objective element
IMS.3.c.		New objective element
IMS.3.d.		New objective element
IMS.3.e.		New objective element
IMS3.f.		New objective element
IMS.4.		New standard
IMS.4.a.		New objective element
IMS.4.b.		New objective element
IMS.4.c.		New objective element
IMS.4.d.		New objective element
IMS.4.e.		New objective element
IMS.4.f.		New objective element
IMS.5.	IMS2	Change in language

IMS.5.a. IMS.5.b.	IMS2.1	Language of the objective element and interpretation modified to make it clear
IMS.5.c.	IMS2.3	Language of the objective element and interpretation modified to make it clear
IMS.5.d.		New objective element
IMS.5.e.	IMS2.4	Language of the objective element and interpretation modified to make it clear
IMS.6.		New standard
IMS.6.a.		New objective element
IMS.6.b.		New objective element
IMS.6.c.		New objective element
IMS.6.d.		New objective element
IMS.7.	IMS3	No change
IMS.7.a.	IMS3.1	Language of the objective element and interpretation modified to make it clear
IMS.7.b.		New objective element
IMS.7.c.		New objective element
IMS.7.d.	IMS3.2	Language of the objective element and interpretation modified to make it clear
IMS.7.e.		New objective element
IMS.7.f.	IMS3.3	Language of the objective element and interpretation modified to make it clear

## Abbreviations

ACLS:	Advanced Cardiac Life Support
AERB:	Atomic Energy Regulatory Board
AHRQ:	Agency for Healthcare Research and Quality
AHU:	Air Handling Unit
ALARA:	As Low As Reasonably Achievable
BLS:	Basic Life Support
BMW:	Bio-Medical Waste
BP:	Blood Pressure
CAPD:	Continuous Ambulatory Peritoneal Dialysis
CCTV:	Closed-Circuit Television
CDC:	Centres for Disease Control and Prevention
CPR:	Cardio-Pulmonary Resuscitation
CSSD:	Central Sterile Services Department
CT:	Computerised Tomography
DG:	Diesel Generator
ECG:	Electrocardiogram
EMR:	Electronic Medical Record
EPR:	Electronic Patient Record
EQA:	External Quality Assurance
ETO:	Ethylene Oxide
ETP:	Effluent Treatment Plant
FCU:	Fan Coil Unit
FDA:	Federal Drug Authority
FMEA:	Failure Modes and Effects Analysis
GNM:	General Nursing and Midwifery
HAI:	Healthcare-Associated Infection
HAZMAT:	Hazardous Material
HDU:	High Dependency Unit
HIRA:	Hazard Identification and Risk Analysis



HIS:	Hospital Information System
HISI:	Hospital Infection Society-India
HIV:	Human Immunodeficiency Virus
HT:	High Tension
HTM:	Health Technical Memorandum
HVAC:	Heating Ventilation and Air Conditioning
HvPI:	Haemo Vigilance Programme of India
ICD:	International Classification of Diseases
ICN:	Infection Control Nurse
ICO:	Infection Control Officer
ICU:	Intensive Care Unit
ID:	Identification Data
IP:	In-Patient
IPD:	In-Patient Department
IPHS:	Indian Public Health Standards
ISMP:	Institute for Safe Medication Practices
ISO:	International Organisation for Standardization
IT:	Information Technology
IV:	Intravenous
LAMA:	Leaving Against Medical Advice
LASA:	Look-Alike Sound-Alike
LIS:	Laboratory Information System
LPG:	Liquefied Petroleum Gas
LT:	Low Tension
MBBS:	Bachelor of Medicine and Bachelor of Surgery
MCI:	Medical Council of India
MDRO:	Multi-Drug Resistant Organisms
MLC:	Medico-Legal Case
MoU:	Memorandum of Understanding
MRD:	Medical Records Department
MRI:	Magnetic Resonance Imaging
MRSA:	Methicillin-Resistant Staphylococcus aureus

MSDS:	Material Safety Data Sheet
MTP:	Medical Termination of Pregnancy
MvPI:	Materio-Vigilance Programme of India
NACO:	National AIDS Control Organisation
NALS:	Neonatal Advanced Life Support
NDMA:	National Disaster Management Authority
NFPA:	National Fire Protection Association
NICU:	Neonatal Intensive Care Unit
OP:	Out-Patient
OPD:	Out-Patient Department
OT:	Operation Theatre
PALS:	Paediatric Advanced Life Support
PC-PNDT:	Pre-Conception and Pre-Natal Diagnostic Testing
PDSA:	Plan Do Study Act
PICU:	Paediatric Intensive Care Unit
PPE:	Personal Protective Equipment
PROM:	Patient Reported Outcome Measures
PvPI:	Pharmaco-Vigilance Programme of India
RIS:	Radiological Information System
RO:	Reverse Osmosis
RTI:	Right To Information
SBAR:	Situation, Background, Assessment, Recommendation
SHEA:	Society for Healthcare Epidemiology of America
SOP:	Standard Operating Procedure
STG:	Standard Treatment Guideline
STP:	Sewage Treatment Plant
TLD:	Thermo Luminescent Dosimeter
TPR:	Temperature, Pulse and Respiratory Rate
UPS:	Uninterrupted Power Supply
VRE:	Vancomycin-Resistant Enterococci
WHO:	World Health Organization

## **Section A:**

# **Accreditation Standards for Dental Hospitals & Educational Institutions**

# Chapter 1

## Access, Assessment and Continuity of Care (AAC)



**Intent of the chapter:** The intent of this chapter is to provide the understanding of scope of services required for the dental healthcare service providers in consonance with the needs of the community, registration process, mechanism for referral of patients/ requisition of outside specialist services for patients whose treatment needs are not in the scope, standardization of initial assessment for dental patient, regular reassessment during treatment at regular interval, infrastructure, safety and quality assurance program for dental laboratory, pathology lab and imaging services commensurate with the scope of services. Patient care is continuous and multidisciplinary.

### Summary of Standards

AAC.1.	The DHSP defines and displays the services that it provides.
AAC.2.	The DHSP has a well-defined registration and record-keeping process.
AAC.3.	There is an appropriate mechanism for referral of patients/ requisition of outside specialist services for patients whose treatment needs are not in the scope of the DHSP.
AAC.4.	Patients undergo an established initial assessment.
AAC.5.	Patients cared for by the organisation undergo a regular reassessment.
AAC.6.	Policies and procedures guide the in-house dental laboratory services offered at DHSP or outsourced to an independent dental laboratory.
AAC.7.	There is an established dental laboratory quality assurance programme.
AAC.8.	There is an established dental laboratory safety programme.
AAC.9.	Pathology Laboratory services are provided in house /out-sourced as per the policy of DHSP.
AAC.10.	There is an established quality assurance and safety programme for in house pathology laboratories.
AAC.11.	Imaging services are provided as per the requirements of the patients.
AAC.12.	There is an established quality assurance and radiation safety program for imaging services.
AAC.13.	The organisation has an established discharge process.
AAC.14.	The organisation defines the content of the discharge summary.
AAC.15.	Patient care is continuous and multidisciplinary in nature.

Objective Element	AAC1	AAC2	AAC3	AAC4	AAC5	AAC6	AAC7	AAC8	AAC9	AAC10	AAC11	AAC12	AAC13	AAC14	AAC15
a.	Commitment	Commitment	Commitment	Core	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Core	Commitment	Commitment	Commitment	Commitment
b.	Commitment	Core	Commitment	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
c.	Commitment	Commitment	Commitment	Commitment	Achievement	Commitment	Excellence	Commitment	Commitment	Commitment	Commitment	Achievement	Commitment	Commitment	Commitment
d.		Achievement		Achievement	Commitment	Commitment		Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
e.						Commitment			Commitment	Commitment	Commitment	Commitment	Achievement	Commitment	
f.						Commitment			Commitment		Commitment	Commitment	Excellence	Achievement	
g.						Commitment			Commitment		Commitment				
h.						Commitment					Commitment				
i.						Commitment									

## Standard

### AAC.1.

The DHSP defines and displays the services that it provides.

## Objective Elements

### Commitment

- a. **The services being provided are clearly defined and are in consonance with the needs of the community.**

**Interpretation:** The services provided are defined by senior management and are in consonance with the requirements of the community. The needs of the community should be considered when planning new dental services and could be captured through various feedback mechanisms. However, this does not preclude the organisation from starting new services based on its own judgment.

### Commitment

- b. **Scope of the oral and dental care services of each department is defined.**

**Interpretation:** Each department's scope is defined. The scope could be by inclusion or exclusion in relation to the services practised in the department. The organisation could have a brochure detailing the scope of each department. For example, Oral and Maxillo-facial department could do all activities like dento-alveolar surgery, surgical correction of maxillofacial skeletal deformities, orthognathic surgery, cleft and craniofacial surgery, maxillofacial trauma etc.

### Commitment

- c. **The defined services are prominently displayed.**

**Interpretation:** DHSP should display the name of the dental surgeons and clinical /diagnostic services of the department. This should be displayed prominently in an area visible to all patients and visitors. The display could be in the form of boards, citizen's charter, etc. It should be permanent. Electronic displays could be used by the organisation. The display should be at least bi-lingual (State language/language spoken by the majority of people in that area and English). Dissemination of information can be supplemented by the use of brochures and standees. The display should be readable from a distance and be appropriate for the patients and visitors.

## Standard

**AAC.2.**
**The DHSP has a well-defined registration and record-keeping process.**

## Objective Elements

### Commitment

#### a. DHSP uses written guidance for registering and admitting (if required) patients.

**Interpretation:** The organisation shall prepare a document(s) detailing the mechanism for registration and admission of patients. All patients who are assessed in the DHSP shall be registered. The organisation could consider mechanisms to verify the identity of the patient during registration. The written guidance addresses out-patients, day-care, in-patients and emergency patients. The patients and/or family are informed of the salient steps for registration/admission. This could be done through appropriate displays/information on the website.

### CORE

#### b. A unique identification number is generated at the end of the registration.

**Interpretation:** The organisation shall ensure that every patient gets a unique number which is generated at the end of registration of the first interaction that the patient has with the organisation. This number shall be used for identification of the patient across the organisation and to ensure continuity of care across the organisation. All oral and dental records of the patient shall have this number. "Unique" implies that this is a one-time affair.

### Commitment

#### c. Patients are accepted only if the DHSP can provide the required service.

**Interpretation:** The staff handling registration needs to be aware of the services that the DHSP can provide. It is also advisable to have a system wherein the staff is aware as to whom to contact, if they need any clarification on the services provided. In case of emergency, life-saving treatment shall be initiated before any decision is taken regarding acceptance.

### Achievement

#### d. Prioritisation of oral and dental services is done as per the clinical needs of the patients.

**Interpretation:** Oral and dental problems should be identified and prioritised as per the need of patients in all care settings (outpatient, in-patient, emergency and diagnostic services). For example, a geriatric patient waiting in the OPD who complains of dental pain is seen as soon as possible; a vulnerable patient coming for a treatment is fast-tracked. All the staff handling these activities should be oriented to the applicable guidelines.

## Standard

### AAC.3.

**There is an appropriate mechanism for referral of patients/ requisition of outside specialist services for patients whose treatment needs are not in the scope of the DHSP.**

## Objective Elements

### Commitment

- a. **Written guidance governs the transfer out / referral of patients to another facility or requisition of outside specialist to DHSP for patients whose treatment needs are not in the scope of the DHSP.**

**Interpretation:** Written guidance should address the methodology of transfer out/ referral of the patient to another DHSP the requisition of outside specialist should be informed to the patient with reasons of transfer/ referral or dis-continuation of treatment before being referred to another DHSP. It also includes patients being shifted for diagnostic tests. The transfer should be done in a safe manner which includes pre-transfer stabilisation where appropriate, choosing the mode/vehicle for transport, equipment and monitoring required during the transfer. In case the organisation is unable to meet some of the stated requirements, the reasons for the same shall be documented.

### Commitment

- b. **During transfer or referral, accompanying staff are appropriate to the clinical condition of the patient.**

**Interpretation:** The staff accompanying shall be trained in basic or advanced cardiopulmonary resuscitation as may be appropriate. Further, the staff identified should be aware of the transfer procedure.

### Commitment

- c. **The DHSP gives a case summary of patient's condition and the treatment given while transferring/ referring patient.**

**Interpretation:** The DHSP gives a case summary mentioning the significant findings and treatment given in case of patients who are being transferred out/ referred for diagnostic and therapeutic purposes. In case of a patient being discharged from the organisation and transferred out, a discharge summary is given to such patients, including those patients going against medical advice. A copy of the same shall be retained by the organisation.



## Standard

**AAC.4.**
**Patients undergo an established initial assessment.**

## Objective Elements

### CORE

- a. **The DHSP defines the content of the initial assessments for the out-patients, in-patients and emergency patients.**

**Interpretation:** The DHSP shall have a standardised format for initial assessment of patients in the OPD which includes chief complaint, Dental and medical history, Dental notation, Drug allergy, intra-oral and extra oral examination, Differential diagnosis, habits especially any disease/habit affecting the prognosis and dental treatment plan indicating related special needs during dental treatment, Investigation (if any) etc. The initial assessment could be standardised across the DHSP, or it could be modified depending on the need of the department. However, it shall be the same for all the patients in that department. For in-patients, this should cover history, examination, including vital signs and documentation of any drug allergies. It should mention the provisional diagnosis. If a detailed assessment has been done earlier in OPD, it need not be written in detail again. However, there shall be a comment linking the assessment to the earlier assessment, and the findings of all such assessments shall be reviewed and/or verified.

### CORE

- b. **The initial assessment is performed by a qualified dentist. \***

**Interpretation:** DHSP determines who can do what assessment. Dental caregivers perform initial assessment within their scope of practice, registration and applicable laws.

### Commitment

- c. **Initial assessment is performed within a time frame based on the needs of the patient. \***

**Interpretation:** The DHSP shall define and document the time frame within which the initial assessment shall be completed concerning out patient, day-care and in-patients (If applicable); and the same shall be implemented. In the case of in-patients, the time frame shall be from the time the patient arrives at the ward until the initial assessment is completed. The maximum time within which the initial assessment is completed for an in-patient is 24 hours. Patients may be assessed earlier depending upon the clinical need.

In the case of OPD, the time frame shall be from the time the patient arrives at the reception until the initial assessment is completed.

**Achievement**

- d. **The initial assessment results in a documented plan of care including preventive/maintenance aspects of the dental care.\***

**Interpretation:** This shall be documented by the treating dentist or by a dental surgeon of his treating team in the case record and should cover preventive/maintenance actions as necessary in the case and should include follow-up recall visits, oral hygiene instructions (OHI), diet, drugs, habits etc. DHSP should have written policy and procedure identifying staff responsible for scheduling of such appointments and treatment undertaken during these appointments. Patient should be educated, informed verbally as well as given a written record of scheduled appointments for preventive/maintenance dental care.

**Standard****AAC.5.****Patients cared for by the organisation undergo a regular reassessment.****Objective Elements****CORE**

- a. **All patients are reassessed at appropriate intervals.**

**Interpretation:** After the initial assessment, the patient is reassessed periodically and this is documented in the case records. The frequency may be different for different cases based on the dental treatment plan and the patient's medical condition. The DHSP shall ensure that the care of patients is always given by appropriately qualified dental personnel (resident dentist, dental surgeon, medical consultant and/or nurse).

**Commitment**

- b. **Out-patients are informed of their next follow-up, where appropriate.**

**Interpretation:** The information could be either in terms of a specific date or after a certain period (weeks/months) and shall be documented in the dental record/ OPD consultation sheet. This may not be applicable in cases where the patient has come for just an opinion or the patient's condition does not warrant a repeat visit.

**Achievement****c. Staff involved in direct clinical care documents reassessments.**

**Interpretation:** Actions taken under reassessment are documented. The staff could be the treating dentist or any member of the team as per their domain of responsibility of care. At a minimum, the documentation shall include oral health, Pain score and medication orders (If Necessary). Patient's vitals can be included. Only phrases like "Ok", "all well" would not be acceptable.

**Commitment****d. Patients are re-assessed to determine their response to treatment and to plan further treatment/referral.**

**Interpretation:** Peer review meets within the DHSP should be undertaken and any observations/ suggestions documented and considered while reassessing patient treatment plan.

**Standard****AAC.6.**

**Policies and procedures guide the in-house dental laboratory services offered at DHSP or outsourced to an independent dental laboratory.**

**Objective Elements****Commitment****a. The scope of the dental laboratory services is commensurate to the services provided by the DHSP.**

**Interpretation:** The DHSP should ensure availability of dental laboratory services commensurate with the Oral and Dental services it offers. For example, denture, porcelain fused to metal crowns, dental appliances etc for geriatric and endodontics patients. The organisation shall ensure that these services are available within a defined timeline and patient care is not disrupted.

**Commitment****b. The infrastructure (physical and equipment) is adequate to provide the defined scope of services.**

**Interpretation:** The dental lab shall have adequate space and equipment to meet its defined scope of services. Lab work should not get delayed due to lack of adequate equipment. The layout of the laboratory prevents cross-contamination.

**Commitment****c. Manpower resource is adequate to provide the defined scope of services.**

**Interpretation:** The number of dental lab technician should be commensurate with the workload with sufficient staff. Dental Lab work should not get delayed due to lack of adequate human resource (including personnel authorised for lab work).

**Commitment****d. Adequately qualified and skilled personnel perform and supervise the work.**

**Interpretation:** The dental technician employed in the lab should be suitably qualified (appropriate degree) and skilled to fabricate crowns, bridges, dentures, and orthodontic appliances based on the prescription of a dentist.

**Commitment****e. Requisition for patient model and prosthesis, collection, identification, handling, safe transportation, processing and disposal of dental impression and dental waste material is performed according to written guidance.\***

**Interpretation:** The DHSP has written guidance for requisition, collection, identification, handling, safe transportation, processing, and disposal of the model and impression, to ensure the safety of the model and impression till the fabrication of the final prostheses or corrective devices are completed (observing standard and special precautions). The DHSP shall ensure that the unique identification number is used for identification of the patient. The disposal of waste shall be as per the statutory requirements (Bio-medical waste management and handling rules).

**Commitment****f. Dental lab work should be available within a defined time frame.\***

**Interpretation:** The DHSP shall define the turnaround time for all dental lab work. The dental lab should ensure the availability of adequate staff, materials and equipment to make final lab work available within the defined time frame. The turnaround time could be different for different lab work and could be decided based on the dental treatment planned.

**Commitment****g. Good manufacturing practices are used by the dental laboratory in all its practices.**

**Interpretation:** Policy should be formulated to identify proven, standard materials (e.g., ADA/CE/BIS certified), processes and equipment and incorporate them for achieving quality.

**Commitment****h. Corrections and alterations are attended to through a structured and time-based programme.**

**Interpretation:** The dental lab shall maintain a log book to record repetition of dental lab work.

**Commitment****I. Laboratory tests not available in the organisation are outsourced to the organisation(s) based on their quality assurance system. \***

**Interpretation:** The organisation has written guidance for outsourcing dental lab work for which it has no facilities. This should include:

- A list of dental work for outsourcing.
- Identity of personnel in the outsourced facilities to ensure safe and timely transportation of lab work and complete within define timeline.
- Manner of the packaging of the models and impression and their labelling for identification and this package should contain the work requisition with all details as required for prostheses.
- A methodology to check the performance of service rendered by the outsourced dental laboratory, as per the requirements of the DHSP.
- The organisation shall have a Memorandum of Understanding (MoU)/agreement for the same, which incorporates quality assurance and requirements of this standard.

**Standard****AAC.7.****There is an established dental laboratory quality assurance programme.****Objective Elements****Commitment****a. The dental laboratory quality assurance programme is implemented. \***

**Interpretation:** The DHSP has a documented quality assurance programme to check the quality of dental material and lab work. There is a mechanism to obtain feedback from various departments to evaluate the dental laboratory work at least once a year.

**Commitment****b. The programme includes periodic calibration and maintenance of equipment. \***

**Interpretation:** The frequency of calibration and maintenance shall be as per the equipment manufacturer's/professional bodies' recommendation. Traceability certificate(s) of all calibration done shall also be documented and maintained. This shall also include point of care equipment wherever feasible.

**Excellence****c. The programme addresses dento -prosthetic meeting(s).**

**Interpretation:** The DHSP conducts dento-prosthetic meeting(s) at pre-defined intervals for correlating the dental Lab work with referring lab technician and uses the same as a tool for improving quality.

**Standard****AAC.8.****There is an established dental laboratory safety programme.****Objective Elements****Commitment****a. The dental laboratory safety programme is implemented. \***

**Interpretation:** Dental laboratory safety manual is available in the laboratory. This takes care of the safety of the workforce as well as the equipment available in the laboratory. It shall be in consonance with the risks and hazards identified. The manual should incorporate the appropriate Material Safety and Data Sheet (MSDS). The laboratory safety programme could be as per Occupational Health and Safety Management System.

**Commitment****b. This programme is aligned with the organisation's safety programme.**

**Interpretation:** Dental laboratory safety programme is aligned with the safety programme of the organisation. The broad principles shall be the same as that of the organisation's safety programme.

**Commitment****c. Laboratory personnel are appropriately trained in safe practices.**

**Interpretation:** All the dental laboratory staff undergo training regarding safe practices in the laboratory as well as in the relevant MSDS. The training need identification must be commensurate to the job description of the staff.

**Commitment****d. Dental laboratory personnel are provided with appropriate safety measures.**

**Interpretation:** Adequate safety measures are available in the dental lab. e.g. PPE, dressing materials, disinfectants, fire extinguishers etc. It should address safety issues at all levels. All laboratory personnel shall always adhere to standard precautions. All lab staff shall be appropriately immunised.

## Standard

**AAC.9.**

**Pathology laboratory services are provided in house /out-sourced as per the policy of DHSP.**

## Objective Elements

### Commitment

- a. Scope of the laboratory services is commensurate to the services provided by the DHSP.**

**Interpretation:** The DHSP should ensure availability of laboratory services commensurate with the need of oral and dental services it offers. For example, CBC (Complete Blood Count) required for oral and maxillo-facial surgeries. The organisation shall ensure that these services are available round the clock, and patient care is not disrupted. Test results required for emergency management must be available within its premises.

### Commitment

- b. The infrastructure (physical and equipment) is adequate to provide the defined scope of oral and dental services.**

**Interpretation:** Laboratory shall have adequate space and equipment to meet its defined scope of oral and dental services. Reports should not get delayed due to lack of adequate equipment. The layout of the laboratory prevents cross-contamination.

### Commitment

- c. If lab services are to be provided in-house, adequately qualified and trained personnel perform and/or supervise the investigations.**

**Interpretation:** The number of laboratory personnel should be suitably qualified (appropriate degree), trained and commensurate with the workload with sufficient staff. Reports should not get delayed due to lack of adequate human resource (including personnel authorised to report results). Oral pathologist, microbiologist and biochemist supervise the staff. Statutory requirements regarding authorised signatory shall have to be adhered to.

### Commitment

- d. Requisition for tests, collection, identification, handling, safe transportation, processing and disposal of a specimen is performed according to written guidance. \***

**Interpretation:** The DHSP has written guidance for requisition, collection, identification, handling, safe transportation, processing, and disposal of the specimen, to ensure the safety of the specimen till the tests and retests (if required) are completed (observing standard and special precautions). The organisation shall ensure that the unique identification number is used for identification of the patient. Also, it could use another number (for example, lab number) to identify the sample. The disposal of waste shall be as per the statutory requirements (Bio-medical waste management and handling rules).

**Commitment****e. Laboratory results are available within a defined time frame.**

**Interpretation:** The organisation shall define the turnaround time for all tests. The organisation should ensure the availability of adequate staff, materials and equipment to make the laboratory results available within the defined time frame. The turnaround time could be different for different tests and could be decided based on the nature of the test, the criticality of test and urgency of test result (as desired by the treating doctor).

**Commitment****f. Critical results are intimated immediately to the concerned personnel.**

**Interpretation:** The laboratory shall establish its biological reference intervals for different tests. The laboratory shall establish and document critical limits for tests which require immediate attention for patient management, and the same shall be documented. If it is not practical to establish the biological reference interval for a particular analysis, the laboratory should carefully evaluate the published data for its reference intervals. Critical results of outsourced investigations are also included.

**Commitment****g. Laboratory tests are outsourced from DHSP(s) based on their quality assurance system.**

**Interpretation:** The DHSP has documented procedure for outsourcing tests for which it has no facilities. This should include:

- List of tests for outsourcing
- Identity of personnel in the outsourced facilities to ensure safe transportation of specimens and completion of tests of the patient concerned, as per requirements and receipt of results at DHSP.
- Manner of packaging of the specimens and their labelling for identification. The package should contain the test requisition with all details as required for testing.
- The organisation shall have a Memorandum of Understanding (MoU)/agreement for the same, which incorporates quality assurance and requirements of this standard.

**Standard****AAC.10.**

**There is an established quality assurance and safety programme for in house pathological laboratories.**



## Objective Elements

### Commitment

#### a. The laboratory quality assurance program is implemented.

**Interpretation:** The organisation has a documented quality assurance programme. Quality assurance includes internal quality control, external quality assurance, pre-analytic phase, test standardisation, post-analytic phase, management and organisation. The laboratory shall participate in external quality assurance programme when available. When such programmes are not available, the laboratory may exchange samples with another laboratory for purposes of peer comparison. There is a mechanism to obtain feedback from various stakeholders to evaluate the laboratory services at least once a year.

### Commitment

#### b. The programme ensures the quality of test results. \*

**Interpretation:** Ensuring the quality of test results includes performing internal quality controls to ensure precision and repeatability. It also includes inter-laboratory comparisons like external quality assurance (EQA)/Proficiency Testing.

A good reference guide is ISO 15189: 2012.

### Commitment

#### c. The program includes periodic calibration and maintenance of all equipment.

**Interpretation:** The frequency of calibration and maintenance shall be as per the equipment manufacturer's/professional bodies' recommendation. Traceability certificate(s) of all calibration done shall also be documented and maintained. This shall also include point of care equipment wherever feasible.

### Commitment

#### d. The program includes the documentation of corrective and preventive actions.

**Interpretation:** Corrective and preventive actions are taken to address the deviations.

### Commitment

#### e. The laboratory safety program is implemented.

**Interpretation:** A laboratory safety manual is available in the laboratory. This takes care of the safety of the workforce as well as the equipment available in the laboratory. It shall be in consonance with the risks and hazards identified. The manual should incorporate the appropriate Material Safety and Data Sheet (MSDS). The laboratory safety programme could be as per Occupational Health and Safety Management System.

## Standard

AAC.11.

Imaging services are provided as per the requirements of the patients.

## Objective Elements

### CORE

#### a. Imaging services comply with legal and other requirements.

**Interpretation:** The organisation is aware of the legal and other requirements of imaging services and the same are documented for information and compliance by all concerned in the organisation. The organisation maintains and updates its compliance status of legal and other requirements in a regular manner. All the statutory requirements are met with, such as Atomic Energy Regulatory Board (AERB) clearance, dosimeters, lead shields, lead aprons, signage, reports to the competent authority, etc. The organisation shall have a Radiation Safety Officer (of appropriate level).

#### Commitment

#### b. Scope of the imaging services are commensurate to the services provided by the DHSP.

**Interpretation:** The DHSP should ensure availability of imaging services commensurate with the oral and dental care services it offers. For example, a DHSP providing orthodontic treatment should have facilities for OPG (Orthopantomography). Imaging services may be provided within the organisation, outsourced to another organisation or both. The key aspect that needs to be ensured is the safe transfer of the patient and the imaging reports being available on time.

#### Commitment

#### c. The infrastructure (physical and equipment) and human resources of the imaging services are adequate to provide for the defined scope of services.

**Interpretation:** Imaging services shall have adequate space and equipment to meet their defined scope of services. Reports should not get delayed due to lack of adequate equipment or human resources (including personnel authorised to report results).

#### Commitment

#### d. Adequately qualified and trained personnel perform and/or supervise the investigations.

**Interpretation:** AERB guidelines could be used as a reference document for radiation-based imaging.

**Commitment****e. Imaging results are available within a defined time frame.**

**Interpretation:** The DHSP shall document turnaround time of imaging results for all modalities. The organisation shall monitor the waiting times, time taken to perform the tests and time taken to prepare the reports of the tests for all modalities. The defined timeframes could be different for different types of tests and could be decided based on the nature of the test, modality, and criticality of the test and the urgency of the test result (as required by the treating dental surgeon).

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**Commitment****f. Critical results are intimated immediately to the concerned personnel.**

**Interpretation:** The organisation shall define and document the critical results which require immediate attention for patient management and the same shall be documented, for example, TMJ Disorders. The critical results must be documented for each modality of imaging. Critical results of outsourced investigations shall also be intimated. The critical test results shall be communicated to a person from the treating team (treating dental Surgeon/member of treating team) at the earliest, but not later than one hour after completion of the test/report being ready. Imaging services in-charge identifies suitable personnel to report critical results. The intimation includes the name of the patient; Unique ID; date and time of imaging; investigation name, result; operator identity of who has communicated the value; the identity of the recipient; read-back and date and time of acknowledgement. This shall be documented. In the case of electronic health systems, system-generated critical result reporting can supplement the physical reporting of critical results.

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**Commitment****g. Results are reported in a standardised manner.**

**Interpretation:** At a minimum, the report shall include the name of the DHSP (or in case of an outsourced imaging centre, the name of the same), the patient's name, the unique identification number, and the name and signature of the person reporting the test result. In case of teleradiology, there shall be the name of the reporting doctor and a remark to that effect. It should also include the name of the reporting organisation if outsourced to an organisation. All reports from the outsourced imaging centre shall incorporate these features, and the DHSP shall not alter/modify anything in the report. The report should be in the prevailing context, taking into account the clinical details and results of any previous imaging.

**Commitment****h. Imaging tests not available in the DHSP are outsourced based on their quality assurance system.**

**Interpretation:** The DHSP has written guidance for outsourcing tests for which it has no facilities. This should include:

- List of tests for outsourcing.
- Identity of personnel in the outsourced facilities to ensure the safe transportation of patients and completing of imaging results.
- Manner of identification of patients and the test requisition with all details as required for testing and a methodology to check the selection and performance of service rendered by the outsourced imaging facility as per the requirements of the DHSP.
- The organisation shall have an MoU/agreement for the same, which incorporates quality assurance and requirements of this standard.

**Standard****AAC.12.**

**There is an established quality assurance and radiation safety program for imaging services.**

**Objective Elements****Commitment****a. The quality assurance program for imaging services is implemented.**

**Interpretation:** The quality assurance programme should be a comprehensive programme addressing equipment, protocols, surveillance and safety. Also, statutory (AERB) requirements will have to be met.

**Commitment****b. Quality assurance programme includes the review of imaging protocols.**

**Interpretation:** The review of imaging protocols ensures optimum image quality with minimum possible dosage to the patient(s). The imaging protocols should be in accordance with guidelines given by professional bodies/academic literature and where relevant based on the clinical diagnosis.

**Commitment**

- c. **The programme addresses periodic internal/external peer review of imaging results using appropriate sampling.**

**Interpretation:** A peer review system is in place to review the imaging results of OPG and CBCT. The peer review shall be done in a structured manner, and the sample size and periodicity for each modality shall be defined by the DHSP. However, at a minimum, this shall be one percent. The peer review can be performed by the head of the department or by a group of peers, with blinding of the original reports. Discrepancies in the reports will be graded on the severity and impact on changes in patient management strategy, and the corrective and preventive actions taken to minimise these will be documented. The purpose is to prevent errors in future, and continuous quality improvement rather than computation or error rates of the individuals. The results of such reviews could be discussed with all stakeholders in “discrepancy meetings”, and the same shall be documented.

**Commitment**

- d. **The program includes periodic calibration and maintenance of all equipment.**

**Interpretation:** Quality Assurance, including calibration and maintenance of all equipment, will be performed as per AERB guidelines, as well as the manufacturer's recommendations/guidelines from professional bodies and records of the same shall be maintained. All such activities will be performed by persons who are appropriately trained and certified by the regulatory authorities for this purpose. Traceability certificates of all calibrations done by calibrated equipment shall be maintained.

**Commitment**

- e. **The program includes the documentation of corrective and preventive actions.**

**Interpretation:** In case of any deviations noted from the laid down quality assurance programme, the organisation shall institute corrective and preventive actions as may be appropriate.

**Commitment**

- f. **The radiation safety program is implemented as per AERB guidelines.**

**Interpretation:** The programme shall be in consonance with the guidelines laid down by AERB. The programme also includes the implementation of “As Low As Reasonably Achievable” (ALARA) principle in investigations involving radiation and screening of those patients who are at high risk for radiation. Imaging personnel are provided with appropriate radiation safety devices. Staff directly working with radiation sources shall possess and use Thermo Luminescent Dosimeters (TLD) badges. Radiation safety devices are periodically tested and documented. Imaging signage are prominently displayed in all appropriate locations. Imaging personnel are trained in radiation safety measures

## Standard

**AAC.13.**
**The organisation has an established discharge process.**

### Objective Elements

**Commitment**

- a. The patient's discharge process is planned in consultation with the patient and/or family.**

**Interpretation:** The patient's treating dental surgeon determines the readiness for discharge during regular reassessments. The same is discussed with the patient and family.

**Commitment**

- b. The discharge process is coordinated among various departments and agencies involved (including medico-legal and absconded cases). \***

**Interpretation:** The discharge procedures are documented to ensure coordination amongst various departments, including accounts so that the discharge papers are completed well within time. For medico-legal cases (MLC), the organisation shall ensure that the police are informed.

**Commitment**

- c. Written guidance governs the discharge of patients leaving against medical advice. \***

**Interpretation:** The treating doctor should explain the consequences of this action to the patient/attendant. The written guidance could address the reasons for leaving against medical advice (LAMA) for any possible corrective and/or preventive action by the organisation.

**Commitment**

- d. A discharge summary is given to all the patients leaving the organisation (including patients leaving against medical advice).**

**Interpretation:** The organisation hands over the discharge summary and reports to the patient/attendant in all cases and a copy is retained in the medical record. In LAMA cases, the patient's right to refuse treatment and his/her request to leave the organisation is respected, the declaration of the patient/attendant is to be recorded in a proper format, and a discharge summary and all reports are handed over as usual. The terminology used to refer to such patients may differ, but the intent of issuing the discharge summary with reports remains the same.

**Achievement****e. The organisation adheres to planned discharge.**

**Interpretation:** Discharge is planned at least 24 hours in advance. Planning shall include preparation of the draft discharge summary, refund of medications, patient education on continued care. Unplanned discharges are minimised.

**Excellence****f. The organisation conforms to the defined timeframe for discharge and makes continual improvement.**

**Interpretation:** The organisation defines the time taken for discharge. The timeframe could be defined based on payor mix, for example, cash, insurance, corporate. The organisation shall conform to the defined timeframe for discharge. The time taken for discharge is monitored for delays. Reasons for delays are identified and improvement activities performed. The start-point for calculating the time taken for discharge is when the treating doctor declares that the patient is fit for discharge. The endpoint is when the patient vacates the bed.

**Standard****AAC.14.**

**The organisation defines the content of the discharge summary.**

**Objective Elements****Commitment****a. A discharge summary is provided to the patients at the time of discharge.**

**Interpretation:** The discharge summary shall be signed by the treating dental surgeon or dentist-member of the treating team. Patient/family acknowledges the receipt of the same.

**Commitment****b. Discharge summary contains the patient's name, unique identification number, name of the treating doctor, date of admission and date of discharge.**

**Interpretation:** The discharge summary shall have the above details. In addition to the name of the treating doctor, it could also have the name of the other consultants involved in the treatment.

**Commitment**

- c. **Discharge summary contains the reasons for admission, significant findings and diagnosis and the patient's condition at the time of discharge.**

**Interpretation:** The discharge summary shall have the above details.

**Commitment**

- d. **Discharge summary contains information regarding investigation results, any procedure performed, medication administered, and other treatment given.**

**Interpretation:** The discharge summary shall have the above details.

**Commitment**

- e. **Discharge summary contains follow-up advice, medication and other instructions in an understandable manner.**

**Interpretation:** This shall also incorporate preventive aspects, where appropriate. The organisation ensures that the follow-up advice, medication and other instructions are explained to the patient and or relatives in a language and manner that they understand. Medical terms like BD, TDS, QID should not be used.

**Achievement**

- f. **Discharge summary incorporates instructions about when and how to obtain urgent care.**

**Interpretation:** The discharge summary should contain advice on 'when' the patient should seek urgent care. This information shall be specific to the patient's diagnosis and clinical condition at the time of discharge. For example, development of fever, bleeding/discharge from the oral operative site. The advice could be in the form of what medicines to take, when to consult a dental surgeon or how to seek medical help and contact number of the DHSP/dentist. The DHSP ensures that instructions about when and how to obtain urgent care are explained to the patient and or relatives in a language/manner that they understand.

**Standard****AAC.15.****Patient care is continuous and multidisciplinary in nature.**



## Objective Elements

### Commitment

- a. **During all phases of care, there is a qualified individual/ individuals responsible for the patient's, care who co-ordinate the care in all the departments with-in the DHSP.**

**Interpretation:** For all patients cared for by the organisation, there is a qualified dental surgeon identified as responsible for care. Although a team may provide care, the DHSP record shall identify a dentist as being responsible for patient care. The DHSP shall ensure that there is effective communication of patient requirements amongst the care-providers in all settings.

### Commitment

- b. **Information about the patient's care and response to treatment is shared among all care providers.**

**Interpretation:** The DHSP ensures periodic discussions about each patient (covering parameters like patient care, response to treatment, unusual developments if any, etc) amongst all care providers.

### Commitment

- c. **Patient transfer within the organisation is done safely.**

**Interpretation:** The organisation shall ensure that intra-organisation transfers are done adhering to safe practices. The patients shall be transported safely, and a proper handover and takeover shall be documented.

### Commitment

- d. **Referral of patients to other departments/ specialties follow written guidance.\***

**Interpretation:** Referral could be for opinion, co-management or takeover. The referral note should mention the reason for the referral. It could be graded into immediate, urgent, priority or routine category. All referrals shall be based on clinical significance and for a better outcome. All referrals shall be seen within a defined timeframe. The timeframe could be different based on the urgency of referral. The organisation has written guidance for the referral of patients to other departments or specialties.

## References:

1. Acute care toolkit 1: Handover. Royal College of Physicians. (2015). Retrieved on May 03 2022, from <https://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-1-handover>
2. Agency for Healthcare Research and Quality. Patient Safety Network. (2012, June). Transfer Troubles. Retrieved on May 03 2022, from <https://psnet.ahrq.gov/webmm/case/269>
3. Albrecht, J. S., Gruber-Baldini, A. L., Hirshon, J. M., et al. (2014). Hospital Discharge Instructions: Comprehension and Compliance Among Older Adults. *Journal of General Internal Medicine*, 29(11), 1491-1498. doi:10.1007/s11606-014-2956-0
4. Brady, A. P. (2016). Error and discrepancy in radiology: inevitable or avoidable? *Insights into Imaging*, 8(1), 171-182. doi:10.1007/s13244-016-0534-1
5. Coleman, E. A., Chugh, A., Williams, M. V., et al.. (2013). Understanding and Execution of Discharge Instructions. *American Journal of Medical Quality*, 28(5), 383-391. doi:10.1177/1062860612472931
6. Communication During Patient Hand-Overs. (2007). Retrieved on May 03 2022, from [https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/psf/patient-safety-solutions/ps-solution3-communication-during-patient-handovers.pdf?sfvrsn=7a54c664\\_4&ua=1](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/psf/patient-safety-solutions/ps-solution3-communication-during-patient-handovers.pdf?sfvrsn=7a54c664_4&ua=1)
7. Content of a discharge summary from a medical ward: views of general practitioners and hospital doctors. *Journal of the Royal College of Physicians of London*. 1995; 29(4):307-310. Retrieved on May 03 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5401316/pdf/jrcollphyslond90372-0047>
8. Davenport, R. J. (2018). How to do it: the clinicopathological conference. *Practical Neurology*, 19(2), 143-146. doi:10.1136/practneurol-2018-001993
9. Déry, J., Ruiz, A., Routhier, F., et al. (2019). Patient prioritization tools and their effectiveness in non- emergency healthcare services: a systematic review protocol. *Systematic Reviews*, 8(1). doi:10.1186/s13643-019-0992-x
10. Dhingra, N. (2010). WHO Guidelines on Drawing Blood: Best Practices in Phlebotomy. Retrieved on May 03 2022, from [http://www.euro.who.int/data/assets/pdf\\_file/0005/268790/WHO-guidelines-on-drawing-blood-best-practices-in-phlebotomy-Eng.pdf?ua=1](http://www.euro.who.int/data/assets/pdf_file/0005/268790/WHO-guidelines-on-drawing-blood-best-practices-in-phlebotomy-Eng.pdf?ua=1)
11. Egan, N. (1999). Managing a bed crisis. *Emergency Medicine Journal*, 16(2), 145-146. doi:10.1136/emj.16.2.145
12. Gail M. Keenan; Elizabeth Yakel; Dana Tschannen; Mary Mandeville. (2008). Chapter 49 Documentation and the Nurse Care Planning Process. In *Patient Safety and Quality: An Evidence-Based Handbook for Nurses*.
13. Gardner-Thorpe, J., Love, N., Wrightson, J., et al. (2006). The Value of Modified Early Warning Score (MEWS) in Surgical In-Patients: A Prospective Observational Study. *The Annals of The Royal College of Surgeons of England*, 88(6), 571-575. doi:10.1308/003588406x130615
14. Goldberg-Stein, S., Frigini, L. A., Long, S. et al. (2017). ACR RADPEER Committee White Paper with 2016 Updates: Revised Scoring System, New Classifications, Self-Review, and Subspecialized Reports. *Journal of the American College of Radiology*, 14(8), 1080-1086. doi:10.1016/j.jacr.2017.03.023

15. Gooneratne, M., & Walker, D. (2017). Rapid response systems and the deteriorating patient. *British Journal of Hospital Medicine*, 78(3), 124-125. doi:10.12968/hmed.2017.78.3.124
16. Hawkins, R. C. (2007). Laboratory Turnaround Time. *Clin Biochem Rev*, 28(4), 179-194.
17. Horwitz, L. I., Moriarty, J. P., Chen, C., et al. (2013). Quality of Discharge Practices and Patient Understanding at an Academic Medical Center. *JAMA Internal Medicine*. doi:10.1001/jamainternmed.2013.9318  
<https://www.osha.gov/sites/default/files/publications/OSHA3404laboratory-safety-guidance.pdf>
18. Johnson, L., Edward, K., & Giandinoto, J. (2018). A systematic literature review of accuracy in nursing care plans and using standardised nursing language. *Collegian*, 25(3), 355-361. doi:10.1016/j.collegn.2017.09.006
19. Kulshrestha, A., & Singh, J. (2016). Inter-hospital and intra-hospital patient transfer: Recent concepts. *Indian Journal of Anaesthesia*, 60(7), 451. doi:10.4103/0019-5049.186012
20. Laboratory biosafety manual, 4th edition. (2020). World Health Organisation (WHO). Retrieved on May 03 2022, from <https://www.who.int/publications/i/item/9789240011311>
21. Lippi, G., & Mattiuzzi, C. (2016). Critical laboratory values communication: summary recommendations from available guidelines. *Annals of Translational Medicine*, 4(20), 400-400. doi:10.21037/atm.2016.09.36
22. Maharaj, R., Raffaele, I., & Wendon, J. (2015). Rapid response systems: a systematic review and meta-analysis. *Critical Care*, 19(1). doi:10.1186/s13054-015-0973-y
23. Mahgerefteh, S., Kruskal, J. B., Yam, C. S., Blachar, A., & Sosna, J. (2009). Peer Review in Diagnostic Radiology: Current State and a Vision for the Future. *RadioGraphics*, 29(5), 1221-1231. doi:10.1148/rg.295095086
24. Müller, M., Jürgens, J., Redaelli, M., et al. (2018). Impact of the communication and patient hand-off tool SBAR on patient safety: a systematic review. *BMJ Open*, 8(8), e022202. doi:10.1136/bmjopen-2018-022202
25. Occupational Safety and Health Administration. (2011). Laboratory safety Guidance. Retrieved on May 03 2022, from
26. Ortiga, B., Salazar, A., Jovell, A., et al. (2012). Standardizing admission and discharge processes to improve patient flow: A cross sectional study. *BMC Health Services Research*, 12(1). doi:10.1186/1472-6963-12-180
27. Patel, S., Gillon, S. A., & Jones, D. A. (2017). Rapid response systems: recognition and rescue of the deteriorating hospital patient. *British Journal of Hospital Medicine*, 78(3), 143-148. doi:10.12968/hmed.2017.78.3.143
28. Patient Identification. Patient Safety Solutions (2007). Retrieved on May 03 2022, from [https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/psf/patient-safety-solutions/ps-solution2-patient-identification.pdf?sfvrsn=ff81d7f9\\_4&ua=1](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/psf/patient-safety-solutions/ps-solution2-patient-identification.pdf?sfvrsn=ff81d7f9_4&ua=1)
29. Radiological Protection Principles. (2017). Atomic energy Regulatory Board (AERB), Government of India. Retrieved on May 03 2022, from <https://aerb.gov.in/english/radiation-protection-principle>

30. Schultz, E. M., Pineda, N., Lonhart, J., et al. (2013). A systematic review of the care coordination measurement landscape. *BMC Health Services Research*, 13(1). doi:10.1186/1472-6963-13-119
31. Scope of Hospital Services: External Standards and Guidelines. (n.d.). Retrieved on May 03 2022, from <https://www.princeton.edu/~ota/disk2/1988/8832/883211.PDF>
32. Shahid, S., & Thomas, S. (2018). Situation, Background, Assessment, Recommendation (SBAR) Communication Tool for Handoff in Health Care – A Narrative Review. *Safety in Health*, 4(1). doi:10.1186/s40886-018-0073-1
33. Subbe, C. (2001). Validation of a modified Early Warning Score in medical admissions. *QJM*, 94(10), 521-526. doi:10.1093/qjmed/94.10.521
34. Subbe, C. P., & Welch, J. R. (2013). Failure to rescue: using rapid response systems to improve care of the deteriorating patient in hospital. *Clinical Risk*, 19(1), 6-11. doi:10.1177/1356262213486451
35. Wacogne, I., & Diwakar, V. (2010). Handover and note-keeping: the SBAR approach. *Clinical Risk*, 16(5), 173-175. doi:10.1258/cr.2010.010043
36. Waring J, Marshall F, Bishop S, et al. Hospital discharge and patient safety: reviews of the literature. In: An ethnographic study of knowledge sharing across the boundaries between care processes, services and organisations: the contributions to 'safe' hospital discharge. *Health Services and Delivery Research*, No. 2.29. 2014. Retrieved on May 03 2022, from <https://www.ncbi.nlm.nih.gov/books/NBK259995/>
37. Warren, J., Fromm, R. E., Orr, R. A., Rotello, L. C., & Horst, H. M. (2004). Guidelines for the inter- and intrahospital transport of critically ill patients\*. *Critical Care Medicine*, 32(1), 256-262. doi:10.1097/01.ccm.0000104917.39204.0a
38. Weston, C., Yune, S., Bass, E., et al. (2017). A Concise Tool for Measuring Care Coordination from the Provider's Perspective in the Hospital Setting. *Journal of Hospital Medicine*, 12(10), 811-817. doi:10.12788/jhm.2795
39. Williams, P., Karuppiah, S., Greentree, K., & Darvall, J. (2019). A checklist for intrahospital transport of critically ill patients improves compliance with transportation safety guidelines. *Australian Critical Care*. doi:10.1016/j.aucc.2019.02.004
40. Winters, B. D., Weaver, S. J., Pfoh, E. R., et al.. (2013). Rapid-Response Systems as a Patient Safety Strategy. *Annals of Internal Medicine*, 158(5\_Part\_2), 417. doi:10.7326/0003-4819-158-5-201303051- 00009
41. World Health Organization. (2010). WHO guidelines on drawing blood: best practices in phlebotomy. Retrieved on May 03 2022, from [http://www.euro.who.int/data/assets/pdf\\_file/0005/268790/WHO-guidelines-on-drawing-blood-best-practices-in-phlebotomy-Eng.pdf?ua=1](http://www.euro.who.int/data/assets/pdf_file/0005/268790/WHO-guidelines-on-drawing-blood-best-practices-in-phlebotomy-Eng.pdf?ua=1)
42. World Health Organization. (2011). Laboratory Quality Management System: Handbook. Retrieved on May 03 2022, from <https://www.who.int/publications/i/item/9789241548274>
43. World Health Organization. (2018). Continuity and coordination of care: a practice brief to support implementation of the WHO Framework on integrated people-centred health services. Retrieved on May 03 2022, from <https://apps.who.int/iris/bitstream/handle/10665/274628/9789241514033-eng.pdf?ua=1>

44. Wright, J., Williams, R., & Wilkinson, J. R. (1998). Health needs assessment: Development and importance of health needs assessment. *BMJ*, 316(7140), 1310-1313. doi:10.1136/bmj.316.7140.1310
45. Yemm, R., Bhattacharya, D., & Wright, D. (2014). What constitutes a high quality discharge summary? A comparison between the views of secondary and primary care doctors. *International Journal of Medical Education*, 5, 125-131. doi:10.5116/ijme.538b.3c2e

# Chapter 2

## Care of Patients (COP)



**Intent of the chapter:** The DHSP provides uniform care to all patients in different settings. The different settings include care provided in outpatient units, various categories of wards, intensive care units, procedure rooms and operation theatre. When similar care is provided in these different settings, care delivery is uniform. Written guidance, applicable laws and regulations guide emergency and ambulance services, cardio-pulmonary resuscitation, use of blood and blood products, care of patients in the Intensive care and high dependency units.

Written guidance, applicable laws and regulations also guide care of vulnerable patients (elderly, physically and/or mentally challenged and children), high risk obstetrical patients, paediatric patients, patients undergoing moderate sedation, administration of anaesthesia, patients undergoing surgical procedures, patients under restraints, research activities and end of life care.

Pain management, nutritional therapy and rehabilitative services are also addressed with a view to provide comprehensive health care. The standards aim to guide and encourage patient safety as the overall principle for providing care to patients.

### Summary of Standards

COP.1.	Uniform care of patients is provided in all departments of the DHSP and is guided by written guidance, applicable laws, regulations and guidelines.
COP.2.	Emergency services are guided by written guidance, applicable laws and regulatory processes.
COP.3.	Cardio-pulmonary resuscitation services are available, when required, in the DHSP.
COP.4.	Transfusion services are provided as per the scope of services of the organisation, safely.
COP.5.	The organisation provides safe paediatric services.
COP.6.	The organisation identifies and manages patients who are at higher risk of morbidity/mortality.
COP.7.	Procedural sedation is provided in a consistent and safe manner..
COP.8.	Written guidance governs the care of patients undergoing moderate sedation.
COP.9.	Written guidance governs the administration of general anaesthesia.
COP.10.	Written guidance governs the care of patients undergoing dental procedures.
COP.11.	Written guidance governs appropriate pain management.

Objective Element	COP1	COP 2	COP 3	COP 4	COP 5	COP 6	COP 7	COP 8	COP 9	COP 10	COP 11
a.	Commitment	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
b.	Core	Commitment	Commitment	Core	Commitment	Commitment	Commitment	Commitment	Core	Commitment	Commitment
c.	Commitment	Commitment	Commitment	Commitment	Commitment	Core	Commitment	Commitment	Commitment	Commitment	Commitment
d.	Achievement	Commitment	Commitment	Commitment	Commitment	Commitment		Commitment	Commitment	Core	
e.		Commitment	Achievement	Achievement				Commitment	Core	Commitment	
f.			Commitment					Commitment	Commitment	Commitment	
g.			Core					Commitment	Commitment	Achievement	
h.								Commitment	Commitment		
i.									Achievement		

## Standard

### COP1.

Uniform care of patients is provided in all departments of the DHSP and is guided by the written guidance, applicable laws, regulations and guidelines.

## Objective Elements

### Commitment

- a. **Care delivery is uniform when similar care is provided in more than one department.**

**Interpretation:** When similar treatment/care is provided in various settings such as out-patients, in-patients, and day care, the organisation shall ensure that patients with the same clinical condition and care needs receive the same quality of health care throughout the organisation. Care delivery shall be uniform irrespective of the setting and category of the ward, and whether the patient is paying or non-paying, and/or is supported from a governmental/private insurance scheme or not. For example, the decision to offer any form of intervention or medication, frequency of consultant visit, nature of support care, decision to discharge is not influenced by the class or category of the patient but is decided by the clinical needs of the patient. Further, in case the organisation has separate OPDs for different category of patients, the methodology for care delivery shall be uniform in all OPDs.

### CORE

- b. **The organisation has a uniform process for identification of patients and at a minimum, uses two identifiers.**

**Interpretation:** The mechanism for identification of patients shall be uniform across the organisation. For example, the use of ID bands with the patient's name and unique identification number. For any care related aspect, at a minimum, two identifiers shall be used. One of the identifiers shall be the unique identification number generated at the time of registration.

### Commitment

- c. **Uniform care is guided by written guidance which reflect applicable laws and regulations.**

**Interpretation:** The organisation shall adhere to the norms laid down by the government through relevant legislation like the Clinical Establishment Act or any such similar legislation. For example, consent before dental surgery, providing first aid to emergency patients and police intimation in case of medico-legal cases.



**Achievement**

- d. **Evidence based clinical practice guidelines are adopted to guide uniform patient care whenever possible.**

**Interpretation:** Clinical practice guidelines brought out by national and international professional organisations may be used. Standard Treatment Guidelines (STGs) brought out by the Government of India are a good starting point. In the absence of evidence-based clinical practice guidelines or where adapting the clinical practice guidelines are not feasible, sound clinical practices shall guide the delivery of care.

For definitions of “evidence-based medicine” and “clinical practice guidelines”, refer to the glossary.

**Standard****COP2.**

**Emergency services are guided by written guidance, applicable laws and regulatory process.**

**Objective Elements****CORE**

- a. **Emergency care is provided in consonance with statutory requirements and in accordance with the written guidance. \***

**Interpretation:** Written guidance shall include guidelines/SOPs/protocols to provide general emergency care as well as management of specific conditions, e.g., road traffic accidents, chemical burn, fall, etc. It shall address both adult and paediatric patients. The procedure shall incorporate at a minimum identification, assessment and provision of care. In case, emergency services are out of the scope of the organisation, or the organisation does not have facilities for appropriate emergency care of a given clinical condition, at a minimum, such patients shall be provided with first-aid before transferring them to another centre. Processes shall be in place to ensure patient safety.

**Commitment**

- b. **The organisation manages medico-legal cases in accordance with statutory requirements. \***

**Interpretation:** The care provided, especially the documentation and intimation to appropriate authorities, shall be in accordance with statutory requirements. The organisation shall also define as to what constitutes a medico-legal case (by statutory guidelines).

**Commitment****c. Initiation of appropriate care is guided by a system of triage. \***

**Interpretation:** Triage shall be done only by qualified/trained personnel. Written guidance based on evidence/sound clinical practices shall guide these activities. The triage shall be part of the routine day-to-day functioning of the emergency department and not from the perspective of managing a large number of patients during a disaster. The criteria could be separate for trauma and non-trauma patients and adults and children. If several clients are waiting to be triaged, a visual triage assessment may be conducted.

**Commitment****d. In case of discharge to home or transfer to another organisation, a discharge/transfer note shall be given to the patient.**

**Interpretation:** The discharge/transfer note shall contain salient clinical findings, investigations done, treatment given, and condition at discharge/transfer. The basis/reasons for discharge or transfer shall be documented.

**Commitment****e. The DHSP shall preferably have facilities for transfer and referral of emergency patients.**

**Interpretation:** An ambulance is appropriately equipped and manned by trained personnel. A checklist of all emergency medications and equipment shall be maintained. If the DHSP does not own an ambulance then it shall have a MoU with emergency care service provider and contact details shall be prominently displayed at appropriate locations.

**Standard****COP3.****Cardio-pulmonary resuscitation services are available, when required, in the DHSP.****Objective Elements****Commitment****a. Resuscitation services are available to patients at all times.**

**Interpretation:** The organisation shall document the procedure for cardio-pulmonary resuscitation for dental patient across all areas in the DHSP. This shall be in consonance with accepted practices. The organisation shall ensure that adequate and appropriate resources (both men and material) are provided. Basic life support shall be initiated as soon as a condition requiring CPR is identified. This is implemented in all areas of the DHSP.

**Commitment**

- b. During cardio-pulmonary resuscitation, assigned roles and responsibilities are complied with.**

**Interpretation:** The team members have a clear understanding of their roles and responsibilities during the resuscitation to effectively function as a team.

**Commitment**

- c. Equipment and medications for use during cardio-pulmonary resuscitation are available in various areas of the organisation.**

**Interpretation:** At a minimum, emergency medications and equipment for intubation shall be available in all patient care areas including the blood bank, radiology, OPD, rehabilitation services areas, endoscopy, and in areas where any procedure is performed. Other equipment like defibrillator shall be easily accessible to ensure that there is no delay in cardio-pulmonary resuscitation. It is preferable that the minimum emergency medication is standardized across the organisation.

**Commitment**

- d. The events during a cardio-pulmonary resuscitation are recorded.**

**Interpretation:** In the actual event of cardio-pulmonary resuscitation, or a mock drill of the same, all the activities along with the personnel attended shall be recorded. At the minimum, it shall include timeliness of response, availability of human resources, equipment, drugs, and barriers if any. The recording could be done using the pre-defined procedural checklist and by monitoring whether the prescribed activity has been performed properly and in the right sequence.

**Achievement**

- e. A post-event analysis of all cardiac emergencies in dental chair station is done by an expert committee, duly constituted by the head of DHSP.**

**Interpretation:** The analysis shall focus on the initiation of CPR, time of arrival of the team, availability of required resources, recording of the sequence of events during CPR (including technique) and the overall coordination. The organisation shall also monitor the outcomes. The multidisciplinary committee shall be independent and include at least one physician/cardiologist, anaesthesiologist, one member from the code blue team and a dental surgeon. The analysis shall be completed within a defined time frame.

**Commitment**

- f. Corrective and preventive measures are taken based on the post-event analysis.**

**Interpretation:** Corrective and preventive measures shall be completed within a defined time frame. The findings of the post-event analysis are communicated to the personnel participating in the CPR. Any lapses shall be discussed, with the view to improve the outcomes in future. During subsequent resuscitations, it is preferable that implementation of these actions is noted and training be modified, if necessary.

**CORE**

- g. **Staff providing direct patient care is trained and periodically updated in cardio-pulmonary resuscitation.**

**Interpretation:** These aspects shall be covered by hands on training on a, periodic basis by qualified personnel and documented.

## Standard

**COP.4.**

**Transfusion services are provided as per the scope of services of the organisation, safely.**

## Objective Elements

**Commitment**

- a. **Scope of transfusion services is commensurate with the services provided by the DHSP.**

**Interpretation:** The organisation shall have blood/blood components available from either an in-house or out-sourced registered blood bank. In case the organisation uses an out-sourced blood bank, it shall have an MoU and ensure that patient care does not suffer for want of blood/blood components. The blood shall be transported from the external blood bank safely and properly. A good reference guide is the NABH standards for blood centres.

**CORE**

- b. **Transfusion of blood and blood components is done safely. \***

**Interpretation:** Transfusion of blood and blood components is managed by written guidance. The written guidance shall at a minimum include how the orders are written including pre-medications if any, where appropriate the rate of transfusion (rate needs to be mentioned for paediatric patients), safe storage as per guidelines and transport of blood, how the blood/blood product is verified prior to transfusion, how the patient is identified and how the patient is monitored. Verification, storage, transportation, cold chain and delivery at the right source shall be taken care of.

**Commitment**

- c. **Blood and blood components are used rationally. \***

**Interpretation:** Blood and blood component usage shall be governed by written guidance which shall address the indications for the use of blood and blood components. These shall be based on the standard practice guidelines/sound clinical practices brought out by the national and international professional organisations. It shall also address inventory and ordering schedules (planned and unplanned).

**Commitment****d. Informed consent is obtained for transfusion of blood and blood products.**

**Interpretation:** Consent shall be taken for transfusion of blood or blood components when there is a requirement (actual or anticipated) for transfusion. The same consent may be valid for multiple transfusions of blood/blood components in a given admission (in-patient) which has a defined validity period. The consent shall include risks (including those of transfusion-related infections in spite of the best possible screening to ensure infection-free blood/blood components), benefits and possible complications of multiple transfusions.

**Achievement****e. Post-transfusion form is collected, reactions if any identified and are analysed for preventive and corrective actions.**

**Interpretation:** The organisation shall ensure that any transfusion reaction is reported. It is preferable that the organisation capture feedback regarding every transfusion (including the ones without reaction) as this would enable it to capture all transfusion reactions. These are then analysed (by individual/committee as decided by the organisation), and appropriate corrective/preventive action is taken. The organisation shall maintain a record of transfusion reactions.

The organisation shall participate in the Haemovigilance Programme of India.

**Standard****COP5.****The organisation provides safe paediatric services.****Objective Elements****Commitment****a. Paediatric services are organised and provided safely. \***

**Interpretation:** Written guidance based on standard treatment guidelines/sound clinical practices governs the organisation and delivery of safe paediatric care. At a minimum, this shall include assessment of these patients, organisation of care, and addressing special needs. The written guidance shall also define the scope of its paediatric services.

**Commitment****b. Provisions are made for special care of children.**

**Interpretation:** Adequate amenities for the care of children shall be available in the DHSP. For example play area, toys etc.

**Commitment**

- c. **The organisation has measures in place to prevent child/neonate abduction and abuse. \***

**Interpretation:** Written guidance shall direct the organisation regarding child abduction prevention and abuse. The organisation shall ensure that there is adequate security/surveillance to prevent such happenings. For example, the installation of CCTV cameras. There is a defined process for rapid response in case of any eventuality. The defined process shall be tested at pre-defined intervals, either through table-top exercise or mock drill. Staff are trained in prevention and rapid response. Staff are aware of how to handle and escalate child abuse if any.

**Standard****COP.6.**

**The organisation identifies and manages patients who are at higher risk of morbidity/mortality.**

**Objective Elements****Commitment**

- a. **The organisation identifies and manages vulnerable patients. \***

**Interpretation:** Written guidance for identification and management of vulnerable patients is developed in consonance with statutory requirements, national and international guidelines. It shall include (but not limited to) elderly, children, differently-abled and/or mentally challenged, mentally ill, comatose, critically ill, patients under sedation and anaesthesia, pregnant women, patients on dialysis, patients receiving chemotherapy etc. The guidance shall state who is responsible for identifying these patients, risk management in these patients and monitoring of these patients.

The guidance shall include how informed consent is obtained from a vulnerable patient, and from the family or legal representative of a patient incapable of making an independent decision. Care is organised and delivered in accordance with written guidance. Refer to the glossary for a definition of “vulnerable patient”.

**Commitment**

- b. **The DHSP provides for a safe and secure environment for the vulnerable patient.**

**Interpretation:** The organisation shall provide proper environment considering the requirement of the vulnerable patient. For example, fall prevention measures, ramps with railings for differently-abled, grab-bars in patient wash-rooms, care of differently-abled patients etc.

**CORE****c. The organisation identifies and manages patients who are at a risk of fall. \***

**Interpretation:** A validated tool shall be used for the assessment of the risk of fall. Patients found at a risk of fall shall be managed according to written guidance. A good guide is 'Universal fall precautions'.

**Commitment****d. The organisation identifies and manages patients who need restraints. \***

**Interpretation:** Restraints include physical and chemical restraints. Written guidance is used to identify patients who need restraints and provide care to them. The written guidance shall incorporate the suggested situations where restraints could be used. It shall also specify as to who can authorise the use of restraints, the frequency of monitoring these patients and the validity of restraint orders. The need for restraints is regularly reassessed, and the least invasive restraint is selected if required. The rationale for using restraints is explained to the family, and consent is obtained where appropriate (as directed by statutory requirements). These patients are monitored more frequently. When restraints are used, the following shall be documented in the medical record: the reason for using restraints and the time frame during which restraints were used.

**Standard****COP.7.**

**Procedural sedation is provided in a consistent and safe manner.**

**Objective Elements****Commitment****a. The DHSP formulates a written guidance regarding administration of local anaesthesia and is in consonance with the national/ international guidelines.**

**Interpretation:** The protocol shall cover selection of local anaesthesia(LA) drug, mode of administration, hypersensitivity test, safe disposal of used needles, ampoules etc.

Identification of anxious patients, administration of anti-anxiety medication, topical LA and psychological counselling is carried out.

**Commitment****b. Informed consent for administration of local anaesthesia is obtained.**

**Interpretation:** The informed consent shall be taken by the dental surgeon from the patient and/or patient's family members before administering local anaesthesia.

**Commitment****c. Competent and trained dental surgeon administer local anaesthesia.**

**Interpretation:** Whenever Infiltration or inferior alveolar nerve block is given, this may be administered by a dental surgeon. The technician shall not administer local anaesthesia.

## Standard

**COP8.**

**Written guidance governs the care of patients undergoing moderate sedation.**

## Objective Elements

**Commitment****a. Dental procedural sedation is administered in a consistent manner \***

**Interpretation:** Written guidance based on standard treatment guidelines/sound clinical practices governs the administration of procedural sedation. At a minimum, this shall include identification of procedures where this is required, the mechanism for writing orders, the pre-procedure assessment, monitoring during and after the procedure and the discharge/transfer out criteria after the dental procedure.

**Commitment****b. Informed consent for administration of procedural sedation is obtained.**

**Interpretation:** The informed consent shall be taken by the Dental Surgeon administering sedation or an anaesthetist member of the team administering sedation.

**Commitment****c. Competent and trained persons administer sedation.**

**Interpretation:** Whenever a parenteral route is used, this may be administered by a dental surgeon or a anaesthetist under the supervision of team. The technician shall not administer sedation.



**Commitment**

- d. **The person administering and monitoring sedation is different from the person performing the procedure.**

**Interpretation:** The person responsible for monitoring the patient shall be trained in the detection of abnormalities of the monitoring parameters and also in recognition of apnoea and airway obstruction.

**Commitment**

- e. **Intra-procedure monitoring includes at a minimum the heart rate, cardiac rhythm, respiratory rate, blood pressure, oxygen saturation and level of sedation.**

**Interpretation:** The monitored parameters shall be documented. Also, certain other parameters may be monitored on a case-to-case basis. The cardiac rhythm may be monitored on a monitor during the procedure, and the same need not be documented. However, in the case of rhythm abnormalities, the same shall be documented.

**Commitment**

- f. **Patients are monitored after sedation and the same is documented.**

**Interpretation:** The patient's vitals shall be monitored at regular intervals (as decided by the organisation) until he/she recovers completely from the sedation. At a minimum, the heart rate, respiratory rate, blood pressure, oxygen saturation and level of sedation are monitored. The level of sedation can be monitored by using a checklist which incorporates the various components of levels of sedation (mild, moderate and deep).

**Commitment**

- g. **Criteria are used to determine appropriateness of discharge from the recovery area.**

**Interpretation:** Criteria shall be developed and documented by the organisation in consonance with physiologic parameters and sound clinical practices. A qualified individual shall apply the criteria, and the same is documented.

**Commitment**

- h. **Equipment and manpower are available to rescue patients from a deeper level of sedation than that intended.**

**Interpretation:** The room where procedural sedation is administered shall have equipment for emergency resuscitation, suction, advanced airway equipment, positive pressure ventilation and supplemental oxygen in working order. A person trained in airway management/anaesthesiologist shall be available in the organisation so that the person can rush to the area.

## Standard

COP9.

Written guidance governs the administration of general anaesthesia.

## Objective Elements

### Commitment

#### a. Anaesthesia services are provided in a consistent manner. \*

**Interpretation:** Written guidance based on standard treatment guidelines/sound clinical practices governs anaesthesia services across the organisation. The organisation shall document the indications, the type of anaesthesia and procedure for the same. For the definition of the “anaesthesia” refer to the glossary.

The standard is not applicable to local anaesthesia.

### CORE

#### b. The pre-anaesthesia assessment results in formulation of an anaesthesia plan which is documented.

**Interpretation:** Patients for anaesthesia have a pre-anaesthesia assessment by a qualified anaesthesiologist. This shall be done before the patient is wheeled into the OT complex. It shall be applicable for both routine and emergency cases. It is preferable to document the assessment in a standardised format. The pre-anaesthesia assessment may even be carried out before admission in case of elective surgeries. This could be done up to 30 days in advance. The plan shall mention the pre-medications, type of anaesthesia, special requirements and anticipated post-anaesthesia care where appropriate. The anaesthesiologist shall review the medication the patient is currently taking.

### Commitment

#### c. A pre-induction assessment is performed and documented.

**Interpretation:** A pre-induction assessment shall be done by an anaesthesiologist. Any changes to the anaesthesia plan shall be documented. When anaesthesia needs to be provided on an urgent basis, the pre-anaesthesia assessment and pre-induction assessment may be performed one-after-another, or simultaneously, but shall be documented separately.

### Commitment

#### d. Informed consent for administration of anaesthesia is obtained by the anaesthetist.

**Interpretation:** Patient and/or the family are educated on the risks, benefits, and alternatives of anaesthesia by the anaesthesiologist. The anaesthesia consent shall be separate from the surgery consent.

**CORE**

- e. **During anaesthesia monitoring includes regular and periodic recording of heart rate, cardiac rhythm, respiratory rate, blood pressure, oxygen saturation, airway security and potency and level of anaesthesia.**

**Interpretation:** The parameters stated in the objective element shall be monitored and documented. In the case of regional anaesthesia instead of end-tidal carbon dioxide, the adequacy of ventilation shall be evaluated by continual observation of qualitative clinical signs. Also, certain other parameters may be monitored on a case-to-case basis. The cardiac rhythm may be monitored on a monitor during the procedure, and the same need not be documented. However, in the case of rhythm abnormalities, the same shall be documented. Anaesthesiologist shall be present throughout the procedure.

**Commitment**

- f. **Patient's post-anaesthesia status is monitored and documented.**

**Interpretation:** This shall be done in the recovery area/OT and at least include monitoring of vitals till the patient recovers completely from anaesthesia and shall be done by an anaesthesiologist. If the patient's condition is unstable, and he/she requires ICU care, the same shall be monitored there.

**Commitment**

- g. **A qualified individual (preferably anaesthesiologist) applies defined criteria to transfer the patient from the recovery area.**

**Interpretation:** The DHSP documents these criteria which shall be based on physiologic parameters and in consonance with sound clinical practices.

**Commitment**

- h. **The type of anaesthesia and anaesthetic medications used are documented in the patient record.**

**Interpretation:** It shall have the name of the anaesthesiologist who performed the procedure and also the names of individuals (with their designation) who helped in the procedure. The documentation shall have the date, time and signature and the author of the entry can be identified.

**Achievement**

- i. **Intraoperative adverse anaesthesia events are recorded and monitored.**

**Interpretation:** Intra-operative adverse anaesthesia events are documented and monitored to take corrective and preventive action. At the outset, the organisation shall define the various intraoperative adverse anaesthesia events. These essentially are adverse events following the administration of anaesthesia. For example, cardiac arrest, failure of anaesthesia gas, a slip of the endotracheal tube, air embolism etc. The DHSP shall have a mechanism to ensure that all adverse events are captured. It could do the same by incorporating in the anaesthesia record a heading for the same.

## Standard

### COP.10.

### Written guidance governs the care of patients undergoing dental procedures.

## Objective Elements

#### Commitment

#### a. Dental surgical services are provided in a consistent and safe manner.

**Interpretation:** Written guidance based on standard treatment guidelines/sound clinical practices governs the provision of dental surgical services. This shall include the list of dental surgical procedures as well as the competency level for performing these procedures.

#### Commitment

#### b. Dental surgical patients have a preoperative assessment, a documented pre-operative diagnosis, and pre-operative instructions are provided before dental surgery.

**Interpretation:** Patients undergoing surgery are assessed pre-operatively, a pre-operative diagnosis is made, and pre-operative instructions documented. The relevant pre-operative instructions are provided to all concerned, including patient/family. This shall apply to all elective cases and whenever possible, to emergency cases. This shall be done by the operating dental surgeon or a doctor member of the operating team.

#### Commitment

#### c. An informed consent is obtained by the treating dental surgeon prior to the procedure.

**Interpretation:** The consent shall be taken by the operating surgeon or a doctor member of the operating team. In case if there is a change in clinical status/expected outcomes after the consent, but before the surgery, the same is explained to the patient/family and is documented. In case, a new and/or an additional procedure that was not planned or for which and explicit consent had been taken before the surgery, a fresh consent needs to be taken for the same except in the case of life-saving procedures.

#### CORE

#### d. Care is taken to prevent adverse events like the wrong site, wrong patient and wrong surgery. \*

**Interpretation:** Written guidance shall be available for preventing adverse events like the wrong site, wrong patient, wrong surgery by a suitable mechanism. The DHSP shall be able to demonstrate methods to prevent these events, e.g., identification tags, badges, cross-checks, time-outs etc.

Refer to WHO "Safe surgery saves lives" initiative.

There is consistency in marking surgical sites across the DHSP. Any exception for not doing site marking shall have justifiable reasons. [responsibility for ensuring the correct site (including side where applicable)/ patient/ procedure verification rests within all team members. However, the person performing the procedure carries ultimate responsibility. In case the procedure is being performed by a person in training, the supervising clinician carries the ultimate responsibility.]

**Commitment****e. An operative note is documented before transfer out of patient from recovery.**

**Interpretation:** This note provides information about the procedure performed, post-operative diagnosis and the status of the patient before shifting and shall be documented by the dental surgeon /doctor member of the operating team. If it is documented by a person other than the chief operating dental surgeon, the same shall be countersigned by the chief dental surgeon. At a minimum, it shall include the surgery performed, name of the dental surgeon(s), name of anaesthesiologist(s), salient steps of the procedure and the key intra-operative findings.

**Commitment****f. Written guidance guides the post-procedure management with a. specific instructions for the patient and b. taking care of specific needs of patients.**

**Interpretation:** A protocol of post-procedure management shall be in place detailing do's and don'ts, drug prescriptions, if needed, contact details for any emergencies and next maintenance appointment schedule. Protocol shall include written standard post-procedure instruction leaflet to be provided to each patient undergoing the procedure. This shall include modifying post-procedure instructions depending upon the patient's medical needs or habits.

**Commitment****g. A quality assurance program is followed for the surgical services.**

**Interpretation:** The written guidance for quality assurance could be developed individually, or it could be a part of the organisation's overall quality-improvement programme. The organisation shall monitor care-related outcomes. For example, intra-operative mishaps such as cautery burns, patient fall, position related nerve injuries; and peri-operative events including surgical site infections, nerve, vascular trauma etc. The organisation's quality assurance programmes shall also include aspects like pre-operative preparation, antibiotic prophylaxis, adherence to set procedure(s) to prevent adverse events, etc.

**Standard****COP.11.****Written guidance governs appropriate pain management.****Objective Elements****Commitment****a. Patients in pain are effectively managed. \***

**Interpretation:** Written guidance based on sound clinical practices governs the care of patients in pain. It shall include as to how patients are screened for pain, the mechanism to ensure that a detailed pain assessment is done (when necessary), pain mitigation techniques and monitoring.

**Commitment****b. Patients are screened for pain.**

**Interpretation:** Patients entering the DHSP shall be screened for pain. Pain shall be considered the fifth vital sign. Screening could be done by incorporating a yes/no question for pain in the initial assessment.

**Commitment****c. Patients with pain undergo detailed assessment and periodic reassessment.**

**Interpretation:** A detailed pain assessment is done when the pain is the predominant (or one of the main) symptom(s). For example, Dental Pain, Trigeminal neuralgia and TMJ disorder. It shall be done for all post-operative patients. The pain assessment shall include the intensity of the pain (can be done using an age-appropriate validated pain rating scale), pain character, frequency, location, duration and referral and/or radiation. The assessment shall be done in an objective manner so that it facilitates regular reassessment.

## References:

1. 2015 American Heart Association Guidelines: Update for CPR and ECC. (2015).
2. ACOG Committee Opinion No. 390: Ethical Decision Making in Obstetrics and Gynecology. (2007). *Obstetrics & Gynecology*, 110(6), 1479-1487. doi:10.1097/01.aog.0000291573.09193.36
3. Anaesthesia Care Standards and Practice Guidelines. American Society of Anesthesiologists. (n.d.). Retrieved on May 03 2022, from <https://www.asahq.org/standards-and-guidelines>
4. Ateriya, N., Saraf, A., Meshram, V., & Setia, P. (2018). Telemedicine and virtual consultation: The Indian perspective. *The National Medical Journal of India*, 31(4), 215. doi:10.4103/0970-258x.258220
5. Barton, N. (2013). Acuity-Based Staffing: Balance Cost, Satisfaction, Quality, and Outcomes. *Nurse Leader*, 11(6), 47-64. doi:10.1016/j.mnl.2013.08.005
6. Brooks Carthon, J. M., Hatfield, L., Plover, C., Dierkes, A., Davis, L., Hedgeland, T., ... Aiken, L. H. (2019). Association of Nurse Engagement and Nurse Staffing on Patient Safety. *Journal of Nursing Care Quality*, 34(1), 40-46. doi:10.1097/ncq.0000000000000334
7. Burch, J., & Tort, S. (2019). Does the use of risk assessment tools help prevent the development of pressure ulcers? *Cochrane Clinical Answers*. doi:10.1002/cca.2400
8. Byrne, J. P., Xiong, W., Gomez, D., Mason, S., Karanicolas, P., Rizoli, S., ... Nathens, A. B. (2015). Redefining "dead on arrival". *Journal of Trauma and Acute Care Surgery*, 79(5), 850-857. doi:10.1097/ta.0000000000000843
9. Chou, R., Gordon, D. B., De Leon-Casasola, O. A., Rosenberg, J. M., Bickler, S., Brennan, T., et al. Management of Postoperative Pain: A Clinical Practice Guideline From the American Pain Society, the American Society of Regional Anesthesia and Pain Medicine, and the American Society of Anesthesiologists' Committee on Regional Anesthesia, Executive Committee, and Administrative Council. *J Pain* 2016 Feb;17(2):131-57. doi: 10.1016/j.jpain.2015.12.008.
10. Christ, M., Grossmann, F., Winter, D., Bingisser, R., & Platz, E. (2010). Modern Triage in the Emergency Department. *Deutsches Aerzteblatt Online*. doi:10.3238/arztebl.2010.0892
11. Clinical practice Guideline for Chronic Pain. (2018). Japanese Society for the Study of Pain. Retrieved on May 03 2022, from [https://plaza.umin.ac.jp/~jaspain/pdf/consortium\\_20180913en.pdf](https://plaza.umin.ac.jp/~jaspain/pdf/consortium_20180913en.pdf)
12. Colvin, J. R., & Peden, C. (2012). *Raising the Standard: A Compendium of Audit Recipes for Continuous Quality Improvement in Anaesthesia*. (3rd ed.). Retrieved on May 03 2022, from [https://www.rcoa.ac.uk/sites/default/files/documents/2019-09/CSQ-ARB-2012\\_0.pdf](https://www.rcoa.ac.uk/sites/default/files/documents/2019-09/CSQ-ARB-2012_0.pdf)
13. Compendium National Blood Policy and Guidelines (2016). Retrieved on May 03 2022, from [http://nbtc.naco.gov.in/assets/resources/policy/commonResource\\_1517222887.pdf](http://nbtc.naco.gov.in/assets/resources/policy/commonResource_1517222887.pdf)
14. Correction to: 2017 American Heart Association Focused Update on Adult Basic Life Support and Cardiopulmonary Resuscitation Quality: An Update to the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. (2018). *Circulation*, 137(1). doi:10.1161/cir.0000000000000555

15. Deutsch, E. S., Yonash, R. A., Martin, D. E., Atkins, J. H., Arnold, T. V., & Hunt, C. M. (2018). Wrong-site nerve blocks: A systematic literature review to guide principles for prevention. *Journal of Clinical Anesthesia*, 46, 101-111. doi:10.1016/j.jclinane.2017.12.008
16. Dykes, P. C., Carroll, D. L., Hurley, A., Lipsitz, S., Benoit, A., Chang, F., ... Middleton, B. (2010). Fall Prevention in Acute Care Hospitals. *JAMA*, 304(17), 1912. doi:10.1001/jama.2010.1567
17. Global Atlas of Palliative Care at the End of Life. (2020). World Health Organization. Retrieved on May 03 2022, from [https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/csy/palliative-care/whpca\\_global\\_atlas\\_p5\\_digital\\_final.pdf?sfvrsn=1b54423a\\_3](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/csy/palliative-care/whpca_global_atlas_p5_digital_final.pdf?sfvrsn=1b54423a_3)
18. Guiding principles on human cell, tissue and organ transplantation. World Health Organization. Retrieved on May 03 2022, from <https://apps.who.int/iris/bitstream/handle/10665/341814/WHO-HTP-EHT-CPR-2010.01-eng.pdf?sequence=1>
19. Haynes, A. B., Berry, W. R., & Gawande, A. A. (2015). What Do We Know About the Safe Surgery Checklist Now? *Annals of Surgery*, 261(5), 829-830. doi:10.1097/sla.0000000000001144
20. Henke, P., and Pannucci, C. (2010). VTE Risk Factor Assessment and Prophylaxis. *Phlebology*, 25(5):219-223. doi:10.1258/phleb.2010.010018. Retrieved on May 03 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4487984/pdf/nihms702670.pdf>
21. Hervig, T., Kaada, S., & Seghatchian, J. (2014). Storage and handling of blood components – perspectives. *Transfusion and Apheresis Science*, 51(2), 103-106. doi:10.1016/j.transci.2014.10.001
22. Hinkelbein, J., Lamperti, M., Akeson, J., Santos, J., Costa, J., De Robertis, E., ... Fitzgerald, R. (2017). European Society of Anaesthesiology and European Board of Anaesthesiology guidelines for procedural sedation and analgesia in adults. *European Journal of Anaesthesiology*, 1. doi:10.1097/eja.0000000000000683
23. ICU Admission, Discharge, and Triage Guidelines: A Framework to Enhance Clinical Operations, Development of Institutional Policies, and Further Research. *Crit Care Med*. 2016;44(8):1553-1602. Retrieved on May 03 2022, from [https://journals.lww.com/ccmjournal/Fulltext/2016/08000/ICU\\_Admission,\\_Discharge,\\_and\\_Triage\\_Guidelines\\_A.15.aspx](https://journals.lww.com/ccmjournal/Fulltext/2016/08000/ICU_Admission,_Discharge,_and_Triage_Guidelines_A.15.aspx)
24. Implementation Handbook on Emergency severity index: A Triage Tool for Emergency Department Care. Version 4. Agency for Healthcare Research and Quality. (2020). Retrieved on May 03 2022, from [https://www.ena.org/docs/default-source/education-document-library/triage/esi-implementation-handbook-2020.pdf?sfvrsn=fdc327df\\_4](https://www.ena.org/docs/default-source/education-document-library/triage/esi-implementation-handbook-2020.pdf?sfvrsn=fdc327df_4)
25. Intensive Care Unit (ICU) guidelines. Indian Society of Critical Care Medicine. (n.d.). Guidelines. Retrieved on May 03 2022, from <https://isccm.org/guidelines.aspx>
26. Kleinman, M. E., Brennan, E. E., Goldberger, Z. D., Swor, R. A., Terry, M., Bobrow, B. J., ... Rea, T. (2015). Part 5: Adult Basic Life Support and Cardiopulmonary Resuscitation Quality. *Circulation*, 132(18 suppl 2), S414-S435. doi:10.1161/cir.0000000000000259



27. Kleinman, M. E., Goldberger, Z. D., Rea, T., Swor, R. A., Bobrow, B. J., Brennan, E. E., ... Travers, A. H. (2018). 2017 American Heart Association Focused Update on Adult Basic Life Support and Cardiopulmonary Resuscitation Quality: An Update to the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. *Circulation*, 137(1). doi:10.1161/cir.0000000000000539
28. Link, M. S., Berkow, L. C., Kudenchuk, P. J., Halperin, H. R., Hess, E. P., Moitra, V. K., ... Donnino, M. W. (2015). Part 7: Adult Advanced Cardiovascular Life Support. *Circulation*, 132(18 suppl 2), S444-S464. doi:10.1161/cir.0000000000000261
29. McClave, S. A., DiBaise, J. K., Mullin, G. E., & Martindale, R. G. (2016). ACG Clinical Guideline: Nutrition Therapy in the Adult Hospitalized Patient. *American Journal of Gastroenterology*, 111(3), 315-334. doi:10.1038/ajg.2016.28
30. Ministry of Health and Family Welfare, Government of India. (n.d.). Standard Treatment Guidelines (Speciality/Super Speciality wise). Retrieved on May 03 2022, from <http://clinicaestablishments.gov.in/En/1068-standard-treatment-guidelines.aspx>
31. Mishra, S., Mukhopadhyay, K., Tiwari, S., Bangal, R., Yadav, B. S., Sachdeva, A., & Kumar, V. (2017). End-of-life care: Consensus statement by Indian Academy of Pediatrics. *Indian Pediatrics*, 54(10), 851- 859. doi:10.1007/s13312-017-1149-4
32. Montori, V. M., Brito, J. P., & Murad, M. H. (2013). The Optimal Practice of Evidence-Based Medicine. *JAMA*, 310(23), 2503. doi:10.1001/jama.2013.281422
33. Moore, Z. E., & Patton, D. (2019). Risk assessment tools for the prevention of pressure ulcers. *Cochrane Database of Systematic Reviews*. doi:10.1002/14651858.cd006471.pub4
34. Myatra SN, Salins N, Iyer S, Macaden SC, Divatia JV, Muckaden M, Kulkarni P, Simha S, Mani RK. End- of-life care policy: An integrated care plan for the dying. *Indian J Crit Care Med* 2014;18:615-35.
35. National Council on Aging. (2017, August 29). Malnutrition Screening and Assessment Tools. Retrieved on May 03 2022, from <https://www.ncoa.org/assessments-tools/malnutrition-screening-assessment- tools/>
36. National Disaster Management Authority (NDMA) Guidelines. Government of India. Retrieved on May 03 2022, from <https://ndma.gov.in/Governance/Guidelines>
37. Nguyen, A. (2015). Acuity-based staffing. *Nursing Management (Springhouse)*, 46(1), 35-39. doi:10.1097/01.numa.0000459555.94452.e2
38. Pavenski, K., Stanworth, S., Fung, M., Wood, E. M., Pink, J., Murphy, M. F., ... Shehata, N. (2018). Quality of Evidence-Based Guidelines for Transfusion of Red Blood Cells and Plasma: A Systematic Review. *Transfusion Medicine Reviews*, 32(3), 135-143. doi:10.1016/j.tmr.2018.05.004
39. Pediatric ICU Admission, Discharge, and Triage Practice Statement and Levels of Care Guidance. *Ped Crit Care Med*. 2019 Sep;20(9): 847-887. Retrieved on May 03 2022, from [https://journals.lww.com/pccmjournal/Fulltext/2019/09000/Criteria\\_for\\_Critical\\_Care\\_Infants\\_and\\_Childr en\\_7.aspx%E2%80%8B](https://journals.lww.com/pccmjournal/Fulltext/2019/09000/Criteria_for_Critical_Care_Infants_and_Childr en_7.aspx%E2%80%8B)

40. Policies and Guidelines. National Blood Transfusion Council. Retrieved on May 03 2022, from [http://nbtnc.naco.gov.in/page/policies\\_guidelines/](http://nbtnc.naco.gov.in/page/policies_guidelines/)
41. Practice Guidelines for Moderate Procedural Sedation and Analgesia 2018. (2018). *Anesthesiology*, 128(3), 437-479. doi:10.1097/aln.0000000000002043
42. Prescribing and clinical use of blood and blood products. Australian Commission on Safety and Quality in Healthcare. Retrieved on May 03 2022, from <https://www.safetyandquality.gov.au/standards/nsqhs-standards/blood-management-standard/prescribing-and-clinical-use-blood-and-blood-products>
43. Preventing Falls in Hospitals. (2013). Agency for Healthcare Research and Quality. Retrieved on May 03 2022, from <https://www.ahrq.gov/professionals/systems/hospital/fallpxtoolkit/index.html>
44. Quality Indicators in ICU. Indian Society of Critical Care Medicine (2009). Retrieved on May 03 2022, from <https://isccm.org/pdf/Section8.pdf>
45. Reay, G., Norris, J. M., Nowell, L., Hayden, K. A., Yokom, K., Lang, E. S., ... Abraham, J. (2019). Transition in Care from EMS Providers to Emergency Department Nurses: A Systematic Review. *Prehospital Emergency Care*, 1-13. doi:10.1080/10903127.2019.1632999
46. Roback, M., Green, S., Andolfatto, G., Leroy, P., & Mason, K. (2018). Tracking and Reporting Outcomes Of Procedural Sedation (TROOPS): Standardized Quality Improvement and Research Tools from the International Committee for the Advancement of Procedural Sedation. *British Journal of Anaesthesia*, 120(1), 164-172. doi:10.1016/j.bja.2017.08.004
47. Rotter, T., Kinsman, L., James, E. L., Machotta, A., Gothe, H., Willis, J., ... Kugler, J. (2010). Clinical pathways: effects on professional practice, patient outcomes, length of stay and hospital costs. *Cochrane Database of Systematic Reviews*. doi:10.1002/14651858.cd006632.pub2
48. Safe Medication Use in the ICU. *Crit Care Med* 2017; 45(9):e877-e915. Retrieved on May 03 2022, from [https://journals.lww.com/ccmjjournal/Fulltext/2017/09000/Clinical\\_Practice\\_Guideline\\_Safe\\_Medicatio\\_n\\_Use.32.aspx](https://journals.lww.com/ccmjjournal/Fulltext/2017/09000/Clinical_Practice_Guideline_Safe_Medicatio_n_Use.32.aspx)
49. Salins, N., Muckaden, M., Nirabhawane, V., Simha, S., Macaden, S., Kulkarni, P., & Joad, A. (2014). End of life care policy for the dying: Consensus position statement of indian association of palliative care. *Indian Journal of Palliative Care*, 20(3), 171. doi:10.4103/0973-1075.138384
50. Sedation in children and young people. National Institute for Health and Clinical Excellence (NICE Guidelines). May 03 2022, from <https://www.nice.org.uk/guidance/cg112/evidence/full-guideline-136287325>
51. Semrau, K. E., Hirschhorn, L. R., Marx Delaney, M., Singh, V. P., Saurastri, R., Sharma, N., ... Gawande, A. A. (2017). Outcomes of a Coaching-Based WHO Safe Childbirth Checklist Program in India. *New England Journal of Medicine*, 377(24), 2313-2324. doi:10.1056/nejmoa1701075
52. Sessler, D. I. (2016). Perioperative thermoregulation and heat balance. *The Lancet*, 387(10038), 2655- 2664. doi:10.1016/s0140-6736(15)00981-2

53. Sharma S, Sharma P and Tyler LN. Transfusion of Blood and Blood Products: Indications and Complications. *Am Fam Physician*. 2011 Mar 15;83(6):719-724. Retrieved on May 03 2022, from <https://www.aafp.org/afp/2011/0315/p719.html>
54. Singh, D., & Jain, G. (2018). Chapter-49 Declaration of Brain Death in India: Current Status. *Critical Care Update* 2017, 273-279. doi:10.5005/jp/books/13063\_50
55. Standards For Blood Banks & Blood Transfusion Services. National AIDS Control Organisation. Ministry of Health and Family Welfare. Government of India. (2007, May). Retrieved on May 03 2022, from <http://naco.gov.in/sites/default/files/Standards%20for%20Blood%20Banks%20and%20Blood%20Transfusion%20Services.pdf>
56. Tripathi, L., & Kumar, P. (2014). Challenges in pain assessment: Pain intensity scales. *Indian Journal of Pain*, 28(2), 61. doi:10.4103/0970-5333.132841
57. Turner, J., Siriwardena, A. N., Coster, J., Jacques, R., Irving, A., Crum, A., ... Campbell, M. (2019). Developing new ways of measuring the quality and impact of ambulance service care: the PhOEBE mixed-methods research programme. *Programme Grants for Applied Research*, 7(3), 1-90. doi:10.3310/pgfar07030
58. Use of Seclusion and Restraint. (2018). American Psychiatric Nurses Association Position Statement on the Use of Seclusion and Restraint. Retrieved on May 03 2022, from <https://www.apna.org/i4a/pages/index.cfm?pageid=3728>
59. Validated Malnutrition Screening and Assessment Tools: Comparison Guide. (2017). Retrieved on May 03 2022, from [https://www.health.qld.gov.au/data/assets/pdf\\_file/0021/152454/hphe\\_scrn\\_tools.pdf](https://www.health.qld.gov.au/data/assets/pdf_file/0021/152454/hphe_scrn_tools.pdf)
60. Van Rein, E. A., Van der Sluijs, R., Voskens, F. J., Lansink, K. W., Houwert, R. M., Lichtveld, R. A., ... Van Heijl, M. (2019). Development and Validation of a Prediction Model for Prehospital Triage of Trauma Patients. *JAMA Surgery*, 154(5), 421. doi:10.1001/jamasurg.2018.4752
61. Vanhaecht, K., De Witte, K., Panella, M., & Sermeus, W. (2009). Do pathways lead to better organized care processes? *Journal of Evaluation in Clinical Practice*, 15(5), 782-788. doi:10.1111/j.1365-2753.2008.01068.x
62. Wax, D. B., McCormick, P. J., Joseph, T. T., & Levin, M. A. (2018). An Automated Critical Event Screening and Notification System to Facilitate Preanesthesia Record Review. *Anesthesia & Analgesia*, 126(2), 606-610. doi:10.1213/ane.0000000000002141
63. Whitehead, L., & Myers, H. (2016). The effect of hospital nurse staffing models on patient and staff- related outcomes. *International Journal of Nursing Practice*, 22(4), 330-332. doi:10.1111/ijn.12463
64. WHO Guidelines for Safe Surgery 2009: Safe Surgery Saves Lives. World Health Organization. World Alliance for Patient Safety. (2009). Retrieved on May 03 2022, from <https://apps.who.int/iris/handle/10665/44185>

# Chapter 3

## Management of Dental Material & Medication (MOM)



**Intent of the chapter:** The DHSP has a safe and organized medication process. The availability, safe storage, prescription, dispensing and administration of medications is governed by written guidance. The standards encourage integration of the pharmacy into everyday functioning of hospitals and patient care. The pharmacy should guide and audit medication processes. The pharmacy should have oversight of all medications stocked out of the pharmacy. The pharmacy should ensure correct storage (as regards to temperature, look-alike, sound-alike etc.), expiry dates and maintenance of documentation.

The availability of emergency medication is stressed upon. The DHSP should have a mechanism to ensure that the emergency medications are standardized throughout the DHSP, readily available and replenished promptly. There should be a monitoring mechanism to ensure that the required medications are always stocked and well within expiry dates.

Every high-risk medication order should be verified by an appropriate person so as to ensure accuracy of the dose, frequency and route of administration.

The process also includes monitoring of patients after administration and procedures for reporting and analysing medication errors.

Patients and family members are educated about safe medication and food-drug interactions.

Medications also include blood, implants, devices and medical gases.

### Summary of Standards

MOM.1.	The DHSP develops, updates and implements a hospital formulary.
MOM.2.	Medications and dental materials are stored appropriately and are available where required.
MOM.3.	Medications are prescribed safely and rationally
MOM.4.	Medications orders are written in a uniform manner.
MOM.5.	Medications are dispensed in a safe manner.
MOM.6.	There are defined procedures for medication administration.
MOM.7.	Patients are monitored after medication administration.
MOM.8.	Implantable prosthesis and dental devices are used in accordance with laid down criteria.
MOM.9.	Medical supplies and consumables are stored appropriately and are available where required.

Objective Element	MOM1	MOM 2	MOM 3	MOM 4	MOM 5	MOM 6	MOM 7	MOM 8	MOM 9
a.	Core	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
b.	Commitment	Commitment	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
c.	Commitment	Core	Commitment	Commitment	Commitment	Commitment	Core	Commitment	Commitment
d.	Excellence	Achievement	Excellence		Core	Core	Commitment	Commitment	Commitment
e.	Commitment	Core	Core		Core	Commitment	Commitment	Achievement	Commitment
f.	Commitment	Commitment	Achievement			Commitment	Commitment		
g.		Core	Achievement			Commitment			
h.			Core						

## Standard

### MOM.1.

### The DHSP develops, updates and implements a hospital formulary.

## Objective Elements

### CORE

- a. **A list of medications and dental material and medications appropriate for patients, as per the scope of the DHSP's clinical services, is developed collaboratively by a multidisciplinary committee.**

**Interpretation:** A multidisciplinary committee shall prepare the DHSP's formulary.

The multi-disciplinary committee shall have defined roles and responsibilities for the management of medications and dental material. Some of the responsibilities of the committee include developing medication management processes; developing and revising the DHSP's formulary, evaluating medication and material use and patient safety incidents involving medications. The committee shall be representative of major clinical departments, administration, Nursing, Quality Team and shall include a pharmacist/clinical pharmacologist. The objectives of the committee, frequency of meetings, the quorum required and the minutes of the meeting shall be documented.

The formulary shall include medications and dental material necessary to meet the DHSP's mission, patient needs and scope of services. The formulary could be prepared keeping in mind the "National List of Essential Medicines" and "WHO Model List of Essential Medicines". The list of dental material could be based on national or international standards like WHO/ANSI\ADA\ISO\CE. The DHSP shall look at the possibility of having system-wise/speciality wise formulary. The DHSP shall categorize dental material department-wise and on the basis of usage.

At a minimum, the formulary should include the name of the molecule, formulation and strength(s). The DHSP should endeavour to limit the number of drug concentrations of a particular drug in the formulary.

Implants and devices also come under drugs.

### Commitment

- b. **The list is reviewed and updated collaboratively by the multidisciplinary committee at least annually.**

**Interpretation:** The committee may review and update all medications and dental materials or only certain medication categories. The review may be done speciality-wise. Non-formulary drugs which were procured in the previous year regularly may be included in the revised list. Aspects of patient safety, including adverse drug reactions, changing disease pattern, changing resistance pattern, and cost, could be taken into consideration during the review. Adverse reactions, durability, function, aesthetics and cost could be taken into consideration during the review for dental material.

**Commitment****c. The current formulary is available for dentists/ dental surgeons to refer to.**

**Interpretation:** The current formulary shall be made available to all treating dentists and dental surgeons of the DHSP. The DHSP needs to ensure that clinicians have access to the current version of the formulary. The formulary could be made available in either physical or electronic form.

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**Excellence****d. Dentists/ dental surgeons adhere to the current formulary.**

**Interpretation:** The current formulary shall be made available to all treating dentists and dental surgeons of the DHSP. The DHSP needs to ensure that clinicians have access to the current version of the formulary. The formulary could be made available in either physical or electronic form.

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**Commitment****e. The DHSP adheres to the written guidance for acquisition of formulary medications. \***

**Interpretation:** The written guidance should address the issues of vendor selection, vendor evaluation, reorder levels, indenting process, generation of the purchase order, and receipt of goods. The guidance also addresses managing stock-outs due to various reasons.

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**Commitment****f. The DHSP adheres to the procedure to obtain medications not listed in the formulary. \***

**Interpretation:** Written guidance shall be used to obtain medications not listed in the formulary. Whenever there is a local purchase of medication that is not listed in the formulary, the DHSP has a process of evaluation, authorisation and ratification and to decide on its subsequent inclusion in formulary if necessary. Local purchase/hotline, which takes care of the immediate requirement are examples of the procedure to obtain medications not listed in the formulary.



## Standard

**MOM.2.**
**Medications are stored appropriately and are available where required.**

## Objective Elements

### CORE

- a. **Medications are stored in a clean, safe and secure environment; and incorporating the manufacturer's recommendation(s).**

**Interpretation:** The medication storage space shall be clean, safe and secure. The DHSP shall adhere to the storage requirements of the drug as specified by the manufacturer. In the absence of manufacturer's instructions, the DHSP shall develop and implement storage requirements. Storage requirements shall apply to all areas where medications and dental material are stored, including wards and in house dental labs respectively. Beyond expiry date drugs (before disposal), shall be stored separately and away from drugs/ material which are intended for patient use.

Restorative dental material like composites, biologic-based combination products (such as bone filling materials) could preferably be kept in refrigerators. Where appropriate, temperature monitoring of the room and the cold storage area/refrigerator shall be done at least once a day. In case of areas which are not opened daily, it shall be done on all working days.

It is preferable that the medication storage area is organised. Overall cleanliness of the storage area shall be maintained.

Where appropriate, temperature monitoring of the room, the cold storage area/refrigerator shall be done at least once a day. In case of areas which are not open on all days, it shall be done on all working days.

Medications shall be protected from loss or theft. Some of the ways of ensuring this is to limit access to medication storage areas to authorised team members, locking medication carts and never leaving them unattended, or storing medications in an area that is continuously staffed. To check for loss or theft, the DHSP could conduct audits at regular intervals (as defined by the DHSP) to verify the stock and detect instances of loss or theft.

### Commitment

- b. **Sound inventory control practices guide storage of the medications.**

**Interpretation:** DHSP shall follow sound inventory control practices like ABC, VED, FSN, First Expiry First Out, Lead Time Analysis, etc. or a combination of these. Medicines can be stored in an alphabetical order of their generic names. The DHSP also has a mechanism for handling medications which are not a part of the regular inventory. For example, a physician's sample medications.

Dental material is available at all times and is replenished promptly when used. Adequate quantity of dental material should be stocked at all times. An inventory check shall be done at least daily/weekly to ensure the same.



**CORE****c. The DHSP defines a list of high-risk medication(s). \***

**Interpretation:** High risk/high alert medications carry a heightened risk for adverse outcomes and catastrophic harm whenever there is an error. High-risk medications/high alert medications include medicines with a low therapeutic window, controlled substances, psychotherapeutic medications, look-alike and sound-alike medications, and concentrated electrolytes.

**Achievement****d. High-risk medications are stored in areas of the DHSP where it is clinically necessary.**

**Interpretation:** High-risk medications are stored in pre-determined areas of the DHSP, for example certain wards, OT, ICU etc. Clinical needs shall determine the availability of these drugs in such areas. Where applicable (narcotics), it shall be guided by regulations. In all such areas, safeguards shall be in place to prevent inadvertent administration.

Narcotic drugs shall be stored securely in consonance with statutory requirements. Security measures should ensure that these medications are not diverted and abused.

**CORE****e. High-risk medications including look-alike, sound-alike medications and different concentrations of the same medication are stored physically apart from each other. \***

**Interpretation:** Many drugs in ampoules, vials or tablets may appear similar (look-alike) or have similarly sounding names (sound-alike). The same also applies to impression and restoration dental material. These drugs and material are identified periodically, and the Look-alike Sound-alike medications (LASA) list shall be made available in all units where drugs and dental material are stored. Different concentrations of the same drug need to be identified. The list shall be developed from the hospital formulary. The list will have to be revised at regular intervals depending on the changes in the formulary and changes in the packaging (in case of look-alike). A good practice is to store the two identified look-alike/sound-alike drugs or different concentrations of the same drugs as far apart physically as possible, say at opposite ends of the pharmacy. This is in addition to regular storage practices. In addition to the pharmacy, these storage practices should be followed in patient care areas.

**Commitment****f. The list of emergency medications is defined and is stored uniformly. \***

**Interpretation:** The list of emergency medications shall be prepared in consonance with sound clinical practices and documented. The list of these drugs shall be uniform across the DHSP; however, the quantity can differ. A crash cart would help the DHSP to store these medications in a standardised manner, i.e. the rows and drawers have defined medicines. No other drug shall be kept stored with emergency medications.

**CORE**

- g. Emergency medications and dental materials are available at all times and are replenished promptly when used.**

**Interpretation:** Adequate quantity of emergency medicines and dental materials should be stocked at all times. An inventory check shall be done at least daily to ensure this. In case the DHSP follows a system of sealing the emergency cart, then the check shall be carried out after each use of the cart/once every month.

## Standard

**MOM.3.****Medications are prescribed safely and rationally.**

## Objective Elements

**Commitment**

- a. Medication prescription is in consonance with good practices/guidelines for the rational prescription of medications.**

**Interpretation:** This should address both out-patient and in-patient prescription. The DHSP shall ensure that the dental surgeons are trained/sensitised on the rational prescription of medications. WHO states: "Rational use of medicines requires that patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and their community."

Refer to the glossary for a definition of "prescription".

**CORE**

- b. The DHSP adheres to the determined minimum requirements of a prescription. \***

**Interpretation:** Prescriptions generated within the DHSP (IPD, OPD and emergency) shall adhere to national/international guidelines and those of regulatory bodies. At a minimum, the prescription shall have the name of the patient; unique hospital number; name of the drug (generic composition is mandatory except in the case of combinations of vitamins and/or minerals), strength, dosage instruction, duration and total quantity of the medicine; name, signature and registration number of the prescribing doctor. Only the designated medical officer(s) who is permitted by the relevant regulatory authority shall prescribe narcotics. Error-prone abbreviations shall not be used. A good reference is the Institution for Safe Medication Practices guidelines. All prescriptions shall be written in capital letters. Prescription errors or illegible prescriptions will be initialled after single strikethrough and rewritten. A good reference is the Drugs and Cosmetics Act and the Code of Medical Ethics.

**Commitment**

- c. **Drug allergies and previous adverse drug reactions are ascertained before prescribing.**

**Interpretation:** Drug allergy and previous adverse drug reaction shall be ascertained during the initial consultation or at any point in time during care. It is a good practice to document drug allergies prominently in the medical record, both in OP and IP.

**Excellence**

- d. **The DHSP has a mechanism to assist the clinician in prescribing appropriate medication.**

**Interpretation:** The DHSP needs to provide its dental surgeons with a mechanism(s) to help identify drug interactions, food-drug interactions, therapeutic duplication, dose adjustments etc. This could either be in electronic or physical form.

**CORE**

- e. **Written guidance governs implementation of verbal orders and ensures safe medication management practices. \***

**Interpretation:** The DHSP shall ensure safe medication management practices for verbal orders through written guidance and implementation of the same. The written guidance shall mention who can give verbal orders, when can they be given and how these orders will be authenticated. Verbal orders should be limited to urgent situations where immediate written or electronic communication is not practical. To the extent possible, their usage should be limited. The DHSP should have an approved list of formulary drugs which can be ordered verbally. This list can be defined either by inclusion or exclusion.

It shall ensure that the procedure incorporates good practices like “repeat back/read back”.

A verbal order shall be counter-signed by the doctor who ordered it within 24 hours of ordering.

**Achievement**

- f. **Audit of medication orders/prescription is carried out to check for safe and rational prescription of medications.**

**Interpretation:** The scope of the audit shall include:

- Legibility, use of capitals in written orders;
- The appropriateness of the drug, dose, frequency, and route of administration;
- The presence of therapeutic duplication;
- The possibility of drug interaction and measures taken to avoid the same;
- The possibility of food-drug interaction and measures taken to avoid the same.
- The requirements of this standard (MOM.3.b. to g.).

This shall be done at least once a month using a representative sample size.

It could preferably be done by a clinical pharmacologist/clinical pharmacist. In case there is no clinical pharmacologist/clinical pharmacist, it shall be done by the multidisciplinary committee.

#### Achievement

- g. **Corrective and/or preventive action(s) is taken based on the audit, where appropriate.**

**Interpretation:** The records of the same have to be maintained. It is preferable that corrective and/or preventive action(s) is taken based on the root-cause analysis.

#### CORE

- h. **Reconciliation of medications occurs at transition points patient care**

**Interpretation:** The purpose of reconciliation of medication is to ensure that the list of medication that a patient has to receive is complete and up-to-date with past clinical conditions and present care plan. The prescribed medications shall be checked for accuracy at the transition points, such as the time of admission, transfer of the patient from one ward setting/department to another, or at the time of discharge. It is preferable that medication reconciliation also occurs after cross-consultation. Medication reconciliation should be documented. There is a system for effective communication during handover regarding the reconciliation of medications.

## Standard

### MOM.4.

**Medications orders are written in a uniform manner.**

## Objective Elements

### Commitment

- a. **The DHSP ensures that only authorised personnel write orders. \***

**Interpretation:** Medication orders shall be written by a dentist/dental surgeon who at a minimum, holds a BDS qualification. In case there is any other category of staff authorised to write medication orders, the same shall be backed by a legislation or government order. The medication order card in the IP shall have the orders written by a dental surgeon, even if it is the case of transcribing orders of the treating consultant from an OP record or an admission note. In facilities which use Electronic Medical Record (EMR), the dentist shall directly enter the prescription in the Hospital Information System (HIS) using his or her unique login. In case the HIS entry is made by an assistant, the same shall be verified and authorised by the dental surgeon.

**Commitment**

- b. **Orders for medicines are written in a uniform location in the medical records, which also reflects the patient's name and unique identification number.**

**Interpretation:** All the orders for medicines are recorded on a uniform location of the medical record. Only medications written in this location shall be administered to the patient. It is imperative that medication orders that are written in any other location of the medical record be transcribed to this location. Electronic orders, when typed, shall again follow the same principles. It is preferable that the prescription and the administration record is on the same sheet. This would help minimise medication errors. Phrases like “CST”/ “continue same treatment”/ “repeat all”/ “repeat 1,4,5,8” should not be accepted. Whenever there is a modification in the existing order for a particular drug, a fresh order will have to be written for that drug for example, Tab. Paracetamol 500 mg QID changed to Tab. Paracetamol 500 mg BD – this shall warrant the first order to be discontinued and a fresh medication order to be written. A strike-through or over-writing of the previous order is not acceptable.

**Commitment**

- c. **Medication orders are clear, legible, timed, dated, named and signed.**

**Interpretation:** Medication orders shall be written in capital letters. In case abbreviations are used, a list of approved standardised abbreviations for medication orders shall be used throughout the DHSP. Error-prone abbreviations shall not be used. A good reference is the Institution for Safe Medication Practices guidelines.

The identity of the person who has written the medication order should be traceable. This could be done by either writing the name against every order or by having a 'master signature list' in the medical record which has the name of the person against the signature or by stating the employee code number against every medication order.

Medication orders contain the name of the medicine, route of administration, strength to be administered and frequency/time of administration.

**Standard****MOM.5.****Medications are dispensed in a safe manner.****Objective Elements****Commitment**

- a. **Dispensing of medications is done safely. \***

**Interpretation:** Written guidance is laid down for the dispensing of medications. Medications should be dispensed only against a valid prescription or medication order (except for over-the-counter drugs). The medication should be checked before dispensing. This should include a check of the generic composition, formulation, expiry date, and where applicable the strength. This shall include both bulk and retail pharmacy.

Physicians' samples shall not be sold.

#### Commitment

#### b. Medication and dental material recalls are handled effectively. \*

**Interpretation:** Recall may be based on communication from regulatory authorities, manufacturers or internal feedback (e.g., visible contaminant in Lignocaine or variation in setting time of alginate, allergic reaction impression materials and composites). Recall procedure in response to internal feedback also includes providing information to the appropriate regulatory authority.

#### Commitment

#### c. Near-expiry medications are handled effectively. \*

**Interpretation:** The DHSP could define as to what constitutes "near expiry", for example, three months before the expiry date. The DHSP's mechanism shall ensure that near expiry drugs are withdrawn and that no beyond expiry date medication is available.

#### CORE

#### d. Dispensed medications are labelled. \*

**Interpretation:** At a minimum, the label must include the dosage instruction in a manner that the patient understands. Labelling is applicable only for out-patients. In instances when medicines are dispensed either as cut strips or from bulk containers, the label must include the drug name, strength, dosage instruction (in a manner that the patient understands) and expiry date. This shall be applicable for both in-patients and out-patients.

#### CORE

#### e. High-risk medication orders are verified before dispensing.

**Interpretation:** High-risk medications shall be given only after written orders, and which should be verified by the staff before dispensing. This shall adhere to statutory requirements where applicable.

## Standard

### MOM.6.

### Medications are administered safely.

## Objective Elements

#### Commitment

#### a. Medications are administered by those who are permitted by law to do so.

**Interpretation:** Only a registered nurse or doctor with a minimum of BDS qualification shall administer medication. In case there is any other category of staff authorised to administer medication, a legislation or government order shall back the same.

#### Commitment

#### b. Prepared medication is labelled prior to preparation of a second drug.

**Interpretation:** Labelling is required when more than one drug is prepared and loaded. Examples of these are anaesthetic drug preparation in OTs.

#### Commitment

#### c. The Patient is identified prior to administration.

**Interpretation:** At a minimum, two identifiers shall be used for identification with one of them being the unique identification number (e.g., hospital number/IP number, etc.) and name.

#### CORE

#### d. Medication is verified from the order and physically inspected before administration.

**Interpretation:** Staff administering medications should verify the medication order and ensure that medications are administered appropriately. It is required to check the general appearance of the medication (e.g., melting, clumping, etc.) and the expiry dates before administration. If any of the parameters concerning an order, namely name, strength, route or frequency/time are missing or incomplete, administration of medication shall be deferred pending early verification by the treating team. In case the confirmation is obtained verbally, it shall be considered a verbal order and the procedure for verbal orders shall be adhered to.

In the case of high-risk medication(s), the verification shall be done by at least two staff (nurse-nurse or nurse-doctor) independently and documented.

Nurses are knowledgeable regarding high-risk medications and are empowered to highlight prescription errors noted while verifying the orders.

#### Commitment

#### e. Strength, route and timing is verified from the order and medication administration is documented.

**Interpretation:** Before administration, the person administering the drug shall verify the strength from the medication order. In case of discrepancy, medication administration shall be deferred. Where applicable, the site of administration shall also be verified. The DHSP shall have documentation to support the time of administration of drugs for which the time has not been written. For example, 1-1-1, BD. The suggested timings for these medicines have to be adhered to.

“ISMP Acute Care Guidelines for Timely Administration of Scheduled Medications” provides guidance on scheduled medications and classifies them into time-critical and non-time-critical. The DHSP could adopt/adapt the same.

The organisation shall ensure that the documentation of medication administration is done in a uniform location. It shall include the name of the medication, strength, route of administration, timing and the name/employee ID number and signature of the person who has administered the medication. Medicines administered are documented each time for each dose of the same medication separately.

#### Commitment

- f. **A proper record is kept of the usage, administration, and disposal of narcotic drugs and psychotropic substances.**

**Interpretation:** A strict inventory control shall be kept for narcotic drugs and psychotropic substances as per statutory requirements. Narcotics shall be disposed off according to Narcotic Drugs and Psychotropic Substances Act.

#### Commitment

- g. **Written guidance governs patient's medications brought from outside the DHSP.**

**Interpretation:** At the outset, the DHSP could define if it would permit the patient getting his/her medications from outside. In case the DHSP permits the same, written guidance shall include the pre-requisites for such a medication (e.g., clear label with mention of the name, strength, expiry date, batch number, etc.).

## Standard

### MOM.7.

### Patients are monitored after medication administration.

## Objective Elements

#### Commitment

- a. **Patients are monitored after medication administration**

**Interpretation:** Relevant monitoring is done collaboratively to verify that medicine is having its intended effect. It could also include monitoring the effects of medications through laboratory results (beneficial or adverse). Medication administration is documented. Besides, this should help identify near misses, medication errors and adverse drug reactions.

The DHSP defines those situations where more frequent monitoring is required. For example, administration of high-risk medicines.



**Commitment****b. Medications are changed, where appropriate, based on the monitoring.**

**Interpretation:** Medication changes are based on clinical response and adverse drug reactions if any.

**CORE****c. The DHSP captures near miss, medication error and adverse drug reaction. \***

**Interpretation:** Near miss, medication error and adverse drug reaction are defined. This shall be in consonance with best practices. The DHSP shall have written guidance to direct the implementation of identifying, documenting, reporting, analysing and acting in response to a near miss, medication error and adverse drug reaction.

Refer to the glossary for “near miss”, “medication error” and “adverse drug reaction”.

**Commitment****d. Near misses, medication error and adverse drug reaction are reported within a specified time frame. \***

**Interpretation:** The DHSP shall define the timeframe for reporting once any of this has occurred and adhere to the same.

**Commitment****e. Near misses, medication errors and adverse drug reactions are collected and analysed.**

**Interpretation:** Details of near miss, medication error and adverse drug reaction incidents are collected and analysed by a multidisciplinary committee. The analysis shall be completed in a defined time frame. It is preferable that a clinical pharmacologist/clinical pharmacist is a part of this exercise.

**Commitment****f. Corrective and/or preventive action(s) are taken based on the analysis.**

**Interpretation:** Where appropriate, corrective and/or preventive action are taken. The records of the same have to be maintained. It is preferable that corrective and/or preventive action(s) is taken based on the root-cause analysis.

**Standard****MOM.8.**

**Implantable prosthesis and dental devices are used in accordance with laid down criteria.**

**Objective Elements**

**Commitment**

- a. **Usage of the implantable prosthesis and Dental devices is guided by scientific criteria for each item and national / international recognised guidelines / approvals for such specific item(s).**

**Interpretation:** The DHSP shall ensure that relevant and sufficient scientific data are available before selection. It shall also look for international (e.g.US-FDA) or national notification (Central Drugs Standard Control Organization notification based on the Drugs and Cosmetics Act) for approval of the particular product. The multidisciplinary committee shall be responsible for approving the use of a particular implant.

**Commitment**

- b. **The DHSP implements a mechanism for the usage of the implantable prosthesis and dental devices. \***

**Interpretation:** The DHSP has written guidance to direct procurement, storage/stocking, issuance and usage of the implantable prosthesis and dental devices. This should address statutory regulations/guidelines and manufacturer's recommendation(s).

**Commitment**

- c. **Patient and his/her family are counselled for the usage of the implantable prosthesis and dental device, including precautions if any.**

**Interpretation:** Precautions could include good oral hygiene and change in food habit; reporting to the dentist if a particular symptom occurs.

**Commitment**

- d. **The batch and serial number of the implantable prosthesis are recorded in the patient's medical record and the master logbook.**

**Interpretation:** In the case where implantable prosthesis does not have pre-labelled stickers, the DHSP shall have suitable mechanisms in place for identifying the implant (manufacturer, type, size, batch number, serial number) and any other important detail.

**CORE**

- e. **Recall of implantable prosthesis and dental devices are handled effectively. \***

**Interpretation:** Recall may be based on communication from regulatory authorities, manufacturer or internal feedback. Recall procedure in response to internal feedback also includes providing information to appropriate regulatory authority and manufacturer.

## Standard

### MOM.9.

**Dental supplies and consumables are stored appropriately and are available where required.**

## Objective Elements

### Commitment

- a. **The organisation adheres to the defined process for the acquisition of medical supplies and consumables. \***

**Interpretation:** In this context, medication supplies and consumable refer to those items used in patient care, excluding medications, implants and dental material. This process should address the issues of vendor selection, vendor evaluation, indenting process, generation of the purchase order and receipt of goods.

### Commitment

- b. **Medical supplies and consumables are used in a safe manner, where appropriate.**

**Interpretation:** The items are opened and used using relevant precautions maintain sterility and integrity.

### Commitment

- c. **Medical supplies and consumables are stored in a clean, safe and secure environment; and incorporating the manufacturer's recommendation(s).**

**Interpretation:** The organisation shall ensure that the storage requirements specified by the manufacturer are adhered to. This shall apply to all areas where these are stored, including wards. They shall be protected from loss or theft. Overall cleanliness of the storage area shall be maintained. Hazardous materials are identified and kept safely.

### Commitment

- d. **Sound inventory control practices guide storage of medical supplies and consumables.**

**Interpretation:** The organisation shall follow or demonstrate ABC, VED, FSN, First Expiry First Out, lead time analysis etc.

### Commitment

- e. **There is a mechanism in place to verify the condition of medical supplies and consumables.**

**Interpretation:** Medical supplies and consumables shall be in a condition suitable for safe usage. The conditions of the se materials shall be checked before dispensing and usage. For example, opened package, damp cotton roll, physical damage and unwanted discolouration.

## References:

1. About Medication Errors. National Coordinating Council for Medication Error Reporting and Prevention. (2015). Retrieved May 03, 2022, from <https://www.nccmerp.org/about-medication-errors>
2. Avoiding Catheter and Tubing Mis-Connections. World Health Organization. (2007). Retrieved May 03, 2022, from [https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/psf/patient-safety-solutions/ps-solution7-avoiding-catheter-and-tubing-miss-connections.pdf?sfvrsn=b913dc7c\\_4&ua=1](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/psf/patient-safety-solutions/ps-solution7-avoiding-catheter-and-tubing-miss-connections.pdf?sfvrsn=b913dc7c_4&ua=1)
3. Bryan R, Aronson JK, Williams A, Jordan S. The problem of look-alike, sound-alike name errors: Drivers and solutions. *Br J Clin Pharmacol*. 2021;87:386–394.
4. FDA and ISMP Lists of Look-Alike Drug Names with Recommended Tall Man Letters. Institute for Safe Medication Practices. (2016). Retrieved May 03, 2022, from <https://www.ismp.org/sites/default/files/attachments/2017-11/tallmanletters.pdf>
5. Guide on handling look alike, sound alike medications. Ministry of Health, Malaysia. (2012). Retrieved May 03, 2022, from <https://www.pharmacy.gov.my/v2/sites/default/files/document-upload/guide-handling-lasa.pdf>
6. Guidelines for Standard Order Sets. Institute for Safe Medication Practices. (2010). Retrieved May 03, 2022, from <https://www.ismp.org/guidelines/standard-order-sets>
7. High-Alert Medications in Acute Care Settings. Institute for Safe Medication Practices. (2018). Retrieved May 03, 2022, from <https://www.ismp.org/recommendations/high-alert-medications-acute-list>
8. High-Risk Medicines. Clinical Excellence Commission (CEC). (n.d.). Retrieved May 03, 2022, from <https://www.cec.health.nsw.gov.au/keep-patients-safe/medication-safety/high-risk-medicines>
9. How to Investigate Drug Use in Health Facilities: Selected Drug Use Indicators - EDM Research Series No. 007. World Health Organization. (1993). Retrieved May 03, 2022, from [https://apps.who.int/iris/bitstream/handle/10665/60519/WHO\\_DAP\\_93.1.pdf](https://apps.who.int/iris/bitstream/handle/10665/60519/WHO_DAP_93.1.pdf)
10. ISMP Acute Care Guidelines for Timely Administration of Scheduled Medications. Institute for Safe Medication Practices. (2011). Retrieved May 03, 2022, from <https://www.ismp.org/sites/default/files/attachments/2018-02/tasm.pdf>
11. Kahn, S., & Abramson, E. L. (2018). What is new in paediatric medication safety? *Archives of Disease in Childhood*, 104(6), 596-599. doi:10.1136/archdischild-2018-315175
12. List of Confused Drug Names. Institute for Safe Medication Practices. (2019). Retrieved May 03, 2022, from <https://www.ismp.org/recommendations/confused-drug-names-list>
13. List of Error-Prone Abbreviations. Institute for Safe Medication Practices. (2017). Retrieved May 03, 2022, from <https://www.ismp.org/recommendations/error-prone-abbreviations-list>
14. Look-Alike, Sound-Alike Medication Names. World Health Organization. (2017). Retrieved May 03, 2022, from [https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/psf/patient-safety-solutions/ps-solution1-look-alike-sound-alike-medication-names.pdf?sfvrsn=d4fb860b\\_6&ua=1](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/psf/patient-safety-solutions/ps-solution1-look-alike-sound-alike-medication-names.pdf?sfvrsn=d4fb860b_6&ua=1)

15. Medication Errors and Adverse Drug Events. Agency for Healthcare Research and Quality Patient Safety Network. (2019). Retrieved May 03, 2022, from <https://psnet.ahrq.gov/primer/medication-errors-and-adverse-drug-events>
16. Medication Reconciliation. Agency for Healthcare Research and Quality Patient Safety Network. (2019). Retrieved May 03, 2022, from <https://psnet.ahrq.gov/primer/medication-reconciliation>
17. Medication Safety in transition of care. World Health Organization. (2019). Retrieved May 03, 2022. <https://www.who.int/publications/i/item/WHO-UHC-SDS-2019.9> Medication errors. Technical Series on Safer Primary Care. World Health Organization (2016).
18. Medication without harm. WHO Global Patient safety Challenge. World Health Organization. (2017). Retrieved May 03, 2022. <https://www.who.int/initiatives/medication-without-harm>
19. Model Lists of Essential Medicines. World Health Organization. (n.d.). Retrieved May 03, 2022, from <https://www.who.int/groups/expert-committee-on-selection-and-use-of-essential-medicines/essential-medicines-lists>
20. National Coordinating Council for Medication Error Reporting and Prevention. (2015). Recommendations to Enhance Accuracy of Administration of Medications. Retrieved May 03, 2022, from <https://www.nccmerp.org/recommendations-enhance-accuracy-administration-medications>
21. National List of Essential Medicines. Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, Government of India. (2018, December 27). Retrieved May 03, 2022, from <https://pharmaceuticals.gov.in/sites/default/files/NLEM.pdf>
22. Pharmacovigilance Programme of India. Indian Pharmacopoeia Commission, National Coordination Centre. Retrieved May 03, 2022, from [https://ipc.gov.in/PvPI/pv\\_home.html](https://ipc.gov.in/PvPI/pv_home.html)
23. Promoting rational use of medicines: core components. World Health Organization. (2012). Retrieved May 03, 2022. [https://apps.who.int/iris/bitstream/handle/10665/67438/WHO\\_EDM\\_2002.3.pdf](https://apps.who.int/iris/bitstream/handle/10665/67438/WHO_EDM_2002.3.pdf)
24. Recommendations to Enhance Accuracy of Dispensing Medications. National Coordinating Council for Medication Error Reporting and Prevention. (2015). Retrieved May 03, 2022, from <https://www.nccmerp.org/recommendations-enhance-accuracy-dispensing-medications>
25. Recommendations to Enhance Accuracy of Prescription/Medication Order Writing. National Coordinating Council for Medication Error Reporting and Prevention. (2015). Retrieved May 03, 2022, from <https://www.nccmerp.org/recommendations-enhance-accuracy-prescription-writing>
26. Recommendations to Enhance Accuracy of Prescription/Medication Order Writing. National Coordinating Council for Medication Error Reporting and Prevention. (2015). Retrieved May 03, 2022, from <https://www.nccmerp.org/recommendations-enhance-accuracy-prescription-writing>
27. Recommendations to Reduce Medication Errors Associated with Verbal Medication Orders and Prescriptions. National Coordinating Council for Medication Error Reporting and Prevention. (2015). Retrieved May 03, 2022, from <https://www.nccmerp.org/recommendations-reduce-medication-errors-associated-verbal-medication-orders-and-prescriptions>

28. Seven (Potentially) Deadly Prescribing Errors. Graham, L. R., Scudder, L., & Stokowski, L. (2015). Retrieved May 03, 2022. <https://www.medscape.com/slideshow/prescribing-errors-6007087>
29. The High 5s Project –Standard Operating Protocol Assuring Medication Accuracy at Transitions in Care: Medication Reconciliation. World Health Organization. (2014). Retrieved May 03, 2022, from [https://cdn.who.int/media/docs/default-source/patient-safety/high5s/h5s-sop.pdf?sfvrsn=594d8e49\\_2&download=true](https://cdn.who.int/media/docs/default-source/patient-safety/high5s/h5s-sop.pdf?sfvrsn=594d8e49_2&download=true)
30. Tully, A. P., Hammond, D. A., Li, C., Jarrell, A. S., & Kruer, R. M. (2019). Evaluation of Medication Errors at the Transition of Care From an ICU to Non-ICU Location. *Critical Care Medicine*, 47(4), 543-549.

# Chapter 4

## Patient Rights and Education (PRE)



**Intent of the chapter:** The DHSP defines the patient and family rights and responsibilities. The staff is aware of these and is trained to protect patient rights. Patients are informed of their rights and educated about their responsibilities at the time of admission. They are informed about the disease, the possible outcomes and are involved in decision making. The cost of treatment is explained in a clear manner to patient and/or family. The patients are educated about the mechanisms available for addressing grievances. A documented process for obtaining patient and / or families consent exists for informed decision making about their care. Patient and families have a right to information and education about their healthcare needs in an understandable language.

### Summary of Standards

PRE.1.	The organisation protects and promotes patient and family rights and informs them about their responsibilities during care.
PRE.2.	Patient and family rights support individual beliefs, values and involve the patient and family in decision-making processes.
PRE.3.	The patient and/or family members are educated to make informed decisions and are involved in the care planning and delivery process.
PRE.4.	Informed consent is obtained from the patient or family about their care.
PRE.5.	Patient and families have a right to information and education about their healthcare needs.
PRE.6.	Patient and families have a right to information on expected costs.
PRE.7.	The organisation has a mechanism to capture patient's feedback and to redress complaints.
PRE.8.	The organisation has a system for effective communication with patients and/or families.

Objective Element	PRE 1	PRE 2	PRE 3	PRE 4	PRE 5	PRE 6	PRE 7	PRE 8
a.	Commitment	Commitment	Core	Core	Commitment	Core	Commitment	Commitment
b.	Achievement	Commitment	Commitment	Commitment	Commitment	Commitment	Core	Commitment
c.	Core	Commitment	Commitment	Core	Commitment	Commitment	Commitment	Commitment
d.	Core	Core	Achievement	Commitment	Commitment	Commitment	Commitment	Commitment
e.		Commitment	Commitment	Core	Commitment		Commitment	Achievement
f.		Commitment	Commitment					
g.		Core						
h.		Commitment						
i.		Achievement						
j.		Commitment						
k.		Commitment						
l.		Commitment						



## Standard

PRE.1.

The organisation protects and promotes patient and family rights and informs them about their responsibilities during care.

## Objective Elements

### Commitment

- a. **Patient and family rights and responsibilities are documented, displayed, and they are made aware of the same. \***

**Interpretation:** DHSP should document the patient's rights and inform them of their responsibilities. These shall be documented in consonance with the Charter of Patients' Rights laid down by the statutory body. The rights and responsibilities of the patients should be displayed in the DHSP where it is prominently visible to patients, families and visitors. Pamphlets could be used to make them aware. Information, education and communication material should at least be bilingual.

### Achievement

- b. **Patient and family rights and responsibilities are actively promoted. \***

**Interpretation:** DHSP should take steps to actively promote patient and family rights and responsibilities. In the case of in-patients, the organisation shall counsel the patient and / or family on their rights and responsibilities. Counselling is done in a format and language that they can understand. In the case of out-patients, educational material shall be easily accessible and prominently displayed continually (television / standee etc.).

### CORE

- c. **The organisation has a mechanism to report a violation of patient and family rights.**

**Interpretation:** The organisation may develop a list of such instances which could be considered as infringements of patients' and families' rights and train the staff accordingly. For example, compromising the privacy, breaching confidentiality, disrespect to the religious and cultural needs, not providing medical records within the stipulated time etc. Violation of patient and family rights is reported through an incident reporting form. It should provide details of how the right was violated and where applicable by whom. Also, there should be a mechanism for the patient and/or family to report a violation of their rights. The patient feedback form (by incorporating patient rights worded appropriately) could be used as a tool to capture violation of patient rights.

### CORE

- d. **Violation of patient and family rights are monitored, analysed, and corrective/preventive action taken by the top leadership of the DHSP.**

**Interpretation:** Where patients' rights have been infringed upon, the management must keep records of such violations, as also a record of the consequences, for example, corrective actions to prevent recurrences.

## Standard

**PRE.2.**

**Patient and family rights support individual beliefs, values and involve the patient and family in decision-making processes.**

## Objective Elements

### Commitment

- a. Patients and family rights include respecting values and beliefs, any special preferences, cultural needs, and responding to requests for spiritual needs.**

**Interpretation:** This could include how they wish to be addressed, dietary preferences and worship requirements. This may also include any specific requirement following death. Processes should be in place to ensure patient safety.

### Commitment

- b. Patient rights include respect for personal dignity and privacy during examination, procedures and treatment.**

**Interpretation:** During all stages of patient care, be it while examining or carrying out a procedure, the hospital staff shall ensure that the patient's privacy and dignity are maintained. The DHSP shall develop the necessary guidelines for the same. During procedures, the DHSP shall ensure that the patient is exposed just before the actual procedure. With regards to photographs/recording procedures, the DHSP shall ensure that explicit informed consent is taken and that the patient's identity is not revealed.

### Commitment

- c. Patient and family rights include protection from neglect or abuse.**

**Interpretation:** Examples of this include falling from the bed/trolley due to negligence, assault, repeated internal examinations (unwarranted), manhandling, etc. Special precautions shall be taken, especially concerning vulnerable patients, e.g. elderly, neonates, physically and mentally challenged patients, comatose patients, patients under anaesthesia etc.

### CORE

- d. Patient rights include treating patient information as confidential.**

**Interpretation:** The DHSP and the treating team shall take effective measures to maintain the confidentiality of all patient-related information. Staff shall avoid having patient-related discussions in public places. Statutory requirements regarding privileged communication shall be followed at all times (refer the glossary for a definition of privileged communication). Confidential information, including HIV status, shall not be revealed without the patient's permission. It shall not be explicitly written/pasted on the cover of the medical record, nor shall it be displayed in a manner that is easily understandable by the public at large.

**Commitment****e. Patient and family rights include the refusal of treatment.**

**Interpretation:** The treating doctor shall discuss all the available options and allow the patient to make an informed choice. In case of refusal, the treating doctor shall explain the consequences of the refusal of treatment and document the same.

**Commitment****f. Patient and family rights include a right to seek an additional opinion regarding clinical care.**

**Interpretation:** There is a mechanism for patient and family to seek a second opinion if they wish, from within or outside the organisation. The organisation shall respect the decision of the patient and family, and facilitate access to all relevant information or clinical evaluation. Request for additional information on a particular physician in terms of qualifications and experience may be provided.

**CORE****g. Patient and family rights include informed consent before the transfusion of blood and blood components, anaesthesia, surgery, initiation of any research protocol and any other invasive / high risk procedures / treatment.**

**Interpretation:** Informed consent shall be obtained by treating doctor or a doctor member of the treating team.

**Commitment****h. Patient and family rights include a right to complain and information on how to voice a complaint.**

**Interpretation:** The displayed patient rights should include the right to make a complaint and also mention the methodology to voice the same. The complaint mechanism must be accessible, and redressal of complaint must be fair and transparent

**Achievement****i. Patient and family rights include information on the expected cost of the treatment.**

**Interpretation:** Patients and families are explained about the expected costs of treatment in a transparent manner. This includes consultations, procedures and investigations. It may involve giving written estimates or making the concerned tariff available.

**Commitment****j. Patient and family rights include access to their clinical records.**

**Interpretation:** Patient and family rights include access to their clinical records.

**Commitment**

- k. Patient and family rights include information on the name of the treating doctor, care plan, progress and information on their health care needs.**

**Interpretation:** Information on the name of the treating doctor, care plan, the progress of the patient and the healthcare needs are discussed with patient and family.

**Commitment**

- l. Patient rights include determining what information regarding their care would be provided to self and family.**

**Interpretation:** The DHSP needs to evolve a mechanism to provide sensitive and/or confidential information to the patient and the next of kin if desired by the patient. In the case of minors, it will be provided to at least one of the parents/guardians.

**Standard****PRE.3.**

**The patient and/or family members are educated to make informed decisions and are involved in the care planning and delivery process.**

**Objective Elements****CORE**

- a. The patient and/or family members are explained about the proposed care, including the risks, alternatives and benefits.**

**Interpretation:** The proposed care, including referral to internal and/or external services, is discussed by the attending doctor with the patient and/or family members. This should be done in a language the patient/attendant can understand. The above information could be documented and signed by the doctor concerned.

**Commitment**

- b. The patient and/or family members are explained about the expected results.**

**Interpretation:** The patients and/or family members are explained in detail by the treating dentist or his/her team about the expected outcomes of such treatment at periodic intervals.

**Commitment**

- c. The patient and/or family members are explained about the possible complications.**

**Interpretation:** Possible complications of the treatment, if any, are clearly communicated to the patient and/or family members.

**Achievement**

- d. **The care plan is prepared and modified in consultation with the patient and/or family members.**

**Interpretation:** During the preparation of the care plan, the patient and/or family members are explained about the various treatment options, risks and benefits. The care plan, where possible, incorporates patient and/or family concerns and requests. The religious, cultural and spiritual views of the patient and/or family shall be considered during the process of care delivery. Incorporating patient and/or family requests shall be limited by the statutory requirements. The DHSP could develop a structured mechanism to implement and capture the same.

**Commitment**

- e. **The patient and/or family members are informed about the results of diagnostic tests and the diagnosis.**

**Interpretation:** The results of all diagnostic tests are explained at least in broad terms to patient and family members and their implication on progress and treatment.

**Commitment**

- f. **The patient and/or family members are explained about any change in the patient's condition in a timely manner.**

**Interpretation:** The counselling includes improvement, deterioration or occurrence of complications. Withholding of resuscitation requests from relatives and family could be discussed within ethical and legal parameters.

**Standard****PRE.4.****Informed consent is obtained from the patient or family about their care.****Objective Elements****CORE**

- a. **The DHSP obtains informed consent from the patient or family for situations where informed consent is required. \***

**Interpretation:** A list of procedures should be made for which informed consent is required. This shall be prepared to keep in mind the requirements of this standard and statutory requirement. For example, the policy for HIV testing should follow the national policy on HIV testing laid down by National AIDS Control Organisation (NACO). The organisation shall have written guidance explaining the various steps involved in the informed consent process and the person responsible. The staff are aware of the same.

**Commitment****b. Informed consent process adheres to statutory norms.**

**Interpretation:** This includes (but is not limited to):

- Taking consent before the procedure;
- At least one witness signing the consent form.

The witness shall be a person who was present for the entire duration of the communication between the dentist and the patient.

In case the patient has to undergo a procedure repeatedly for a long time (for example, orthodontic treatment), informed consent is taken at the first instance. Such consent shall have a defined validity period but not more than six months. The patient endorses the consent at each repeat treatment. However, if there is a change in the treatment modality or an addition of another modality, then fresh consent shall be obtained.

**CORE****c. Informed consent includes information on risks, benefits, alternatives and as to who will perform the requisite procedure in a language that they can understand.**

**Interpretation:** The consent shall have the name of the dentist performing the procedure. In case a procedure requires more than one dentist from different specialities, then the same will have to be explained to the patient and consent shall include the name of the principal surgeon from each speciality who is performing the procedure. Each doctor will have to explain his role and address all aspects required for informed consent. For example, if the dental surgery involves the requirement of a ENT surgeon, Ophthalmologist and plastic surgeon, the consent should reflect the same. It should have the names of the principal surgeons of the three specialities. It is the responsibility of each of the surgeons/team to explain their role and the benefits/risks and alternatives of the procedures they are performing on the patient.

If it is a “doctor under training” the same shall be specified. However, the name of the qualified doctor supervising the procedure shall also be mentioned.

The consent form shall at a minimum be bilingual. When consent is taken in a language other than what the patient understands, there should be clear documentation detailing the language in which the patient has been counselled and if any interpreter has been used.

It is preferable to have the risks, benefits and alternatives of the procedure as a part of the documentation. The focus is on informed consent as a process of effective communication between a doctor and patient and not a signature on a form.

**Commitment**

- d. **The organisation describes who can give consent when a patient is incapable of independent decision making and implements the same. \***

**Interpretation:** The consent shall be taken from the patient in all cases when the patient is capable of giving consent and above the legal age for giving consent. No one can consent on behalf of a competent adult. The organisation shall take into consideration the statutory norms when the patient is incapable of independent decision making. This would include next of kin/legal guardian. The order of preference of next of kin / legal guardian is spouse / son / daughter / parents / brothers / sister. For life-threatening situations when a patient is incapable and next of kin is not available, in the interest of the patient, the treating doctor and another clinician can together decide to safeguard the patients' life.

**CORE**

- e. **Informed consent is taken by the person performing the procedure.**

**Interpretation:** The person performing shall be responsible for the entire consent process, including providing explanation and taking the signature. For example, it is not acceptable if the person performing the procedure only explains, and the written consent is taken by the nurse.

A doctor member of the team can take consent on behalf of the person performing the procedure.

**Standard****PRE.5.**

**Patient and families have a right to information and education about their healthcare needs.**

**Objective Elements****Commitment**

- a. **During initial appointment, patient and families are educated about good oral hygiene methods, their dental ailments and different treatment options available along with their benefits and disadvantages.**

**Interpretation:** A dedicated dental education room with audio-visual facility may be created in DHSP for the purpose. Graphic and pictorial charts and patient education models must be available for the purpose.

Oral hygiene instructions should include demonstrating correct tooth brushing technique on models, through computer animation, video or in patient's mouth itself.

**Commitment**

- b. **Patient and families are educated about deleterious habits like smoking and tobacco chewing.**

**Interpretation:** The education posters detailing harmful effects of tobacco consumption along with photos of oral cancer patients may be displayed in patient reception area or in patient education room. Other deleterious habits specific to the patient should be explained in detail with the help of computer animation and/or other aids in a language and format that they can understand.

**Commitment**

- c. **Patient and families are educated about the prevention of dental diseases and importance of periodic maintenance visits post-treatment.**

**Interpretation:** The education shall include information on the prevention of dental diseases. The education could also be done through patient education leaflets/booklets.

**Commitment**

- d. **Patient and family are educated about safe and effective use of materials/prosthesis, for example, denture adhesives, dentures etc.**

**Interpretation:** The DHSP shall make a list of such materials and accordingly educate. A standard written dos and don'ts instructions sheet pertaining to each case should also be given to patient and/or family members.

**Commitment**

- e. **Patient and/or family are educated about diet and nutrition.**

**Interpretation:** The education could include the relationships between various foods or supplements and specific health conditions. It should also incorporate general recommendations for following a healthy diet.

**Standard****PRE.6.****Patient and families have a right to information on expected costs.****Objective Elements****CORE**

- a. **There is uniform pricing policy in a given setting.**

**Interpretation:** There should be a billing policy which defines the charges to be levied for various activities.



**Commitment****b. The tariff list is available to patients.**

**Interpretation:** The DHSP shall ensure that there is an updated tariff list and that this list is available / displayed. The DHSP shall charge as per the tariff list. Any additional charge should also be enumerated in the tariff and the same communicated to the patients. The tariff rates should be uniform and transparent.

**Commitment****c. Patients are explained about the estimated costs of treatment before initiating treatment and also any revised costs, if necessary, during treatment.**

**Interpretation:** Patients should be given an estimate of the expenses on account of the treatment, preferably in a written form. This estimate shall be prepared based on the treatment plan. It could be prepared by the OPD/Registration/Admission staff in consultation with the treating doctor. The limitations of the estimate if any (for example, , emergency admissions) could also be discussed with the patient.

**Commitment****d. Patients are informed about the financial implications when there is a change in the care plan.**

**Interpretation:** When more work is required to be undertaken than was envisaged, the financial implications must be clearly conveyed to patient and fresh consent for the same is undertaken.

**Standard****PRE.7.**

**The organisation has a mechanism to capture patient's feedback and to redress complaints.**

**Objective Elements****Commitment****a. The organisation has a mechanism to capture feedback from patients, which includes patient satisfaction.**

**Interpretation:** The feedback could be captured either physically or electronically. It is preferable that separate data is obtained from out-patients and in-patients.

**CORE****b. The organisation redresses patient complaints as per the defined mechanism. \***

**Interpretation:** The written guidance shall incorporate the mechanism for lodging complaints (including verbal or telephonic complaints), method of compiling them, analysing complaints including the time frame, the person(s) responsible and documenting the action taken. It is for the organisation to decide if it wants to give credence to anonymous complaints.

Patient complaints include those against healthcare workers.

**Commitment**

- c. **Patient and/or family members are made aware of the procedure for giving feedback and/or lodging complaints.**

**Interpretation:** The awareness shall be either by display or providing written information. The DHSP must create an environment of trust wherein the patients would be comfortable to air their views.

**Commitment**

- d. **Feedback and complaints are reviewed and/or analysed within a defined time frame.**

**Interpretation:** The entire process shall be documented. Where appropriate, the patient and/or family could be involved in the discussions and also informed regarding the outcome.

**Commitment**

- e. **Corrective and/or preventive action(s) are taken based on the analysis where appropriate.**

**Interpretation:** The analysis identifies opportunities for improvement and the same are carried out.

## Standard

**PRE.8.**

**The organisation has a system for effective communication with patients and/or families.**

## Objective Elements

**Commitment**

- a. **Communication with the patients and/or families is done effectively. \***

**Interpretation:** Communication is considered to be effective if it serves the purpose. The principles of effective communication are complied. For example, the seven C's namely clear, correct, complete, concrete, concise, considerate and courteous. The organisation has plans to identify and overcome potential communication barriers. For example, the language barrier could be overcome by having interpreters.

The DHSP could adopt any model of effective communication.

**Commitment**

- b. **The organisation shall identify special situations where enhanced communication with patients and / or families would be required. \***

**Interpretation:** Some of these situations could include communication during challenging situations like breaking bad news, handling adverse events, handling an aggressive patient/family, talking to a family of a patient who has expired, counselling for a complicated intervention etc.

**Commitment****c. Enhanced communication with the patients and/or families is done effectively. \***

**Interpretation:** For each identified special situation, the DHSP shall detail the nature of the enhanced communication that may be required. For example, a model for delivering bad news is SPIKES.

**Commitment****d. The organisation ensures that there is no unacceptable communication.**

**Interpretation:** The DHSP shall not allow unacceptable communication. For example, abusing patients, hurting the religious or cultural sentiments, communicating with disrespect, etc.

**Achievement****e. The organisation has a system to monitor and review the implementation of effective communication.**

**Interpretation:** This could be done through feedback from patients and other stakeholders.

## References:

1. Badarudeen, S., & Sabharwal, S. (2010). Assessing Readability of Patient Education Materials: Current Role in Orthopaedics. *Clinical Orthopaedics and Related Research*®, 468(10), 2572-2580. doi:10.1007/s11999-010-1380-y
2. Boissy, A., & Gilligan, T. (2016). *Communication the Cleveland Clinic Way: How to Drive a Relationship- Centered Strategy for Exceptional Patient Experience*. New York, NY: McGraw Hill Professional.
3. Burgener, A. M. (2017). Enhancing Communication to Improve Patient Safety and to Increase Patient Satisfaction. *The Health Care Manager*, 36(3), 238-243. doi:10.1097/hcm.000000000000165
4. Communication with patients and families. Ian Anderson Continuing Education Program in End-of-Life Care. (2000). Retrieved May 08, 2022 , from <https://www.cpd.utoronto.ca/endoflife/Modules/COMMUNICATIONS%20MODULE.pdf>
5. Effective Patient–Physician Communication. Committee Opinion. (2016). The American College of Obstetricians and Gynecologists. Retrieved May 08, 2022 , from <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2014/02/effective-patient- physician-communication.pdf>
6. Five strategies for Providing Effective Patient Education. Lippincott Solutions. (2017). Retrieved May 08, 2022 , from <https://www.wolterskluwer.com/en/expert-insights/5-strategies-for-providing-effective- patient-education>
7. Ha JF and Longnecker N. Doctor-Patient Communication: A Review. *Ochsner J*. 2010 Spring; 10(1): 38–43. Retrieved May 08, 2022 , from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3096184/>
8. Hong, J., Nguyen, T. V., & Prose, N. S. (2013). Compassionate care: Enhancing physician–patient communication and education in dermatology. *Journal of the American Academy of Dermatology*, 68(3), 364.e1-364.e10. doi:10.1016/j.jaad.2012.10.060
9. Human rights and health. (2017). World Health Organisation. Retrieved May 08, 2022 , from <https://www.who.int/news-room/fact-sheets/detail/human-rights-and-health>
10. Kumar, A., Mullick, P., Prakash, S., & Bharadwaj, A. (2015). Consent and the Indian medical practitioner. *Indian Journal of Anaesthesia*, 59(11), 695-700. doi:10.4103/0019-5049.169989
11. Marcus, C. (2014). Strategies for improving the quality of verbal patient and family education: a review of the literature and creation of the EDUCATE model. *Health Psychology and Behavioral Medicine*, 2(1), 482-495. doi:10.1080/21642850.2014.900450
12. Munro, C. L., & Savel, R. H. (2013). Communicating and Connecting With Patients and Their Families. *American Journal of Critical Care*, 22(1), 4-6. doi:10.4037/ajcc2013249
13. Nandimath, O. (2009). Consent and medical treatment: The legal paradigm in India. *Indian Journal of Urology*, 25(3), 343. doi:10.4103/0970-1591.56202
14. Nouri, S. S., & Rudd, R. E. (2015). Health literacy in the “oral exchange”: An important element of patient–provider communication. *Patient Education and Counseling*, 98(5), 565-571. doi:10.1016/j.pec.2014.12.002

15. Olejarczyk JP and Young M. Patient Rights And Ethics. (2021). Retrieved May 08, 2022 , from <https://www.ncbi.nlm.nih.gov/books/NBK538279/>
16. Patient Rights: Confidentiality & Informed Consent. Emedicine health. (2020). Retrieved May 08, 2022, from [https://www.emedicinehealth.com/patient\\_rights/article\\_em.htm](https://www.emedicinehealth.com/patient_rights/article_em.htm)
17. Reader, T. W., Gillespie, A., & Roberts, J. (2014). Patient complaints in healthcare systems: a systematic review and coding taxonomy. *BMJ Quality & Safety*, 23(8), 678-689. doi:10.1136/bmjqs-2013-002437
18. Roberts, H., Zhang, D., & Dyer, G. S. (2016). The Readability of AAOS Patient Education Materials. *The Journal of Bone and Joint Surgery*, 98(17), e70. doi:10.2106/jbjs.15.00658
19. Williams, A. M., Muir, K. W., & Rosdahl, J. A. (2016). Readability of patient education materials in ophthalmology: a single-institution study and systematic review. *BMC Ophthalmology*, 16(1). doi:10.1186/s12886-016-0315-0

# Chapter 5

## Infection Prevention & Control (IPC)

The standards guide the provision of an effective infection control programme in the DHSP. The programme is documented and aims at preventing, reducing/eliminating infection risks to patients, visitors and providers of care. The DHSP measures and takes action to prevent or reduce the risk of Healthcare Associated Infection (HAI) in patients and employees. The DHSP provides proper facilities and adequate resources to support the Infection Prevention and Control Programme. The programme includes an action plan to control outbreaks of infection, disinfection and /or, sterilization activities, biomedical waste (BMW) management, training of staff Resource allocation and employee health.

### Summary of Standards

IPC.1.	The DHSP has a comprehensive and coordinated Infection Control (IC) programme aimed at preventing, reducing / eliminating risks to patients, visitors, care providers and the community.
IPC.2.	The DHSP provides adequate and appropriate resources for infection prevention and control.
IPC.3.	The DHSP implements the infection prevention and control programme in clinical areas.
IPC.4.	The DHSP implements the infection prevention and control programme in non-clinical areas.
IPC.5.	The organisation performs surveillance to collect and monitor infection prevention and control data.
IPC.6.	Infection prevention measures include sterilisation and/or disinfection of instruments, equipment and devices.

Objective Element	IPC 1	IPC 2	IPC 3	IPC 4	IPC 5	IPC 6
a.	Core	Core	Core	Commitment	Core	Commitment
b.	Commitment	Commitment	Core	Commitment	Commitment	Core
c.	Commitment	Commitment	Commitment	Core	Commitment	Commitment
d.	Achievement	Commitment	Core	Core	Core	Commitment
e.	Commitment	Core	Commitment		Core	Commitment
f.	Commitment	Commitment	Core		Commitment	
g.	Commitment	Commitment	Excellence		Commitment	
h.	Commitment	Achievement			Commitment	
i.	Commitment					

## Standard

### IPC.1.

**DHSP has a comprehensive and coordinated Infection Prevention Control (IC) program aimed at preventing reducing / eliminating risks to patients, visitors, care providers and the community.**

## Objective Elements

### CORE

- a. The DHSP's infection prevention and control programme is documented, and aims at preventing and reducing the risk of healthcare associated infections in the organisation. \***

**Interpretation:** The written guidance shall be directed at prevention and control of infection in all areas of the DHSP and include its monitoring. The organisation shall have hospital infection prevention and control manual (HIC manual) that shall incorporate the structure of the programme, overall aims and objectives, all processes, activities and surveillance procedures related to the programme. This shall be based on organisational priorities, current scientific knowledge, guidelines from international/national and professional bodies and statutory requirements, wherever applicable.

Reference documents could include WHO guidelines, CDC Guidelines and Manual for Control of Hospital Associated Infections, Standard Operative Procedures by National AIDS Control Organisation (NACO), Ministry of Health and Family Welfare, Government of India, Indian Council of Medical Research and National Centre for Disease Control, and Kayakalp.

### Commitment

- b. The DHSP's infection prevention and control programme identifies high-risk activities, and has written guidance to prevent and manage infections for these activities. \***

**Interpretation:** The high-risk activities are identified based on scientific literature, keeping in view the potential risk of transmission of infections to the patient, health care provider and attendants.

Examples of these activities include performing aerosol-generating procedures; handling blood and body fluids spills, and sharps; and exposure to contaminated medical and dental devices/equipment and bio-medical waste.

### Commitment

- c. The infection prevention and control programme is reviewed and updated at least once a year.**

**Interpretation:** The update shall be done based on newer literature on infection prevention and outbreak prevention mechanisms, infection trends and outcomes of the audit processes.

In case the annual review does not identify any opportunities for improvement, the same shall be documented in the minutes of the infection control committee meeting.



**Achievement**

- d. **The infection prevention and control programme is reviewed based on an infection control assessment tool.**

**Interpretation:** The organisation should use any validated tool for performing infection prevention and control assessment tool. Examples of validated tools include WHO's Infection Prevention and Control Assessment Framework at the Facility Level and CDC's Infection Prevention and Control Assessment Tool for Acute Care Hospitals.

**Commitment**

- e. **The DHSP has a multidisciplinary infection control committee, which co-ordinates all infection prevention and control activities. \***

**Interpretation:** This shall preferably have a hospital administrator, microbiologist, physician/infection control specialist, dental surgeon, infection control nurse(s), staff from Central Sterile Services Department (CSSD), Operation Theatre (OT) and support services(s). It could also include invitees from various departments, as deemed necessary. The committee shall lay down the written guidance to guide implementation. The composition, frequency of meetings (at least monthly), the minimum quorum required and the minutes of the meeting shall be documented.

Risk-reduction goals and measurable objectives are established by the committee at least annually and reviewed monthly.

**Commitment**

- f. **The DHSP has an infection control team, which coordinates the implementation of all infection prevention and control activities. \***

**Interpretation:** The team is responsible for the day-to-day functioning of infection prevention and control programme. It shall support the surveillance process and detect outbreaks. It shall also participate in audit activity and infection prevention and control on a day-to-day basis. The infection control team should be staffed according to the DHSP size, the level of risk of infection, and the programme's complexity and scope. However, at a minimum, the team shall at least comprise of an infection control nurse(s). The committee and the team shall not be the same. However, the team shall be represented in the infection control committee.

**Commitment**

- g. **The DHSP has designated infection control nurse(s) as part of the infection control team. \***

**Interpretation:** The criteria for designating shall be by qualification (registered nurse) and additional structured training. The responsibilities of the ICN(s) are defined in the manual. The responsibilities could include surveillance of healthcare associated infections and healthcare-associated organisms, compliance monitoring (hand hygiene, transmission-related precautions, isolation, infection-specific bundles, disinfection and sterilisation procedures, and checklists), education, working on outbreaks and documentation.

**Commitment**

- h. The DHSP implements information, education and communication programme for infection prevention and control activities for the community.**

**Interpretation:** The organisation could work with stakeholders and create information, education and communication messages. Examples of infection prevention and control activities include hand hygiene, appropriate use of antibiotics, use of personal protective equipment, preparedness towards pandemics etc.

**Commitment**

- i. The DHSP participates in managing community outbreaks.**

**Interpretation:** The organisation coordinates with external agencies, including statutory, to respond effectively to community outbreaks. This includes communication (both internal and external), roles and responsibilities for staff and training of staff.

**Standard****IPC.2.**

**The DHSP provides adequate and appropriate resources for infection prevention and control.**

**Objective Elements****CORE**

- a. DHSP management makes available resources required for the infection prevention and control program.**

**Interpretation:** The DHSP shall ensure that the resources required by the personnel should be available in a sustained manner. This includes both staff and materials which includes hand hygiene rubs, PPEs, BMW bags and bins etc.

**Commitment**

- b. The DHSP regularly earmarks adequate funds from its annual budget in this regard.**

**Interpretation:** There shall be a separate budget demarcated for infection, Prevention and control activity. This shall be prepared taking into consideration the scope of the activity and previous year's experience. Line items based expenses, training, pre and post exposure prophylaxis, BMW management, cleaning and disinfection and sterilisation materials and resources to strengthening IPC activities should be included

**Commitment**

- c. **It also conducts regular “in-service” training sessions for all concerned categories of staff at least once in a year.**

**Interpretation:** All topics mentioned in IPC manual and related patient safety issues should be covered.

**Commitment**

- d. **Appropriate pre-and post-exposure prophylaxis is provided to all concerned staff members.**

**Interpretation:** This should include various vaccinations for all staff as deemed necessary. Required dose and vaccination schedule for Hepatitis B, Tetanus, Typhoid, Influenza, Pneumococcal when required shall be followed

**CORE**

- e. **Adequate and appropriate facilities for hand hygiene in all patient-care areas are accessible to healthcare providers.**

**Interpretation:** The organisation provides at least one easily accessible washbasin with running water in every patient care area for health care providers. For hand wash, the organisation could consider providing large washbasins, hands-free tap, soap and facility for drying hands without contamination. Hand rub should be available in every patient care area. Hand rub dispensers can be installed at convenient points and can also be carried by staff as they move between patients.

**Commitment**

- f. **Compliance with proper hand washing/scrubbing is monitored regularly.**

**Interpretation:** The DHSP shall preferably display the necessary instructions near every hand washing/ scrubbing area. Compliance could be verified by random checking, observation, WHO Hand Hygiene Audit tool may be used to monitor compliance etc.

**Commitment**

- g. **Adequate and appropriate personal protective equipment, soaps, and disinfectants are available and used correctly.**

**Interpretation:** They should be available at the point of use, and the organisation shall ensure that it maintains an adequate inventory.

Personal protective equipment includes:

- Gloves
- Protective eyewear (goggles)
- Mask
- Apron
- Gown
- Boots/shoe covers and
- Cap/hair cover

The staff use PPE appropriate to the risks involved. The PPE is removed as soon as the purpose is served.

**Achievement****h. Isolation/ barrier facilities are available.**

**Interpretation:** The DHSP shall define the conditions where isolation is required, and the conditions wherein barrier is required. The same shall be carried out. The DHSP shall ensure that it provides the necessary resources to carry out the activity (e.g., clothing, masks, gloves, etc.). Ideally, patients requiring isolation (contact, droplet and airborne) should be placed in isolation rooms.

**Standard****IPC.3.**

**The DHSP implements the infection prevention and control programme in clinical areas.**

**Objective Elements****CORE****a. The DHSP adheres to standard precautions at all times. \***

**Interpretation:** Adherence to standard precautions is one of the fundamental tenets of infection prevention and control. In every area of the organisation, standard precautions shall be adhered.

Refer to the glossary for “standard precautions”. This shall include hand hygiene, PPEs, injection safety, cleaning and disinfection.

**CORE****b. The DHSP adheres to hand-hygiene guidelines. \***

**Interpretation:** The organisation shall adhere to international/national guidelines on hand hygiene. A good reference is the WHO guidelines on hand hygiene in health care of 2009. MoHFW, ICMR and NCDC Guidelines

The organisation could display the necessary instructions near every hand washing area.

**Commitment****c. The DHSP adheres to transmission-based precautions. \***

**Interpretation:** This shall cover airborne, droplet and contact modes of transmission. Personal protective equipment (PPE) to be used in various situations of patient care are identified and used appropriately. There admission and isolation shall be applicable as per the scope of DHSP and attached hospitals. Refer to international guidelines like that of CDC.

**CORE****d. The DHSP adheres to safe injection and infusion practices.**

**Interpretation:** This shall include, “One needle, ne syringe, only one time” as recommended by CDC. A good reference guide is “WHO best practices for injections and related procedures toolkit 2010”.

**Commitment****e. Appropriate antimicrobial usage policy is established and documented. \***

**Interpretation:** The organisation shall identify clinical conditions in which antimicrobial agents (antibiotics, anti-fungal agents, ant-viral agents and anti-parasite agents) shall be used in terms of the type of the antimicrobial agent, monotherapy versus combination therapy, escalation and de-escalation of therapy, dose and duration of antimicrobial therapy. A good reference guide to develop antibiotic policy is, Step-By-Step Approach for Development and Implementation of Hospital Antibiotic Policy and Standard Treatment Guidelines by WHO 2011 Ministry of Health's National Treatment Guidelines for Antimicrobial Use in Infectious Diseases 2016, Indian Council of Medical Research's Treatment Guidelines for Antimicrobial Use in Common Syndromes 2019 shall be considered while framing the antimicrobial usage policy.

The organisation can also refer to national and international guidelines from professional societies while framing the policy.

It is preferable that the organisation has a standardised methodology for antibiotic susceptibility testing.

The antimicrobial usage policy should identify a list of restricted antimicrobial agents, if any. Guidance note shall be from AWARE classification from WHO.

**CORE****f. The organisation implements the antimicrobial usage policy and monitors the rational use of antimicrobial agents.**

**Interpretation:** The antimicrobial agents should be prescribed as per the organisation's policy. The organisation needs to implement a mechanism for ordering restricted antimicrobial agents. Deviations are brought to the notice of concerned clinicians, and corrective and preventive actions are taken and documented.

The organisation should have a mechanism to monitor the appropriate use of restricted antimicrobial agents.

**Excellence****g. The DHSP implements an antibiotic stewardship programme. \***

**Interpretation:** The antibiotic stewardship programme must aim to guide efforts to improve appropriate and necessary antibiotic use. This shall include Right Indication, Right Drug, Right Dose, Right Frequency and Right Duration. It should include leadership commitment, accountability, drug expertise, action, tracking, reporting and education.

## Standard

IPC.4.

The DHSP implements the infection prevention and control programme in non-clinical areas.

## Objective Elements

### Commitment

#### a. The organisation has appropriate engineering controls to prevent infections. \*

**Interpretation:** This shall include the design of patient care areas (optimum spacing between dental chairs is one-two metres), operating rooms, air quality and water supply. Refer to NABH guidelines on OT air-conditioning. (For oral and maxillofacial surgery only)

Issues such as air-conditioning plant and equipment maintenance, cleaning of air-conditioning ducts/filters, air handling units, cleaning/replacement of filters, prevention of fungal colonisation should be included. Water-supply sources and system of supply, testing for water quality must be included. Engineering controls to handle aerosols generation and treatment shall also be practised

### Commitment

#### b. The organisation designs and implements a plan to reduce the risk of infection during construction and renovation. \*

**Interpretation:** A validated tool (for example infection control risk assessment tool) should be used to identify the risk of infection during construction and renovation. Facility construction/renovation could ensure that when new facilities are built, infection prevention and control is considered from the design stage onwards. Any renovation work in the hospital should be planned with the infection control team concerning architectural segregation, traffic flow, use of materials, and efforts to plan prevention of spread is considered etc.

### CORE

#### c. The organisation adheres to housekeeping procedures. \*

**Interpretation:** Housekeeping shall be addressed at all levels of the organisation, for example, ward, OT, public areas including toilets, corridors. Regular cleaning to remove visible dirt and dust is mandatory. This includes the environment, fixtures, fomites, furniture, furnishings, equipment, etc., as applicable. A risk stratification matrix may be used to determine the frequency of cleaning. The physical environment may be divided into several areas depending on the risk of transmitting microorganisms. The criteria used to identify these areas can include the number of footfalls, the type of activity performed (for example, clinical versus non-clinical) and the probability of being exposed to body fluid (for example, in an OT or dental laboratory). It is preferable that the organisation follows a uniform policy across different departments within the organisation.

The common disinfectants used are identified, dilution protocols are established, and its usage in the appropriate situation is complied with. It shall also include procedures for terminal cleaning, blood and body fluid clean up and isolation rooms. Dusting of any sort inside the clinical areas should be avoided.

A good reference is “CDC Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008” and “Swachhta Guidelines for Public Health Facilities”.

## CORE

### d. Biomedical waste (BMW) is handled appropriately and safely.

**Interpretation:** Proper segregation and collection of biomedical waste from patient-care areas of the hospital are implemented. Waste is segregated and collected in different colour-coded bags and containers as per statutory provisions. Monitoring shall be done by members of the infection control committee/team. Biomedical waste shall be handled in a proper manner using appropriate personal protective equipment.

The organisation ensures that biomedical waste is stored in accordance with statutory provisions. Biomedical waste is handed over to the authorised vendor for transport to the site of treatment and disposal.

## Standard

IPC.5.

The organisation performs surveillance to capture and monitor infection prevention and control data.

## Objective Elements

## CORE

### a. Surveillance activities are appropriately directed towards the identified high-risk areas.

**Interpretation:** The organisation must be able to provide evidence of conducting periodic surveillance activities in its identified high-risk activities. It shall define the frequency and mode of surveillance. The surveillance system shall be appropriate and adhering to national/international guidelines. Surveillance activities include areas where demolition, construction or repairs are undertaken.

## Commitment

### b. Verification of data is done regularly by the infection control team.

**Interpretation:** The data collected shall be authenticated by the infection control team by going through every data or by using random sampling.

In case the collection of data is done only by the infection control team, verification is not necessary.

**Commitment****c. Scope of surveillance incorporates tracking and analysis of infection rates and trends.**

**Interpretation:** The organisation shall use a judicious mix of active and passive surveillance. The organisation could lay down the parameters that need to be captured and the process for reporting. The collection of surveillance data is an on-going process and is done at regular intervals (maybe monthly and consolidated into an annual report), and the organisation shall take suitable steps based on the analysis. A simple calculation of infected patients (numerator) provides only limited information which would be difficult to interpret. Risk factor analysis would require information for both infected and non-infected patients to calculate infection and risk-adjusted rates.

**CORE****d. Surveillance includes monitoring compliance with hand-hygiene guidelines.**

**Interpretation:** Monitoring shall be done at a minimum once every month. An appropriate sample size shall be chosen, and all categories of staff (involved in direct patient care) shall be monitored. The compliance levels shall be shared with the relevant staff. A good tool is the WHO's "Observation Form".

**CORE****e. Surveillance activities include monitoring the effectiveness of house-keeping services.**

**Interpretation:** Monitoring of the effectiveness of housekeeping services shall be done regularly. The organisation shall define the periodicity. This is applicable even if the housekeeping services are outsourced. It is mandatory to capture the effectiveness of the housekeeping activities and not just verify if the housekeeping activity has been done as per the defined frequency. To capture effectiveness, the organisation could identify desired outcome parameters for housekeeping activities. The data could be captured using a checklist. This need not mean routine environmental sampling.

**Commitment****f. Feedback regarding surveillance data is provided regularly to the appropriate health care provider.**

**Interpretation:** The feedback shall include the adherence rates, healthcare associated infection (HAI) rates, trends and opportunities for improvement, including data from other surveillance activities. It could also provide specific inputs to reduce the HAI rate. This could be in the form of a bulletin/newsletter.

**Commitment****g. The organisation identifies and takes appropriate action to control outbreaks of infections. \***

**Interpretation:** Surveillance should help early identification of outbreaks. To define as to what constitutes an outbreak, the organisation should have baseline rates. The organisation implements written guidance for handling such outbreaks which includes epidemics or pandemics.



**Commitment**

- h. Surveillance data is analysed, and appropriate corrective and preventive actions are taken.**

**Interpretation:** The Infection Control Committee analyses the surveillance data and based on this corrective and preventive actions are taken where necessary. This also includes taking appropriate corrective actions to prevent recurrence after an outbreak.

**Standard****IPC.6.**

**Infection prevention measures include sterilisation and/or disinfection of instruments, equipment and devices.**

**Objective Elements****Commitment**

- a. The organisation provides adequate space and appropriate zoning for sterilisation activities. \***

**Interpretation:** Adequacy of space refers to the central sterile services department (CSSD), which should have a suitable location, proper layout (unidirectional flow, zoning) and separation of clean and dirty areas. Sufficient space shall be available to ensure that the activities can be performed properly. It is preferable to have separate areas for receiving, washing, cleaning, packing, sterilisation, sterile storage and issue. A good reference is Hospital Infection Society India (HISI) and WHO guidelines.

**CORE**

- b. Cleaning, packing, disinfection and/or sterilisation, storing and the issue of items is done as per the written guidance. \***

**Interpretation:** The written guidance shall be in consonance with national and/or international guidelines. A good reference is "CDC Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008". Other references include the Hospital Infection Society India (HISI) guidelines.

Cleaning of used instrument/equipment/device shall preferably be done in the CSSD. In case the service is outsourced The organisation shall have a Memorandum of Understanding (MoU)/agreement for the same, which incorporates quality assurance and requirements of this standard. However, if the same is done in patient care areas, adequate measures are taken for infection prevention. Cleaning ensures that visible biological material and dirt is removed. After cleaning the instrument, sets are prepared and packed using the appropriate material. Spaulding's classification guides the decision to do high/intermediate/low-level disinfection. Disinfection/sterilisation is performed as per the written guidance. Flash sterilisation shall only be done in exceptional situations when there is insufficient time to sterilise an item by the preferred method. The sterilised/disinfected equipment/sets shall be stored appropriately across the organisation and not just in CSSD. The expiry date of sterilised instruments/equipment shall be guided by the packing material used and the mode of sterilisation.

**Commitment**

- c. **Reprocessing of single-use instruments, equipment and devices are done as per written guidance. \***

**Interpretation:** The organisation identifies those single-use instruments, equipment and devices which are meant for re-use. The number of re-uses and the process of re-use of these items are defined and monitored. The patient is informed about the same. The written guidance addresses cleaning, disinfection or sterilisation between patients. The written guidance shall be in consonance with the available good practices. Guideline for Disinfection and Sterilization in Healthcare Facilities (2008); FDA document 2008

**Commitment**

- d. **Regular validation tests for sterilization are carried out and documented.**

**Interpretation:** This shall be done by accepted methods, e.g., bacteriologic, strips, etc. Physical/chemical tests shall be done daily, and biological tests at least weekly. Engineering validations like Bowie-Dick tape test and leak rate test need to be carried out.

Each load should have a unique number and content description. Where applicable, temperature, pressure and time-record chart shall be maintained. A good reference is "CDC Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008".

**Commitment**

- e. **There is an established recall and corrective audit procedure in case of breakdown in the sterilization system.**

**Interpretation:** The organisation shall ensure that the sterilisation procedure is regularly monitored and in the eventuality of a breakdown it has written guidance for withdrawal of such items. The organisation could have a batch-processing system with date and machine number for effective recall.

## References:

1. Banach, D. B., Bearman, G., Barnden, M., et al. (2018). Duration of Contact Precautions for Acute-Care Settings. *Infection Control & Hospital Epidemiology*, 39(2), 127-144. doi:10.1017/ice.2017.245
2. Banach, D. B., Johnston, B. L., Al-Zubeidi, D., Bartlett, A. H., Bleasdale, S. C., & Deloney, V. M. (2017). Outbreak Response and Incident Management: SHEA Guidance and Resources for Healthcare Epidemiologists in United States Acute-Care Hospitals. *Infection Control & Hospital Epidemiology*, 38(12), 1393-1419. doi:10.1017/ice.2017.212
3. Bearman, G., Bryant, K., Leekha, S., Mayer, J., Munoz-Price, L. S., Murthy, R., ... White, J. (2014). Healthcare Personnel Attire in Non-Operating-Room Settings. *Infection Control & Hospital Epidemiology*, 35(2), 107-121. doi:10.1086/675066
4. Best practices for injections and related procedures toolkit. World Health Organization. (2010). Retrieved May 08, 2022 , from [https://apps.who.int/iris/bitstream/handle/10665/44298/9789241599252\\_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/44298/9789241599252_eng.pdf?sequence=1)
5. Bloodborne Pathogens and Needlestick Prevention. Occupational Safety and Health Administration. (2018). Retrieved May 08, 2022 , from <https://www.osha.gov/SLTC/bloodbornepathogens/index.html>
6. Checklist for Prevention of Central Line Associated Blood Stream Infections. Centers for Disease Control and Prevention. (2014). Retrieved May 08, 2022 , from <https://www.cdc.gov/hai/pdfs/bsi/checklist-for-CLABSI.pdf>
7. Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals. Society for Healthcare Epidemiology of America. (2008). Retrieved May 08, 2022 , from <https://shea-online.org/compendium-of-strategies-to-prevent-healthcare-associated-infections-in-acute-care-hospitals/>
8. De Sousa Martins, B., Queiroz e Melo, J., Logarinho Monteiro, J., Rente, G., & Teixeira Bastos, P. (2019). Reprocessing of Single-Use Medical Devices: Clinical and Financial Results. *Portuguese Journal of Public Health*, 1-7. doi:10.1159/000496299
9. Dolan, S. A., Arias, K. M., Felizardo, G., Barnes, S., Kraska, S., Patrick, M., & Bumsted, A. (2016). APIC position paper: Safe injection, infusion, and medication vial practices in health care. *American Journal of Infection Control*, 44(7), 750-757. doi:10.1016/j.ajic.2016.02.033
10. Environmental Cleaning for the Prevention of Healthcare-Associated Infections (HAI). Agency for Healthcare Research and Quality. (2014). Retrieved May 08, 2022 , from <https://effectivehealthcare.ahrq.gov/products/healthcare-infections/research-protocol>
11. Fishman, N. (2012). Policy Statement on Antimicrobial Stewardship by the Society for Healthcare Epidemiology of America (SHEA), the Infectious Diseases Society of America (IDSA), and the Pediatric Infectious Diseases Society (PIDS). *Infection Control & Hospital Epidemiology*, 33(4), 322-327. doi:10.1086/665010
12. Global Guidelines for the Prevention of Surgical Site Infection. World Health Organization. (2016). Retrieved May 08, 2022 , from <https://apps.who.int/iris/bitstream/handle/10665/250680/9789241549882-eng.pdf>
13. Guideline for Disinfection and Sterilization in Healthcare Facilities (2008). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/disinfection/index.html>

14. Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>
15. Guideline for Prevention of Catheter-Associated Urinary Tract Infections (2009). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/CAUTI/index.html>
16. Guideline for Prevention of Surgical Site Infection (2017). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/ssi/index.html>
17. Guidelines for Environmental Infection Control in Health-Care Facilities: Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC). MMWR 2003;52(RR10):1-42. Retrieved May 08, 2022 , from <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5210a1.htm>
18. Guidelines for the Prevention of Intravascular Catheter-Related Infections (2011) Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/bsi/index.html>
19. Guidelines on Core Components of Infection Prevention and Control Programmes at the National and Acute Health Care Facility Level. World Health Organization. (2016). Retrieved May 08, 2022 , from <https://apps.who.int/iris/handle/10665/251730>
20. Guidelines on hand hygiene in health care. World Health Organization. (2019). Retrieved May 08, 2022 , from <https://www.who.int/publications/i/item/9789241597906>
21. Han, J. H., Sullivan, N., Leas, B. F., Pegues, D. A., Kaczmarek, J. L., & Umscheid, C. A. (2015). Cleaning Hospital Room Surfaces to Prevent Health Care–Associated Infections. *Annals of Internal Medicine*, 163(8), 598. doi:10.7326/m15-1192
22. Health Care Workers, Prevention Controls. (2016). Centers for Disease Control and Prevention. (2018). CDC -, Infectious Agents - The National Institute for Occupational Safety and Health (NIOSH). Retrieved May 08, 2022 , from <https://www.cdc.gov/niosh/topics/healthcare/prevention.html>
23. Healthcare-Associated Infections (HAIs). Centers for Disease Control and Prevention. (2021). Retrieved May 08, 2022 , from <https://www.cdc.gov/hai/index.html>
24. Hospital Infection Control Guidelines. Indian Council of Medical Research. (n.d.). Retrieved May 08, 2022 , from [https://www.icmr.nic.in/sites/default/files/guidelines/Hospital\\_Infection\\_control\\_guidelines.pdf](https://www.icmr.nic.in/sites/default/files/guidelines/Hospital_Infection_control_guidelines.pdf)
25. Infection Prevention and Control in Healthcare Settings. Standard Operating Procedures. (2018). Delhi State Health Mission. Government of NCT of Delhi, India. Retrieved May 08, 2022 , from [https://dshm.delhi.gov.in/\(S\(qohk5xwyvoyrqxe20uuyb0k\)\)/pdf/QAC/SoPs/IPC\\_FINAL\\_MANUAL.doc](https://dshm.delhi.gov.in/(S(qohk5xwyvoyrqxe20uuyb0k))/pdf/QAC/SoPs/IPC_FINAL_MANUAL.doc)
26. Lee, T. B., Montgomery, O. G., Marx, J., Olmsted, R. N., & Scheckler, W. E. (2007). Recommended practices for surveillance: Association for Professionals in Infection Control and Epidemiology (APIC), Inc. *American Journal of Infection Control*, 35(7), 427-440. doi:10.1016/j.ajic.2007.07.002
27. Management of Multidrug-Resistant Organisms in Healthcare Settings (2006). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/mdro/index.html>

28. McDonald, L. C., Gerding, D. N., Johnson, S., et al. (2018). Clinical Practice Guidelines for Clostridium difficile Infection in Adults and Children: 2017 Update by the Infectious Diseases Society of America (IDSA) and Society for Healthcare Epidemiology of America (SHEA). *Clinical Infectious Diseases*, 66(7), 987-994. doi:10.1093/cid/ciy149
29. Munoz-Price, L., Banach, D., Bearman, G., et al. (2015). Isolation Precautions for Visitors. *Infection Control & Hospital Epidemiology*, 36(7), 747-758. doi:10.1017/ice.2015.67
30. Munoz-Price, L., Bowdle, A., Johnston, B., et al. (2019). Infection prevention in the operating room anesthesia work area. *Infection Control & Hospital Epidemiology*, 40(1), 1-17. doi:10.1017/ice.2018.303
31. National guidelines for infection prevention and control in healthcare facilities. (2020). National Centre for Disease Control, Directorate General of Health Services. Ministry of Health & Family Welfare, Government of India. Retrieved May 08, 2022 , from <https://www.mohfw.gov.in/pdf/National%20Guidelines%20for%20IPC%20in%20HCF%20-%20final%281%29.pdf>
32. National Technical Guidelines on Anti Retroviral Treatment. National AIDS Control Organization. Ministry of Health and Family Welfare, Government of India. (2018). Retrieved May 08, 2022 , from [http://naco.gov.in/sites/default/files/NACO%20-%20National%20Technical%20Guidelines%20on%20ART\\_October%202018%20%281%29.pdf](http://naco.gov.in/sites/default/files/NACO%20-%20National%20Technical%20Guidelines%20on%20ART_October%202018%20%281%29.pdf)
33. National Treatment Guidelines for Antimicrobial Use in Infectious Diseases. (2016). National Centre for Disease Control, Directorate General of Health Services. Ministry of Health & Family Welfare, Government of India. Retrieved May 08, 2022 , from <https://ncdc.gov.in/WriteReadData/1892s/File622.pdf>
34. Outline For Healthcare-Associated Infections Surveillance. Centers for Disease Control and Prevention. (2006). Retrieved May 08, 2022 , from <https://www.cdc.gov/nhsn/PDFS/OutlineForHAISurveillance.pdf>
35. Personal Protective Equipment in Medical Settings. Infectious Diseases Society of America (2022). Retrieved May 08, 2022 , from <https://www.idsociety.org/covid-19-real-time-learning-network/infection-prevention/personal-protective-equipment-in-medical-settings/>
36. Petersen, B. T., Cohen, J., Hambrick, R. D., Buttar, N., Greenwald, D. A., Buscaglia, J. M., ... Eisen, G. (2017). Multisociety guideline on reprocessing flexible GI endoscopes: 2016 update. *Gastrointestinal Endoscopy*, 85(2), 282-294.e1. doi:10.1016/j.gie.2016.10.002
37. Post-exposure prophylaxis (PEP). Centers for Disease Control and Prevention. (2021). Retrieved May 08, 2022 , from <https://www.cdc.gov/hiv/basics/pep.html>
38. Post-exposure prophylaxis to prevent HIV infection : joint WHO/ILO guidelines on post-exposure prophylaxis (PEP) to prevent HIV infection. World Health Organization. (2007). Retrieved May 08, 2022 , from <https://apps.who.int/iris/handle/10665/43838>
39. Postexposure Prophylaxis: Viral Hepatitis. Centers for Disease Control and Prevention. (2020). Retrieved May 08, 2022 , from <https://www.cdc.gov/hepatitis/hbv/pep.htm>
40. Recommended Vaccines for Healthcare Workers. (2016). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/vaccines/adults/rec-vac/hcw.html>

41. Recommended work restrictions for communicable diseases in health care workers. Association of Occupational Health Professionals in Healthcare. (2014). Retrieved May 08, 2022 , from <https://aohp.org/aohp/Portals/0/Documents/MemberServices/templateandform/WR4CD-HCW.pdf>
42. Reprocessed Single-Use Devices. ACOG Committee Opinion No. 769. (2019). *Obstetrics & Gynecology*, 133(3), e235-e237. doi:10.1097/aog.0000000000003124
43. Sfeir, M., Simon, M. S., & Banach, D. (2017). Isolation Precautions for Visitors to Healthcare Settings. *Infection Prevention*, 19-27. doi:10.1007/978-3-319-60980-5\_4
44. Silvia Munoz-Price L, Bowdle A, Johnston L et al. Infection Prevention in the Operating Room Anesthesia Work Area. *Infection Control & Hospital Epidemiology* 2019;40 (1): 1 – 17. Retrieved May 08, 2022 , from <https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/infection-prevention-in-the-operating-room-anesthesia-work-area/66EB7214F4F80E461C6A9AC00922EFC9>
45. Standard precautions in health care. World Health Organization. (2007). Retrieved May 08, 2022 , from <https://www.who.int/docs/default-source/documents/health-topics/standard-precautions-in-health-care.pdf>
46. Summary of WHO Position Papers – Immunization of Health Care Workers. World Health Organization. (2019). Retrieved May 08, 2022 , from [https://cdn.who.int/media/docs/default-source/immunization/immunization\\_schedules/immunization-routine-table4.pdf?sfvrsn=714e38d6\\_4&download=true](https://cdn.who.int/media/docs/default-source/immunization/immunization_schedules/immunization-routine-table4.pdf?sfvrsn=714e38d6_4&download=true)
47. Swachhta Guidelines for Public Health Facilities. Ministry of Health & Family Welfare, Government Of India. (2015). Retrieved May 08, 2022 , from <http://tripuranrhm.gov.in/QA/Guideline/SwachhtaGuidelinesforPublicHealthFacilities.pdf>
48. Swaminathan, S., Prasad, J., Dhariwal, A. C., et al. Strengthening infection prevention and control and systematic surveillance of healthcare associated infections in India. *BMJ* 2017: j3768. doi:10.1136/bmj.j3768
49. Transmission-Based Precautions. Centers for Disease Control and Prevention. (2016). Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>
50. Treatment Guidelines for Antimicrobial Use in Common Syndromes. Indian Council of Medical Research. (2019). Retrieved May 08, 2022 , from [https://main.icmr.nic.in/sites/default/files/guidelines/Treatment\\_Guidelines\\_2019\\_Final.pdf](https://main.icmr.nic.in/sites/default/files/guidelines/Treatment_Guidelines_2019_Final.pdf)

# Chapter 6

## Patient Safety and Quality Improvement (PSQ)

The standards encourage an environment of patient safety and quality improvement. The quality and safety programme shall be documented and involve all areas of the DHSP and all staff members. The DHSP shall collect data on structures, processes and outcomes, especially in areas of high-risk situations. The collected data shall be collated, analysed and used for further improvements. The improvements shall be sustained. The quality programme of the diagnostic services shall be integrated into the DHSP's quality plan. Infection control and patient safety plans shall also be integrated into the DHSP's quality plan. The DHSP shall define its sentinel events and intensively investigate when such events occur. The quality programme shall be supported by the management.

### Summary of Standards

<b>PSQ.1.</b>	There is a structured quality assurance and continuous monitoring program in the DHSP.
<b>PSQ.2.</b>	The organisation identifies key indicators to monitor the structures, processes and outcomes, which are used as tools for continual improvement.
<b>PSQ.3.</b>	The quality improvement program is supported by the management.
<b>PSQ.4.</b>	There is an established system for clinical audit.
<b>PSQ.5.</b>	Incidents are collected and analysed to ensure continuous patient safety and quality improvement.

Objective Element	PSQ 1	PSQ 2	PSQ 3	PSQ 4	PSQ 5
a.	Core	Commitment	Achievement	Commitment	Core
b.	Commitment	Core	Commitment	Achievement	Commitment
c.	Commitment	Core	Achievement	Commitment	Commitment
d.	Excellence	Commitment	Achievement	Commitment	Commitment
e.	Commitment	Commitment		Commitment	
f.	Commitment	Commitment		Commitment	
g.	Commitment	Commitment			
h.		Achievement			



## Standard

PSQ.1.

**There is a structured quality assurance and continuous monitoring program in the DHSP.**

## Objective Elements

### CORE

- a. The quality improvement programme is developed, implemented and maintained by a multidisciplinary committee. \***

**Interpretation:** The quality improvement programme shall be developed, implemented and maintained in a structured manner.

It shall be integrated across the organisation and provide a framework for risk management, ongoing monitoring and performing improvements based on reviews.

The roles and responsibilities of the multidisciplinary committee are defined, and it shall have representation from management, various clinical and support departments of the organisation. This committee shall receive inputs on significant deliberations from other committees in the organisation. The committee may be called as the core committee, quality improvement committee etc.

### Commitment

- b. There are designated personnel for coordinating and implementing the quality assurance program.**

**Interpretation:** The designated individual (accreditation coordinator/quality management representative/quality manager) shall preferably have a good knowledge of accreditation standards, statutory requirements, DHSP quality improvement principles and evaluation methodologies, hospital functioning and operations..

The designated individual shall report directly to the top management. The role and responsibilities of the designated individual shall be defined.

Also, champions in quality improvement are identified and developed across the organisation and supported to drive improvement.

### Commitment

- c. The quality assurance program is comprehensive and covers all the major elements related to quality assurance and risk management.**

**Interpretation:** The quality improvement programme shall be documented in the form of a quality improvement manual. The quality improvement programme shall incorporate the goals and objectives of the programme, framework for performing quality improvement activities including data collection, important indicators as identified, frequency of mock drills, audit schedules, committees and their terms of reference, review policy and implementation of corrective and preventive action. The quality assurance programme for specific areas like laboratory, imaging, emergency, operation theatre and the Intensive Care Unit(s) is also summarised.

**Excellence****d. The quality improvement programme improves process efficiency and effectiveness.**

**Interpretation:** The quality improvement programme encourages the use of quality tools, novel strategies to improve both clinical and managerial processes. The impact of the managerial process innovations may be at the level of the department or organisation-wide. Innovations may be targeted to improve patient safety, improve care delivery, to reduce costs, to introduce environmentally-friendly measures etc. The management of the organisation promotes these innovations.

**Commitment****e. The quality improvement programme identifies opportunities for improvement based on the review at pre-defined intervals. \***

**Interpretation:** The quality improvement programme is a dynamic process. There is an outline of the periodic review mechanisms at different levels, such as department/senior administration/management reviews, etc. The quality improvement programme needs to be reviewed by the quality improvement committee at regular pre-defined intervals as defined by the organisation in the quality improvement manual but at least once in three months. The review shall include findings of audits, organisational performance, analysis of key indicators as identified and determined by the organisation. The minutes of the review meetings shall be recorded and maintained.

**Commitment****f. The quality assurance program is a continuous process and updated at least once in a year.**

**Interpretation:** The update shall be done based on newer literature on quality improvement based on audits, feedback mechanisms, the review carried out by the quality improvement committee, etc.

In case the annual review does not identify any opportunities for improvement, the same shall be documented in the minutes of the quality improvement committee meeting.

**Commitment****g. Audits are conducted at regular intervals as a means of continuous monitoring. \***

**Interpretation:** Choice and frequency of audits shall be defined for priority areas in the organisation and for areas of concern as identified by trends in indicators, identified risk, etc. However, all the areas of the organisation shall be covered by a DHSP-wide internal audit at least once in 6 months as per a scheduled plan. This internal audit shall be done by an identified staff or a multidisciplinary team trained in NABH standards. They shall assess areas independent of their area of work. The internal audit of a particular area shall include all the applicable standards and objective elements. At the end of the audit, there shall be a formal meeting to summarise the findings and corrective and preventive measures shall be taken and documented. Implementation of changes is verified and recorded.

## Standard

PSQ.2.

The organisation identifies key indicators to monitor the structures, processes and outcomes, which are used as tools for continual improvement.

## Objective Elements

### Commitment

- a. **The organisation identifies and monitors key indicators to oversee the clinical structures, processes and outcomes.**

**Interpretation:** The organisation identifies and monitors the priority aspects of its patient care. Any indicator mandated by the Government of India or the National Accreditation Board for Hospitals and Healthcare Providers (NABH) shall be monitored. These indicators are based on available literature or created in accordance with good practice. Every indicator shall have a defined numerator, denominator and multiplier. Where appropriate, the definition of terms shall be provided.

### CORE

- b. **The organisation identifies and monitors key indicators to oversee patient safety activities.**

**Interpretation:** The organisation shall identify and monitor appropriate key performance indicators suitable to it. Any indicator mandated by the Government of India or the National Accreditation Board for Hospitals and Healthcare Providers (NABH) shall be monitored.

Some of the indicators that could be monitored pertain to patient safety goals and risk management.

These indicators are based on available literature or created in accordance with good practice. Every indicator shall have a defined numerator, denominator and multiplier. Where appropriate, the definition of terms shall be provided.

### CORE

- c. **The organisation identifies and monitors the key indicators to oversee infection control activities.**

**Interpretation:** The organisation shall identify and monitor appropriate key performance indicators suitable to it. Any indicator mandated by the Government of India or the National Accreditation Board for Hospitals and Healthcare Providers (NABH) shall be monitored.

Some of the indicators that could be monitored include the dry socket, dental implantitis, surgical Site infection.

These indicators are based on available literature or created in accordance with good practice. Every indicator shall have a defined numerator, denominator and multiplier. Where appropriate, the definition of terms shall be provided.

**Commitment****d. The organisation identifies and monitors key indicators to oversee the managerial structures, processes and outcomes.**

**Interpretation:** The organisation identifies and monitors priority managerial activities in the organisation. Any indicator mandated by the Government of India or the National Accreditation Board for Hospitals and Healthcare Providers (NABH) shall be monitored.

Some of the indicators that could be monitored pertain to medication procurement, utilisation rates, patient and staff satisfaction, waiting time for consultation and diagnostics, and availability and content of medical records.

These indicators are based on available literature or created in accordance with good practice. Every indicator shall have a defined numerator, denominator and multiplier. Where appropriate, the definition of terms shall be provided.

**Commitment****e. Verification of data is done regularly by the quality team.**

**Interpretation:** The data which is collected is verified from time to time and in response to queries or when an unexplained trend occurs, etc.

The data collected shall be authenticated by the quality team by going through every data or by using random sampling.

Whenever errors are detected in the process of collection of data, they are corrected.

**Commitment****f. There is a mechanism for analysis of data which results in identifying opportunities for improvement.**

**Interpretation:** The data is analysed and based on this corrective and preventive actions are taken where necessary. The organisation could also consider developing benchmarks/acceptable quality levels based on national/international norms. This also includes undertaking quality improvement projects when the benchmark/acceptable quality levels are consistently not met, or the trend is unfavourable.

In case the organisation is consistently meeting benchmark/acceptable quality levels, they could reduce the frequency of monitoring.

**Commitment****g. The improvements are implemented and evaluated.**

**Interpretation:** The improvement activities carried out by the organisation shall have an evaluable outcome. The same shall be documented.

**Commitment****h. Feedback about care and service is communicated to staff.**

**Interpretation:** The feedback shall include the rates, trends and opportunities for improvement. It could also provide specific inputs to improve/reduce the rate. This could be in the form of a bulletin/newsletter. It is equally important that positive feedback about care and service is communicated to staff.

## Standard

PSQ.3.

The quality improvement program is supported by the management.

## Objective Elements

### Achievement

#### a. The management creates a culture of safety.

**Interpretation:** The management needs to ensure the adoption of behaviours that promote patient safety. Some of the key features required for a culture of safety are sharing information, reporting occurrences of incidents, learning from safety incident analysis, blame-free culture and encouragement of collaboration across disciplines and departments. The key components of patient safety culture are informed culture, reporting culture, learning culture, just culture and flexible culture.

The management needs to measure its safety culture regularly (at least once a year). This shall be measured using validated surveys. For example, the Manchester Patient Safety Framework (MaPSaF), Safety Attitudes Questionnaire, AHRQ Surveys on Patient Safety Culture (SOPS™). The management shall act on their patient safety culture assessment results.

### Commitment

#### b. DHSP management makes available adequate resources including annual budget required for quality improvement program.

**Interpretation:** Resources shall include men, material, machine, money, milieu, measurement and method. These shall be in steady supply to ensure that the programme functions smoothly.

Appropriate fund allocation is done by the organisation for the smooth functioning of the patient safety and quality improvement programme. The budget could be earmarked based on previous year's spending. If no data is available, the organisation could make a beginning by earmarking a budget but reviewing it at the end of six months to make any necessary modifications.

### Achievement

#### c. The management identifies organisational performance improvement targets.

**Interpretation:** The management shall identify the organisation and department level quality objectives, set targets, monitor them (at least once in three months) and modify the target (at least annually). The targets shall be shared with the faculty and staff and regular feedback taken.

### Achievement

#### d. The management uses the feedback obtained from the workforce to improve patient safety and quality improvement programme.

**Interpretation:** The feedback shall be obtained from the staff on their understanding and use of the safety and quality systems. Feedback may be obtained once a year through staff surveys, but it is also important that staff workforce feel able to raise concerns whenever they occur. These inputs shall be used to improve patient safety and quality improvement programmes.

## Standard

**PSQ.4.**

**There is an established system for clinical audit.**

## Objective Elements

### Commitment

#### a. Clinical audits are performed to improve the quality of patient care.

**Interpretation:** The organisation shall use clinical audits as a quality improvement tool to improve the quality of patient care. The clinical audit could be retrospective/prospective in nature. The topic for audit could be clinical based, cost-based or community-based. The organisation shall conduct one clinical audit per department per year. The organisation needs to take care to differentiate clinical audit from research projects.

### Achievement

#### b. Medical/Dental staff participates in this system.

**Interpretation:** The organisation shall identify such personnel. It could be a mix of dentists, dental surgeons, clinicians, administrators and hygienists, (dental technicians). These could be members of the core committee/quality assurance committee, etc.

### Commitment

#### c. The parameters to be audited are defined by the DHSP

**Interpretation:** As clinical audits are standards-based, they must be done using predefined parameters so that there is no bias. The organisation shall lay down the objectives, the standards against which the audit shall be conducted, develop a checklist where required, sampling and data collection guidelines and preparation of the report. The audit shall encompass aspects of clinical care.

### Commitment

#### d. Patient, Clinician and staff anonymity are maintained.

**Interpretation:** This means that the names of the patients and the DHSP staff who may figure in the audit documents must not be disclosed nor any reference is made to them in public discussions/conferences. This is at the stage of report preparation and dissemination. The staff participating in the audit shall maintain patient and staff anonymity and not reveal names.

### Commitment

#### e. Clinical audits are documented.

**Interpretation:** The organisation could use a checklist with the predefined parameters, and the audit findings could be recorded on this sheet. After the audit, a report shall be prepared, highlighting the key findings of the audit.

### Commitment

#### f. Remedial measures are implemented.

**Interpretation:** All remedial measures as ascertained shall be documented and implemented, and improvements thereof recorded to complete the audit cycle. This shall preferably be done based on the root-cause analysis.

## Standard

PSQ.5.

**Incidents are collected and analysed to ensure continuous patient safety and quality improvement.**

## Objective Elements

### CORE

#### a. The organisation implements an incident management system. \*

**Interpretation:** The incident management system includes:

- Identification
- Reporting
- Review
- Action on incidents

This system supports factual reporting and learning and is based on the principle of just culture.

The organisation shall have a mechanism for reporting the occurrence of incidents on standardised incident report forms. It is preferable that the reporting system is simple (a few steps), clear (what needs to be reported, how to report, and to whom), confidential, and focused on process improvement.

While capturing the incidents, the organisation shall capture all incidents without going into the severity or whether harm was caused.

#### Commitment

#### b. The organisation has a mechanism to identify sentinel events. \*

**Interpretation:** The sentinel events relating to system or process deficiencies that are relevant and important to the organisation must be clearly defined. The list of the identified and relevant sentinel events shall be documented.

Refer to the glossary for a definition of "sentinel events".

#### Commitment

#### c. The DHSP has established processes for intense analysis of such events.

**Interpretation:** The safety committee shall be responsible for this activity. This could preferably be done by identifying the root cause. Inputs could be sought from the units/discipline/departments concerned. Where possible, patients and other stakeholders could be included in analysing the feedback and complaint.

The immediate response to a safety incident shall be to address the urgent care and support needs of those involved. This shall not await analysis

In case of sentinel events, correction if any shall be initiated within 24-working hours of occurrence or reporting. The analysis of sentinel events shall be completed within seven working days of occurrence or reporting.

#### Commitment

#### d. Corrective and Preventive Actions (CAPA) are taken upon findings of such analysis.

**Interpretation:** The objective of this is to improve the quality of patient-care services continually. All such action shall be documented. The findings and recommendations arrived at after the analysis shall be communicated to all personnel concerned to correct the systems and processes to prevent recurrences. Any change in the policy or procedure is reflected as an amendment in the organisation's documentation.



## References:

1. Canadian Incident Analysis Framework. (2012). Canadian Patient Safety Institute. Retrieved May 08, 2022, from <https://www.patientsafetyinstitute.ca/en/toolsResources/IncidentAnalysis/Documents/Canadian%20Incident%20Analysis%20Framework.PDF>
2. Charles, R., Hood, B., Derosier, J. M., et al. (2016). How to perform a root cause analysis for workup and future prevention of medical errors: a review. *Patient Safety in Surgery*, 10(1). doi:10.1186/s13037-016-0107-8
3. Culture of Safety. Agency for Healthcare Research and Quality. Patient Safety Network. (2019). Retrieved May 08, 2022, from <http://psnet.ahrq.gov/primer.aspx?primerID=5>
4. Detection of Safety Hazards. (2019). Agency for Healthcare Research and Quality. Patient Safety Primers. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/primers/primer/24/Detection-of-Safety-Hazards>
5. Dimick, J. B. (2010). What Makes a “Good” Quality Indicator? *Archives of Surgery*, 145(3), 295. doi:10.1001/archsurg.2009.291
6. Donabedian, A. (1983). Quality Assessment and Monitoring. *Evaluation & the Health Professions*, 6(3), 363-375. doi:10.1177/016327878300600309
7. Doyle, C., Lennox, L., & Bell, D. (2013). A systematic review of evidence on the links between patient experience and clinical safety and effectiveness. *BMJ Open*, 3(1), e001570. doi:10.1136/bmjopen-2012-001570
8. Esposito P and Canton AD. Clinical audit, a valuable tool to improve quality of care: General methodology and applications in nephrology. *World J Nephrol*. 2014 Nov 6; 3(4): 249–255. Retrieved May 08, 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4220358/>
9. Ewen, B. M., & Bucher, G. (2013). Root Cause Analysis. *Home Healthcare Nurse*, 31(8), 435-443. doi:10.1097/nhh.0b013e3182a1dc32
10. Frankel A and Leonard M. Update on Safety Culture. (2013). Agency for Healthcare Research and Quality Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/perspective/update-safety-culture>
11. Fung, C. H., Lim, Y., Mattke, S., Damberg, C., & Shekelle, P. G. (2008). Systematic Review: The Evidence That Publishing Patient Care Performance Data Improves Quality of Care. *Annals of Internal Medicine*, 148(2), 111. doi:10.7326/0003-4819-148-2-200801150-00006
12. Gruen, R. L., Gabbe, B. J., Stelfox, H. T., & Cameron, P. A. (2011). Indicators of the quality of trauma care and the performance of trauma systems. *British Journal of Surgery*, 99(S1), 97-104. doi:10.1002/bjs.7754
13. How can leaders influence a safety culture? (2012). The Health Foundation. Retrieved May 08, 2022, from <https://www.health.org.uk/sites/default/files/HowCanLeadersInfluenceASafetyCulture.pdf>
14. How To Guides. Clinical audits. (n.d.). University Hospitals Bristol. Retrieved May 08, 2022, from <http://www.uhbristol.nhs.uk/for-clinicians/clinicalaudit/how-to-guides/>
15. Hughes, R. (2008). Chapter 44 Tools and Strategies for Quality Improvement and Patient Safety. In *Patient Safety and Quality: An Evidence-based Handbook for Nurses*.



16. Human Factors: Technical Series on Safer Primary Care. World Health Organization. (2016). Retrieved May 08, 2022, from <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjS1rnPrND3AhXU4HMBHaPYADEQFnoECAsQAQ&url=https%3A%2F%2Fapps.who.int%2Firis%2Frest%2Fbitstream%2F1070137%2Fretrieve&usg=AOvVaw2F7Ms2P-O-eEcMqTkLIP9f>
17. International Use of the Surveys on Patient Safety Culture. (2012). Agency for Healthcare Research and Quality. Retrieved May 08, 2022, from <http://www.ahrq.gov/professionals/quality-patient-safety/patientsafetyculture/pscintusers.html>
18. Jones, P., Shepherd, M., Wells, S., Le Fevre, J., & Ameratunga, S. (2014). Review article: What makes a good healthcare quality indicator? A systematic review and validation study. *Emergency Medicine Australasia*, 26(2), 113-124. doi:10.1111/1742-6723.12195
19. Kötter, T., Blozik, E., & Scherer, M. (2012). Methods for the guideline-based development of quality indicators--a systematic review. *Implementation Science*, 7(1). doi:10.1186/1748-5908-7-21
20. Krause, C. (2017). The Case for Quality Improvement. *Healthcare Quarterly*, 20(1), 25-27. doi:10.12927/hcq.2017.25138
21. Leonard, M. E. (2013). *The Essential Guide for Patient Safety Officers* (2nd ed.).
22. Leotsakos, A., Zheng, H., Croteau, R., Loeb, J. M., Sherman, H., Hoffman, C., ... Munier, B. (2014). Standardization in patient safety: the WHO High 5s project. *International Journal for Quality in Health Care*, 26(2), 109-116. doi:10.1093/intqhc/mzu010
23. Limb, C., Fowler, A., Gundogan, B., Koshy, K., & Agha, R. (2017). How to conduct a clinical audit and quality improvement project. *International Journal of Surgery Oncology*, 2(6), e24. doi:10.1097/ij9.0000000000000024
24. Lindblad, S., Ernestam, S., Van Citters, A., Lind, C., Morgan, T., & Nelson, E. (2016). Creating a culture of health: evolving healthcare systems and patient engagement. *QJM*, hcw188. doi:10.1093/qjmed/hcw188
25. Medicine, I. O., Board on Health Care Services, & Committee on Patient Safety and Health Information Technology. (2012). *Health IT and Patient Safety: Building Safer Systems for Better Care*. Washington, DC: National Academies Press.
26. Patient safety incident reporting and learning systems: technical report and guidance. (2020). World Health Organization. Retrieved May 08, 2022, from <https://www.who.int/publications/i/item/9789240010338>
27. Patient Safety Solutions. (2017). World Health Organization. Retrieved May 08, 2022, from <https://www.who.int/teams/integrated-health-services/patient-safety/research/patient-safety-solutions>
28. Quality Improvement Essentials Toolkit. (n.d.). Institute for Healthcare Improvement. Retrieved May 08, 2022, from <http://www.ihl.org/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx>
29. Quality Statistics - Statistical Methods for Quality Improvement. (n.d.). American Society for Quality. Retrieved May 08, 2022, from <https://asq.org/quality-resources/statistics>

30. RCA2 Improving Root Cause Analyses and Actions to Prevent Harm. (2015). National Patient Safety Foundation. Retrieved May 08, 2022, from <https://www.ashp.org/-/media/assets/policy-guidelines/docs/endorsed-documents/endorsed-documents-improving-root-cause-analyses-actions-prevent-harm.ashx>
31. Reporting Patient Safety Events. (2019). Agency for Healthcare Research and Quality. Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/primers/primer/13/reporting-patient-safety-events%20on%20April%2016>
32. Root Cause Analysis. (2019). Agency for Healthcare Research and Quality. Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/primers/primer/10/Root-Cause-Analysis>
33. Rubin, H. R. (2001). The advantages and disadvantages of process-based measures of health care quality. *International Journal for Quality in Health Care*, 13(6), 469-474. doi:10.1093/intqhc/13.6.469
34. Santana, M., Ahmed, S., Lorenzetti, D., et al. (2019). Measuring patient-centred system performance: a scoping review of patient-centred care quality indicators. *BMJ Open*, 9(1), e023596. doi:10.1136/bmjopen-2018-023596
35. Secanell, M., Groene, O., Arah, O. A., et al. (2014). Deepening our understanding of quality improvement in Europe (DUQuE): overview of a study of hospital quality management in seven countries. *Int J Qual Health Care*, 2014(1), 5-15. doi:10.1093/intqhc/mzu025
36. Seven basic quality tools for process improvement. (n.d.). American Society for Quality. Retrieved May 08, 2022, from <https://asq.org/quality-resources/seven-basic-quality-tools>
37. Shaikh U. Strategies and Approaches for Investigating Patient Safety Events. (2022). Retrieved May 08, 2022, from <https://psnet.ahrq.gov/primer/strategies-and-approaches-investigating-patient-safety-events>
38. Shaikh U. Strategies and Approaches for Tracking Improvements in Patient Safety. (2021). Agency for Healthcare Research and Quality Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/primer/strategies-and-approaches-tracking-improvements-patient-safety>
39. Swensen, S. J., Dilling, J. A., Mc Carty, P. M., et al. (2013). The business case for health-care quality improvement. *J Patient Saf*, 9(1), 44-52. doi:10.1097/PTS.0b013e3182753e33
40. Systematic review: the evidence that publishing patient care performance data improves quality of care. (2009). *Clinical Governance: An International Journal*, 14(1). doi:10.1108/cgij.2009.24814aae.006
41. Thomas, E. J. (2015). The future of measuring patient safety: prospective clinical surveillance. *BMJ Quality & Safety*, 24(4), 244-245. doi:10.1136/bmjqs-2015-004078
42. Thomas, L., & Galla, C. (2012). Building a culture of safety through team training and engagement. *BMJ Quality & Safety*, 22(5), 425-434. doi:10.1136/bmjqs-2012-001011
43. Trbovich, P. L., & Griffin, M. (2015). Measuring and improving patient safety culture: still a long way to go. *BMJ Quality & Safety*, 25(3), 209-211. doi:10.1136/bmjqs-2015-005038
44. Tsai, T. C., Jha, A. K., Gawande, A. A., Huckman, R. S., Bloom, N., & Sadun, R. (2015). Hospital Board And Management Practices Are Strongly Related To Hospital Performance On Clinical Quality Metrics. *Health Affairs*, 34(8), 1304-1311. doi:10.1377/hlthaff.2014.1282

45. Wagner, C., Smits, M., Sorra, J., & Huang, C. C. (2013). Assessing patient safety culture in hospitals across countries. *International Journal for Quality in Health Care*, 25(3), 213-221. doi:10.1093/intqhc/mzt024
46. Ways To Approach the Quality Improvement Process. (2017). Agency for Healthcare Research and Quality. Retrieved May 08, 2022, from <https://www.ahrq.gov/cahps/quality-improvement/improvement-guide/4-approach-qi-process/index.html>
47. Weaver, S. J., Lubomksi, L. H., Wilson, R. F., Pfoh, E. R., Martinez, K. A., & Dy, S. M. (2013). Promoting a Culture of Safety as a Patient Safety Strategy. *Annals of Internal Medicine*, 158(5\_Part\_2), 369. doi:10.7326/0003-4819-158-5-201303051-00002
48. What is Risk Management in Healthcare? (2019). NEJM Catalyst. Retrieved May 08, 2022, from <https://catalyst.nejm.org/what-is-risk-management-in-healthcare/>
49. What is Root Cause Analysis (RCA)? (n.d.). American Society for Quality. Retrieved May 08, 2022, from <https://asq.org/quality-resources/root-cause-analysis>

# Chapter 7

## Responsibilities of Management (ROM)

The standards encourage the governance of the DHSP in a professional and ethical manner. The responsibilities of the management are defined. The DHSP complies with all applicable regulations. The DHSP is led by a suitably qualified and experienced individual. The responsibilities of the leaders at all levels are defined. The services provided by each department are documented. DHSP ensures that patient safety and risk management issues are an integral part of patient care and hospital management.

### Summary of Standards

<b>ROM.1.</b>	The responsibilities of the management are defined.
<b>ROM.2.</b>	The leaders manage the organisation in an ethical manner.
<b>ROM.3.</b>	A suitably qualified and experienced individual heads the DHSP.
<b>ROM.4.</b>	The organisation displays professionalism in its functioning.
<b>ROM.5.</b>	Leaders ensure that patient safety aspects and risk management issues are an integral part of patient care and management.

Objective Element	ROM 1	ROM 2	ROM 3	ROM4	ROM 5
a.	Core	Commitment	Commitment	Commitment	Core
b.	Commitment	Core	Commitment	Achievement	Achievement
c.	Commitment	Commitment	Excellence	Achievement	Commitment
d.	Achievement	Commitment		Commitment	Commitment
e.	Commitment			Excellence	Commitment
f.	Commitment				Achievement
g.	Commitment				
h.	Achievement				
i.	Excellence				

## Standard

**ROM.1.**
**The responsibilities of the management are defined.**

## Objective Elements

### CORE

- a. Those responsible for governance are identified, and their roles and responsibilities are defined and documented. \***

**Interpretation:** Those responsible for governance are accountable for the quality of care and help the healthcare organisation achieve its goals. The terms of reference, by-laws and membership of those responsible for governance is documented. This may require that those responsible for governance receive formal orientation and ongoing education regarding their role. Those responsible for governance meet at regular intervals and minutes of the meeting are maintained. going into the severity or whether harm was caused.

### Commitment

- b. Those responsible for governance lay down the organisation's vision, mission and values. \***

**Interpretation:** The organisation shall enunciate its vision, mission and values through an authorised document. These shall be developed and reviewed by those responsible for governance in consultation with the organisation's leaders. Further, inputs could be from external stakeholders, including patients and families.

For the definition of "mission", "vision" and "values" refer to the glossary.

### Commitment

- c. Those responsible for governance approve the strategic and operational plans and the organisation's annual budget.**

**Interpretation:** The methodology and frequency of preparation of strategic plan may differ according to the size and type of organisation. Operational plans and budget/expenditure shall be approved annually. The operational plan should be linked to the strategic plan. The strategic and operational plans should identify responsibility and possible timeframes for achievement. The annual budget should include both capital expenditure and operating expenditure.

Refer to the glossary for "strategic and operational plans".

### Achievement

- d. Those responsible for governance monitor and measure the performance of the DHSP against the stated mission.**

**Interpretation:** The head of the organisation shall develop quarterly (at least) performance reports based on the strategic and operational plans. Performance shall be discussed in the meeting of those responsible for governance and action items are regularly followed up.

**Commitment****e. Those responsible for governance establish the DHSP's organogram.**

**Interpretation:** The DHSP shall have the reporting structure/chart and this shall clearly document the hierarchy, line of control and function.

**Commitment****f. Those responsible for governance appoint the senior leaders in the DHSP.**

**Interpretation:** At a minimum, the person responsible for managing the day-to-day functioning of the organisation shall be appointed by those responsible for governance. This may be based on qualifications, training, experience and skills.

**Commitment****g. Those responsible for governance support safety initiatives and quality improvement plans.**

**Interpretation:** Reports of the safety and quality improvement committee's discussions are shared with those responsible for governance, and funds and resources allocated for corrective and preventive action. The information shared shall include the salient points of risk management and quality improvement activities.

**Achievement****h. Those responsible for governance support the ethical management framework of the organisation.**

**Interpretation:** This includes the ethical management framework, resolving ethical issues and addressing conflicts of interest. It also includes support for the ethical conduct of research.

**Excellence****i. Those responsible for governance inform the public of the quality and performance of services.**

**Interpretation:** This could be done in the form of displays or brochures or on the website. This could include positive and negative feedback received from the stakeholders, results of surveys done by independent third parties, results of benchmarking done by professional bodies, etc.

**Standard****ROM.2.****The leaders manage the organisation in an ethical manner.****Objective Elements**

**Commitment****a. The leaders make public the vision, mission and values of the organisation.**

**Interpretation:** The vision, mission and values of the organisation should be displayed prominently. Only a display on its website would not be appropriate. The same could be translated and displayed in the local language also.

For the definition of "mission", "vision" and "values" refer to the glossary.

**CORE****b. The leaders establish the DHSP's ethical management framework.**

**Interpretation:** The organisation shall function ethically. Transparency in its actions shall be one of its guiding principles. Handling of complaints, grievances, clinical care delivery and research shall be some of the areas to address. The framework includes codes of conduct. A good reference guide for minimum code of conduct for dentist is "Code of Dental Ethics" published by Dental Council of India.

**Commitment****c. The DHSP discloses its ownership.**

**Interpretation:** The ownership of the DHSP, for example, trust, private, public with the name of the ownership has to be disclosed. The disclosure could be in the form of a registration certificate.

**Commitment****d. The DHSP honestly portrays its affiliations and accreditations.**

**Interpretation:** It implies that the organisation conveys its affiliations, accreditations for specific departments or whole hospital in an honest manner, wherever such exist.

**Standard****ROM.3.****A suitably qualified and experienced individual heads the DHSP.****Objective Elements****Commitment****a. The designated individual has requisite and appropriate administrative qualifications.**

**Interpretation:** Appropriate implies qualification in DHSP management / administration.

**Commitment****b. The designated individual has requisite and appropriate administrative experience.**

**Interpretation:** Appropriate implies administrative experience in a DHSP.



**Excellence**

- c. **The leader ensures that each organisational programme, service, site or department has effective leadership.**

**Interpretation:** There needs to be a minimum essential qualification and/or relevant experience of the leader. The leader should have domain knowledge of that particular department. The organisation needs to develop its metrics for measuring the effectiveness of leaders.

**Standard****ROM.4.**

**The organisation displays professionalism in its functioning.**

**Objective Elements****Commitment**

- a. **The organisation has strategic and operational plans, including long-term and short-term goals commensurate to the organisation's vision, mission and values in consultation with the various stakeholders.**

**Interpretation:** The leader(s) shall define and develop the process for strategic and operational plans to achieve the organisational vision and mission statement and adhere to the values. It shall be discussed with all stakeholders. The strategic plan development should take into consideration both external and internal scan. The external scan includes a scan of the environment. The same can be done using tools like PEST/PESTLE (Political, Economic, Social and technological)/, STEEP (Safety, Timeliness, Efficiency, Equity, Effectiveness, Patient centric) /STEEPLE (Social, Technological, Economic, Environmental, Political, Legal and Ethical.), DEEPLIST analysis. Some of the inputs that should be considered while finalising these plans shall be the findings of the risk management plan, patient safety goals and results of facility rounds. Operational plan(s) shall at least be done on an annual basis.

The strategic and operational plan should have defined goals and objectives which are measurable. Strategic plans could also be to maintain the current level of operations.

Stakeholders include the community the organisation serves.

Refer to the glossary for “strategic plan” and operational plan”.

**Achievement**

- b. **The organisation coordinates the functioning with departments and external agencies and monitors the progress in achieving the defined goals and objectives.**

**Interpretation:** The goals and objectives shall be drawn from the strategic plan and operational plan. They shall be consistent with the mission and values. They shall have measurable outcomes. The reasons for not achieving any particular goal shall be analysed, and appropriate action shall be taken. This could be done through periodic reviews and/or formal management review meetings.

**Achievement****c. The functioning of committees is reviewed for their effectiveness.**

**Interpretation:** The review shall be done by the management. The review of the functioning shall include whether the purpose of having the committee is being met, whether the committee is meeting at the prescribed frequency and whether the committee is suggesting remedial measures and if there is adequate monitoring of the corrective and preventive action suggested by the committee by way of risk mitigation within the scope of the particular committee. For an effective review, the organisation could document the scope of every committee, the roles and responsibilities assigned to various members and the frequency of meetings. Minutes of the meeting for each committee meeting will be maintained.

**Commitment****d. The organisation documents staff rights and responsibilities. \***

**Interpretation:** The organisation shall define the same in consonance with statutory requirements.

**Commitment****e. Systems and processes are in place for change management.**

**Interpretation:** Change may be operational, financial or departmental. It also involves succession planning and a change in leadership. The process could address aspects like communication, ownership, organisational culture etc.

**Standard****ROM.5.**

**Leaders ensure that patient safety aspects and risk management issues are an integral part of patient care and management.**

**Objective Elements****CORE****a. Management ensures proactive risk management across the organisation. \***

**Interpretation:** Risk management shall include clinical and non-clinical (strategic, financial, operational and hazard) risks. It shall include risk identification at every level of the organisation, analysis, prioritisation and risk alleviation. The same shall be documented. At a minimum, analysis of potential risks must include the likelihood of its occurrence and the potential severity of the impact or consequences. The identified risks shall be documented in a risk register, which shall be updated at regular intervals.

This shall be documented as a “risk management plan”. It shall include the various risks identified, the action taken for risk alleviation of each of these risks and the mechanism for informing staff regarding the same. Other components of the risk management plan include contingency plans and education and training of staff.

Further, the risk management plan shall be monitored and reviewed for continued effectiveness at least annually. The results of the review shall be communicated to the relevant stakeholders in the organisation. This could be done using a matrix.

The clinical-risk assessment could include:

- Medication management, covering issues such as patient/service-user allergies and antibiotic resistance,
- Equipment risks, e.g., fire/injury risks from the use of LASER, and
- Risks resulting from long-term conditions.

#### Achievement

#### b. Management ensures implementation of systems for internal and external reporting of system and process failures.

**Interpretation:** The organisation has a system in place for internal and external reporting of system and process failures. The contingency plan shall be in place to deal with the situation of system and process failure anticipated within the organisation. For example, in case of fire incidents, strong internal and external reporting systems are required. The system for reporting shall be documented.

#### Commitment

#### c. Management provides resources for proactive risk assessment and risk reduction activities.

**Interpretation:** There shall be sufficient resources kept as a contingency to address the risk reduction activities as and when the leaders proactively suggest. These shall be directed at preventive actions wherever feasible. Refer to the glossary for a definition of “risk assessment” and “risk reduction”.

#### Commitment

#### d. Management ensures integration between quality improvement, risk management and strategic planning within the organisation.

**Interpretation:** The management ensures that strategic planning incorporates risk management aspects in its strategic plan. Further, quality improvement should also incorporate risk management aspects.

#### Commitment

#### e. Management ensures that it has a documented agreement for all outsourced services that include service parameters.

**Interpretation:** The agreement shall specify the service parameters. Examples of service parameters include quality, numbers, reports and timelines. The agreement should include agreed dispute resolution mechanisms. Even if a group/affiliate concern is providing services, there shall be an agreement with that unit.

**Achievement**

- f. Management monitors the quality of the outsourced services and improvements are made as required.**

**Interpretation:** The frequency of monitoring shall be determined by the organisation but shall not be less than once a year. This shall be done keeping in mind the criticality of that service towards providing patient care. Based on the results of the monitoring, the organisation should work with the vendor to try and ensure that the agreed service parameters are met.

In instances where the outsourcing has been done based on prescribed statutory norms/regulations, it is not mandatory to monitor the quality of the outsourced services.

## References:

1. Alam, A. Y. (2016). Steps in the Process of Risk Management in Healthcare. *Journal of Epidemiology and Preventive Medicine*, 02(02). doi:10.19104/jepm.2016.118
2. Arnwine, D. L. (2002). Effective Governance: The Roles and Responsibilities of Board Members. *Baylor University Medical Center Proceedings*, 15(1), 19-22. doi:10.1080/08998280.2002.11927809
3. Baba, V. V., & HakemZadeh, F. (2012). Toward a theory of evidence based decision making. *Management Decision*, 50(5), 832-867. doi:10.1108/00251741211227546
4. Balding, C. (2008). From quality assurance to clinical governance. *Australian Health Review*, 32(3), 383. doi:10.1071/ah080383
5. Barends E, Rousseau DM and Briner RB. (2014). Evidence-Based Management: The Basic Principles. Center for Evidence-Based Management. Retrieved May 08, 2022, from <https://www.cebma.org/wp-content/uploads/Evidence-Based-Practice-The-Basic-Principles-vs-Dec-2015.pdf>
6. Biller-Andorno, N. (2004). Ethics, EBM, and hospital management. *Journal of Medical Ethics*, 30(2), 136-140. doi:10.1136/jme.2003.007161
7. Braithwaite, J., Herkes, J., Ludlow, K., Testa, L., & Lamprell, G. (2017). Association between organisational and workplace cultures, and patient outcomes: systematic review. *BMJ Open*, 7(11), e017708. doi:10.1136/bmjopen-2017-017708
8. Bruning, P. (2013). Improving Ethical Decision Making in Health Care Leadership. *Business and Economics Journal*, 04(02). doi:10.4172/2151-6219.1000e101
9. Chatterjee, C., & Srinivasan, V. (2013). Ethical issues in health care sector in India. *IIMB Management Review*, 25(1), 5. doi:10.1016/j.iimb.2012.12.007
10. Choudhuri, D. (2015). Strategic Planning: A Comprehensive Approach. Retrieved May 08, 2022, from <https://www.structuremag.org/wp-content/uploads/2015/08/D-BusinessPrac-Choudhuri-Sept151.pdf>
11. Clay-Williams, R., Ludlow, K., Testa, L., Li, Z., & Braithwaite, J. (2017). Medical leadership, a systematic narrative review: do hospitals and healthcare organisations perform better when led by doctors? *BMJ Open*, 7(9), e014474. doi:10.1136/bmjopen-2016-014474
12. Combes, J. R. (2009). Effective boards begin with effective board members. *Trustee*, 62(9), 26-29.
13. Common Ethical Dilemmas for Doctors. *Medscape*. (n.d.). Retrieved May 08, 2022, from <https://www.medscape.com/courses/section/898063>
14. Daly, J., Jackson, D., Mannix, J., Davidson, P., & Hutchinson, M. (2014). The importance of clinical leadership in the hospital setting. *Journal of Healthcare Leadership*, 75. doi:10.2147/jhl.s46161
15. Davies, H. T. (2000). Organisational culture and quality of health care. *Quality in Health Care*, 9(2), 111- 119. doi:10.1136/qhc.9.2.111

16. Determining Your Core Values, Mission, and Vision. (2015). Complete Guide to Practice Management, 3-18. doi:10.1002/9781119204312.ch1
17. Doran, E., Fleming, J., Jordens, C., Stewart, C. L., Letts, J., & Kerridge, I. H. (2015). Managing ethical issues in patient care and the need for clinical ethics support. *Australian Health Review*, 39(1), 44. doi:10.1071/ah14034
18. Effective board members have three qualities. (2019). *Board & Administrator for Administrators Only*, 35(S7), 2-2. doi:10.1002/ban.30866
19. Feudtner, C., Schall, T., Nathanson, P., & Berry, J. (2018). Ethical Framework for Risk Stratification and Mitigation Programs for Children With Medical Complexity. *Pediatrics*, 141(Supplement 3), S250-S258. doi:10.1542/peds.2017-1284j
20. Frankel A and Leonard M. Update on Safety Culture. (2013). Agency for Healthcare Research and Quality Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/perspective/update-safety-culture>
21. G20/OECD Principles of Corporate Governance. (2015). OECD. Retrieved May 08, 2022, from <https://www.oecd.org/daf/ca/Corporate-Governance-Principles-ENG.pdf>
22. Govind, N. (2014). Between families and doctors. *Indian Journal of Medical Ethics*. doi:10.20529/ijme.2014.016
23. India Code: Home. Digital repository of all central and state acts. (n.d.). Government of India. Retrieved May 08, 2022, from <https://indiacode.nic.in/>
24. Ingersoll, G. L., Witzel, P. A., & Smith, T. C. (2005). Using Organizational Mission, Vision, and Values to Guide Professional Practice Model Development and Measurement of Nurse Performance. *JONA: The Journal of Nursing Administration*, 35(2), 86-93. doi:10.1097/00005110-200502000-00008
25. Jondle, D., Maines, T. D., Burke, M. R., & Young, P. (2013). Modern risk management through the lens of the ethical organizational culture. *Risk Management*, 15(1), 32-49. doi:10.1057/rm.2012.11
26. Kaya, G. K., Ward, J. R., & Clarkson, P. J. (2018). A framework to support risk assessment in hospitals. *International Journal for Quality in Health Care*, 31(5), 393-401. doi:10.1093/intqhc/mzy194
27. Kaya, G. K., Ward, J. R., & Clarkson, P. J. (2018). A framework to support risk assessment in hospitals. *International Journal for Quality in Health Care*, 31(5), 393-401. doi:10.1093/intqhc/mzy194
28. Kuhn, A. M. (2002). The need for risk management to evolve to assure a culture of safety. *Quality and Safety in Health Care*, 11(2), 158-162. doi:10.1136/qhc.11.2.158
29. Mannion, R., & Davies, H. (2018). Understanding organisational culture for healthcare quality improvement. *BMJ*, k4907. doi:10.1136/bmj.k4907
30. McDonagh, K. J. (2006). Hospital Governing Boards: A Study of Their Effectiveness in Relation to Organizational Performance. *Journal of Healthcare Management*, 51(6), 377-389. doi:10.1097/00115514-200611000-00007
31. McSherry, R., Wadding, A., & Pearce, P. (n.d.). Healthcare Governance Through Effective Leadership. *Effective Healthcare Leadership*, 58-75. doi:10.1002/9780470774984.ch5

32. Organizational Management—How to Run a Meeting and Make Decisions. (n.d.). *Developing Human Service Leaders*, 149-168. doi:10.4135/9781506330389.n11
33. Orlikoff, J. E., & Totten, M. K. (2007). Center for Healthcare Governance: effective board development: showing the way toward exceptional governance. *Healthc Exec.*, 22(3), 68-70.
34. Personal Characteristics of Effective Boards and Members. (2015). *Audit Committee Essentials*, 33-39. doi:10.1002/9781119201472.ch3
35. Phrampus PE. Building a Safety Program in a Vast Health Care Network. (2019). Agency for Healthcare Research and Quality. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/perspective/building-safety-program-vast-health-care-network>
36. Quality and Patient Safety Directorate. (2012). Quality and Patient Safety Clinical Governance Development: an assurance check for health service providers. Retrieved May 08, 2022, from <https://www.pna.ie/images/0405124.pdf>
37. Rego, A., Araújo, B., & Serrão, D. (2015). The mission, vision and values in hospital management. *Journal of Hospital Administration*, 5(1). doi:10.5430/jha.v5n1p62
38. Risk management -- Guidelines. (2018). International Organization for Standardization. ISO 31000:2018 Retrieved May 08, 2022, from <https://www.iso.org/standard/65694.html>
39. Schmets G, Rajan D, Kadandale S. Strategizing National Health in the 21st Century: A Handbook. World Health Organization. (2016). Retrieved May 08, 2022, from <http://apps.who.int/iris/bitstream/10665/250221/41/9789241549745-eng.pdf?ua=1>
40. Stern RJ and Sarkar U. Update: Patient Engagement in Safety. (2018). Agency for Healthcare Research and Quality. Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/perspective/update-patient-engagement-safety>
41. Strategic Planning: Why It Makes a Difference, and How to Do It. (2009). *Journal of Oncology Practice*, 5(3), 139-143. doi:10.1200/jop.0936501
42. Suchy, K. (2010). A Lack of Standardization: The Basis for the Ethical Issues Surrounding Quality and Performance Reports. *Journal of Healthcare Management*, 55(4), 241-251. doi:10.1097/00115514-201007000-00005
43. Trybou, J., Gemmel, P., Desmidt, S., & Annemans, L. (2017). Fulfillment of administrative and professional obligations of hospitals and mission motivation of physicians. *BMC Health Services Research*, 17(1). doi:10.1186/s12913-017-1990-0
44. Useem, M. (n.d.). How well-run boards make decisions. *Harv Bus Rev.*, 84(11), 130-6.

# Chapter 8

## Facility Management and Safety (FMS)

The standards guide the provision of a safe and secure environment for patients, their families, staff and visitors. To ensure this, the DHSP conducts regular facility inspection rounds and takes the appropriate action to ensure safety. The DHSP provides for safe water, electricity, medical gases and vacuum systems. The DHSP has a programme for clinical and support service equipment management. The DHSP plans for emergencies within the facilities and the community. The DHSP is a no smoking area and manages hazardous materials in a safe manner.

### Summary of Standards

<b>FMS.1.</b>	The DHSP has a system in place to provide a safe and secure environment.
<b>FMS.2.</b>	The organisation's environment and facilities operate in a planned manner and promotes environment-friendly measures.
<b>FMS.3.</b>	The DHSP's environment and facilities operate to ensure safety of patients, their families, staff and visitors.
<b>FMS.4.</b>	The organisation has a programme for medical and support service equipment management.
<b>FMS.5.</b>	The organisation has a programme for medical gases, vacuum and compressed air.
<b>FMS.6.</b>	The DHSP has plans for fire and non-fire emergencies within the facilities.



Objective Element	FMS 1	FMS 2	FMS 3	FMS 4	FMS 5	FMS 6
a.	Core	Commitment	Excellence	Commitment	Commitment	Core
b.	Commitment	Commitment	Commitment	Commitment	Core	Commitment
c.	Core	Core	Achievement	Core	Core	Commitment
d.	Commitment	Core	Commitment	Commitment	Commitment	Commitment
e.	Excellence	Commitment	Core	Commitment	Commitment	
f.	Commitment	Commitment	Commitment	Achievement		
g.		Excellence		Achievement		

## Standard

**FMS.1.**
**The DHSP has a system in place to provide a safe and secure environment.**

## Objective Elements

**CORE**

- a. Patient-safety devices and infrastructure are installed across the organisation and inspected periodically.**

**Interpretation:** For example, grab bars, bed rails, signposting, safety belts on wheelchairs, warning signs like radiation or biohazard, fire-safety devices, etc.

**Commitment**

- b. The organisation has facilities for the differently-abled.**

**Interpretation:** Provisions are made for differently-abled persons like the physically challenged, the visually impaired and mentally impaired person. At a minimum, this shall be as per regulatory requirement. For example, wheelchair accessible entrance.

**CORE**

- c. Facility inspection rounds to ensure safety are conducted at least once a month.**

**Interpretation:** Potential safety risks are identified during the rounds using a checklist. The potential security risk areas and restricted areas are identified and are monitored. The organisation plans and budgets for upgrading or replacing key systems, buildings, or components based on the facility inspection.

**Commitment**

- d. Inspection reports of facility rounds are documented, and corrective and preventive measures are undertaken.**

**Interpretation:** The facility inspection reports are reviewed monthly by the safety committee and appropriate action(s) taken. Evidence of pre- and post- corrective actions are maintained at least for one accreditation cycle.

**Excellence**

- e. Before construction, renovation and expansion of the existing hospital, risk assessment is carried out.**

**Interpretation:** The risk assessment shall cover noise, vibration and infection control. This is carried out before the commencement of renovation and expansion of the facility.

**Commitment**

- f. The DHSP defines its' policies to eliminate smoking.**

**Interpretation:** DHSP should follow Government guidelines of no-smoking in public places strictly. The policy has provisions for motivating patients and families and its staff not to smoke. DHSP should sensitize its staff towards the no-smoking policy.

## Standard

**FMS.2.**

**The organisation's environment and facilities operate in a planned manner and promotes environment-friendly measures.**

## Objective Elements

### Commitment

#### a. Facilities and space provisions are appropriate to the scope of services.

**Interpretation:** The basis of the appropriateness of facilities and space provisions will be as per the national/international guidelines. For example, regulatory requirements, the directive of government agencies like AERB guidelines.

### Commitment

#### b. As-built and updated drawings are maintained as per statutory requirements.

**Interpretation:** A designated person maintains as-built and updated site layout, floor drawings, floor wise fire evacuation plans, separate civil, electrical, plumbing, HVAC and piped medical gas drawings.

### CORE

#### c. There are internal and external sign postings in the organisation in a manner understood by the patient, families and community.

**Interpretation:** Manner implies language and/or pictorial. Signage could be bi-lingual and should meet statutory requirements.

### CORE

#### d. Potable water and electricity are available round the clock.

**Interpretation:** The organisation shall make arrangements for the supply of adequate potable water and electricity. Potable water quality is monitored and documented. Water testing includes bio-chemical (once in three months) and microbiological analysis (once in a month). Water shall be collected at the user end (tap). For water quality, refer to the current version IS 10500.

### Commitment

#### e. Alternate sources for electricity and water are provided as a backup for any failure/shortage.

**Interpretation:** The organisation shall ensure that there is sufficient water supply to meet the requirements. The electric load shall be appropriate to the requirements of the organisation and adhere to the regulatory requirements. Alternate sources for water and electricity shall be made available all the times. A good reference for estimating the water requirement is the National Building Code. Alternate electric supply could be from DG sets, solar energy, UPS and any other suitable source. The organisation identifies and mitigates the risk of critical areas/services during electrical supply failure, or when water is contaminated or interrupted. In case of electrical supply through alternate sources (Diesel generator or uninterrupted power supply), the capacity and longevity of power availability based on usage are considered. Alternate source of water can be bore/open well, supply through water tanker or extra storage tanks.

**Commitment**

- f. **The organisation tests the functioning of these alternate sources at a predefined frequency.**

**Interpretation:** The results of these tests shall be documented. In case of water, if the organisation uses alternate sources for making up the shortfall water testing shall be done on acceptance and at a pre-defined frequency. If the organisation uses alternate sources only as an emergency measure, water testing shall be done on acceptance. Water shall be collected for testing at the point where it is received from the source.

**Excellence**

- g. **The organisation takes initiatives towards an energy-efficient and environmentally friendly DHSP. \***

**Interpretation:** This includes using the concepts of reduce, recycle and reuse in promoting the basic concepts of the green hospital. e.g. energy-efficient lighting, rainwater harvesting, increase usage of solar power, wind energy, use of battery-operated or e-vehicles, recycling of STP/ETP water for gardening and flush water, reduction of plastic usage where possible, use of 'green' materials in construction, use of volatile organic compounds free paints. The organisation should focus on efficient and sustainable use of energy, water and other utilities.

**Standard****FMS.3.**

**The DHSP's environment and facilities operate to ensure safety of patients, their families, staff and visitors.**

**Objective Elements****Excellence**

- a. **Patient safety aspects in terms of structural safety of hospitals, especially of critical areas are considered while planning, design and construction of new hospitals and re-planning, assessment, and retrofitting of existing hospitals.**

**Interpretation:** At a minimum, Indian Seismic Code IS: 1893 (part 1) latest version should be followed while making provisions for structural and non-structural elements.

Some good references are National Disaster Management guidelines; Hospital safety 2016 and WHO guide on hospital safety index: guide for evaluators 2nd edition 2015.

**Commitment**

- b. **Operational planning identifies areas which need to have extra security and describes access to different areas in the hospital by staff, patients, and visitors.**

**Interpretation:** The planning process shall begin by identifying various categories of people in a DHSP. At a minimum, this shall include staff, patients and visitors, in the

DHSP. The DHSP shall have a mechanism to identify the defined categories. The DHSP shall define access to different areas in the hospital for the defined categories as per the operational security plan. Vulnerable areas like dark areas, long corridors, entrances to critical areas need to be identified, and appropriate security is in place such as CCTV coverage.

### Achievement

#### c. The organisation conducts electrical safety audits for the facility.

**Interpretation:** The intent of electrical safety audits is to minimise the electrical risks to persons and property and ensure that occurrence of fire due to short-circuiting is prevented. It should be performed at least once a year. It could be incorporated into the electric system maintenance plan. The help of new technology like thermal imaging equipment can help detect loose connections in the system and thereby prevent fire incidents. This shall incorporate statutory requirements where applicable. National electrical code 2011 could be used as a reference document.

### Commitment

#### d. There is a procedure which addresses the identification and disposal of material (s) not in use in the organisation. \*

**Interpretation:** Organisation shall condemn and dispose of the material which is not in usage such as non-functioning items, excess unwanted material, general waste, scrap material etc.

### CORE

#### e. Hazardous materials are identified and used safely within the organisation. \*

**Interpretation:** The organisation shall identify and document the hazardous materials and has a documented procedure for their sorting, storage, handling, transportation and disposal. In addition to chemicals, biological materials like blood, body fluids and microbiological cultures, mercury, medical gases, LPG gas, steam, etc. are some of the other common hazardous materials.

The organisation could develop its procedures based on Material Safety Data Sheets (MSDS). Applicable statutory requirements shall be complied with.

### Commitment

#### f. The plan for managing spills of hazardous materials is implemented. \*

**Interpretation:** The plan shall be developed based on information provided in MSDS. The key elements shall be summarised in a manner that is easy to understand (if necessary, translated in local language) and available for staff to refer to wherever such materials are stored. Personnel who handle such material are accordingly trained. The organisation has a HAZMAT kit(s) for handling spills of hazardous materials.

## Standard

**FMS.4.**
**The organisation has a programme for medical and support service equipment management.**

## Objective Elements

### Commitment

- a. **The organisation plans for medical and support service equipment in accordance with its services and strategic plan.**

**Interpretation:** This shall also take into consideration future requirements. The medical equipment shall be appropriate to its scope of services. A good reference for minimum medical equipment is the IPHS guideline. Medical equipment is selected, rented, updated or upgraded by a collaborative process. Collaborative process implies that during equipment selection, there is involvement of end-user, management, finance, engineering and biomedical departments. The organisation could define differential financial clearance in accordance with the policy. For example, the purchase of BP apparatus can be made by the departmental head.

### Commitment

- b. **Medical equipment and support service equipment are inventoried, and proper logs are maintained as required.**

**Interpretation:** Medical equipment and medical devices will be classified as per the risk defined by medical devices regulations. A unique identifier is provided for each equipment. This includes equipment on a rental basis and equipment kept for demonstration purpose. The relevant quality conformance certificates/marks along with manufacturer factory test certificate need to be retained as part of the documentation for all equipment.

### CORE

- c. **The documented operational and maintenance (preventive and breakdown) plan for medical and support service equipment is implemented. \***

**Interpretation:** The operator is trained in handling the medical equipment. The operational plan must assist the operator in operating the medical equipment daily. The original equipment manual is a good source for this. In case this is not available, the organisation shall develop the operational plan for the concerned equipment. The operational plan of medical equipment includes evaluation of safe usage of equipment like validation with respect to the instruction manual, user training on equipment, operational check of equipment and verification of set parameter. This includes plans for all utility equipment, engineering equipment, electrical systems, water management, HVAC, facility and furniture. The maintenance plan includes periodic checks, execution of timely preventive maintenance, and response to any breakdown issues including at night and weekends. There shall be a planned preventive maintenance tracker.

**Commitment****d. Medical and support service equipment are periodically inspected and calibrated for their proper functioning.**

**Interpretation:** The organisation has weekly/monthly/annual schedules of inspection and calibration of equipment, which involve measurement, appropriately. The organisation either calibrates the equipment in-house or outsources, maintaining traceability to national or international or manufacturer's guidelines/standards. The organisation shall ensure that calibration and conformance testing of the equipment has been done before commissioning. Medical equipment is re-calibrated after its repairs/breakdown..

**Commitment****e. Qualified and trained personnel operate and maintain medical and support service equipment.**

**Interpretation:** The operator of the medical equipment is trained to use medical equipment safely and effectively, for example, nurse trained to use blood gas analyser, ECG machine and syringe pump etc. Maintenance of medical equipment shall be done by a bio-medical engineer/technologist or instrumentation engineer/technologist with relevant training and experience.

**Achievement****f. There is monitoring of medical equipment and medical devices related to adverse events, and compliance hazard notices on recalls. \***

**Interpretation:** The monitoring shall include medical device-related adverse events. All statutory requirements and procedures shall be adhered to (Gazette of India GSR 78(E) 2017. Medical device rules 2017). The organisation shall participate in Materio-vigilance Programme of India (MvPI). Recalls are on based on letters/hazard notice issued from the manufacturer and or regulatory authorities. This may not be a routine occurrence, but whenever hospital authorities receive or become aware of such recalls, it should be immediately acted upon, and the said medical equipment and the medical device should not be put into further clinical use till the issue is resolved..

**Achievement****g. Downtime for critical equipment breakdown is monitored from reporting to inspection and implementation of corrective actions.**

**Interpretation:** The organisation shall define critical medical equipment. At a minimum, this shall include ventilators, MRI, Cath lab, CT scan, anaesthesia machines, monitors, laboratory, ultrasound etc. and especially where there is no alternative available. The organisation shall define the critical engineering and utility equipment. At a minimum, this shall include DG set, lifts, UPS, and water pumps. A complaint attendance register is to be maintained (physical or electronic) to indicate the date and time of receipt of the complaint, allotment of job and completion of the job. Completion of the job should always be ratified by the user department. The start of downtime shall be the time when the complaint was lodged, and the end of the downtime shall be the time at which completion of the job was ratified by the user department.

## Standard

**FMS.5.**

**The organisation has a programme for medical gases, vacuum and compressed air.**

## Objective Elements

### Commitment

- a. The DHSP procedures for medical gasses address safety issues at all levels.**

**Interpretation:** This shall include from the point of storage/ source area, gas supply lines and the end user area. Appropriate safety measures shall be developed and implemented for all levels. These shall include alarm units and valve boxes installation at various locations and monitoring of alarm units for gas pressure going beyond the limit.

### CORE

- b. The written guidance governs the handling, storage, distribution and use of medical gases in a safe manner**

**Interpretation:** Regular testing of medical gases cylinder will be carried out as per supplier recommendations. The standardized colour coding of the cylinder and pipe line should be maintained. The good reference for medical gas systems HTM02-01, ISO 7396-1; 2016 (medical gas pipeline system).

### CORE

- c. Alternate sources for medical gases, vacuum and compressed air are provided for, in case of failure.**

**Interpretation:** In the case of an air compressor and vacuum pump, it could be the stand-by air compressor and vacuum pump unit. For medical gases, it could be stand-by gas manifold/bulk cylinders.

### Commitment

- d. The organisation regularly tests the functioning of these alternate sources.**

**Interpretation:** The results of these tests shall be documented.

### Commitment

- e. There is a maintenance plan for centralized compressed air supply system, if installed.**

**Interpretation:** This shall adhere to the manufacturer's recommendations.



## Standard

**FMS.6.**
**The DHSP has plans for fire and non-fire emergencies within the facilities.**

## Objective Elements

### CORE

- a. The DHSP has plans and provisions for early detection, abatement and containment of fire and non-fire emergencies.**

**Interpretation:** The organisation shall:

- I. has a fire plan covering fire arising out of burning of inflammable items, explosion, electric short-circuiting or acts of negligence or due to the incompetence of the staff on duty;
- II. deploy adequate and qualified personnel for this;
- III. follow NABH minimum fire safety guidelines;
- IV. have safety measures in place to minimise the effect of smoke during the fire;
- V. has adequate training plans;
- VI. have schedules for the conduct of mock fire drills;
- VII. maintain mock drill records;
- VIII. display exit plans prominently;
- IX. have a dedicated emergency illumination system, which comes into effect in case of fire.

The organisation shall take care of non-fire emergencies by identifying them and by deciding the appropriate course of action. The organisation shall establish liaison with civil and police authorities and fire brigade as required by law for enlisting their help and support in case of an emergency.

### Commitment

- b. The DHSP has a documented safe exit plan in case of fire and non-fire emergencies.**

**Interpretation:** Exit plan shall be displayed on each floor, particularly close to the lifts and inside all enclosed areas like individual rooms and laboratories. Exit doors should remain open or have push bars on them. Fire signage should follow the norms laid down by respective statutory body (for example, fire service) and/or National Building Code. Signage and maintenance of refuge area as applicable should be done.

### Commitment

- c. Staff is trained for their role in case of such emergencies.**

**Interpretation:** In case of fire, designated persons are assigned particular work.

**Commitment****d. Mock drills are held at least twice in a year.**

**Interpretation:** Testing twice a year is only the minimum frequency, and this may be increased. This includes fire and important non-fire emergencies (as identified by the organisation).

The plan can be tested using a table-top exercise, or a mock drill. At a minimum, at least one mock drill should be held once in 12 months. This shall test all the components of the plan and not just awareness/demonstration of practices. In the case of a mock drill, simulated patients (not real) shall be used. After every table-top exercise/mock drill, the variations are identified, the reason for the same is analysed, debriefing conducted and where appropriate, the necessary corrective and/or preventive actions are taken.

## References:

1. Aggarwal, R., Mytton, O. T., Greaves, F., & Vincent, C. (2010). Technology as applied to patient safety: an overview. *Quality and Safety in Health Care*, 19 (Suppl 2), i3-i8. doi:10.1136/qshc.2010.040501
2. Medical Gases. (n.d.). British Compressed Gases Association. Retrieved May 08, 2022, from [http://www.bcgas.co.uk/pages/index.cfm?page\\_id=29&title=medical\\_gases](http://www.bcgas.co.uk/pages/index.cfm?page_id=29&title=medical_gases)
3. Respiratory equipment. Compressed gases for breathing apparatus. BS EN 12021:2014. (2014). British Standards Institution. Retrieved May 08, 2022, from <https://shop.bsigroup.com/ProductDetail?pid=000000000030315779>
4. National Building Code of India, 2016. (2016). Bureau of Indian Standards. New Delhi. Retrieved May 08, 2022, from <https://www.bis.gov.in/index.php/standards/technical-department/national-building-code/>
5. Coulliette, A. D., & Arduino, M. J. (2015). Hemodialysis and Water Quality. *Semin Dial*, 26(4), 427-438.
6. Medical Gas Pipeline Systems. (2006). Department of Health: Estates and Facilities Division. London, England: The Stationery Office.
7. Dhillon, V. S. (2015). Green Hospital and Climate Change: Their Interrelationship and the Way Forward. *JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH*. doi:10.7860/jcdr/2015/13693.6942
8. Medical Devices and Diagnostics. Government of India. Ministry of Health and Family Welfare. (n.d.). Retrieved May 08, 2022, from <https://cdsco.gov.in/opencms/opencms/en/Medical-Device-Diagnostics/Medical-Device-Diagnostics/>
9. National Disaster Management Guidelines. Hospital Safety. (2016). Government of India. National Disaster Management Authority. Retrieved May 08, 2022, from <https://nidm.gov.in/PDF/pubs/NDMA/18.pdf>
10. Biomedical Equipment Management and Maintenance Program. Government of India. National Health Mission. (n.d.). Retrieved May 08, 2022, from [https://nhm.gov.in/New\\_Updates\\_2018/NHM\\_Components/Health\\_System\\_Strengthening/BEMMP/Biomedical\\_Equipment\\_Revised\\_Guidelines.pdf](https://nhm.gov.in/New_Updates_2018/NHM_Components/Health_System_Strengthening/BEMMP/Biomedical_Equipment_Revised_Guidelines.pdf)
11. Gudlavalleti, V. (2018). Challenges in Accessing Health Care for People with Disability in the South Asian Context: A Review. *International Journal of Environmental Research and Public Health*, 15(11), 2366. doi:10.3390/ijerph15112366
12. Hart, J. R. (2018). Medical Gas and Vacuum Systems Handbook. National Fire Protection Association.
13. Infrastructures to improve patient safety. *Health Facilities Management*. (2015, December 2). Retrieved May 08, 2022, from <https://www.hfmmagazine.com/articles/1827-infrastructures-to-improve-patient-safety>
14. Pressure regulators for use with medical gases — Part 1: Pressure regulators and pressure regulators with flow-metering devices. ISO 10524-1:2018. (2018). International Organization for Standardization. Retrieved May 08, 2022, from <https://www.iso.org/standard/67190.html>

15. Pressure regulators for use with medical gases — Part 2: Manifold and line pressure regulators. International Organization for Standardization. ISO 10524-2:2018. (2018). Retrieved May 08, 2022, from <https://www.iso.org/standard/66690.html>
16. Pressure regulators for use with medical gases — Part 3: Pressure regulators integrated with cylinder valves (VIPRs). ISO 10524-3:2019. (2019). International Organization for Standardization. Retrieved May 08, 2022, from <https://www.iso.org/standard/66691.html>
17. Medical Gas Cylinder Storage. (2018). National Fire Protection Association. Retrieved May 08, 2022, from <https://www.nfpa.org/~media/4B6B534171E04E369864672EBB319C4F.pdf>
18. Indian Public Health Standards. (2022). National Health Mission. Ministry of Health & Family Welfare, Government of India. Retrieved May 08, 2022, from <https://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=971&lid=154>
19. Sarangi, S., Babbar, S., & Taneja, D. (n.d.). Safety of the medical gas pipeline system. *Journal of Anaesthesiology Clinical Pharmacology*, 34(1), 99-102. Retrieved May 08, 2022, from <http://www.joacp.org/text.asp?2018/34/1/99/227571>
20. Guidelines for Drinking-water Quality (4th Edition). World Health Organization. (2011). Retrieved May 08, 2022, from [https://apps.who.int/iris/bitstream/handle/10665/44584/9789241548151\\_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/44584/9789241548151_eng.pdf?sequence=1)
21. Safe Management of Wastes from Health-Care Activities (2nd ed.). World Health Organization. (2014). Retrieved May 08, 2022, from [https://apps.who.int/iris/bitstream/handle/10665/85349/9789241548564\\_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/85349/9789241548564_eng.pdf?sequence=1)
22. Hospital safety index: guide for evaluators – 2nd ed. World Health Organization. (2015). Retrieved May 08, 2022, from [https://www.who.int/hac/techguidance/hospital\\_safety\\_index\\_evaluators.pdf](https://www.who.int/hac/techguidance/hospital_safety_index_evaluators.pdf)
23. Handle medical gases safely. BOC. (2017). Retrieved May 08, 2022, from [http://www.boc-healthcare.com.au/en/images/HCD186\\_Gases%20safety%20pocket%20guide\\_V3\\_FA\\_web\\_tcm350-131320.pdf](http://www.boc-healthcare.com.au/en/images/HCD186_Gases%20safety%20pocket%20guide_V3_FA_web_tcm350-131320.pdf)

# Chapter 9

## Human Resource Management (HRM)

**Intent of the chapter :** The most important resource of a hospital and health care system is the human resource. Human resources are an asset for effective and efficient functioning of a hospital. Without an equally effective human resource management system, all other inputs like technology, infrastructure and finances come to naught. Human resource management is concerned with the “people” dimension in management. The goal of human resource management is to acquire, provide, retain and maintain competent people in right numbers to meet the needs of the patients and community served by the DHSP. This is based on the DHSP's mission, objectives, goals and scope of services. Effective Human Resource Management involves the following processes and activities: -

- a. Acquisition of Human Resources which involves human resource planning, recruiting and socialization of the new employees.
- b. Training and development relate to the performance in the present and future anticipated jobs. The employees are provided with opportunities to advance personally as well as professionally.
- c. Motivation relates to job design, performance appraisal and discipline
- d. Maintenance relates to safety and health of the employees

The term “employee” refers to all salaried personnel working in the DHSP.

The term “staff” refers to all personnel working in the DHSP including employees, “fee for service” medical professionals, part time workers, contractual personnel and volunteers.

### Summary of Standards

HRM.1.	The DHSP has a documented system of human resource planning.
HRM.2.	The organisation implements a defined process for staff recruitment.
HRM.3.	Staff are provided induction training at the time of joining the organisation.
HRM.4.	There is an ongoing program for professional training and development of the staff.
HRM.5.	Staff are trained in safety and quality-related aspects.
HRM.6.	An appraisal system for evaluating the performance of an employee exists as an integral part of the human resource management process.
HRM.7.	Process for disciplinary and grievance handling is defined and implemented in the organisation.
HRM.8.	The organisation promotes staff well-being and addresses their health and safety needs.
HRM.9.	There is a documented personal record for each staff member.
HRM.10.	There is a process for collecting, verifying and evaluating the credentials (education, registration, training and experience) of dental/medical professionals permitted to provide patient care without supervision.
HRM.11.	There is a process for collecting, verifying and evaluating the credentials (education, registration, training and experience) of para-dental staff (nursing staff/dental hygienist /dental technician and dental Assistant).

Objective Element	HRM1	HRM 2	HRM 3	HRM 4	HRM 5	HRM 6	HRM 7	HRM 8	HRM 9	HRM 10	HRM 11
a.	Commitment	Core	Core	Core	Commitment	Commitment	Commitment	Achievement	Commitment	Core	Commitment
b.	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Core
c.	Achievement	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
d.	Commitment	Commitment	Commitment	Commitment	Commitment	Achievement	Core	Commitment	Commitment	Core	Commitment
e.	Commitment		Commitment	Excellence	Commitment	Commitment	Commitment	Core		Commitment	Commitment
f.	Commitment		Commitment	Achievement	Commitment		Commitment			Commitment	
g.	Achievement		Commitment		Commitment						
h.			Commitment								

## Standard

**HRM.1.**
**The DHSP has a documented system of human resource planning.**

## Objective Elements

### Commitment

- a. **Human resource planning supports the DHSP's current and future ability to meet the care, treatment and service needs of the patient.**

**Interpretation:** Human resource planning shall be done in a structured manner for all categories of staff keeping in mind the DHSP's mission, volume and mix of patients, services, and dental technology. This is done with the involvement of various stakeholders. It shall use recognised methods for determining levels of staffing to match the strategic and operational plan of the DHSP. Where appropriate, corrective action is taken on variances found during the year and should be incorporated in the subsequent plan.

### CORE

- b. **The DHSP maintains an adequate number and mix of staff to meet the care, treatment and service needs of the patient.**

**Interpretation:** The staff should be commensurate with the workload and the clinical requirement of the patients. Whenever there is a shortfall of staff, contingency plans to meet the workforce shortage exists. This includes support staff too.

### Achievement

- c. **The DHSP has contingency plans to manage long- and short-term workforce shortages, including unplanned shortages.**

**Interpretation:** At various times, the mix of skills required for the DHSP to function at peak efficiency may not be immediately available due to workforce shortages, which can occur on a shift-by-shift, short-term or long-term basis. Existing staff crises can be managed using a contingency plan, which may include strategies such as reprioritising tasks, allocating tasks to different staff members, and relying on a pool of filler staff, which may consist predominantly of previous employees and casual staff sourced from agencies.

### Commitment

- d. **The required job specifications and job description are well defined for each category of staff.**

**Interpretation:** The content of each job should be defined, and the qualifications, skills and experience required for performing the job should be laid down. The job description should be commensurate with the qualification. Refer to the glossary for a definition of "job description" and "job specification".

**Commitment****e. The organisation performs a background check of new staff.**

**Interpretation:** The organisation can have a suitable methodology to implement the same. This should be done either before the person joins the organisation or within one month of joining.

**CORE****f. Reporting relationships are defined for each category of staff. \***

**Interpretation:** The DHSP could document this as the organisation structure/chart, and this shall document the hierarchy, line of control, along with the functions at various levels. Organogram is transparent and is disseminated to all stakeholders.

**Achievement****g. Exit interviews are conducted and used as a tool to improve human resource practices.**

**Interpretation:** The DHSP conducts exit interviews to obtain feedback from employees leaving the organisation. This could be done through personal interview. This shall be a voluntary exercise.

**Standard****HRM.2.****The organisation implements a defined process for staff recruitment.****Objective Elements****CORE****a. Written guidance governs the process of recruitment. \***

**Interpretation:** Recruitment of staff shall be based on defined criteria. The recruitment process ensures an adequate number and skill mix of staff to provide the organisation's services. The procedure shall ensure that the staff has the necessary registration, qualifications, skills and experience to perform its work. Recruitment is undertaken following statutory requirements, where applicable. The process shall be documented and carried out transparently.

**Commitment****b. A pre-employment medical examination is conducted on the staff.**

**Interpretation:** The purpose of this examination is to ensure that the staff is fit to provide safe care to patients. Performance of diagnostic tests could be guided by the nature of the job of the staff in the organisation. However, any such test done shall be in accordance with the law of the land. For example, performing pre-employment HIV testing without consent is illegal. The organisation shall bear the cost of the pre-employment medical examination.



**CORE****c. The organisation defines and implements a code of conduct for its staff.**

**Interpretation:** The code of conduct should outline the do's and don'ts for staff behaviour at the workplace. It should be aligned with the organisation's values and ethics framework.

Code of conduct shall include protection of patient confidentiality. It is preferable that the staff sign the code of conduct at the time of joining.

**Achievement****d. Administrative procedures for human resource management are documented. \***

**Interpretation:** This shall include administrative procedures like attendance, leave, conduct, replacement, etc.

**Standard****HRM.3.**

**Staff are provided induction training at the time of joining the organisation.**

**Objective Elements****CORE****a. Staff are provided with induction training.**

**Interpretation:** The DHSP's staff, including dentists, consultants (including visiting) and the outsourced staff, are provided induction training.

The DHSP shall determine as to when induction training shall be conducted. However, it shall be within 15 days of the staff joining. Similarly, all other requirements of this standard could be covered. The contents of this training could be provided to every staff in the form of a booklet. There can be separate induction training at the organisational level and for the respective departments. The records of the training shall be maintained.

**Commitment****b. The induction training includes orientation to the DHSP's vision, mission and values.**

**Interpretation:** The DHSP's staff, including the outsourced staff, should be aware and should correctly interpret the vision, mission and values of the organisation.

**Commitment****c. The induction training includes an orientation in all departments / unit / service / program' policies and procedures**

**Interpretation:** Each staff member is made aware of DHSP facility wide policies and procedures as well as relevant department/ unit/ service/ program's policies and procedures.

**Commitment****d. The induction training includes training on safety.**

**Interpretation:** The training shall incorporate aspects of patient, visitor and staff safety. This includes training on 'codes'.

**Commitment****e. The induction training includes training on cardio-pulmonary resuscitation for staff providing direct patient care.**

**Interpretation:** All dentists, nursing staff and dental assistants must at least be trained to provide basic life support (BLS). In case the staff has a valid training certificate, the same is not necessary. The training could be imparted by trainers from within or outside the organisation using established evidence-based protocols.

**Commitment****f. The induction training includes training in hospital infection prevention and control.**

**Interpretation:** The training should include the policies, procedures and practices of the infection prevention and control programme.

**Commitment****g. All employees are oriented to the service standards of the DHSP.**

**Interpretation:** This shall include all administrative procedures like attendance, leave, conduct, etc. This shall also include awareness of organisation-wide policies and procedures.

**Commitment****h. The induction training includes an orientation on relevant department / unit / service / programme's policies and procedures.**

**Interpretation:** The staff should be provided training regarding policies and procedures of the department/unit/service in which they are performing the requisite duties. This training shall be provided at the department/unit/service/programme level.

**Standard****HRM.4.****There is an ongoing program for professional training and development of the staff.****Objective Elements****CORE****a. Written guidance governs training and development policy for the staff. \***

**Interpretation:** A training manual incorporating the procedure for identification of training needs, the training methodology, documentation of training, training assessment, the impact of training and the training calendar should be prepared. At a minimum staff shall be trained on occupational safety aspects and soft skills. In addition, the staff shall be educated on various aspects of patient-centred care like respecting patient preferences, shared decision-making and provision of integrated care. The training shall be for all categories of staff, including doctors and outsourced staff (wherever applicable).

**Commitment****b. The organisation maintains the training record.**

**Interpretation:** The human resources department shall maintain a record of all training provided. At a minimum, it shall include the title of the training, the trainer(s), list of trainees (with signatures). Where possible, the contents of the training may also be captured.

**Commitment****c. Training also occurs when job responsibilities change/new equipment is introduced.**

**Interpretation:** The training should focus on the revised job responsibilities as well as on the newly introduced equipment and technology. In the case of new equipment, the operating staff should receive training on operational as well as daily-maintenance aspects.

**Commitment****d. Feedback mechanisms are in place for improvement of training and development programme.**

**Interpretation:** This shall include both internal and external training. Feedback includes collecting information on the appropriateness of course material, facilities for the training programme and capability of the trainer.

**Excellence****e. Evaluation of training effectiveness is done by the organisation.**

**Interpretation:** The evaluation should be done immediately after the training and after a certain period has lapsed. The immediate effectiveness could be captured using a pre and post-test. To ensure that the training has resulted in improvement of competency at the workplace, the effect of training should be evaluated after a certain period has lapsed. The organisation can define the time frame for capturing the effectiveness at the workplace based on the type of training imparted. One of the tools that the organisation could use is incident reports and non-conformities pointed out during assessment.

The evaluation should focus on knowledge, skills and attitude. Based on the evaluation, where appropriate, re-training has to be provided.

**Achievement****f. The organisation supports continuing professional development and learning.**

**Interpretation:** The purpose of this is to ensure that staff can keep up with advancements in their field and develop skills and improve their skill sets and competency. This includes encouraging and providing resources for staff to attend courses or conferences. It can also include providing access to distance learning and e-learning resources. The organisation should specify minimum mandatory hours of training that every staff must attend in a year.

## Standard

**HRM.5.**
**Staff are trained in safety and quality-related aspects.**

## Objective Elements

**Commitment**
**a. Staff are trained in the organisation's safety programme.**

**Interpretation:** This could be done through a regular training programme or printed materials. Staff working in dental laboratory and imaging services are trained in their respective safety programmes.

**Commitment**
**b. Staff are provided training in the detection, handling, minimisation and elimination of identified risks within the organisation's environment.**

**Interpretation:** The organisation shall define such risks that shall include patient, visitors and staff-related risks. These risks could be physical (poor lighting, slippery floors, blind corners, open electrical points, naked wires etc.), chemical (improper handling, spills, aerosolization etc.), environmental (noise, smoke, dampness, heat etc.) or process-related (needle-stick injury, blood and body fluid spills, soiled linen etc.).

Further, staff should be able to practically demonstrate actions like taking care of blood spills, handling hazardous materials etc.

**Commitment**
**c. Staff members are made aware of procedures to follow in the event of an untoward incident.**

**Interpretation:** The staff should be able to intimate the sequence of events that they will undertake in the eventuality of occurrence of any incident.

**Commitment**
**d. Staff are trained in occupational safety aspects**

**Interpretation:** The organisation shall identify the areas with potential occupational hazards. Staff are made aware of the possible risks involved and the preventive actions to avoid risks. For example, needle stick injury and blood/body fluid exposure, radiation exposure, noise in utility areas.

**Commitment**
**e. Staff are trained in the organisation's disaster management plan.**

**Interpretation:** The training shall include the various elements of the disaster management plan. They are also trained in their specific role in disasters.

**Commitment****f. Staff are trained in handling fire and non-fire emergencies.**

**Interpretation:** In case of fire, training shall include the various classes of fires, information and demonstration on how to use fire extinguishers, evacuation plans and other procedures to be followed in case of fire. They are also trained on their specific role in such emergencies.

**Commitment****g. Staff are trained in the organisation's quality improvement programme.**

**Interpretation:** Staff is made aware of the structure of the quality improvement programme of the organisation. The staff are also made aware of their roles in contributing to the quality improvement programme.

**Standard****HRM.6.**

**An appraisal system for evaluating the performance of an employee exists as an integral part of the human resource management process.**

**Objective Elements****Commitment****a. Performance appraisal is done for staff within the organisation. \***

**Interpretation:** Performance appraisal shall be done for all categories of staff starting from the person heading the organisation and including dentist/dental surgeon. Where appropriate, the performance appraisal should include competency assessment. In the case of outsourced staff, the performance appraisal could be done by the contractor.

For the definition of "performance appraisal" refer to the glossary.

**Commitment****b. The employees are made aware of the system of appraisal at the time of induction.**

**Interpretation:** Awareness could be incorporated in the service booklet and included in the induction training.

**Commitment****c. Performance is evaluated based on the pre-determined criteria.**

**Interpretation:** Criteria shall be done based on key performance indicators/key result areas which are derived from the job description.

**Achievement****d. The appraisal system is used as a tool for further development.**

**Interpretation:** This can be done by identifying training requirements and accordingly providing for the same (wherever possible). Key result areas are identified for each staff and training need assessment is also done. The organisation should have written guidance for management of underperformance effectively.

**Commitment**

- e. **Performance appraisal is carried out at pre defined intervals and is documented.**

**Interpretation:** The performance appraisal shall be done at least once a year.

**Standard****HRM.7.**

**Process for disciplinary and grievance handling is defined and implemented in the organisation.**

**Objective Elements****Commitment**

- a. **Written guidance governs disciplinary and grievance handling mechanisms. \***

**Interpretation:** The documentation shall be done keeping in mind objective elements "c, d and e". Grievances should include workplace issues like bullying and harassment.

For the definition of "disciplinary procedure" and "grievance handling" refer to the glossary.

**Commitment**

- b. **The disciplinary policy and procedure is based on the principles of natural justice.**

**Interpretation:** Principles of natural justice imply that both parties (employee and employer) are allowed to present their case and decision is taken accordingly.

**Commitment**

- c. **The disciplinary and grievance handling mechanism is known to all categories of staff of the organisation.**

**Interpretation:** All staff should be aware of the disciplinary procedure and the process to be followed in case they feel aggrieved.

**CORE**

- d. **The disciplinary and grievance procedure is in consonance with the prevailing laws.**

**Interpretation:** Refer to relevant labour laws and CCS (CCA) rules. Internal Complaints Committee should be established in the organisation to handle complaints of sexual harassment.

**Commitment**

- e. **There is a provision for appeals in all disciplinary cases.**

**Interpretation:** The organisation shall designate an appellate authority to consider appeals in disciplinary cases. The appellate authority should be higher than the disciplinary authority.

**Commitment****f. Actions are taken to redress the grievance.**

**Interpretation:** The redress procedure addresses the grievance. Actions that are taken shall be documented and communicated to the aggrieved staff.

**Standard****HRM.8.**

**The organisation promotes staff well-being and addresses their health and safety needs.**

**Objective Elements****Achievement****a. Staff well-being is promoted.**

**Interpretation:** Organisation takes proactive steps to ensure staff well-being. Examples of these include promoting healthy lifestyle programmes, having defined work hours and workload monitoring, providing scheduled breaks, stress management, access to dining facilities, rewards and recognition, staff engagement activities etc.

Tracking absenteeism or over-time could help organisations to monitor stress and fatigue indirectly. The staff satisfaction survey is another tool to capture this data.

The organisation should have facilities for staff to seek support and advice when necessary.

**Commitment****b. Health problems of the staff, including occupational health hazards, are taken care of in accordance with the organisation's policy.**

**Interpretation:** The organisation's policy shall be in consonance with the law of the land and good work practices. For example, staff health and safety policy.

Appropriate personal protective equipment is provided to the staff concerned, and they are educated on how to use them.

For the definition of "occupational health hazard" refer to the glossary.

**Commitment****c. Health checks of staff dealing with direct patient care are done at least once a year and the findings/results are documented.**

**Interpretation:** The results of examination, investigations (if any) and outcome of the evaluation should be documented in the personal file. The organisation could define the parameters, and it could be different for different categories of personnel. The organisation could also identify competent individuals to perform the same. The staff member shall not be charged for this health check.

The organisation could do health checks more frequently if required.

**Commitment****d. Organisation provides treatment to staff who sustain workplace-related injuries.**

**Interpretation:** Examples of workplace-related injuries are needlestick injuries, back injuries sustained during patient transport, hearing impairments due to noise levels etc. The treatment also includes counselling, where appropriate. Injuries due to workplace violence are included.

**CORE****e. The organisation has measures in place for prevention and handling workplace violence.**

**Interpretation:** An integrative and participative approach is used to address this. Key aspects include workplace risk assessment, including identifying situations at special risk, workplace interventions including information and communication, environmental interventions including signage, security and restricted access and individual interventions like training. The organisation shall have a mechanism in place to handle these situations, including liaison with law enforcement agencies where applicable and provision of counselling to affected staff.

Refer to the glossary for a definition of “workplace violence”.

**Standard****HRM.9.**

**There is a documented personal record for each staff member.**

**Objective Elements****Commitment****a. Personal files are maintained with respect to all staff, and their confidentiality is ensured**

**Interpretation:** Each file must be current and updated. The organisation maintains confidentiality and access to personal files is restricted.

**Commitment****b. The personal files contain personal information regarding the staff's qualification, job description, verification of credentials and health status.**

**Interpretation:** The personal file should contain these records.

**Commitment****c. All records of in-service training and education are contained in the personal files.**

**Interpretation:** In the case of internal training, the organisation could file a summary of all trainings attended by the staff on an annual basis. However, there shall be a supporting document (hard/soft copy) to verify that the staff has attended the training. In case the organisation maintains training records elsewhere, traceability shall be provided in the personal file to ensure that the intent of the objective element is addressed.



**Commitment****d. Personal files contain results of all evaluations.**

**Interpretation:** Evaluations would include performance appraisals, training assessment and outcome of health checks. The personal file would include records of achievement/ appreciation /complaint/ warning/ memo.

**Standard****HRM.10.**

**There is a process for collecting, verifying and evaluating the credentials (education, registration, training and experience) of dental/medical professionals permitted to provide patient care without supervision.**

**Objective Elements****CORE****a. Dental/medical professionals permitted by law/regulation in the DHSP who can provide patient care without supervision are identified.**

**Interpretation:** The organisation identifies the individuals who have the required qualification(s), training and experience to provide patient care in consonance with the law. For the definition of "credentialing" refer to the glossary.

**Commitment****b. The education, registration, training and experience of the identified dental/medical professionals is documented and updated periodically.**

**Interpretation:** Update is done after the acquisition of new skills and/or qualification.

**Commitment****c. All such information pertaining to the dental/ medical professionals is appropriately verified when possible.**

**Interpretation:** The organisation shall do the same by verifying the credentials from the organisation which has awarded the qualification/training.

**CORE****d. Dental/medical professionals are granted privileges to admit and care for patients in consonance with their qualification, training, experience and registration.**

**Interpretation:** The organisation shall identify clinical services which each dental/ medical professional is authorised to do. This shall be done based on qualification, experience and any additional training received.

Privileges have to be reviewed every year and where necessary revised.

**Commitment**

- e. **The requisite services to be provided by the medical professionals are known to them as well as the various departments/units of the organisation.**

**Interpretation:** This could be done through internal communication. The communication to the medical professionals should include aspects like OP consultation rights, admission rights and rights to certain procedures and/or surgeries (either by inclusion or exclusion). Concerned departments are informed of the relevant privileging rights of medical professionals. For example, front desk shall be informed of the admission rights; the operation theatre shall be informed of the surgical rights.

**Commitment**

- f. **Dental/ medical professionals admit and care for patients as per their privileging.**

**Interpretation:** A standardised format can be used for each faculty, and a norm for providing privilege should be practised uniformly. New faculty members can be under proctorship till independent privileges are provided. The organisation could evolve a mechanism to ensure that medical professionals are providing only those services that they have been privileged to offer.

**Standard****HRM.11.**

**There is a process for collecting, verifying and evaluating the credentials (education, registration, training and experience) of para-dental staff (nursing staff/Dental Hygienist /dental technician and dental assistant.**

**Objective Elements****Commitment**

- a. **The education, registration, training and experience of nursing staff/dental hygienist and assistant is documented and updated periodically.**

**Interpretation:** Updating is done after the acquisition of new skills and/or qualification. The organisation shall do the same by verifying the credentials from the organisation which has awarded the qualification/training.

**CORE**

- b. **Para-clinical professionals are granted privileges in consonance with their qualification, training, experience and registration.**

**Interpretation:** The organisation shall identify as to what each para-clinical professional is authorised to do. Where applicable, the para-clinical professional shall have the requisite registration/license.

**Commitment**

- c. **The requisite services to be provided by the para-clinical professionals are known to them as well as the various departments/units of the organisation.**

**Interpretation:** This could be done through internal communication.

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**Commitment**

- d. **Para-clinical professionals care for patients as per their privileging.**

**Interpretation:** New staff members can be under supervision until independent privilege is provided for each staff. The organisation could evolve a mechanism to ensure that para-clinical professionals are providing only those services that they have been privileged to offer.

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**Commitment**

- e. **All such information pertaining to the para-dental staff is appropriately verified when possible.**

**Interpretation:** The DHSP shall do the same by verifying the credentials from the authority which has awarded the qualification/training.

## References:

1. Academy of Nutrition and Dietetics: Revised 2017 Scope of Practice for the Registered Dietitian Nutritionist. Academy Quality Management Committee. (2017). *Journal of the Academy of Nutrition and Dietetics*, 118(1), 141-165. Retrieved May 08, 2022, from <https://doi.org/10.1016/j.jand.2017.10.002>
2. Aswathappa, K. (2013). *Human Resource Management 6E* (7th ed.). New York, NY: Tata McGraw-Hill Education.
3. Barnett, S. D. (2015). Growing Pains of Credentialing Research: Discussions from the Institute of Medicine Workshop. *The Journal of Continuing Education in Nursing*, 46(2), 53-55. doi:10.3928/00220124-20150121-11
4. Baumann, A., Norman, P., Blythe, J., Kratina, S., & Deber, R. (2014). Accountability: The Challenge for Medical and Nursing Regulators. *Healthcare Policy | Politiques de Santé*, 10(SP), 121-131. doi:10.12927/hcpol.2014.23911
5. Baumann, M. H., Simpson, S. Q., Stahl, M., Raoof, S., Marciniuk, D. D., & Gutterman, D. D. (2012). First, Do No Harm: Less Training != Quality Care. *American Journal of Critical Care*, 21(4), 227-230. doi:10.4037/ajcc.2012825
6. Britt, L. D. (2009). Use of Board Certification and Recertification in Hospital Privileging—Invited Critique. *Archives of Surgery*, 144(8), 752. doi:10.1001/archsurg.2009.27
7. Chhabra, S. (2016). Health hazards among health care personnel. *Journal of Mahatma Gandhi Institute of Medical Sciences*, 21(1), 19. doi:10.4103/0971-9903.178074
8. Chhabra, T. N., & Chhabra, M. S. (2014). *Human Resources Management* (1st ed.). India: Sun publications.
9. Cook, D. A., Blachman, M. J., Price, D. W., West, C. P., Berger, R. A., & Wittich, C. M. (2017). Professional Development Perceptions and Practices Among U.S. Physicians. *Academic Medicine*, 92(9), 1335-1345. doi:10.1097/acm.0000000000001624
10. Credentialing and privileging of pharmacists: A resource paper from the Council on Credentialing in Pharmacy. (2014). *American Journal of Health-System Pharmacy*, 71(21), 1891-1900. doi:10.2146/ajhp140420
11. Gesme, D. H., Towle, E. L., & Wiseman, M. (2010). Essentials of Staff Development and Why You Should Care. *Journal of Oncology Practice*, 6(2), 104-106. doi:10.1200/jop.091089
12. Gillespie, G. L., Fisher, B. S., & Gates, D. M. (2015). Workplace Violence in Healthcare Settings. *Work*, 51(1), 3-4. doi:10.3233/wor-152017
13. Gillespie, G. L., Gates, D. M., Miller, M., & Howard, P. K. (2010). Workplace Violence in Healthcare Settings: Risk Factors and Protective Strategies. *Rehabilitation Nursing*, 35(5), 177-184. doi:10.1002/j.2048-7940.2010.tb00045.x
14. Gorman, T., Dropkin, J., Kamen, J., et al. (2014). Controlling Health Hazards to Hospital Workers: A Reference Guide. *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy*, 23(1\_suppl), 1-169. doi:10.2190/ns.23.suppl

15. Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers. (2016). Occupational Safety and Health Administration. Retrieved May 08, 2022, from <https://www.osha.gov/Publications/OSHA3148.pdf>
16. Guiding Principles for Privileging of Innovative Procedures in Gynecologic Surgery. American College of Obstetricians and Gynecologists. (2016). Retrieved May 08, 2022, from <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2016/09/guiding-principles-for-privileging-of-innovative-procedures-in-gynecologic-surgery>
17. Health Care Workers. (2019). National Institute for Occupational Safety and Health. Retrieved May 08, 2022, from <https://www.cdc.gov/niosh/topics/healthcare/default.html>
18. Healthcare. (2019). Occupational Safety and Health Administration. United States Department of Labor. Retrieved May 08, 2022, from <https://www.osha.gov/SLTC/healthcarefacilities/index.html>
19. Hravnak, M., & Baldisseri, M. (1997). Credentialing and Privileging. AACN Clinical Issues: Advanced Practice in Acute and Critical Care, 8(1), 108-115. doi:10.1097/00044067-199702000-00014
20. Is credentialing a solution to the workforce crisis? (2017). Emergency Nurse, 25(1), 5-5. doi:10.7748/en.25.1.5.s1
21. Izadi, N. (2018). Occupational Health Hazards among Health Care Workers. Public Health Open Access, 2(1). doi:10.23880/phoa-16000120
22. Jones, L., & Moss, F. (2018). What should be in hospital doctors' continuing professional development? Journal of the Royal Society of Medicine, 112(2), 72-77. doi:10.1177/0141076818808427
23. Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). Kirkpatrick's Four Levels of Training Evaluation. Association for Talent Development.
24. Medical Surveillance for Healthcare Workers Exposed to Hazardous Drugs. (2013). Department of Health and Human Services, Centers for Disease Control and Prevention National Institute for Occupational Safety and Health. Retrieved May 08, 2022, from <https://www.cdc.gov/niosh/docs/wp-solutions/2013-103/pdfs/2013-103.pdf>
25. Niles, N. J. (2012). Basic Concepts of Health Care Human Resource Management (1st ed.). Burlington, MA: Jones & Bartlett Publishers.
26. Pearl, J., Fellingner, E., Dunkin, B., Pauli, E., Trus, T., Marks, J., ... Richardson, W. (2016). Guidelines for privileging and credentialing physicians in gastrointestinal endoscopy. Surgical Endoscopy, 30(8), 3184-3190. doi:10.1007/s00464-016-5066-8
27. Position Statement on Credentialing and Privileging for Nurse Practitioners. (2016). Journal of Pediatric Health Care, 30(2), A20-A21. doi:10.1016/j.pedhc.2015.11.006
28. Sarre, S., Maben, J., Aldus, C., Schneider, J., Wharrad, H., Nicholson, C., & Arthur, A. (2018). The challenges of training, support and assessment of healthcare support workers: A qualitative study of experiences in three English acute hospitals. International Journal of Nursing Studies, 79, 145-153. doi:10.1016/j.ijnurstu.2017.11.010

29. Singh, S. (2014). Credentialing and Privileging in Healthcare Organizations. *Handbook of Healthcare Quality and Patient Safety*, 114-114. doi:10.5005/jp/books/12287\_9
30. Srinivasan, A. V. (2008). *Human Resource Management in Hospitals*. In *Managing a Modern Hospital* 2nd ed.). New Delhi, India: SAGE Publications India.
31. Steege, A. L., Boiano, J. M., & Sweeney, M. H. (2014). NIOSH Health and Safety Practices Survey of Healthcare Workers: Training and awareness of employer safety procedures. *American Journal of Industrial Medicine*, 57(6), 640-652. doi:10.1002/ajim.22305
32. STRESS...At Work. (2018). National Institute for Occupational Safety and Health. Retrieved May 08, 2022, from <https://www.cdc.gov/niosh/docs/99-101/default.html>
33. Tam, V., Zeh, H. J., & Hogg, M. E. (2017). Incorporating Metrics of Surgical Proficiency Into Credentialing and Privileging Pathways. *JAMA Surgery*, 152(5), 494. doi:10.1001/jamasurg.2017.0025
34. The Kirkpatrick Model. (2019). Kirkpatrick Partners. Retrieved May 08, 2022, from <https://kirkpatrickpartners.com/Our-Philosophy/The-Kirkpatrick-Model>
35. Wilburn, S. Q., & Eijkemans, G. (2004). Preventing Needlestick Injuries among Healthcare Workers: A WHO-ICN Collaboration. *International Journal of Occupational and Environmental Health*, 10(4), 451- 456. doi:10.1179/oeh.2004.10.4.451
36. Work Organization and Stress. WHO/SDE/Objective ElementH/01.10. World Health Organization. (2003). Retrieved May 08, 2022, from <https://apps.who.int/iris/bitstream/handle/10665/42625/9241590475.pdf>
37. Workload Indicators for Staffing Need (WISN) methodology for health workforce planning and estimation. (2020). World Health Organization. Retrieved May 08, 2022, from [https://www.who.int/news-room/articles-detail/workload-indicators-for-staffing-need-\(wisn\)-methodology-for-health-workforce-planning-and-estimation](https://www.who.int/news-room/articles-detail/workload-indicators-for-staffing-need-(wisn)-methodology-for-health-workforce-planning-and-estimation)
38. Workload indicators of staffing need (WISN); a manual for implementation. (1998). World Health Organization. Retrieved May 08, 2022, from [https://apps.who.int/iris/bitstream/handle/10665/64011/WHO\\_HRB\\_98.2.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/64011/WHO_HRB_98.2.pdf?sequence=1&isAllowed=y)
39. Workload indicators of staffing need. (2010). World Health Organization. Retrieved May 08, 2022, from <https://www.who.int/publications/i/item/9789241500197>
40. Zhao, S., Liu, H., Ma, H., Jiao, M., Li, Y., Hao, Y., ... Qiao, H. (2015). Coping with Workplace Violence in Healthcare Settings: Social Support and Strategies. *International Journal of Environmental Research and Public Health*, 12(11), 14429-14444. doi:10.3390/ijerph121114429

# Chapter 10

## Information Management System (IMS)

**Intent of the chapter :** Information is an important resource for effective and efficient delivery of health care. Provision of health care and its continued improvement is dependent to a large extent on the information generated, stored and utilized appropriately by the DHSPs. One of the major intents of this chapter is to ensure data and information meet the DHSP's needs and support the delivery of quality care and service. Provision of patient care is a complex activity that is highly dependent on communication of information. This communication is to and from the community, patients and their families, and other health professionals. Failures in communication are one of the most common root causes of patient safety incidents. The goal of Information management in a hospital is to ensure that the right information is made available to the right person. This is provided in an authenticated, secure and accurate manner at the right time and place. This helps to achieve the ultimate DHSP goal of a satisfied and improved provider and recipient of any health care setting. An effective Information management system is based on the information needs of the DHSP. The system is able to capture, transmit, store, analyse, utilize and retrieve information as and when required for improving clinical outcomes as well as individual and overall DHSP performance. Although a digital based information system improves efficiency, the basic principles of a good information management system apply equally to a manual/paper-based system. These standards are designed to be equally compatible with non-computerized systems and future technologies.

### Summary of Standards

IMS.1.	Information needs of the patients, visitors, staff, management and external agencies are met.
IMS.2.	The organisation has processes in place for management and control of data and information.
IMS.3.	The DHSP has a complete and accurate dental record of every patient.
IMS.4.	The clinical record reflects continuity of care.
IMS.5.	The DHSP maintains confidentiality, integrity and security of records, data and information.
IMS.6.	The DHSP ensures availability of current and relevant documents, records, data and information and provides for retention of the same.
IMS.7.	The DHSP regularly carries out review of clinical records.

Objective Element	IMS 1	IMS 2	IMS 3	IMS 4	IMS 5	IMS 6	IMS 7
a.	Core	Commitment	Commitment	Commitment	Core	Core	Core
b.	Commitment	Commitment	Commitment	Commitment	Core	Core	Commitment
c.	Commitment	Commitment	Commitment	Commitment	Core	Commitment	Commitment
d.	Commitment	Commitment	Achievement	Commitment	Achievement	Commitment	Commitment
e.	Achievement	Commitment	Commitment	Commitment	Commitment		Commitment
f.	Excellence		Core	Commitment			Commitment
g.							Commitment



## Standard

**IMS.1.**
**Information needs of the patients, visitors, staff, management and external agencies are met.**

## Objective Elements

### CORE

- a. The DHSP identifies the information needs of the patients, visitors, staff, management external agencies and community. \***

**Interpretation:** Information needs of various stakeholders are identified by the DHSP through a systematic process. Some of the mechanisms to identify the information needs include feedback forms, patient calls, focus group interviews and benchmarking. The identified information needs shall be documented.

For example, the information needs of the patient could be met through information on OPD timings, availability of services etc. For the visitors, it could be visiting hours, the age restriction for visitors etc. For the staff, it would include information on leave policy, standard operating procedures etc. For the management, daily census report, utilisation rates, etc. For external agencies, it could be data of vital statistics, notifiable diseases etc. For the community, it could be information on the addition of new service, induction of new dental staff etc.

### Commitment

- b. Identified information needs are captured and/or disseminated.**

**Interpretation:** A written guidance is available for capture and/or dissemination, and the same is implemented. The mechanism for dissemination of patient/visitor/staff information needs could be through a website, intranet, information booklets, display and signage. External agencies are provided information as per the methodologies and guidelines laid down for the purpose. The information needs of the management could be captured through manual and/or electronic hospital information system and/or management information system. The written guidance shall also specify the frequency of data collection and the person(s) responsible.

### Commitment

- c. Information management and technology acquisitions are commensurate with the identified information needs.**

**Interpretation:** The organisation shall define the needs for software and hardware solutions as per current and future information needs. In case the organisation uses electronic medical records, they could refer to Electronic Health Report/Electronic Medical Record guidelines published by the Ministry of Health and Family Welfare. The organisation shall ensure that it has the necessary license for the software.

**Commitment**

- d. **A maintenance plan for information technology and communication network is implemented.**

**Interpretation:** IT maintenance plans shall include specific fire protection plan for IT network and servers. This shall include Data Server units, telephone exchange units, computers, telephone lines, nurse call system etc. This shall adhere to manufacturer's recommendations, regular inspections etc. This includes timely repair of telephone, printer unit.

**Achievement**

- e. **Contingency plan ensures continuity of information capture, integration and dissemination.**

**Interpretation:** The DHSP should have a plan to ensure that in case the electronic HIS is experiencing downtime, the capture, integration and dissemination of information are not interrupted.

**Excellence**

- f. **The DHSP ensures that information resources are accurate and meet stakeholder requirements.**

**Interpretation:** Information resources include information on the website, brochures, newsletters, flyers, education material etc. Accuracy of information resources could be ensured by having subject experts prepare and/or review the material. By monitoring feedback and complaints, the organisation could verify if it is meeting stakeholder requirements.

**Standard****IMS.2.**

**The organisation has processes in place for management and control of data and information.**

**Objective Elements****Commitment**

- a. **Processes for data collection are standardised.**

**Interpretation:** Process includes formats and frequency of data collection. Formats for data collection include forms- physical and/or electronic. The capture of data can be event-based or as per defined frequency such as daily, weekly, monthly, quarterly, yearly etc.

**Commitment****b. Data is analysed to meet the information needs.**

**Interpretation:** The collected data is analysed using appropriate tools and techniques to ensure that the information needs are met. Necessary resources like men, material, space and budget are available for analysing data.

**Commitment****c. The organisation disseminates the information in a timely and accurate manner.**

**Interpretation:** Timely and accurate information is given to relevant stakeholders after analysis of data. The DHSP could decide on which information needs to be shared with whom and the modalities (for example, memos, circulars, webpage, etc.) for the dissemination of such information.

**Commitment****d. The organisation stores and retrieves data according to its information needs. \***

**Interpretation:** Storage could be physical or electronic. Wherever electronic storage is done, the DHSP shall ensure that there are adequate safeguards for the protection of data. The DHSP's storage and retrieval systems facilitate timely access to information for patient care, education, research and management of services.

**Commitment****e. Clinical and managerial staff participate in selecting, integrating and using data for meeting the information needs.**

**Interpretation:** Appropriate clinical and managerial staff are responsible for the selection of relevant indicators, measurement of trends, and initiating action, wherever required. A multidisciplinary committee could do this.

**Standard****IMS.3.****The DHSP has a complete and accurate dental record of every patient.****Objective Elements****Commitment****a. A unique identifier is assigned to the dental record.**

**Interpretation:** The dental record shall have a unique identifier number. This shall also apply to records on digital media. In case of electronic records, all entries for one unique identifier shall be available in one place.

**Commitment****b. Authorised staff make the entry in the dental record. \***

**Interpretation:** DHSP shall have written guidance authorising who can make entries and the content of entries. This could be a different category of staff for different entries, but it shall be uniform across the DHSP. For example, medication orders by the doctor, orthodontic treatment by dentist and nursing care by nurse.

**Commitment****c. Entry in the dental record is signed, dated and timed.**

**Interpretation:** All entries should be documented immediately but no later than one hour of completion of the assessment/procedure. For records on electronic media, it is preferable that the date and time are automatically generated by the system.

**Achievement****d. The author of the entry can be identified.**

**Interpretation:** This could be-by writing the full name or by mentioning the employee code number, with the help of stamp, etc. In case of electronic based records, authorized e-signature provision as per statutory requirements must be kept.

**Commitment****e. The contents of dental record are identified and documented.**

**Interpretation:** The DHSP identifies the documents that are part of the dental record and implements the same. For example, admission orders, IP sheet, discharge summary, dental surgeon's order sheet, consent form, etc. The contents of the dental record can be hand-written, typed, printed or in electronic form. There can be a mix of these, but appropriate linkages must be available.

**CORE****f. The record provides an up-to-date and chronological account of patient care.**

**Interpretation:** The Dental record has all the identified sheets filed in sequential order. Entries in the components of the record are filed in chronological order. It shall ensure that all medico-legal case records have mandatory information. In case a sheet is missing note to that effect would be put in the medical record. It is preferable that the pages in the dental record are numbered.

**Standard****IMS.4.****The clinical record reflects continuity of care.****Objective Elements****Commitment****a. The clinical record contains information regarding reasons for admission (wherever applicable), diagnosis and plan of care.**

**Interpretation:** In cases of in-patients, the diagnosis must be documented by the treating doctor or a doctor member of the treating team in all records. This could preferably be as per ICD/SNOMED CT. However, in the medical records department, all such diagnoses shall be codified as per ICD/SNOMED CT.

**Commitment**

- b. **The clinical record contains the results of investigations and the details of the care provided.**

**Interpretation:** The results of all investigations shall be a part of the medical record either in physical or electronic form.

**Commitment**

- c. **Operative and other procedures performed are incorporated in the clinical record.**

**Interpretation:** This includes the name and details of the operative and other procedures performed.

**Commitment**

- d. **When a patient is transferred to another organisation, the clinical record contains the details of the transfer.**

**Interpretation:** The clinical record should contain the date of transfer, the reason for transfer and the name of the receiving organisation. It is mandatory to mention the clinical condition of the patient before transfer. If the patient has been transferred at his/her request, a note may be added to that effect. In such instances, the name of the receiving organisation could be the name that the patient desires to go. All available details of the transfer are documented.

**Commitment**

- e. **The clinical record contains a copy of the discharge Note/ Summary (in case of in-patient).**

**Interpretation:** The discharge summary should be signed by appropriate and qualified personnel.

**Commitment**

- f. **All dental care providers attending to the patient should have access to current and past clinical record.**

**Interpretation:** The DHSP provides access to clinical records to designated healthcare providers (those involved in the care of that patient). For electronic medical record system, identified care providers shall have a user ID and a password.

Provision is made for 24-hour availability of the patient's record to healthcare providers to ensure continuity of care. In case of physical records, when the MRD is not open, there should be a system in place by which authorised personnel can open the MRD and retrieve the record.

**Standard****IMS.5.**

**The DHSP maintains confidentiality, integrity and security of records, data and information.**

## Objective Elements

### CORE

#### a. The organisation maintains the confidentiality of records, data and information. \*

**Interpretation:** Confidentiality implies that only authorised persons have access to the contents of the record. This shall align with the applicable laws.

The DHSP shall control the accessibility to the clinical records department and its hospital information system. In electronic systems, the access should be different for different types of personnel and specific for that user. For physical records, it shall ensure the usage of tracer card for movement of the file in and out of the MRD. Similarly, for data and information, it shall ensure that records and data are not taken out from the areas where they are stored. In the case of electronic systems, it shall ensure that these cannot be copied at all locations.

There must be authentication, access control and automatic log off features to protect data privacy and security. Ideally, only clinical care providers should have access rights to a person's clinical records.

### CORE

#### b. The organisation maintains the integrity of records, data and information. \*

**Interpretation:** Integrity implies that the entries are not tampered. Any corrections shall be done in accordance with the DHSP's defined written guidance. This shall also address how entries in the patient record are corrected or overwritten. The DHSP should have a system to keep track of changes made in the records or data.

### CORE

#### c. The organisation maintains the security of records, data and information. \*

**Interpretation:** Security refers to the protection of the record, data and information against loss and destruction. For physical records, the DHSP shall ensure that there are adequate pest and rodent control measures. For electronic data, there should be protection against virus/trojans, and a proper backup procedure is implemented. In case of physical records and data, there must be a provision to store in fire-safe cabinets, or there must be adequate (and appropriate) fire-fighting equipment.

### Achievement

#### d. The DHSP uses developments in appropriate technology for improving confidentiality, integrity and security.

**Interpretation:** The organisation shall review and update its technological features to improve confidentiality, integrity and security of information. For example, moving from physical to electronic format, remote backup of data, etc.

### Commitment

#### e. A documented procedure for responding to patients/physicians and other public agencies requests for access to information in the clinical record exists.

**Interpretation:** In the case of patients, the release of information is in accordance with the Code of Medical Ethics 2002. Grievances concerning RTI shall be addressed

by the Government and other applicable bodies, as per the written guidance. Denial of information is permitted only if in the opinion of a licensed healthcare professional, the release of the information would endanger the life or safety of the patients and others.

Request from dentist/dental surgeon for access to clinical records of patients treated by him/her shall be addressed in accordance with the written guidance.

## Standard

IMS.6.

**The DHSP ensures availability of current and relevant documents, records, data and information and provides for retention of the same.**

## Objective Elements

**CORE**

**a. The organisation has an effective process for document control.\***

**Interpretation:** The DHSP ensures that all documents including forms, formats, policies and procedures in use are current and relevant. They are created, reviewed for adequacy, authorised and released by designated individuals. Documents are reviewed for updating them as per a planned schedule. All approved documents are identifiable. Obsolete documents are removed from use and archived as per a planned retention period based on the organisation's policy.

**CORE**

**b. The DHSP retains patient's clinical records, data and information according to its requirements.\***

**Interpretation:** The DHSP shall define the retention period for each category of medical records: out-patient, in-patient and MLC. The retention period shall be in consonance with rules laid down by MCI and respective state authority. It shall also do the same for various data and the formats (for example, registers and forms) that have been used for capturing this data.

**Commitment**

**c. The retention process provides expected confidentiality and security.**

**Interpretation:** This is applicable for both manual and electronic system.

**Commitment**

**d. The destruction of medical records, data and information are in accordance with the written guidance.\***

**Interpretation:** Destruction can be done after the retention period is over and after taking the approval of the concerned authority (internal/external).

## Standard

**IMS.7.**
**The DHSP regularly carries out review of clinical records.**

### Objective Elements

**CORE**
**a. The clinical records are reviewed periodically.**

**Interpretation:** The DHSP defines the periodicity. A checklist can be used for this purpose.

**Commitment**
**b. The review uses a representative sample based on statistical principles.**

**Interpretation:** The DHSP shall define the principles on which sampling is based. For example, simple random, systemic random sampling, etc. The review shall be based on total discharges including LAMA and Transfer Cases, total indoor patients, etc.

**Commitment**
**c. The review is conducted by identified care providers.**

**Interpretation:** The DHSP shall identify and authorise such individuals.

**Commitment**
**d. The review focuses on the timeliness, legibility and completeness of the clinical records.**

**Interpretation:** At a minimum, the review should include timeliness, legibility and completeness of the medical records. Other parameters which could be included are the completeness of consent forms, availability of operation/procedure notes, etc.

**Commitment**
**e. The review process includes records of both active and discharged patients.**

**Interpretation:** An adequate mix of both active and discharged patients should be used.

**Commitment**
**f. The review points out and documents any deficiencies in records.**

**Interpretation:** For example, missing a final diagnosis, absence of OT notes in an operated patient, etc.

**Commitment**
**g. Appropriate corrective and preventive measures undertaken are documented.**

**Interpretation:** Based upon the deficiencies recorded, appropriate corrections are carried out in a defined time, and the same is documented. The preventive actions are disseminated to the relevant staff.



## References:

1. Aguiar T, Gomes SB, de Cunha PR, da Silva MM. (2021). Identifying the Practices of Digital Transformation: Based on a Systematic Literature Review. ISACA Journal, Vol1. Retrieved May 08, 2022, from [https://www.isaca.org/-/media/files/isacadp/project/isaca/articles/journal/2021/volume-1/identifying-the-practices-of-digital-transformation\\_joa\\_eng\\_0121.pdf](https://www.isaca.org/-/media/files/isacadp/project/isaca/articles/journal/2021/volume-1/identifying-the-practices-of-digital-transformation_joa_eng_0121.pdf)
2. Alotaibi, Y., & Federico, F. (2017). The impact of health information technology on patient safety. Saudi Medical Journal, 38(12), 1173-1180. doi:10.15537/smj.2017.12.20631
3. Anderson, J. G. (2010). Improving Patient Safety with Information Technology. Handbook of Research on Advances in Health Informatics and Electronic Healthcare Applications, 144-152. doi:10.4018/978-1-60566-030-1.ch009
4. Blum, B. I. (1986). Clinical Information Systems—A Review. West J Med., 145(6), 791-797. Retrieved May 08, 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1307152/pdf/westjmed00160-0055.pdf>
5. Borycki, E., & Kushniruk, A. (2017). Patient Safety and Health Information Technology. E-Health Two- Sided Markets, 19-31. doi:10.1016/b978-0-12-805250-1.00004-6
6. Electronic Health Record (EHR) Standards for India -2016. Ministry of Health and Family Welfare, Government of India. (2016). Retrieved May 08, 2022, from <https://www.nhp.gov.in/NHPfiles/EHR- Standards-2016-MoHFW.pdf>
7. Feldman, S. S., Buchalter, S., & Hayes, L. W. (2018). Health Information Technology in Healthcare Quality and Patient Safety: Literature Review. JMIR Medical Informatics, 6(2), e10264. doi:10.2196/10264
8. Generic medical record keeping standards. Royal College of Physicians. (2015). Retrieved May 08, 2022, from <https://www.rcplondon.ac.uk/projects/outputs/generic-medical-record-keeping-standards>
9. Guidance Document of ABDM Compliant HMIS/LMIS. (2022). Ayushman Bharat Digital Mission (ABDM). National Health Authority. Ministry of Health and Family Welfare. Government of India. Retrieved May 08, 2022, from [https://abdm.gov.in/assets/uploads/Guidance\\_Document\\_for\\_ABDM\\_Compliant\\_HMIS\\_LMIS.pdf](https://abdm.gov.in/assets/uploads/Guidance_Document_for_ABDM_Compliant_HMIS_LMIS.pdf)
10. Haemovigilance Programme of India. National Institute of Biologicals, Ministry of Health & Family Welfare, Government of India. (n.d.). Retrieved May 08, 2022, from [http://nib.gov.in/haemovigilance/HvPI\\_website/HvPI\\_index.html](http://nib.gov.in/haemovigilance/HvPI_website/HvPI_index.html)
11. Hamiel, U., Hecht, I., Nemet, A., Pe'er, L., Man, V., Hilely, A., & Achiron, A. (2018). Frequency, comprehension and attitudes of physicians towards abbreviations in the medical record. Postgraduate Medical Journal, 94(1111), 254-258. doi:10.1136/postgradmedj-2017-135515
12. Haux, R. (2006). Health information systems – past, present, future. International Journal of Medical Informatics, 75(3-4), 268-281. doi:10.1016/j.ijmedinf.2005.08.002
13. Health Informatics -- Information Security Management in Health Using ISO/IEC 27002. ISO 27799:2016. International Organization for Standardization. (2016). Retrieved May 08, 2022, from <https://www.iso.org/standard/62777.html>

14. Koppel R. (2012). Patient Safety and Health Information Technology: Learning from Our Mistakes. Patient Safety Network, Agency for Healthcare Research and Quality. (2012). Retrieved May 08, 2022, from <https://psnet.ahrq.gov/perspective/patient-safety-and-health-information-technology-learning-our-mistakes>
15. Mann, R., & Williams, J. (2003). Standards in medical record keeping. *Clinical Medicine*, 3(4), 329-332. doi:10.7861/clinmedicine.3-4-329
16. Mathiharan, K. (2001). Medical Records. *Indian Journal of Medical Ethics*, 1(2), 59. doi:10.20529/IJME.2004.029
17. Myuran, T., Turner, O., Ben Doostdar, B., & Lovett, B. (2017). The e-CRABEL score: an updated method for auditing medical records. *BMJ Quality Improvement Reports*, 6(1), u211253.w4529. doi:10.1136/bmjquality.u211253.w4529
18. National Digital Health Mission: Health Data Management Policy. (2020). Ayushman Bharat Digital Mission (ABDM). National Health Authority. Ministry of Health and Family Welfare. Government of India. Retrieved May 08, 2022, from [https://abdm.gov.in/publications/policies\\_regulations/health\\_data\\_management\\_policy](https://abdm.gov.in/publications/policies_regulations/health_data_management_policy)
19. National Digital Health Mission: Personal Data Processing Model Consent Form. (2020). Ayushman Bharat Digital Mission (ABDM). National Health Authority. Ministry of Health and Family Welfare. Government of India. Retrieved May 08, 2022, from <https://abdm.gov.in/documents/hdmpolicy/consentform>
20. Patient Safety and Health Information Technology. (2015). Committee Opinion; 621. American College of Obstetricians and Gynaecologists. Retrieved May 08, 2022, from <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2015/01/patient-safety-and-health-information-technology.pdf>
21. Planning for and Implementing ISO 27001. (2011). ISACA Journal. Retrieved May 08, 2022, from <https://www.isaca.org/resources/isaca-journal/past-issues/2011/2011-planning-for-and-implementing-iso-27001>
22. Schneider EC, Ridgely MS, Meeker D, Hunter LE, Khodyakov D, Rudin R. (2014). Promoting Patient Safety Through Effective Health Information Technology Risk Management. RAND Health. Washington, DC: Office of the National Coordinator for Health Information Technology; May 2014. RR-654- DHHSNCH. Retrieved May 08, 2022, from [https://www.healthit.gov/sites/default/files/rr654\\_final\\_report\\_5-27-14.pdf](https://www.healthit.gov/sites/default/files/rr654_final_report_5-27-14.pdf)
23. Schweitzer, M., & Hoerbst, A. (2015). A Systematic Investigation on Barriers and Critical Success Factors for Clinical Information Systems in Integrated Care Settings. *Yearbook of Medical Informatics*, 24(01), 79-89. doi:10.15265/iy-2015-018
24. Thomas, J. (2009). Medical records and issues in negligence. *Indian Journal of Urology*, 25(3), 384. doi:10.4103/0970-1591.56208

25. Tuffaha, H., Amer, T., Jayia, P., Bicknell, C., Rajaretnam, N., & Ziprin, P. (2012). The STAR score: a method for auditing clinical records. *The Annals of The Royal College of Surgeons of England*, 94(4), 235-239.  
doi:10.1308/003588412x13171221499865
26. Winter, A., Ammenwerth, E., Bott, O., et al. (2001). Strategic information management plans: the basis for systematic information management in hospitals. *International Journal of Medical Informatics*, 64(2- 3), 99-109.  
doi:10.1016/s1386-5056(01)00219-2

## **Section B: Accreditation Standards for Dental Clinics**

# Chapter 1

## Access, Assessment and Continuity of Care (AAC)



**Intent of the chapter:** The intent of this chapter is to provide the understanding of scope of services required for the dental healthcare service providers in consonance with the needs of the community, registration process, mechanism for referral of patients/ requisition of outside specialist services for patients whose treatment needs are not in the scope, standardization of initial assessment for dental patient, regular reassessment during treatment at regular interval, infrastructure, safety and quality assurance program for dental laboratory, pathology laboratory and imaging services commensurate with the scope of services. Patient care is continuous and multidisciplinary.

### Summary of Standards

AAC.1.	The DHSP defines and displays the services that it provides.
AAC.2.	The DHSP has a well-defined registration and record-keeping process.
AAC.3.	There is an appropriate mechanism for referral of patients/ requisition of outside specialist services for patients whose treatment needs are not in the scope of the DHSP.
AAC.4.	Patients undergo an established initial assessment.
AAC.5.	Patients cared by the organisation undergo a regular follow up.
AAC.6.	Written guidance governs the in-house dental laboratory services offered at DHSP, or outsourced to an independent dental laboratory.
AAC.7.	There is an established dental laboratory quality assurance programme.
AAC.8.	There is an established dental laboratory safety programme.
AAC.9.	Pathology laboratory services are provided in house /out-sourced as per the policy of DHSP.
AAC.10.	There is an established quality assurance and safety programme for in house pathology laboratories.
AAC.11.	Imaging services are provided as per the requirements of the patients.
AAC.12.	There is an established quality assurance and radiation safety program for imaging services.
AAC.13.	The organisation defines the content of the case summary.
AAC.14.	Patient care is continuous and multidisciplinary in nature.

Objective Element	AAC1	AAC2	AAC3	AAC4	AAC5	AAC6	AAC7	AAC8	AAC9	AAC10	AAC11	AAC12	AAC13	AAC14
a.	Commitment	Commitment	Commitment	Core	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Core	Commitment	Commitment	Commitment
b.	Commitment	Core	Commitment	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
c.	Commitment	Commitment		Commitment	Achievement	Commitment	Excellence	Commitment	Commitment	Commitment	Commitment	Achievement	Commitment	Commitment
d.		Achievement		Achievement	Commitment	Commitment		Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	
e.						Commitment			Commitment	Commitment	Commitment	Commitment	Commitment	
f.						Commitment			Commitment		Commitment	Commitment	Achievement	
g.						Commitment			Commitment		Commitment			
h.						Commitment					Commitment			
i.						Commitment								

## Standard

**ACC.1.**
**The DHSP defines and displays the services that it provides.**

## Objective Elements

### Commitment

- a. **The services being provided are clearly defined and are in consonance with the needs of the community.**

**Interpretation:** The services provided are defined by senior management and are in consonance with the requirements of the community. The needs of the community should be considered when planning new dental services and could be captured through various feedback mechanisms. However, this does not preclude the organisation from starting new services based on its own judgment.

### Commitment

- b. **Scope of the oral and dental care services of each department is defined.**

**Interpretation:** Each department's scope is defined. The scope could be by inclusion or exclusion in relation to the services practised in the department. The organisation could have a brochure detailing the scope of each department.

### Commitment

- c. **The defined services are prominently displayed.**

**Interpretation:** DHSP should display the name of the dental surgeons and clinical /diagnostic services of the department. This should be displayed prominently in an area visible to all patients and visitors. The display could be in the form of boards, citizen's charter, etc. It should be permanent. Electronic displays could be used by the organisation. The display should be at least bi-lingual (State language/language spoken by the majority of people in that area and English). Dissemination of information can be supplemented by the use of brochures and standees. The display should be readable from a distance and be appropriate for the patients and visitors.

## Standard

**ACC.2.**
**The DHSP has a well-defined registration and record-keeping process.**

## Objective Elements

### Commitment

- a. **DHSP uses written guidance for registering and admitting (if required) patients.**

**Interpretation:** The organisation shall prepare a document(s) detailing the mechanism for registration and admission of patients. All patients who are assessed

in the DHSP shall be registered. The organisation could consider mechanisms to verify the identity of the patient during registration. The patients and/or family are informed of the salient steps for registration/admission. This could be done through appropriate displays/information on the website.

**CORE****b. A unique identification number is generated at the end of the registration.**

**Interpretation:** The organisation shall ensure that every patient gets a unique number which is generated at the end of registration of the first interaction that the patient has with the organisation. This number shall be used for identification of the patient across the organisation and to ensure continuity of care across the organisation. All oral and dental records of the patient shall have this number. "Unique" implies that this is a one-time affair.

**Commitment****c. Patients are accepted only if the DHSP can provide the required service.**

**Interpretation:** The staff handling registration needs to be aware of the services that the DHSP can provide. It is also advisable to have a system wherein the staff is aware as to whom to contact, if they need any clarification on the services provided.

**Achievement****d. Prioritisation of oral and dental services is done as per the clinical needs of the patients.**

**Interpretation:** Oral and dental problems should be identified and prioritised as per the need of patients in all care settings (outpatient, emergency and diagnostic services). For example, a geriatric patient waiting in the OPD who complains of dental pain is seen as soon as possible; a vulnerable patient coming for a treatment is fast-tracked. All the staff handling these activities should be oriented to the applicable guidelines.

**Standard****ACC.3.**

**There is an appropriate mechanism for referral of patients/ requisition of outside specialist services for patients whose treatment needs are not in the scope of the DHSP.**

**Objective Elements****Commitment****a. Written guidance governs the referral of patients to another facility or requisition of outside specialist to DHSP for patients whose treatment needs are not in the scope of the DHSP.**



**Interpretation:** Written guidance should address the methodology of transfer out/ referral of the patient to another DHSP. The requisition of outside specialist should be informed to the patient with reasons of referral or discontinuation of treatment before being referred to another DHSP. In case the organisation is unable to meet some of the stated requirements, the reasons for the same shall be documented.

#### Commitment

- b. The DHSP gives a case summary of the patient's condition and the treatment given when transferring/ referring patient.**

**Interpretation:** The DHSP gives a case summary mentioning the significant findings and treatment given in case of patients who are being transferred out/ referred for diagnostic and therapeutic purposes. A copy of the same shall be retained by the organisation.

### Standard

**ACC.4.**

**Patients undergo an established initial assessment.**

### Objective Elements

#### CORE

- a. The DHSP defines the content of the initial assessments for patients. \***

**Interpretation:** The DHSP shall have a standardised format for initial assessment of patients in the OPD which includes chief complaint, dental and medical history, dental notation, drug allergy, intra-oral and extra oral examination, differential diagnosis, habits especially any disease/habit affecting the prognosis and dental treatment plan indicating related special needs during dental treatment, investigation (if any) etc. The initial assessment could be standardised across the DHSP, or it could be modified depending on the need of the department. However, it shall be the same for all the patients in that department.

#### CORE

- b. The initial assessment is performed by a qualified dentist. \***

**Interpretation:** DHSP determines who can do what assessment. Dental caregivers perform initial assessment within their scope of practice, registration and applicable laws.

#### Commitment

- c. Initial assessment is performed within a time frame based a based on the needs of the patient.\***

**Interpretation:** The DHSP shall define and document the time frame within which the initial assessment is to be completed concerning out patient and the same shall be implemented. In the OPD, the time frame shall be from the time the patient arrives at the reception until the initial assessment is completed.

**Achievement**

- d. **The initial assessment results in a documented plan of care including preventive/maintenance aspects of the dental care.\***

**Interpretation:** This shall be documented by the treating dentist or by a dental surgeon of his treating team in the case record and should cover preventive/maintenance actions as necessary in the case and should include follow-up recall visits, oral hygiene instructions (OHI), diet, drugs, habits etc. DHSP should have a written policy and procedure which identifies staff responsible for scheduling of such appointments and treatment undertaken during these appointments. Patient should be educated, informed verbally as well as given a written record of scheduled appointments for preventive/maintenance dental care.

**Standard****ACC.5.****Patients cared for by the organisation undergo a regular follow up.****Objective Elements****CORE**

- a. **All patients are followed up at appropriate intervals.**

**Interpretation:** After the initial assessment, the patient is reassessed periodically and this is documented in the case records. The frequency may be different for different cases based on the dental treatment plan and the patient's medical condition. The DHSP has to ensure that the care of patients is always given by appropriately qualified dental personnel (resident dentist, dental surgeon, medical consultant and/or nurse).

**Commitment**

- b. **Out-patients are informed of their next follow-up, where appropriate**

**Interpretation:** The information could be either in terms of a specific date or after a certain period (weeks/months) and shall be documented in the dental record/ OPD consultation sheet. This may not be applicable in cases where the patient has come for just an opinion or the patient's condition does not warrant a repeat visit.

**Achievement**

- c. **Staff involved in direct clinical care documents reassessments.**

**Interpretation:** Actions taken under reassessment are documented. The staff could be the treating dentist or any member of the team as per their domain of responsibility of care. At a minimum, the documentation shall include oral health, pain score and medication orders (If necessary). Patient's vitals can be included. Only phrases like "Ok", "all well" would not be acceptable.

**Commitment**

- d. **Patients are followed up, to determine their response to treatment and to plan further treatment/referral.**

**Interpretation:** Peer review meets within the DHSP should be undertaken and any observations/ suggestions documented and considered while reassessing patient treatment plan.

**Standard****ACC.6.**

**Written guidance governs the in-house dental laboratory services offered at DHSP, or outsourced to an independent dental laboratory.**

**Objective Elements****Commitment**

- a. **The scope of the dental laboratory services is commensurate to the services provided by the DHSP.**

**Interpretation:** The DHSP should ensure availability of dental laboratory services commensurate with the Oral and Dental services it offers. For example, denture, porcelain fused to metal crowns, dental appliances etc for geriatric and endodontics patients. The organisation shall ensure that these services are available within a defined timeline and patient care is not disrupted.

**Commitment**

- b. **The infrastructure (physical and equipment) is adequate to provide the defined scope of services.**

**Interpretation:** The dental lab shall have adequate space and equipment to meet its defined scope of services. Lab work should not get delayed due to lack of adequate equipment. The layout of the laboratory prevents cross-contamination.

**Commitment**

- c. **Manpower resource is adequate to provide the defined scope of services.**

**Interpretation:** The number of dental lab technician should be commensurate with the workload. Dental lab work should not get delayed due to lack of adequate human resource (including personnel authorised for lab work).

**Commitment**

- d. **Adequately qualified and skilled personnel perform and supervise the work.**

**Interpretation:** The dental technician employed in the lab should be suitably qualified (appropriate degree) and skilled to fabricate crowns, bridges, dentures, and orthodontic appliances based on the prescription of a dentist.

**Commitment**

- e. Requisition for patient model and prosthesis, collection, identification, handling, safe transportation, processing and disposal of dental impression and dental waste material is performed according to written guidance.\***

**Interpretation:** The DHSP has written guidance for requisition, collection, identification, handling, safe transportation, processing, and disposal of the model and impression, to ensure the safety of the model and impression till the fabrication of the final prostheses or corrective devices are completed (observing standard and special precautions). The DHSP shall ensure that the unique identification number is used for identification of the patient. The disposal of waste shall be as per the statutory requirements (Bio-medical Waste Management and Handling rules).

**Commitment**

- f. Dental lab work should be available within a defined time frame.\***

**Interpretation:** The DHSP shall define the turnaround time for all dental lab work. The dental lab should ensure the availability of adequate staff, materials and equipment to make final lab work available within the defined time frame. The turnaround time could be different for different lab work and could be decided based on the dental treatment planned.

**Commitment**

- g. Good manufacturing practices are used by the dental laboratory in all its practices.**

**Interpretation:** Written guidance shall be used to identify proven, standard materials (e.g., ADA/CE/BIS certified), processes and equipment and incorporate them for achieving quality.

**Commitment**

- h. Corrections and alterations are attended to through a structured and time-based programme.**

**Interpretation:** The dental lab shall maintain a log book to record repetition of dental lab work.

**Commitment**

- i. Laboratory tests not available in the organisation are outsourced to the organisation(s) based on their quality assurance system.\***

**Interpretation:** The organisation has written guidance for outsourcing dental lab work for which it has no facilities. This should include:

- A list of dental work for outsourcing.
- Identity of personnel in the outsourced facilities to ensure safe and timely transportation of lab work and complete within define timeline.
- Manner of the packaging of the models and impression and their labelling for identification and this package should contain the work requisition with all details as required for prostheses.
- A methodology to check the performance of service rendered by the outsourced dental laboratory, as per the requirements of the DHSP.
- The organisation shall have a Memorandum of Understanding (MoU)/agreement for the same, which incorporates quality assurance and requirements of this standard.

## Standard

**ACC.7.**
**There is an established dental laboratory quality assurance programme.**

## Objective Elements

### Commitment

#### a. The dental laboratory quality assurance programme is implemented. \*

**Interpretation:** The DHSP has a documented quality assurance programme to check the quality of dental material and laboratory work. There is a mechanism to obtain feedback from various departments to evaluate the dental laboratory work at least once a year.

### Commitment

#### b. The programme includes periodic calibration and maintenance of equipment. \*

**Interpretation:** The frequency of calibration and maintenance shall be as per the equipment manufacturer's/professional bodies' recommendation. Traceability certificate(s) of all calibration done shall also be documented and maintained. This shall also include point of care equipment wherever feasible.

### Excellence

#### c. The programme addresses the dento -prosthetic meeting(s).

**Interpretation:** The DHSP conducts dento -prosthetic meeting(s) at pre-defined intervals for correlating the dental lab work with referring lab technician and uses the same as a tool for improving quality.

## Standard

**ACC.8.**
**There is an established dental laboratory safety programme.**

## Objective Elements

### Commitment

#### a. The dental laboratory safety programme is implemented. \*

**Interpretation:** Dental laboratory safety manual is available in the laboratory. This takes care of the safety of the workforce as well as the equipment available in the laboratory. It shall be in consonance with the risks and hazards identified. The manual should incorporate the appropriate Material Safety and Data Sheet (MSDS). The laboratory safety programme could be as per Occupational Health and Safety Management System.

**Commitment****b. This programme is aligned with the organisation's safety programme.**

**Interpretation:** Dental laboratory safety programme is aligned with the safety programme of the organisation. The broad principles shall be the same as that of the organisation's safety programme.

**Commitment****c. Laboratory personnel are appropriately trained in safe practices.**

**Interpretation:** All the Dental laboratory staff undergo training regarding safe practices in the laboratory as well as in the relevant MSDS. The training need identification must be made commensurate with the job description of the staff.

**Commitment****d. Dental laboratory personnel are provided with appropriate safety measures.**

**Interpretation:** Adequate safety measures are available in the dental laboratory for example, PPE, dressing materials, disinfectants, fire extinguishers etc. It should address safety issues at all levels. All laboratory personnel shall always adhere to standard precautions. All lab staff shall be appropriately immunised.

## Standard

**ACC.9.**

**Pathological laboratory services are provided in house /out-sourced as per the policy of DHSP.**

## Objective Elements

**Commitment****a. Scope of the laboratory services is commensurate to the services provided by the DHSP.**

**Interpretation:** The DHSP should ensure availability of laboratory services commensurate with the need of oral and dental services it offers. The organisation shall ensure that these services are available round the clock, and patient care is not disrupted.

**Commitment****b. The infrastructure (physical and equipment) is adequate to provide the defined scope of oral and dental services.**

**Interpretation:** Laboratory shall have adequate space and equipment to meet its defined scope of oral and dental services.

**Commitment****c. If lab services are to be provided in-house, adequately qualified and trained personnel perform and/or supervise the investigations.**

**Interpretation:** The number of laboratory personnel should be suitably qualified (appropriate degree), trained and commensurate to the workload. Statutory requirements regarding authorised signatory shall have to be adhered to.

**Commitment**

- d. **Requisition for tests, collection, identification, handling, safe transportation, processing and disposal of a specimen is performed according to written guidance.\***

**Interpretation:** The DHSP has written guidance for requisition, collection, identification, handling, safe transportation, processing, and disposal of the specimen, to ensure the safety of the specimen till the tests and retests (if required) are completed (observing standard and special precautions). The organisation shall ensure that the DHSP's unique identification number is used for identification of the patient.

**Commitment**

- e. **Laboratory results are available within a defined time frame.**

**Interpretation:** The organisation shall define the turnaround time for all tests. The organisation should ensure the availability of adequate staff, materials and equipment to make the laboratory results available within the defined time frame. The turnaround time could be different for different tests and could be decided based on the nature of the test, the criticality of test and urgency of test result (as desired by the treating doctor).

**Commitment**

- f. **Critical results are intimated immediately to the concerned personnel.**

**Interpretation:** The laboratory shall establish its biological reference intervals for different tests. The laboratory shall establish and document critical limits for tests which require immediate attention for patient management, and the same shall be documented. If it is not practical to establish the biological reference interval for a particular analysis, the laboratory should carefully evaluate the published data for its reference intervals. Critical results of outsourced investigations are also included.

**Commitment**

- g. **Laboratory tests are outsourced to DHSP(s) based on their quality assurance system.**

**Interpretation:** The DHSP has documented procedure for outsourcing tests for which it has no facilities. This should include:

- List of tests for outsourcing
- Identity of personnel in the outsourced facilities to ensure safe transportation of specimens and completing of tests as per requirements of the patient concerned and receipt of results at DHSP.
- Manner of packaging of the specimens and their labelling for identification. The package should contain the test requisition with all details as required for testing.
- The organisation shall have a Memorandum of Understanding (MoU)/agreement for the same, which incorporates quality assurance and requirements of this standard.

## Standard

**ACC.10.**

**There is an established quality assurance and safety programme for in house pathological laboratories.**

## Objective Elements

### Commitment

#### a. The laboratory quality assurance program is implemented.

**Interpretation:** The organisation has a documented quality assurance programme. Quality assurance includes internal quality control, external quality assurance, pre-analytic phase, test standardisation, post-analytic phase, management and organisation. The laboratory shall participate in external quality assurance programme when available. When such programmes are not available, the laboratory may exchange samples with another laboratory for purposes of peer comparison. There is a mechanism to obtain feedback from various stakeholders to evaluate the laboratory services at least once a year.

### Commitment

#### b. The programme ensures the quality of test results. \*

**Interpretation:** Ensuring the quality of test results includes performing internal quality controls to ensure precision and repeatability. It also includes inter-laboratory comparisons like external quality assurance (EQA)/proficiency testing.

A good reference guide is ISO 15189: 2012.

### Commitment

#### c. The program includes periodic calibration and maintenance of all equipment.

**Interpretation:** The frequency of calibration and maintenance shall be as per the equipment manufacturer's/professional bodies' recommendation. Traceability certificate(s) of all calibration done shall also be documented and maintained. This shall also include point of care equipment wherever feasible.

### Commitment

#### d. The program includes the documentation of corrective and preventive actions.

**Interpretation:** Corrective and preventive actions are taken to address the deviations.

### Commitment

#### e. The laboratory safety program is implemented.

**Interpretation:** Laboratory safety manual is available in the laboratory. This takes care of the safety of the workforce as well as the equipment available in the laboratory. It shall be in consonance with the risks and hazards identified. The manual should incorporate the appropriate Material Safety and Data Sheet (MSDS). The laboratory safety programme could be as per Occupational Health and Safety Management System.



## Standard

ACC.11.

Imaging services are provided as per the requirements of the patients.

## Objective Elements

### CORE

#### a. Imaging services comply with legal and other requirements.

**Interpretation:** The organisation is aware of the legal and other requirements of imaging services and the same are documented for information and compliance by all concerned in the organisation. The organisation maintains and updates its compliance status of legal and other requirements in a regular manner. All the statutory requirements are met with such as Atomic Energy Regulatory Board (AERB) clearance, dosimeters, lead shields, lead aprons, signage, reports to the competent authority, etc. The organisation shall have a Radiation Safety Officer (of appropriate level).

#### Commitment

#### b. Scope of the imaging services are commensurate to the services provided by the DHSP.

**Interpretation:** The DHSP should ensure availability of imaging services commensurate with the oral and dental care services it offers. For example, a DHSP providing orthodontic treatment should have facilities for OPG (Orthopantomography). Imaging services may be provided within the organisation, outsourced to another organisation or both. The key aspect that needs to be ensured is the safe transfer of the patient and the imaging reports being available on time.

#### Commitment

#### c. The infrastructure (physical and equipment) and human resources are adequate to provide for its defined scope of services.

**Interpretation:** Imaging services shall have adequate space and equipment to meet their defined scope of services. Reports should not get delayed due to lack of adequate equipment or human resources (including personnel authorised to report results).

#### Commitment

#### d. Adequately qualified and trained personnel perform and/or supervise the investigations.

**Interpretation:** AERB guidelines could be used as a reference document for radiation-based imaging.

**Commitment****e. Imaging results are available within a defined time frame.**

**Interpretation:** The DHSP shall document turnaround time of imaging results for all modalities. The organisation shall monitor the waiting times, time taken to perform the tests and time taken to prepare the reports of the tests for all modalities. The defined timeframes could be different for a different type of tests and could be decided based on the nature of the test, modality, and criticality of the test and the urgency of the test result (as required by the treating dental surgeon).

**Commitment****f. Critical results are intimated immediately to the concerned personnel.**

**Interpretation:** The organisation shall define and document the critical results which require immediate attention for patient management and the same shall be documented, for example,, Temporo-Mandibular Joint disorders. The critical results must be documented for each modality of imaging. Critical results of outsourced investigations shall also be intimated. The critical test results shall be communicated to the person from the treating team (treating dental Surgeon/member of treating team) at the earliest, but not later than one hour after completion of the test/report being ready. Imaging services in-charge identifies suitable personnel to report critical results. The intimation includes the name of the patient; Unique ID; date and time of imaging; investigation name, result; operator identity of who has communicated the value; the identity of the recipient; read-back and date and time of acknowledgement. This shall be documented. In the case of electronic health systems, system-generated critical result reporting can supplement the physical reporting of critical results.

**Commitment****g. Results are reported in a standardised manner.**

**Interpretation:** At a minimum, the report shall include the name of the DHSP (or in case of an outsourced imaging centre, the name of the same), the patient's name, the unique identification number, and the name and signature of the person reporting the test result. In case of teleradiology, there shall be the name of the reporting doctor and a remark to that effect. It should also include the name of the reporting organisation if outsourced to an organisation. All reports from the outsourced imaging centre shall incorporate these features, and the clinic shall not alter/modify anything in the report. The report should be in the prevailing context, taking into account the clinical details and results of any previous imaging.

**Commitment****h. Imaging tests not available in the DHSP are outsourced based on their quality assurance system.**

**Interpretation:** The DHSP has written guidance for outsourcing tests for which it has no facilities. This should include:

- List of tests for outsourcing,

- Identity of personnel in the outsourced facilities to ensure the safe transportation of patients and completing of imaging results,
- Manner of identification of patients and the test requisition with all details as required for testing and a methodology to check the selection and performance of service rendered by the outsourced imaging facility as per the requirements of the DHSP.
- The organisation shall have an MoU/agreement for the same, which incorporates quality assurance and requirements of this standard. account the clinical details and results of any previous imaging.

## Standard

ACC.12.

**There is an established quality assurance and radiation safety program for imaging services.**

## Objective Elements

### Commitment

#### a. The quality assurance program for imaging services is implemented.

**Interpretation:** The quality assurance programme should be a comprehensive programme addressing equipment, protocols, surveillance and safety. Also, statutory (AERB) requirements will have to be met.

### Commitment

#### b. Quality assurance programme includes the review of imaging protocols.

**Interpretation:** The review of imaging protocols ensures optimum image quality with minimum possible dosage to the patient(s). The imaging protocols should be in accordance with guidelines given by professional bodies/academic literature and where relevant based on the clinical diagnosis.

### Achievement

#### c. The programme addresses periodic internal/external peer review of imaging results using appropriate sampling.

**Interpretation:** A peer review system is in place to review the imaging results of OPG and CBCT. The peer review shall be done in a structured manner, and the sample size and periodicity for each modality shall be defined by the DHSP. However, at a minimum, this shall be one percent. The peer review can be performed by the head of the department or by a group of peers, with blinding of the original reports. Discrepancies in the reports will be graded on the severity and impact on changes in patient management strategy, and the corrective and preventive actions taken to minimise these will be documented. The purpose is to prevent errors in future, and continuous quality improvement rather than computation or error rates of the individuals. The results of such reviews could be discussed with all stakeholders in “discrepancy meetings”, and the same shall be documented.

**Commitment****d. The program includes periodic calibration and maintenance of all equipment.**

**Interpretation:** Quality Assurance, including calibration and maintenance of all equipment, will be performed as per AERB guidelines, as well as the manufacturer's recommendations/guidelines from professional bodies and records of the same shall be maintained. All such activities will be performed by persons who are appropriately trained and certified by the regulatory authorities for this purpose. Traceability certificates of all calibrations done by calibrated equipment shall be maintained.

**Commitment****e. The program includes the documentation of corrective and preventive actions.**

**Interpretation:** In case of any deviations noted from the laid down quality assurance programme, the organisation shall institute corrective and preventive actions as may be appropriate.

**Commitment****f. The radiation safety program is implemented as per AERB guidelines.**

**Interpretation:** The programme shall be in consonance with the guidelines laid down by AERB. The programme also includes the implementation of "As Low As Reasonably Achievable" (ALARA) principle in investigations involving radiation and screening of those patients who are at high risk for radiation. Imaging personnel are provided with appropriate radiation safety devices. Staff directly working with radiation sources shall possess and use Thermo Luminescent Dosimeters (TLD) badges. Radiation safety devices are periodically tested and documented. Imaging signage are prominently displayed in all appropriate locations. Imaging personnel are trained in radiation safety measures

**Standard****ACC.13.****The organisation defines the content of the case summary.****Objective Elements****Commitment****a. A case summary is provided to the patients.**

**Interpretation:** The case summary shall be signed by the treating dental surgeon or dentist-member of the treating team. Patient/family acknowledges the receipt of the same.

**Commitment****b. Case summary contains the patient's name, unique identification number, name of the treating doctor.**

**Interpretation:** The case summary shall have the above details. In addition to the name of the treating doctor, it could also have the name of the other consultants involved in the treatment.

Commitment	<p>c. <b>Case summary contains the reasons for out patient care, significant findings and diagnosis and the patient's condition.</b></p> <p><b>Interpretation:</b> The case summary shall have the above details.</p>
Commitment	<p>d. <b>Case summary contains information regarding investigation results, any procedure performed, medication administered, and other treatment given.</b></p> <p><b>Interpretation:</b> The case summary shall have the above details.</p>
Commitment	<p>e. <b>Case summary contains follow-up advice, medication and other instructions in an understandable manner.</b></p> <p><b>Interpretation:</b> This shall also incorporate preventive aspects, where appropriate. The organisation ensures that the follow-up advice, medication and other instructions are explained to the patient and or relatives in a language and manner that they understand. Medical terms like BD, TDS, QID should not be used.</p>
Achievement	<p>f. <b>Case summary incorporates instructions about when and how to obtain urgent care.</b></p> <p><b>Interpretation:</b> The case summary should contain advice on 'when' the patient should seek urgent care. This information shall be specific to the patient's diagnosis and clinical condition. For example, development of fever, bleeding/discharge from the oral operative site. The advice could be in the form of what medicines to take, when to consult a dental surgeon or how to seek medical help and contact number of the DHSP/dentist. The DHSP ensures that instructions about when and how to obtain urgent care are explained to the patient and or relatives in a language/manner that they understand.</p>

## Standard

ACC.14.

Patient care is continuous and multidisciplinary in nature

## Objective Elements

Commitment	<p>a. <b>During all phases of care, there is a qualified individual/ individuals responsible for the patient's care who co-ordinate the care in all the departments with-in the DHSP.</b></p> <p><b>Interpretation:</b> For all patients cared for by the organisation, there is a qualified dental surgeon identified as responsible for care. Although a team may provide care, the DHSP record shall identify by a dentist as being responsible for patient care. The DHSP shall ensure that there is effective communication of patient requirements amongst the care-providers in all settings.</p>
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**Commitment**

- b. **Information about the patient's care and response to treatment is shared amongst all care providers.**

**Interpretation:** The DHSP ensures periodic discussions about each patient (covering parameters like patient care, response to treatment, unusual developments if any, etc) amongst all care providers.

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**Commitment**

- c. **Written guidance governs the referral of patients to other departments / specialties.**

**Interpretation:** Referral could be for opinion, co-management or takeover. The referral note should mention the reason for the referral. It could be graded into immediate, urgent, priority or routine category. All referrals shall be based on clinical significance and for a better outcome. All referrals shall be seen within a defined timeframe. The timeframe could be different based on the urgency of referral. The organisation has written guidance for the referral of patients to other departments or specialties.

## References:

1. Acute care toolkit 1: Handover. Royal College of Physicians. (2015). Retrieved on May 03 2022, from <https://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-1-handover>
2. Agency for Healthcare Research and Quality. Patient Safety Network. (2012, June). Transfer Troubles. Retrieved on May 03 2022, from <https://psnet.ahrq.gov/webmm/case/269>
3. Albrecht, J. S., Gruber-Baldini, A. L., Hirshon, J. M., et al. (2014). Hospital Discharge Instructions: Comprehension and Compliance Among Older Adults. *Journal of General Internal Medicine*, 29(11), 1491-1498. doi:10.1007/s11606-014-2956-0
4. Brady, A. P. (2016). Error and discrepancy in radiology: inevitable or avoidable? *Insights into Imaging*, 8(1), 171-182. doi:10.1007/s13244-016-0534-1
5. Coleman, E. A., Chugh, A., Williams, M. V., et al.. (2013). Understanding and Execution of Discharge Instructions. *American Journal of Medical Quality*, 28(5), 383-391. doi:10.1177/1062860612472931
6. Communication During Patient Hand-Overs. (2007). Retrieved on May 03 2022, from [https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/psf/patient-safety-solutions/ps-solution3-communication-during-patient-handovers.pdf?sfvrsn=7a54c664\\_4&ua=1](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/psf/patient-safety-solutions/ps-solution3-communication-during-patient-handovers.pdf?sfvrsn=7a54c664_4&ua=1)
7. Content of a discharge summary from a medical ward: views of general practitioners and hospital doctors. *Journal of the Royal College of Physicians of London*. 1995; 29(4):307-310. Retrieved on May 03 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5401316/pdf/jrcollphyslond90372-0047>
8. Davenport, R. J. (2018). How to do it: the clinicopathological conference. *Practical Neurology*, 19(2), 143-146. doi:10.1136/practneurol-2018-001993
9. Déry, J., Ruiz, A., Routhier, F., et al. (2019). Patient prioritization tools and their effectiveness in non- emergency healthcare services: a systematic review protocol. *Systematic Reviews*, 8(1). doi:10.1186/s13643-019-0992-x
10. Dhingra, N. (2010). WHO Guidelines on Drawing Blood: Best Practices in Phlebotomy. Retrieved on May 03 2022, from [http://www.euro.who.int/data/assets/pdf\\_file/0005/268790/WHO-guidelines-on-drawing-blood-best-practices-in-phlebotomy-Eng.pdf?ua=1](http://www.euro.who.int/data/assets/pdf_file/0005/268790/WHO-guidelines-on-drawing-blood-best-practices-in-phlebotomy-Eng.pdf?ua=1)
11. Egan, N. (1999). Managing a bed crisis. *Emergency Medicine Journal*, 16(2), 145-146. doi:10.1136/emj.16.2.145
12. Gail M. Keenan; Elizabeth Yakel; Dana Tschannen; Mary Mandeville. (2008). Chapter 49 Documentation and the Nurse Care Planning Process. In *Patient Safety and Quality: An Evidence-Based Handbook for Nurses*.
13. Gardner-Thorpe, J., Love, N., Wrightson, J., et al. (2006). The Value of Modified Early Warning Score (MEWS) in Surgical In-Patients: A Prospective Observational Study. *The Annals of The Royal College of Surgeons of England*, 88(6), 571-575. doi:10.1308/003588406x130615
14. Goldberg-Stein, S., Frigini, L. A., Long, S. et al. (2017). ACR RADPEER Committee White Paper with 2016 Updates: Revised Scoring System, New Classifications, Self-Review, and Subspecialized Reports. *Journal of the American College of Radiology*, 14(8), 1080-1086. doi:10.1016/j.jacr.2017.03.023

15. Hawkins, R. C. (2007). Laboratory Turnaround Time. *Clin Biochem Rev*, 28(4), 179-194.
16. Horwitz, L. I., Moriarty, J. P., Chen, C., et al. (2013). Quality of Discharge Practices and Patient Understanding at an Academic Medical Center. *JAMA Internal Medicine*. doi:10.1001/jamainternmed.2013.9318  
<https://www.osha.gov/sites/default/files/publications/OSHA3404laboratory-safety-guidance.pdf>
17. Johnson, L., Edward, K., & Giandinoto, J. (2018). A systematic literature review of accuracy in nursing care plans and using standardised nursing language. *Collegian*, 25(3), 355-361. doi:10.1016/j.colegn.2017.09.006
18. Kulshrestha, A., & Singh, J. (2016). Inter-hospital and intra-hospital patient transfer: Recent concepts. *Indian Journal of Anaesthesia*, 60(7), 451. doi:10.4103/0019-5049.186012
19. Laboratory biosafety manual, 4th edition. (2020). World Health Organisation (WHO). Retrieved on May 03 2022, from <https://www.who.int/publications/i/item/9789240011311>
20. Lippi, G., & Mattiuzzi, C. (2016). Critical laboratory values communication: summary recommendations from available guidelines. *Annals of Translational Medicine*, 4(20), 400-400. doi:10.21037/atm.2016.09.36
21. Mahgerefteh, S., Kruskal, J. B., Yam, C. S., Blachar, A., & Sosna, J. (2009). Peer Review in Diagnostic Radiology: Current State and a Vision for the Future. *RadioGraphics*, 29(5), 1221-1231. doi:10.1148/rg.295095086
22. Müller, M., Jürgens, J., Redaelli, M., et al. (2018). Impact of the communication and patient hand-off tool SBAR on patient safety: a systematic review. *BMJ Open*, 8(8), e022202. doi:10.1136/bmjopen-2018-022202
23. Occupational Safety and Health Administration. (2011). Laboratory safety Guidance. Retrieved on May 03 2022, from
24. Ortega, B., Salazar, A., Jovell, A., et al. (2012). Standardizing admission and discharge processes to improve patient flow: A cross sectional study. *BMC Health Services Research*, 12(1). doi:10.1186/1472-6963-12-180
25. Patient Identification. Patient Safety Solutions (2007). Retrieved on May 03 2022, from [https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/psf/patient-safety-solutions/ps-solution2-patient-identification.pdf?sfvrsn=ff81d7f9\\_4&ua=1](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/psf/patient-safety-solutions/ps-solution2-patient-identification.pdf?sfvrsn=ff81d7f9_4&ua=1)
26. Radiological Protection Principles. (2017). Atomic energy Regulatory Board (AERB), Government of India. Retrieved on May 03 2022, from <https://aerb.gov.in/english/radiation-protection-principle>
27. Schultz, E. M., Pineda, N., Lonhart, J., et al. (2013). A systematic review of the care coordination measurement landscape. *BMC Health Services Research*, 13(1). doi:10.1186/1472-6963-13-119
28. Scope of Hospital Services: External Standards and Guidelines. (n.d.). Retrieved on May 03 2022, from <https://www.princeton.edu/~ota/disk2/1988/8832/883211.PDF>
29. Subbe, C. (2001). Validation of a modified Early Warning Score in medical admissions. *QJM*, 94(10), 521-526. doi:10.1093/qjmed/94.10.521



30. Waring J, Marshall F, Bishop S, et al. Hospital discharge and patient safety: reviews of the literature. In: An ethnographic study of knowledge sharing across the boundaries between care processes, services and organisations: the contributions to 'safe' hospital discharge. Health Services and Delivery Research, No. 2.29. 2014. Retrieved on May 03 2022, from <https://www.ncbi.nlm.nih.gov/books/NBK259995/>
31. Weston, C., Yune, S., Bass, E., et al. (2017). A Concise Tool for Measuring Care Coordination from the Provider's Perspective in the Hospital Setting. *Journal of Hospital Medicine*, 12(10), 811-817. doi:10.12788/jhm.2795
32. Williams, P., Karuppiah, S., Greentree, K., & Darvall, J. (2019). A checklist for intrahospital transport of critically ill patients improves compliance with transportation safety guidelines. *Australian Critical Care*. doi:10.1016/j.aucc.2019.02.004
33. World Health Organization. (2010). WHO guidelines on drawing blood: best practices in phlebotomy. Retrieved on May 03 2022, from [http://www.euro.who.int/data/assets/pdf\\_file/0005/268790/WHO-guidelines-on-drawing-blood-best-practices-in-phlebotomy-Eng.pdf?ua=1](http://www.euro.who.int/data/assets/pdf_file/0005/268790/WHO-guidelines-on-drawing-blood-best-practices-in-phlebotomy-Eng.pdf?ua=1)
34. World Health Organization. (2011). Laboratory Quality Management System: Handbook. Retrieved on May 03 2022, from <https://www.who.int/publications/i/item/9789241548274>
35. World Health Organization. (2018). Continuity and coordination of care: a practice brief to support implementation of the WHO Framework on integrated people-centred health services. Retrieved on May 03 2022, from <https://apps.who.int/iris/bitstream/handle/10665/274628/9789241514033-eng.pdf?ua=1>
36. Wright, J., Williams, R., & Wilkinson, J. R. (1998). Health needs assessment: Development and importance of health needs assessment. *BMJ*, 316(7140), 1310-1313. doi:10.1136/bmj.316.7140.1310
37. Yemm, R., Bhattacharya, D., & Wright, D. (2014). What constitutes a high quality discharge summary? A comparison between the views of secondary and primary care doctors. *International Journal of Medical Education*, 5, 125-131. doi:10.5116/ijme.538b.3c2e

# Chapter 2

## Care of Patients (COP)



**Intent of the chapter:** The DHSP provides uniform care to all patients in different settings. The different settings include care provided in outpatient units, various categories of wards, intensive care units, procedure rooms and operation theatre. When similar care is provided in these different settings, care delivery is uniform.

Written guidance, applicable laws and regulations guide emergency and ambulance services, cardio-pulmonary resuscitation, use of blood and blood products, care of patients in the Intensive care and high dependency units.

Written guidance, applicable laws and regulations also guide care of vulnerable patients (elderly, physically and/or mentally challenged and children), high risk obstetrical patients, paediatric patients, patients undergoing moderate sedation, administration of anaesthesia, patients undergoing surgical procedures, patients under restraints, research activities and end of life care.

Pain management, nutritional therapy and rehabilitative services are also addressed with a view to provide comprehensive health care. The standards aim to guide and encourage patient safety as the overall principle for providing care to patients.

### Summary of Standards

<b>COP1.</b>	Uniform care of patients is provided in all departments of the DHSP and is governed by written guidance, applicable laws, regulations and guidelines.
<b>COP2.</b>	Emergency services are provided in accordance with written guidance, applicable laws and regulations process.
<b>COP3.</b>	Cardio-pulmonary resuscitation services are available, when required, in the DHSP.
<b>COP4.</b>	Organisation provides safe paediatric services.
<b>COP5.</b>	The organisation identifies and manages patients who are at higher risk of morbidity/mortality.
<b>COP6.</b>	Written guidance governs the care of patients undergoing local anaesthesia.
<b>COP7.</b>	Procedural sedation is provided in a consistent and safe manner.
<b>COP8.</b>	Written guidance governs the care of patients undergoing dental procedures.
<b>COP9.</b>	Written guidance guides appropriate pain management.

Objective Element	COP1	COP 2	COP 3	COP 4	COP 5	COP 6	COP 7	COP 8	COP 9
a.	Commitment	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
b.	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
c.	Commitment	Commitment	Commitment			Commitment	Commitment	Commitment	Commitment
d.	Achievement		Commitment					Core	
e.			Achievement					Commitment	
f.			Commitment					Commitment	
g.			Core					Achievement	
h.									
i.									

## Standard

### COP.1.

Uniform care of patients is provided in all departments of the DHSP and is governed by written guidance, applicable laws, regulations and guidelines.

## Objective Elements

### Commitment

- a. **Care delivery is uniform when similar care is provided in more than one department.\***

**Interpretation:** When similar treatment/care is provided in various settings such as out-patients and day care, the organisation shall ensure that patients with the same clinical condition and care needs receive the same quality of health care throughout the DHSP. Further, in case the organisation has separate OPDs for different category of patients, the methodology for care delivery shall be uniform in all OPDs.

### CORE

- b. **The organisation has a uniform process for identification of patients and at a minimum, uses two identifiers.**

**Interpretation:** The mechanism for identification of patients shall be uniform across the organisation. For any care related aspect, at a minimum, two identifiers shall be used. One of the identifiers shall be the unique identification number generated at the time of registration.

### Commitment

- c. **Uniform care is guided by written guidance which reflect applicable laws and regulations.**

**Interpretation:** The organisation shall adhere to the norms laid down by the government through relevant legislation like the Clinical Establishment Act or any such similar legislation. For example, consent before dental surgery.

### Achievement

- d. **Evidence based clinical practice guidelines are adopted to guide uniform patient care whenever possible.**

**Interpretation:** Clinical practice guidelines brought out by national and international professional organisations may be used. Standard treatment guidelines (STGs) brought out by the Government of India are a good starting point. In the absence of evidence-based clinical practice guidelines or where adapting the clinical practice guidelines are not feasible, sound clinical practices shall guide the delivery of care.

For definitions of “evidence-based medicine” and “clinical practice guidelines”, refer to the glossary.

## Standard

**COP.2.**

**Emergency services are provided in accordance with written guidance, applicable laws and regulations process.**

## Objective Elements

### CORE

- a. Emergency care is provided in consonance with statutory requirements and in accordance with the written guidance. \***

**Interpretation:** Written guidance shall include guidelines/SOPs/protocols to provide general emergency care as well as management of specific conditions, for example, road traffic accidents, fall, etc. It shall address both adult and paediatric patients. The procedure shall incorporate at a minimum identification, assessment and provision of care. In case, emergency services are out of the scope of the organisation, or the organisation does not have facilities for appropriate emergency care of a given clinical condition, at a minimum, such patients shall be provided with first-aid before transferring them to another centre. Processes shall be in place to ensure patient safety.

### Commitment

- b. The organisation manages medico-legal cases in accordance with statutory requirements. \***

**Interpretation:** The care provided, especially the documentation and intimation to appropriate authorities, shall be in accordance with statutory requirements. The organisation shall also define as to what constitutes a medico-legal case (by statutory guidelines).

### Commitment

- c. Initiation of appropriate care is guided by a system of triage. \***

**Interpretation:** Triage shall be done only by qualified/trained personnel. Written guidance based on evidence/sound clinical practices shall guide these activities.

## Standard

**COP.3.**

**Cardio-pulmonary resuscitation services are available, when required, in the DHSP.**

## Objective Elements

**Commitment****a. Resuscitation services are available to patients at all times.**

**Interpretation:** The organisation shall document the procedure for cardio-pulmonary resuscitation for dental patient across all areas in the DHSP. This shall be in consonance with accepted practices. The organisation shall ensure that adequate and appropriate resources (both men and material) are provided. Basic life support shall be initiated as soon as a condition requiring CPR is identified. This is implemented in all areas of the DHSP.

**Commitment****b. During cardio-pulmonary resuscitation, assigned roles and responsibilities are complied with.**

**Interpretation:** The team members have a clear understanding of their roles and responsibilities during the resuscitation to effectively function as a team.

**Commitment****c. Equipment and medications for use during cardio-pulmonary resuscitation are available in various areas of the organisation.**

**Interpretation:** At a minimum, emergency medications and equipment for intubation shall be available in all patient care areas and in areas where any procedure is performed.

**Commitment****d. The events during a cardio-pulmonary resuscitation are recorded.**

**Interpretation:** In the actual event of cardio-pulmonary resuscitation, or a mock drill of the same, all the activities along with the personnel attended shall be recorded. At the minimum, it shall include timeliness of response, availability of human resources, equipment, drugs, and barriers if any. The recording could be done using the pre-defined procedural checklist and by monitoring whether the prescribed activity has been performed properly and in the right sequence.

**Achievement****e. A post-event analysis of all cardiac emergencies in dental chair station is done by an expert committee, duly constituted by the head of DHSP.**

**Interpretation:** The analysis shall focus on the initiation of CPR, time of arrival of the team, availability of required resources, recording of the sequence of events during CPR (including technique) and the overall coordination.

**Commitment****f. Corrective and preventive measures are taken based on the post-event analysis.**

**Interpretation:** Corrective and preventive measures shall be completed within a defined time frame. The findings of the post-event analysis are communicated to the personnel participating in the CPR. Any lapses shall be discussed, with the view to improve the outcomes in future. During subsequent resuscitations, it is preferable that implementation of these actions is noted and training be modified, if necessary.

**CORE**

- g. Staff providing direct patient care is trained and periodically updated in cardio-pulmonary resuscitation.**

**Interpretation:** These aspects shall be covered by hands on training on a regular, periodic by qualified personnel and documented.

**Standard****COP.4.****Organisation provides safe paediatric services.****Objective Elements****Commitment**

- a. Paediatric services are organised and provided safely. \***

**Interpretation:** Written guidance based on standard treatment guidelines/sound clinical practices governs the organisation and delivery of safe paediatric care. At a minimum, this shall include assessment of these patients, organisation of care, and addressing special needs. The written guidance shall also define the scope of its paediatric services.

**Commitment**

- b. Provisions are made for special care of children.**

**Interpretation:** Adequate amenities for the care of children to be available in the DHSP. For example play area, toys etc.

**Standard****COP.5.****The organisation identifies and manages patients who are at higher risk of morbidity/mortality.****Objective Elements****Commitment**

- a. The organisation identifies and manages vulnerable patients. \***

**Interpretation:** Written guidance for Identification and management of vulnerable patients is developed in consonance with statutory requirements, national and international guidelines. It shall include (but not limited to) elderly, children, differently-abled and/or mentally challenged, mentally ill, patients under sedation and anaesthesia, pregnant women etc. The guidance shall state who is responsible for identifying these patients, risk management in these patients and monitoring of these patients.

The guidance shall include how informed consent is obtained from a vulnerable patient, and from the family or legal representative of a patient incapable of making an independent decision. Care is organised and delivered in accordance with written guidance. Refer to the glossary for a definition of “vulnerable patient”.

**Commitment**

- b. **The DHSP provides for a safe and secure environment for the vulnerable patient.**

**Interpretation:** The organisation shall provide proper environment considering the requirement of the vulnerable patient. For example, fall prevention measures.

**Standard****COP.6.**

**Written guidance governs the care of patients undergoing local anaesthesia.**

**Objective Elements****Commitment**

- a. **The DHSP formulates a written guidance regarding administration of local anaesthesia and is in consonance with the national/ international guidelines.**

**Interpretation:** The protocol shall cover selection of LA drug, mode of administration, hypersensitivity test, safe disposal of used needles, ampoules etc. Identification of anxious patients, administration of anti-anxiety medication, topical LA and psychological counselling is carried out.

**Commitment**

- b. **Informed consent for administration of local anaesthesia is obtained.**

**Interpretation:** The informed consent shall be taken by the dental surgeon from the patient and/or patient's family members before administering local anaesthesia.

**Commitment**

- c. **Competent and trained dental surgeon administer Local Anaesthesia.**

**Interpretation:** Whenever Infiltration or inferior alveolar nerve block is given, this may be administered by a dental surgeon. The technician shall not administer local anaesthesia.

**Standard****COP.7.**

**Procedural sedation is provided in a consistent and safe manner.**

**Objective Elements****Commitment**

- a. **Dental procedural sedation is administered in a consistent manner. \***

**Interpretation:** Written guidance is based on standard treatment guidelines/sound clinical practices governs the administration of procedural sedation. At a minimum, this shall include identification of procedures where this is required, the mechanism for writing orders, the pre-procedure assessment, monitoring during and after the procedure and the discharge/transfer out criteria after the dental procedure.



**Commitment****b. Informed consent for administration of procedural sedation is obtained.**

**Interpretation:** The informed consent shall be taken by the dental surgeon administering sedation or a anaesthetist member of the team administering sedation.

**Commitment****c. Competent and trained persons administer sedation.**

**Interpretation:** Whenever a parenteral route is used, this may be administered by a dental surgeon or an anaesthetist under the supervision of the team. A technician shall not administer sedation.

**Standard****COP8.**

**Written guidance governs the care of patients undergoing dental procedures.**

**Objective Elements****Commitment****a. Dental surgical services are provided in a consistent and safe manner.**

**Interpretation:** Written guidance based on standard treatment guidelines/sound clinical practices governs the provision of dental surgical services. This shall include the list of dental surgical procedures as well as the competency level for performing these procedures.

**Commitment****b. Dental surgical patients undergo a preoperative assessment, a documented pre-operative diagnosis, and pre-operative instructions are provided before dental surgery.**

**Interpretation:** Patients undergoing surgery are assessed pre-operatively, a pre-operative diagnosis is made, and pre-operative instructions documented. The relevant pre-operative instructions are provided to all concerned, including patient/family. This shall apply to all elective cases and whenever possible, to emergency cases. This shall be done by the operating dental surgeon or a doctor member of the operating team.

**Commitment****c. An informed consent is obtained by the treating dental surgeon prior to the procedure.**

**Interpretation:** The consent shall be taken by the operating surgeon or a doctor member of the operating team. In case if there is a change in clinical status/expected outcomes after the consent, but before the surgery, the same is explained to the patient/family and is documented. In case, a new and/or an additional procedure that was not planned or for which and explicit consent had been taken before the surgery, a fresh consent needs to be taken for the same except in the case of life-saving procedures.

**CORE**

- d. Care is taken to prevent adverse events like the wrong site, wrong patient and wrong surgery. \***

**Interpretation:** Written guidance shall be available for preventing adverse events like the wrong site, wrong patient, wrong surgery by a suitable mechanism. The DHSP shall be able to demonstrate methods to prevent these events, for example, identification tags, badges, cross-checks, time-outs etc.

Refer to WHO "Safe surgery saves lives" initiative.

There is consistency in marking surgical sites across the DHSP. Any exception for not doing site marking shall have justifiable reasons. [responsibility for ensuring the correct site (including side where applicable)/ patient/ procedure verification rests within all team members. However, the person performing the procedure carries ultimate responsibility. In case the procedure is being performed by a person in training, the supervising clinician carries ultimate responsibility.]

**Commitment**

- e. An operative note is documented before transfer out of patient.**

**Interpretation:** This note provides information about the procedure performed, post-operative diagnosis and the status of the patient before shifting and shall be documented by the dental surgeon /doctor member of the operating team. If it is documented by a person other than the chief operating dental surgeon, the same shall be countersigned by the chief dental surgeon. At a minimum, it shall include the surgery performed, name of the dental surgeon(s), name of anaesthesiologist(s), salient steps of the procedure and the key intra-operative findings.

**Commitment**

- f. Written guidance guides the post-procedure management with a. specific instructions for the patient and b. taking care of specific needs of patients.**

**Interpretation:** A protocol of post-procedure management shall be in place detailing do's and don'ts, drug prescriptions, if needed, contact details for any emergencies and next maintenance appointment schedule. The protocol shall include written standard post-procedure instruction leaflet to be provided to each patient undergoing the procedure. This shall include modifying post procedure instructions depending upon patient's medical needs or habits.

**Achievement**

- g. A quality assurance program is followed for the surgical services.**

**Interpretation:** The written guidance for quality assurance could be developed individually, or it could be a part of the organisation's overall quality-improvement programme. The organisation shall monitor care-related outcomes. For example, intra-operative mishaps such as cautery burns, patient fall, position related nerve injuries; and peri-operative events including surgical site infections, nerve, vascular trauma etc. The organisation's quality assurance programmes shall also include aspects like pre-operative preparation, antibiotic prophylaxis, adherence to set procedure(s) to prevent adverse events, etc.

## Standard

**COP.9.**
**Written guidance guides appropriate pain management.**

## Objective Elements

**Commitment**
**a. Patients in pain are effectively managed. \***

**Interpretation:** Written guidance based on sound clinical practices governs the care of patients in pain. It shall include as to how patients are screened for pain, the mechanism to ensure that a detailed pain assessment is done (when necessary), pain mitigation techniques and monitoring.

**Commitment**
**b. Patients are screened for pain.**

**Interpretation:** Patients entering the DHSP shall be screened for pain. Pain shall be considered the fifth vital sign. Screening could be done by incorporating a yes/no question for pain in the initial assessment.

**Commitment**
**c. Patients with pain undergo detailed assessment and periodic reassessment.**

**Interpretation:** A detailed pain assessment is done when the pain is the predominant (or one of the main) symptom(s). For example, dental pain, trigeminal neuralgia and TMJ disorder. It shall be done for all post-operative patients. The pain assessment shall include the intensity of the pain (can be done using an age-appropriate validated pain rating scale), pain character, frequency, location, duration and referral and/or radiation. The assessment shall be done in an objective manner so that it facilitates regular reassessment.

## References:

1. 2015 American Heart Association Guidelines: Update for CPR and ECC. (2015).
2. Anaesthesia Care Standards and Practice Guidelines. American Society of Anesthesiologists. (n.d.). Retrieved on May 03 2022, from <https://www.asahq.org/standards-and-guidelines>
3. Chou, R., Gordon, D. B., De Leon-Casasola, O. A., Rosenberg, J. M., Bickler, S., Brennan, T., et al. Management of Postoperative Pain: A Clinical Practice Guideline From the American Pain Society, the American Society of Regional Anesthesia and Pain Medicine, and the American Society of Anesthesiologists' Committee on Regional Anesthesia, Executive Committee, and Administrative Council. *J Pain* 2016 Feb;17(2):131-57. doi: 10.1016/j.jpain.2015.12.008.
4. Christ, M., Grossmann, F., Winter, D., Bingisser, R., & Platz, E. (2010). Modern Triage in the Emergency Department. *Deutsches Aerzteblatt Online*. doi:10.3238/arztebl.2010.0892
5. Clinical practice Guideline for Chronic Pain. (2018). Japanese Society for the Study of Pain. Retrieved on May 03 2022, from [https://plaza.umin.ac.jp/~jaspain/pdf/consortium\\_20180913en.pdf](https://plaza.umin.ac.jp/~jaspain/pdf/consortium_20180913en.pdf)
6. Correction to: 2017 American Heart Association Focused Update on Adult Basic Life Support and Cardiopulmonary Resuscitation Quality: An Update to the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. (2018). *Circulation*, 137(1). doi:10.1161/cir.0000000000000555
7. Deutsch, E. S., Yonash, R. A., Martin, D. E., Atkins, J. H., Arnold, T. V., & Hunt, C. M. (2018). Wrong-site nerve blocks: A systematic literature review to guide principles for prevention. *Journal of Clinical Anesthesia*, 46, 101-111. doi:10.1016/j.jclinane.2017.12.008
8. Haynes, A. B., Berry, W. R., & Gawande, A. A. (2015). What Do We Know About the Safe Surgery Checklist Now? *Annals of Surgery*, 261(5), 829-830. doi:10.1097/sla.0000000000001144
9. Henke, P., and Pannucci, C. (2010). VTE Risk Factor Assessment and Prophylaxis. *Phlebology*, 25(5):219-223. doi:10.1258/phleb.2010.010018. Retrieved on May 03 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4487984/pdf/nihms702670.pdf>
10. Hinkelbein, J., Lamperti, M., Akeson, J., Santos, J., Costa, J., De Robertis, E., ... Fitzgerald, R. (2017). European Society of Anaesthesiology and European Board of Anaesthesiology guidelines for procedural sedation and analgesia in adults. *European Journal of Anaesthesiology*, 1. doi:10.1097/eja.0000000000000683
11. Implementation Handbook on Emergency severity index: A Triage Tool for Emergency Department Care. Version 4. Agency for Healthcare Research and Quality. (2020). Retrieved on May 03 2022, from [https://www.ena.org/docs/default-source/education-document-library/triage/esi-implementation-handbook-2020.pdf?sfvrsn=fdc327df\\_4](https://www.ena.org/docs/default-source/education-document-library/triage/esi-implementation-handbook-2020.pdf?sfvrsn=fdc327df_4)
12. Kleinman, M. E., Goldberger, Z. D., Rea, T., Swor, R. A., Bobrow, B. J., Brennan, E. E., ... Travers, A. H. (2018). 2017 American Heart Association Focused Update on Adult Basic Life Support and Cardiopulmonary Resuscitation Quality: An Update to the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. *Circulation*, 137(1). doi:10.1161/cir.0000000000000539

13. Ministry of Health and Family Welfare, Government of India. (n.d.). Standard Treatment Guidelines (Speciality/Super Speciality wise). Retrieved on May 03 2022, from <http://clinicaestablishments.gov.in/En/1068-standard-treatment-guidelines.aspx>
  14. Mishra, S., Mukhopadhyay, K., Tiwari, S., Bangal, R., Yadav, B. S., Sachdeva, A., & Kumar, V. (2017). End-of-life care: Consensus statement by Indian Academy of Pediatrics. *Indian Pediatrics*, 54(10), 851- 859. doi:10.1007/s13312-017-1149-4
  15. Montori, V. M., Brito, J. P., & Murad, M. H. (2013). The Optimal Practice of Evidence-Based Medicine. *JAMA*, 310(23), 2503. doi:10.1001/jama.2013.281422
  16. Practice Guidelines for Moderate Procedural Sedation and Analgesia 2018. (2018). *Anesthesiology*, 128(3), 437-479. doi:10.1097/aln.0000000000002043
  17. Roback, M., Green, S., Andolfatto, G., Leroy, P., & Mason, K. (2018). Tracking and Reporting Outcomes Of Procedural Sedation (TROOPS): Standardized Quality Improvement and Research Tools from the International Committee for the Advancement of Procedural Sedation. *British Journal of Anaesthesia*, 120(1), 164-172. doi:10.1016/j.bja.2017.08.004
  18. Salins, N., Muckaden, M., Nirabhawane, V., Simha, S., Macaden, S., Kulkarni, P., & Joad, A. (2014). End of life care policy for the dying: Consensus position statement of indian association of palliative care. *Indian Journal of Palliative Care*, 20(3), 171. doi:10.4103/0973-1075.138384
  19. Sedation in children and young people. National Institute for Health and Clinical Excellence (NICE Guidelines). May 03 2022, from <https://www.nice.org.uk/guidance/cg112/evidence/full-guideline-136287325>
  20. Van Rein, E. A., Van der Sluijs, R., Voskens, F. J., Lansink, K. W., Houwert, R. M., Lichtveld, R. A., ... Van Heijl, M. (2019). Development and Validation of a Prediction Model for Prehospital Triage of Trauma Patients. *JAMA Surgery*, 154(5), 421. doi:10.1001/jamasurg.2018.4752
- WHO Guidelines for Safe Surgery 2009: Safe Surgery Saves Lives. World Health Organization. World Alliance for Patient Safety. (2009). Retrieved on May 03 2022, from <https://apps.who.int/iris/handle/10665/44185>

# Chapter 3

## Management of Dental Material & Medication (MOM)



**Intent of the chapter:** The DHSP has a safe and organized medication process. The availability, safe storage, prescription, dispensing and administration of medications is governed by written guidance. The standards encourage integration of the pharmacy into everyday functioning of clinics and patient care. The pharmacy should guide and audit medication processes. The pharmacy should have oversight of all stocked out medications. The pharmacy should ensure correct storage (as regards to temperature, look-alike, sound-alike etc.), expiry dates and maintenance of documentation.

The availability of emergency medication is stressed upon. The DHSP should have a mechanism to ensure that emergency medications are standardized throughout the DHSP, readily available and replenished promptly. There should be a monitoring mechanism to ensure that the required medications are always stocked and well within expiry dates.

Every high-risk medication order should be verified by an appropriate person so as to ensure accuracy of the dose, frequency and route of administration.

The process also includes monitoring of patients after administration and procedures for reporting and analysing medication errors.

Patients and family members are educated about safe medication and food-drug interactions.

Medications also include blood, implants, devices and medical gases.

### Summary of Standards

MOM.1.	The DHSP develops, updates and implements a formulary.
MOM.2.	Medications and dental materials are stored appropriately and are available where required.
MOM.3.	Medications are prescribed safely and rationally
MOM.4.	Medications orders are written in a uniform manner.
MOM.5.	Medications are dispensed in a safe manner (if applicable).
MOM.6.	There are defined procedures for medication administration.
MOM.7.	Patients are monitored after medication administration.
MOM.8.	Implantable prosthesis and dental devices are used in accordance with laid down criteria.
MOM.9.	Medical supplies and consumables are stored appropriately and are available where required.

Objective Element	MOM1	MOM 2	MOM 3	MOM 4	MOM 5	MOM 6	MOM 7	MOM 8	MOM 9
a.	Core	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
b.	Commitment	Commitment	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
c.	Commitment	Core	Commitment		Commitment	Commitment	Core	Commitment	Commitment
d.	Excellence	Achievement	Excellence		Core	Core	Commitment	Commitment	Commitment
e.	Commitment	Core	Core		Core	Commitment	Commitment	Achievement	Commitment
f.	Commitment	Commitment	Achievement				Commitment		
g.		Core	Achievement						
h.			Core						

## Standard

**MOM.1.**
**The DHSP develops, updates and implements a formulary.**

## Objective Elements

### CORE

- a. **A list of dental material and medications appropriate for patients as per the scope of the DHSP's clinical services is developed collaboratively by a multi-disciplinary committee.**

**Interpretation:** A multidisciplinary committee, with defined roles and responsibilities, shall prepare the DHSP's formulary.

Some of the responsibilities of the committee include developing medication management processes; developing and revising the DHSP's formulary, evaluating medication and material use and patient safety incidents involving medications.

For dental chair set up, at a minimum, a dental surgeon should be a part of the committee.

The formulary shall include medications and dental material necessary to meet the DHSP's mission, patient needs and scope of services. The formulary could be prepared keeping in mind the "National List of Essential Medicines" and "WHO Model List of Essential Medicines". The list of dental material could be based on national or international standards like WHO/ANSI/ADA/ISO/CE. The DHSP shall look at the possibility of having system-wise/speciality wise formulary. The DHSP shall categorize dental material department-wise and on the basis of usage.

At a minimum, the formulary should include the name of the molecule, formulation and strength(s). The DHSP should endeavour to limit the number of drug concentrations of a particular drug in the formulary.

Implants and devices also come under drugs.

### Commitment

- b. **The list is reviewed and updated collaboratively by the multidisciplinary committee at least annually.**

**Interpretation:** The committee may review and update all medications and dental materials or only certain medication categories. The review may be done speciality-wise. Non-formulary drugs which were procured in the previous year regularly may be included in the revised list. Aspects of patient safety, including adverse drug reactions, changing disease pattern, changing resistance pattern, and cost, could be taken into consideration during the review. Adverse reactions, durability, function, aesthetics and cost could be taken into consideration during the review for dental material.



**Commitment**

- c. **The current formulary is available for dentists/ dental surgeons to refer to.**

**Interpretation:** The current formulary shall be made available to all treating dentists and dental surgeons of the DHSP. The DHSP needs to ensure that clinicians have access to the current version of the formulary. The formulary could be made available in either physical or electronic form.

**Excellence**

- d. **Dentists/ dental surgeons adhere to the current formulary.**

**Interpretation:** The DHSP shall ensure that the prescriptions are as per the formulary. It shall monitor the frequency of prescriptions being rejected/ or which local purchase is done because it contained non-formulary drugs.

**Commitment**

- e. **The DHSP adheres to the written guidance for acquisition of formulary medications. \***

**Interpretation:** The written guidance should address the issues of vendor selection, vendor evaluation, reorder levels, indenting process, generation of the purchase order, and receipt of goods. The guidance also addresses managing stock-outs due to various reasons.

**Commitment**

- f. **The DHSP adheres to the procedure to obtain medications not listed in the formulary. \***

**Interpretation:** Written guidance shall be used to obtain medications not listed in the formulary. Whenever there is a local purchase of medication that is not listed in the formulary, the DHSP has a process of evaluation, authorisation and ratification and to decide on its subsequent inclusion in formulary if necessary. Local purchase/hotline, which takes care of the immediate requirement are examples of the procedure to obtain medications not listed in the formulary.

**Standard****MOM.2.****Medications are stored appropriately and are available where required.****Objective Elements****CORE**

- a. **Medications are stored in a clean, safe and secure environment; and incorporating the manufacturer's recommendation(s).**

**Interpretation:** Restorative dental material like composites, biologic-based combination products (such as bone filling materials) could preferably be kept in refrigerators. Where appropriate, temperature monitoring of the room and the cold storage area/refrigerator shall be done at least once a day. In case of areas which are not opened daily, it shall be done on all working days.

The medication storage space shall be clean, safe and secure. The DHSP shall adhere to the storage requirements of the drug as specified by the manufacturer. In the absence of manufacturer's instructions, the DHSP shall develop and implement storage requirements. Storage requirements shall apply to all areas where medications and dental material are stored, including wards and in house dental labs respectively. Beyond expiry date drugs (before disposal), shall be stored separately and away from drugs/ material which are intended for patient use.

It is preferable that the medication storage area is organised. Overall cleanliness of the storage area shall be maintained.

Where appropriate, temperature monitoring of the room, the cold storage area/refrigerator shall be done at least once a day. In case of areas which are not open on all days, it shall be done on all working days.

Medications shall be protected from loss or theft. Some of the ways of ensuring this is to limit access to medication storage areas to authorised team members, locking medication carts and never leaving them unattended, or storing medications in an area that is continuously staffed. To check for loss or theft, the DHSP could conduct audits at regular intervals (as defined by the DHSP) to verify the stock and detect instances of loss or theft.

## Commitment

### b. Sound inventory control practices guide storage of the medications.

**Interpretation:** DHSP shall follow sound inventory control practices like ABC, VED, FSN, First Expiry First Out, Lead Time Analysis, etc. or a combination of these.

Dental material is available at all times and is replenished promptly when used. Adequate quantity of dental material should be stocked at all times. An inventory check shall be done at least daily/weekly to ensure the same.

Medicines can be stored in an alphabetical order of their generic names. The DHSP also has a mechanism for handling medications which are not a part of the regular inventory. For example, a physician's sample medications.

## CORE

### c. The DHSP defines a list of high-risk medication(s). \*

**Interpretation:** High risk/high alert medications carry a heightened risk for adverse outcomes and catastrophic harm whenever there is an error. High-risk medications/high alert medications include medicines with a low therapeutic window, controlled substances, psychotherapeutic medications, look-alike and sound-alike medications, and concentrated electrolytes.

**Achievement**

- d. **High-risk medications are stored in areas of the DHSP where it is clinically necessary.**

**Interpretation:** High-risk medications are stored in pre-determined areas of the DHSP. Clinical needs shall determine the availability of these drugs in such areas. In all such areas, safeguards shall be in place to prevent inadvertent administration.

**CORE**

- e. **High-risk medications including look-alike, sound-alike medications and different concentrations of the same medication are stored physically apart from each other. \***

**Interpretation:** Many drugs in ampoules, vials or tablets may appear similar (look-alike) or have similarly sounding names (sound-alike). The same also applies to impression and restoration dental material. These drugs and material are identified periodically, and the Look-alike Sound-alike medications (LASA) list shall be made available in all units where drugs and dental material are stored. Different concentrations of the same drug need to be identified. The list shall be developed from the formulary. The list will have to be revised at regular intervals depending on the changes in the formulary and changes in the packaging (in case of look-alike). A good practice is to store the two identified look-alike/sound-alike drugs or different concentrations of the same drugs as far apart physically as possible, say at opposite ends of the room. This is in addition to regular storage practices.

**Commitment**

- f. **The list of emergency medications is defined and is stored uniformly. \***

**Interpretation:** The list of emergency medications shall be prepared in consonance with sound clinical practices and documented. A crash cart would help the DHSP to store these medications in a standardised manner, i.e. the rows and drawers have defined medicines. No other drug shall be kept stored with emergency medications.

**CORE**

- g. **Emergency medications and dental materials are available at all times and are replenished promptly when used.**

**Interpretation:** Adequate quantity of emergency medicines and dental materials should be stocked at all times. An inventory check shall be done at least daily to ensure this.

**Standard****MOM.3.****Medications are prescribed safely and rationally.****Objective Elements**

**Commitment**

- a. **Medication prescription is in consonance with good practices/guidelines for the rational prescription of medications.**

**Interpretation:** This should address out-patient prescription. The DHSP shall ensure that the dental surgeons are trained/sensitised on the rational prescription of medications. WHO states: "Rational use of medicines requires that patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and their community."

Refer to the glossary for a definition of "prescription".

**CORE**

- b. **The DHSP adheres to the determined minimum requirements of a prescription. \***

**Interpretation:** Prescriptions generated within the DHSP ( OPD and emergency) shall adhere to national/international guidelines and those of regulatory bodies. At a minimum, the prescription shall have the name of the patient; unique number; name of the drug (generic composition is mandatory except in the case of combinations of vitamins and/or minerals), strength, dosage instruction, duration and total quantity of the medicine; name, signature and registration number of the prescribing doctor. Only the designated medical officer(s) who is permitted by the relevant regulatory authority shall prescribe narcotics Error-prone abbreviations shall not be used. A good reference is the Institution for Safe Medication Practices guidelines. All prescriptions shall be written in capital letters. Prescription errors or illegible prescriptions will be initialled after single strikethrough and rewritten. A good reference is the Drugs and Cosmetics Act and the Code of Medical Ethics.

**Commitment**

- c. **Drug allergies and previous adverse drug reactions are ascertained before prescribing.**

**Interpretation:** Drug allergy and previous adverse drug reaction shall be ascertained during the initial consultation or at any point in time during care. It is a good practice to document drug allergies prominently in the medical record, both in OP and IP.

**Excellence**

- d. **The DHSP has a mechanism to assist the clinician in prescribing appropriate medication.**

**Interpretation:** The DHSP needs to provide its dental surgeons with a mechanism(s) to help identify drug interactions, food-drug interactions, therapeutic duplication, dose adjustments etc. This could either be in electronic or physical form.

**CORE****e. Written guidance governs implementation of verbal orders and ensures safe medication management practices. \***

**Interpretation:** The DHSP shall ensure safe medication management practices for verbal orders through written guidance and implementation of the same. The written guidance shall mention who can give verbal orders, when can they be given and how these orders will be authenticated. Verbal orders should be limited to urgent situations where immediate written or electronic communication is not practical. To the extent possible, their usage should be limited. The DHSP should have an approved list of formulary drugs which can be ordered verbally. This list can be defined either by inclusion or exclusion.

It shall ensure that the procedure incorporates good practices like “repeat back/read back”.

A verbal order shall be counter-signed by the doctor who ordered it within 24 hours of ordering.

**Achievement****f. Audit of medication orders/prescription is carried out to check for safe and rational prescription of medications.**

**Interpretation:** The scope of the audit shall include:

- Legibility, use of capitals in written orders;
- The appropriateness of the drug, dose, frequency, and route of administration;
- The presence of therapeutic duplication;
- The possibility of drug interaction and measures taken to avoid the same;
- The possibility of food-drug interaction and measures taken to avoid the same.
- The requirements of this standard (MOM.3.b. to g.).

This shall be done at least once a month using a representative sample size.

It could preferably be done by a clinical pharmacologist/clinical pharmacist. In case there is no clinical pharmacologist/clinical pharmacist, it shall be done by the multidisciplinary committee.

**Achievement****g. Corrective and/or preventive action(s) is taken based on the audit, where appropriate.**

**Interpretation:** The records of the same have to be maintained. It is preferable that corrective and/or preventive action(s) is taken based on the root-cause analysis.

**CORE****h. Reconciliation of medications occurs at transition points patient care**

**Interpretation:** The purpose of reconciliation of medication is to ensure that the list of medication that a patient has to receive is complete and up-to-date with past clinical conditions and present care plan. The prescribed medications shall be checked for accuracy at the transition points, such as the time of entry in the DHSP. It is preferable that medication reconciliation also occurs after cross-consultation. Medication reconciliation should be documented.

**Standard****MOM.4.****Medications orders are written in a uniform manner.****Objective Elements****Commitment****a. The DHSP ensures that only authorised personnel write orders. \***

**Interpretation:** Medication orders shall be written by a dentist/dental surgeon who at a minimum, holds a BDS qualification. In case there is any other category of staff authorised to write medication orders, the same shall be backed by a legislation or government order. In facilities which use Electronic Medical Record (EMR), the dentist shall directly enter the prescription using his or her unique login. In case the HIS entry is made by an assistant, the same shall be verified and authorised by the dental surgeon.

**Commitment****b. Orders for medicines are written in a uniform location in the medical records, which also reflects the patient's name and unique identification number.**

**Interpretation:** Medication orders shall be written in capital letters. In case abbreviations are used, a list of approved standardised abbreviations for medication orders shall be used throughout the DHSP. Error-prone abbreviations shall not be used. A good reference is the Institution for Safe Medication Practices guidelines. Medication orders contain the name of the medicine, route of administration, strength to be administered and frequency/time of administration.

**Standard****MOM.5.****Medications are dispensed in a safe manner (if applicable).****Objective Elements**

**Commitment****a. Dispensing of medications is done safely. \***

**Interpretation:** Written guidance is laid down for the dispensing of medications. Medications should be dispensed only against a valid prescription or medication order (except for over-the-counter drugs). The medication should be checked before dispensing. This should include a check of the generic composition, formulation, expiry date, and where applicable the strength. This shall include both bulk and retail pharmacy.

Physicians' samples shall not be sold.

**Commitment****b. Medication and dental material recalls are handled effectively. \***

**Interpretation:** Recall may be based on communication from regulatory authorities, manufacturers or internal feedback (e.g., visible contaminant in Lignocaine or variation in setting time of alginate, allergic reaction impression materials and composites Recall procedure in response to internal feedback also includes providing information to the appropriate regulatory authority.

**Commitment****c. Near-expiry medications are handled effectively. \***

**Interpretation:** The DHSP could define as to what constitutes "near expiry", for example, three months before the expiry date. The DHSP's mechanism shall ensure that near expiry drugs are withdrawn and that no beyond expiry date medication is available.

**CORE****d. Dispensed medications are labelled. \***

**Interpretation:** At a minimum, the label must include the dosage instruction in a manner that the patient understands. Labelling is applicable only for out-patients. In instances when medicines are dispensed either as cut strips or from bulk containers, the label must include the drug name, strength, dosage instruction (in a manner that the patient understands) and expiry date. This shall be applicable for out-patients.

**CORE****e. High-risk medication orders are verified before dispensing.**

**Interpretation:** High-risk medications shall be given only after written orders, and which should be verified by the staff before dispensing. This shall adhere to statutory requirements where applicable.

## Standard

### MOM.6.

### Medications are administered safely.

## Objective Elements

#### Commitment

#### a. Medications are administered by those who are permitted by law to do so.

**Interpretation:** Only a registered nurse or doctor with a minimum of BDS qualification shall administer medication. In case there is any other category of staff authorised to administer medication, a legislation or government order shall back the same.

#### Commitment

#### b. Prepared medication is labelled prior to preparation of a second drug.

**Interpretation:** Labelling is required when more than one drug is prepared and loaded. Examples of these are anaesthetic drug preparation in OTs.

#### Commitment

#### c. The patient is identified prior to administration.

**Interpretation:** At a minimum, two identifiers shall be used for identification with one of them being the unique identification number (e.g., number/IP number, etc.) and name.

#### CORE

#### d. Medication is verified from the prescription and physically inspected before administration.

**Interpretation:** Staff administering medications should verify the medication order and ensure that medications are administered appropriately. It is required to check the general appearance of the medication (e.g., melting, clumping, etc.) and the expiry dates before administration. If any of the parameters concerning an order, namely name, strength, route or frequency/time are missing or incomplete, administration of medication shall be deferred pending early verification by the treating team. In case the confirmation is obtained verbally, it shall be considered a verbal order and the procedure for verbal orders shall be adhered to.

In the case of high-risk medication(s), the verification shall be done by at least two staff (nurse-nurse or nurse-doctor) independently and documented.

#### Commitment

#### e. Strength, route and timing is verified from the order and medication administration is documented.

**Interpretation:** Before administration, the person administering the drug shall verify the strength from the medication order. In case of discrepancy, medication administration shall be deferred. Where applicable, the site of administration shall also be verified. The organisation shall ensure that the documentation of medication



administration is done in a uniform location. It shall include the name of the medication, strength, route of administration, timing and the name/employee ID number and signature of the person who has administered the medication. Medicines administered are documented each time for each dose of the same medication separately.

## Standard

### MOM.7.

### Patients are monitored after medication administration.

## Objective Elements

#### Commitment

#### a. Patients are monitored after medication administration

**Interpretation:** Relevant monitoring is done collaboratively to verify that medicine is having its intended effect. Medication administration is documented. Besides, this should help identify near misses, medication errors and adverse drug reactions.

#### Commitment

#### b. Medications are changed where appropriate based on the monitoring.

**Interpretation:** Medication changes are based on clinical response and adverse drug reactions if any.

#### CORE

#### c. The DHSP captures near miss, medication error and adverse drug reaction. \*

**Interpretation:** Near miss, medication error and adverse drug reaction are defined. This shall be in consonance with best practices. The DHSP shall have written guidance to direct the implementation of identifying, documenting, reporting, analysing and acting in response to a near miss, medication error and adverse drug reaction.

Refer to the glossary for “near miss”, “medication error” and “adverse drug reaction”.

#### Commitment

#### d. Near misses, medication error and adverse drug reaction are reported within a specified time frame. \*

**Interpretation:** The DHSP shall define the timeframe for reporting once any of this has occurred and adhere to the same.

#### Commitment

#### e. Near misses, medication errors and adverse drug reactions are collected and analysed.

**Interpretation:** Details of near miss, medication error and adverse drug reaction incidents are collected and analysed by a multidisciplinary team, which includes the dental surgeon. The analysis shall be completed in a defined time frame.

**Commitment****f. Corrective and/or preventive action(s) are taken based on the analysis.**

**Interpretation:** Where appropriate, corrective and/or preventive action are taken. The records of the same have to be maintained. It is preferable that corrective and/or preventive action(s) is taken based on the root-cause analysis.

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**Standard**
**MOM.8.**

**Implantable prosthesis and dental devices are used in accordance with laid down criteria.**

**Objective Elements****Commitment****a. Usage of the implantable prosthesis and dental devices is guided by scientific criteria for each item and national / international recognised guidelines / approvals for such specific item(s).**

**Interpretation:** The DHSP shall ensure that relevant and sufficient scientific data are available before selection. It shall also look for international (e.g.US-FDA) or national notification (Central Drugs Standard Control Organization notification based on the Drugs and Cosmetics Act) for approval of the particular product. The multidisciplinary committee shall be responsible for approving the use of a particular implant.

**Commitment****b. The DHSP implements a mechanism for the usage of the implantable prosthesis and dental devices. \***

**Interpretation:** The DHSP has written guidance to direct procurement, storage/stocking, issuance and usage of the implantable prosthesis and dental devices. This should address statutory regulations/guidelines and manufacturer's recommendation(s).

**Commitment****c. Patient and his/her family are counselled for the usage of the implantable prosthesis and dental device, including precautions if any.**

**Interpretation:** Precautions could include good oral hygiene and change in food habit; reporting to the dentist if a particular symptom occurs.

**Commitment****d. The batch and serial number of the implantable prosthesis are recorded in the patient's medical record and the master logbook.**

**Interpretation:** In the case where implantable prosthesis does not have pre-labelled stickers, the DHSP shall have suitable mechanisms in place for identifying the implant (manufacturer, type, size, batch number, serial number) and any other important detail.

**Achievement****e. Recall of implantable prosthesis and dental devices are handled effectively. \***

**Interpretation:** Recall may be based on communication from regulatory authorities, manufacturer or internal feedback. Recall procedure in response to internal feedback also includes providing information to appropriate regulatory authority and manufacturer.

**Standard****MOM.9.**

**Dental supplies and consumables are stored appropriately and are available where required.**

**Objective Elements****Commitment****a. The organisation adheres to the defined process for the acquisition of medical supplies and consumables. \***

**Interpretation:** In this context, medication supplies and consumable refer to those items used in patient care, excluding medications, implants and dental material. This process should address the issues of vendor selection, vendor evaluation, indenting process, generation of the purchase order and receipt of goods.

**Commitment****b. Medical supplies and consumables are used in a safe manner, where appropriate.**

**Interpretation:** The items are opened and used using relevant precautions maintain sterility and integrity.

**Commitment****c. Medical supplies and consumables are stored in a clean, safe and secure environment; and incorporating the manufacturer's recommendation(s).**

**Interpretation:** The organisation shall ensure that the storage requirements specified by the manufacturer are adhered to. This shall apply to all areas where these are stored, including wards. They shall be protected from loss or theft. Overall cleanliness of the storage area shall be maintained. Hazardous materials are identified and kept safely.

**Commitment****d. Sound inventory control practices guide storage of medical supplies and consumables.**

**Interpretation:** The organisation shall follow or demonstrate ABC, VED, FSN, First Expiry First Out, lead time analysis etc.

**Commitment**

- e. **There is a mechanism in place to verify the condition of medical supplies and consumables.**

**Interpretation:** Medical supplies and consumables shall be in a condition suitable for safe usage. The conditions of the se materials shall be checked before dispensing and usage. For example, opened package, damp cotton roll, physical damage and unwanted discolouration.

## References:

1. About Medication Errors. National Coordinating Council for Medication Error Reporting and Prevention. (2015). Retrieved May 03, 2022, from <https://www.nccmerp.org/about-medication-errors>
2. Guidelines for Standard Order Sets. Institute for Safe Medication Practices. (2010). Retrieved May 03, 2022, from <https://www.ismp.org/guidelines/standard-order-sets>
3. High-Alert Medications in Acute Care Settings. Institute for Safe Medication Practices. (2018). Retrieved May 03, 2022, from <https://www.ismp.org/recommendations/high-alert-medications-acute-list>
4. High-Risk Medicines. Clinical Excellence Commission (CEC). (n.d.). Retrieved May 03, 2022, from <https://www.cec.health.nsw.gov.au/keep-patients-safe/medication-safety/high-risk-medicines>
5. ISMP Acute Care Guidelines for Timely Administration of Scheduled Medications. Institute for Safe Medication Practices. (2011). Retrieved May 03, 2022, from <https://www.ismp.org/sites/default/files/attachments/2018-02/tasm.pdf>
6. List of Error-Prone Abbreviations. Institute for Safe Medication Practices. (2017). Retrieved May 03, 2022, from <https://www.ismp.org/recommendations/error-prone-abbreviations-list>
7. Medication Errors and Adverse Drug Events. Agency for Healthcare Research and Quality Patient Safety Network. (2019). Retrieved May 03, 2022, from <https://psnet.ahrq.gov/primer/medication-errors-and-adverse-drug-events>
8. Medication Reconciliation. Agency for Healthcare Research and Quality Patient Safety Network. (2019). Retrieved May 03, 2022, from <https://psnet.ahrq.gov/primer/medication-reconciliation>
9. Medication Safety in transition of care. World Health Organization. (2019). Retrieved May 03, 2022. <https://www.who.int/publications/i/item/WHO-UHC-SDS-2019.9> Medication errors. Technical Series on Safer Primary Care. World Health Organization (2016).
10. Medication without harm. WHO Global Patient safety Challenge. World Health Organization. (2017). Retrieved May 03, 2022. <https://www.who.int/initiatives/medication-without-harm>
11. Model Lists of Essential Medicines. World Health Organization. (n.d.). Retrieved May 03, 2022, from <https://www.who.int/groups/expert-committee-on-selection-and-use-of-essential-medicines/essential-medicines-lists>
12. National Coordinating Council for Medication Error Reporting and Prevention. (2015). Recommendations to Enhance Accuracy of Administration of Medications. Retrieved May 03, 2022, from <https://www.nccmerp.org/recommendations-enhance-accuracy-administration-medications>
13. National List of Essential Medicines. Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, Government of India. (2018, December 27). Retrieved May 03, 2022, from <https://pharmaceuticals.gov.in/sites/default/files/NLEM.pdf>
14. Pharmacovigilance Programme of India. Indian Pharmacopoeia Commission, National Coordination Centre. Retrieved May 03, 2022, from [https://ipc.gov.in/PvPI/pv\\_home.html](https://ipc.gov.in/PvPI/pv_home.html)

15. Promoting rational use of medicines: core components. World Health Organization. (2012). Retrieved May 03, 2022. [https://apps.who.int/iris/bitstream/handle/10665/67438/WHO\\_EDM\\_2002.3.pdf](https://apps.who.int/iris/bitstream/handle/10665/67438/WHO_EDM_2002.3.pdf)
16. Recommendations to Enhance Accuracy of Dispensing Medications. National Coordinating Council for Medication Error Reporting and Prevention. (2015). Retrieved May 03, 2022, from <https://www.nccmerp.org/recommendations-enhance-accuracy-dispensing-medications>
17. Seven (Potentially) Deadly Prescribing Errors. Graham, L. R., Scudder, L., & Stokowski, L. (2015). Retrieved May 03, 2022. <https://www.medscape.com/slideshow/prescribing-errors-6007087>
18. The High 5s Project –Standard Operating Protocol Assuring Medication Accuracy at Transitions in Care: Medication Reconciliation. World Health Organization. (2014). Retrieved May 03, 2022, from [https://cdn.who.int/media/docs/default-source/patient-safety/high5s/h5s-sop.pdf?sfvrsn=594d8e49\\_2&download=true](https://cdn.who.int/media/docs/default-source/patient-safety/high5s/h5s-sop.pdf?sfvrsn=594d8e49_2&download=true)
19. Tully, A. P., Hammond, D. A., Li, C., Jarrell, A. S., & Kruer, R. M. (2019). Evaluation of Medication Errors at the Transition of Care From an ICU to Non-ICU Location. *Critical Care Medicine*, 47(4), 543-549.



Objective Element	PRE 1	PRE 2	PRE 3	PRE 4	PRE 5	PRE 6	PRE 7	PRE 8
a.	Commitment	Commitment	Core	Core	Commitment	Core	Commitment	Commitment
b.	Achievement	Commitment	Commitment	Commitment	Commitment	Commitment	Core	Commitment
c.	Core	Commitment	Commitment	Core	Commitment	Commitment	Commitment	Commitment
d.	Core	Core	Achievement	Commitment	Commitment	Commitment	Commitment	Commitment
e.		Commitment	Commitment	Core	Commitment		Commitment	Achievement
f.		Commitment	Commitment					
g.		Core						
h.		Commitment						
i.		Achievement						
j.		Commitment						
k.		Commitment						
l.		Commitment						



## Standard

PRE.1.

The organisation protects and promotes patient and family rights and informs them about their responsibilities during care.

## Objective Elements

### Commitment

- a. **Patient and family rights and responsibilities are documented, displayed, and they are made aware of the same. \***

**Interpretation:** DHSP should document the patient's rights and inform them of their responsibilities. These shall be documented in consonance with Charter of Patients' Rights laid down by the statutory body. The rights and responsibilities of the patients should be displayed in the DHSP where it is prominently visible to patients, families and visitors. Pamphlets could be used to make them aware. Information, education and communication material should at least be bilingual.

### Achievement

- b. **Patient and family rights and responsibilities are actively promoted. \***

**Interpretation:** DHSP should take steps to promote actively patient and family rights and responsibilities. In the case of in-patients, the organisation shall counsel the patient and / or family on their rights and responsibilities. Counselling is done in a format and language that they can understand. In the case of out-patients, educational material shall be easily accessible and prominently displayed continually (television / standee).

### CORE

- c. **The organisation has a mechanism to report a violation of patient and family rights.**

**Interpretation:** The organisation may develop a list of such instances which could be considered as infringements of patients' and families' rights and train the staff accordingly. For example, compromising the privacy, breaching confidentiality, disrespect to the religious and cultural needs, not providing medical records within the stipulated time etc. Violation of patient and family rights is reported through an incident reporting form. It should provide details of how the right was violated and where applicable by whom. Also, there should be a mechanism for the patient and/or family to report a violation of their rights. The patient feedback form (by incorporating patient rights worded appropriately) could be used as a tool to capture violation of patient rights.

**CORE**

- d. **Violation of patient and family rights are monitored, analysed, and corrective/preventive action taken by the top leadership of the DHSP.**

**Interpretation:** Where patients' rights have been infringed upon, management must keep records of such violations, as also a record of the consequences, for example., corrective actions to prevent recurrences.

## Standard

**PRE.2.**

**Patient and family rights support individual beliefs, values and involve the patient and family in decision-making processes.**

## Objective Elements

**Commitment**

- a. **Patients and family rights include respecting values and beliefs, any special preferences, cultural needs, and responding to requests for spiritual needs.**

**Interpretation:** This could include how they wish to be addressed, dietary preferences and worship requirements. This may also include any specific requirement following death. Processes should be in place to ensure patient safety.

**Commitment**

- b. **Patient rights include respect for personal dignity and privacy during examination, procedures and treatment.**

**Interpretation:** During all stages of patient care, be it in the examination or carrying out a procedure, staff shall ensure that the patient's privacy and dignity are maintained. The DHSP shall develop the necessary guidelines for the same. During procedures, the DHSP shall ensure that the patient is exposed just before the actual procedure. With regards to photographs/recording procedures, the DHSP shall ensure that explicit informed consent is taken and that the patient's identity is not revealed.

**Commitment**

- c. **Patient and family rights include protection from neglect or abuse.**

**Interpretation:** Examples of this include falling from the bed/trolley due to negligence, assault, repeated internal examinations (unwarranted), manhandling, etc. Special precautions shall be taken, especially concerning vulnerable patients, for example,. elderly, neonates, physically and mentally challenged patients, comatose patients, patients under anaesthesia etc.

**CORE****d. Patient rights include treating patient information as confidential.**

**Interpretation:** The DHSP and the treating team shall take effective measures to maintain the confidentiality of all patient-related information. Staff shall avoid having patient-related discussions in public places. Statutory requirements regarding privileged communication shall be followed at all times (refer the glossary for a definition of privileged communication). Confidential information, including HIV status, shall not be revealed without the patient's permission. It shall not be explicitly written/pasted on the cover of the medical record, nor shall it be displayed in a manner that is easily understandable by the public at large.

**Commitment****e. Patient and family rights include the refusal of treatment.**

**Interpretation:** The treating doctor shall discuss all the available options and allow the patient to make an informed choice. In case of refusal, the treating doctor shall explain the consequences of the refusal of treatment and document the same.

**Commitment****f. Patient and family rights include a right to seek an additional opinion regarding clinical care.**

**Interpretation:** There is a mechanism for patient and family to seek a second opinion if they wish, from within or outside the organisation. The organisation shall respect the decision of the patient and family, and facilitate access to all relevant information or clinical evaluation. Request for additional information on a particular physician in terms of qualifications and experience may be provided.

**CORE****g. Patient and family rights include informed consent before the transfusion of blood and blood components, anaesthesia, surgery, initiation of any research protocol and any other invasive / high risk procedures / treatment.**

**Interpretation:** Informed consent shall be obtained by treating doctor or a doctor member of the treating team.

**Commitment****h. Patient and family rights include a right to complain and information on how to voice a complaint.**

**Interpretation:** The displayed patient rights should include the right to make a complaint and also mention the methodology to voice the same. Complaint mechanism must be accessible, and redressal of complaint must be fair and transparent

**Achievement****i. Patient and family rights include information on the expected cost of the treatment.**

**Interpretation:** Patients and families are explained about the expected costs of treatment in a transparent manner. This includes consultations, procedures and investigations. It may involve giving written estimates or making the concerned tariff available.

**Commitment****j. Patient and family rights include access to their clinical records.**

**Interpretation:** Patient and family rights include access to their clinical records.

**Commitment****k. Patient and family rights include information on the name of the treating doctor, care plan, progress and information on their health care needs.**

**Interpretation:** Information on the name of the treating doctor, care plan, the progress of the patient and the healthcare needs are discussed with patient and family.

**Commitment****l. Patient rights include determining what information regarding their care would be provided to self and family.**

**Interpretation:** The DHSP needs to evolve a mechanism to provide sensitive and/or confidential information to the patient and the next of kin if desired by the patient. In the case of minors, it will be provided to at least one of the parents/guardians.

**Standard****PRE.3.**

**The patient and/or family members are educated to make informed decisions and are involved in the care planning and delivery process.**

**Objective Elements****CORE****a. The patient and/or family members are explained about the proposed care, including the risks, alternatives and benefits.**

**Interpretation:** The proposed care, including referral to internal and/or external services, is discussed by the attending doctor with the patient and/or family members. This should be done in a language the patient/attendant can understand. The above information could be documented and signed by the doctor concerned.

**Commitment****b. The patient and/or family members are explained about the expected results.**

**Interpretation:** The patients and/or family members are explained in detail by the treating dentist or his/her team about the expected outcomes of such treatment at periodic intervals.

**Commitment****c. The patient and/or family members are explained about the possible complications.**

**Interpretation:** Possible complications of the treatment, if any, are clearly communicated to the patient and/or family members.

**Achievement**

- d. **The care plan is prepared and modified in consultation with the patient and/or family members.**

**Interpretation:** During the preparation of the care plan, the patient and/or family members are explained about the various treatment options, risks and benefits. The care plan, where possible, incorporates patient and/or family concerns and requests. The religious, cultural and spiritual views of the patient and/or family shall be considered during the process of care delivery. Incorporating patient and/or family requests shall be limited by the statutory requirements. The DHSP could develop a structured mechanism to implement and capture the same.

**Commitment**

- e. **The patient and/or family members are informed about the results of diagnostic tests and the diagnosis.**

**Interpretation:** The results of all diagnostic tests are explained at least in broad terms to patient and family members and their implication on progress and treatment.

**Commitment**

- f. **The patient and/or family members are explained about any change in the patient's condition in a timely manner.**

**Interpretation:** The counselling includes improvement, deterioration or occurrence of complications. Withholding of resuscitation requests from relatives and family could be discussed within ethical and legal parameters.

**Standard****PRE.4.****Informed consent is obtained from the patient or family about their care.****Objective Elements****CORE**

- a. **The DHSP obtains informed consent from the patient or family for situations where informed consent is required. \***

**Interpretation:** A list of procedures should be made for which informed consent is required. This shall be prepared to keep in mind the requirements of this standard and statutory requirement. For example, the policy for HIV testing should follow the national policy on HIV testing laid down by National AIDS Control Organisation (NACO). The organisation shall have written guidance explaining the various steps involved in the informed consent process and the person responsible. The staff are aware of the same.

**Commitment****b. Informed consent process adheres to statutory norms.**

**Interpretation:** This includes (but is not limited to):

- Taking consent before the procedure;
- At least one witness signing the consent form.

The witness shall be a person who was present for the entire duration of the communication between the dentist and the patient.

In case the patient has to undergo a procedure repeatedly for a long time (e.g., ortho treatment), informed consent is taken at the first instance. Such consent shall have a defined validity period but not more than six months. The patient endorses the consent at each repeat treatment. However, if there is a change in the treatment modality or an addition of another modality, then fresh consent shall be obtained.

**CORE****c. Informed consent includes information on risks, benefits, alternatives and as to who will perform the requisite procedure in a language that they can understand.**

**Interpretation:** The consent shall have the name of the dentist performing the procedure. In case a procedure requires more than one dentist from different specialities, then the same will have to be explained to the patient and consent shall include the name of the principal surgeon from each speciality who is performing the procedure. Each doctor will have to explain his role and address all aspects required for informed consent. e.g., if the dental surgery involves the requirement of a ENT surgeon, Ophthalmologist and plastic surgeon, the consent should reflect the same. It should have the names of the principal surgeons of the three specialities. It is the responsibility of each of the surgeons/team to explain their role and the benefits/risks and alternatives of the procedures they are performing on the patient.

If it is a “doctor under training” the same shall be specified. However, the name of the qualified doctor supervising the procedure shall also be mentioned.

The consent form shall at a minimum be bilingual. When consent is taken in a language other than what the patient understands, there should be clear documentation detailing the language in which the patient has been counselled and if any interpreter has been used.

It is preferable to have the risks, benefits and alternatives of the procedure as a part of the documentation. The focus is on informed consent as a process of effective communication between a doctor and patient and not a signature on a form.

**Commitment****d. The organisation describes who can give consent when a patient is incapable of independent decision making and implements the same. \***

**Interpretation:** The consent shall be taken from the patient in all cases when the patient is capable of giving consent and above the legal age for giving consent. No

one can consent on behalf of a competent adult. The organisation shall take into consideration the statutory norms when the patient is incapable of independent decision making. This would include next of kin / legal guardian. The order of preference of next of kin / legal guardian is spouse / son / daughter / parents / brothers / sister. For life-threatening situations when a patient is incapable and next of kin is not available, in the interest of the patient, the treating doctor and another clinician can decide to safeguard the patients' life.

**CORE****e. Informed consent is taken by the person performing the procedure.**

**Interpretation:** The person performing shall be responsible for the entire consent process, including providing explanation and taking the signature. For example, it is not acceptable if the person performing the procedure only explains, and the written consent is taken by the nurse.

A doctor member of the team can take consent on behalf of the person performing the procedure.

**Standard****PRE.5.**

**Patient and families have a right to information and education about their healthcare needs.**

**Objective Elements****Commitment**

- a. During initial appointment, patient and families are educated about good oral hygiene methods, their dental ailments and different treatment options available along with their benefits and disadvantages.**

**Interpretation:** A dedicated dental education room with audio-visual facility may be created in DHSP for the purpose. Graphic and pictorial charts and patient education models must be available for the purpose.

Oral hygiene instructions should include demonstrating correct tooth brushing technique on models, through computer animation, video or in patient's mouth itself.

**Commitment**

- b. Patient and families are educated about deleterious habits like smoking and tobacco chewing.**

**Interpretation:** The education posters detailing harmful effects of tobacco consumption along with photos of oral cancer patients may be displayed in patient reception area or in patient education room. Other deleterious habits specific to the patient should be explained in detail with the help of computer animation and/or other aids in a language and format that they can understand.

**Commitment**

- c. **Patient and families are educated about the prevention of dental diseases and importance of periodic maintenance visits post-treatment.**

**Interpretation:** The education shall include information on the prevention of dental diseases. The education could also be done through patient education leaflets/booklets.

**Commitment**

- d. **Patient and family are educated about safe and effective use of materials/prosthesis e.g., denture adhesives, dentures etc.**

**Interpretation:** The DHSP shall make a list of such materials and accordingly educate. A standard written dos and don'ts instructions sheet pertaining to each case should also be given to patient and/or family members.

**Commitment**

- e. **Patient and/or family are educated about diet and nutrition.**

**Interpretation:** The education could include the relationships between various foods or supplements and specific health conditions. It should also incorporate general recommendations for following a healthy diet.

**Standard****PRE.6.****Patient and families have a right to information on expected costs.****Objective Elements****CORE**

- a. **There is uniform pricing policy in a given setting.**

**Interpretation:** There should be a billing policy which defines the charges to be levied for various activities.

**Commitment**

- b. **The tariff list is available to patients.**

**Interpretation:** The DHSP shall ensure that there is an updated tariff list and that this list is available / displayed. The DHSP shall charge as per the tariff list. Any additional charge should also be enumerated in the tariff and the same communicated to the patients. The tariff rates should be uniform and transparent.

**Commitment**

- c. **Patients are explained about the estimated costs of treatment before initiating treatment and also any revised costs, if necessary, during treatment.**

**Interpretation:** Patients should be given an estimate of the expenses on account of the treatment, preferably in a written form. This estimate shall be prepared based on the treatment plan. It could be prepared by the OPD/Registration/Admission staff in consultation with the treating doctor. The limitations of the estimate if any (e.g., emergency admissions) could also be discussed with the patient.



**Commitment**

- d. **Patients are informed about the financial implications when there is a change in the care plan.**

**Interpretation:** When more work is required to be undertaken than was envisaged, the financial implications must be clearly conveyed to patient and fresh patient's consent for the same is undertaken.

**Standard****PRE.7.**

**The organisation has a mechanism to capture patient's feedback and to redress complaints.**

**Objective Elements****Commitment**

- a. **The organisation has a mechanism to capture feedback from patients, which includes patient satisfaction.**

**Interpretation:** The feedback could be captured either physically or electronically. It is preferable that separate data is obtained from out-patients.

**CORE**

- b. **The organisation redresses patient complaints as per the defined mechanism. \***

**Interpretation:** The written guidance shall incorporate the mechanism for lodging complaints (including verbal or telephonic complaints), method of compiling them, analysing complaints including the time frame, the person(s) responsible and documenting the action taken. It is for the organisation to decide if it wants to give credence to anonymous complaints.

Patient complaints include those against healthcare workers.

**Commitment**

- c. **Patient and/or family members are made aware of the procedure for giving feedback and/or lodging complaints.**

**Interpretation:** The awareness shall be either by display or providing written information. The DHSP must create an environment of trust wherein the patients would be comfortable to air their views.

**Commitment**

- d. **Feedback and complaints are reviewed and/or analysed within a defined time frame.**

**Interpretation:** The entire process shall be documented. Where appropriate, the patient and/or family could be involved in the discussions and also informed regarding the outcome.

**Commitment**

- e. **Corrective and/or preventive action(s) are taken based on the analysis where appropriate.**

**Interpretation:** The analysis identifies opportunities for improvement and the same are carried out.

**Standard****PRE.8.**

**The organisation has a system for effective communication with patients and/or families.**

**Objective Elements****Commitment**

- a. **Communication with the patients and/or families is done effectively. \***

**Interpretation:** Communication is considered to be effective if it serves the purpose. The principles of effective communication are complied. For example, the seven C's namely clear, correct, complete, concrete, concise, considerate and courteous. The organisation has plans to identify and overcome potential communication barriers. For example, the language barrier could be overcome by having interpreters. The DHSP could adopt any model of effective communication.

**Commitment**

- b. **The organisation shall identify special situations where enhanced communication with patients and/or families would be required. \***

**Interpretation:** Some of these situations could include communication during challenging situations like breaking bad news, handling adverse events, handling an aggressive patient/family, talking to a family of a patient who has expired, counselling for a complicated intervention etc.

**Commitment**

- c. **Enhanced communication with the patients and/or families is done effectively. \***

**Interpretation:** For each identified special situation, the DHSP shall detail the nature of the enhanced communication that may be required. For example, a model for delivering bad news is SPIKES.

**Commitment**

- d. **The organisation ensures that there is no unacceptable communication.**

**Interpretation:** The DHSP shall not allow unacceptable communication. For example, abusing patients, hurting the religious or cultural sentiments, communicating with disrespect, etc.

**Achievement**

- e. **The organisation has a system to monitor and review the implementation of effective communication.**

**Interpretation:** This could be done through feedback from patients and other stakeholders.

## References:

1. Boissy, A., & Gilligan, T. (2016). *Communication the Cleveland Clinic Way: How to Drive a Relationship- Centered Strategy for Exceptional Patient Experience*. New York, NY: McGraw Hill Professional.
2. Burgener, A. M. (2017). Enhancing Communication to Improve Patient Safety and to Increase Patient Satisfaction. *The Health Care Manager*, 36(3), 238-243. doi:10.1097/hcm.000000000000165
3. Effective Patient–Physician Communication. Committee Opinion. (2016). The American College of Obstetricians and Gynecologists. Retrieved May 08, 2022 , from <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2014/02/effective-patient- physician- communication.pdf>
4. Five strategies for Providing Effective Patient Education. Lippincott Solutions. (2017). Retrieved May 08, 2022 , from <https://www.wolterskluwer.com/en/expert-insights/5-strategies-for-providing-effective- patient-education>
5. Ha JF and Longnecker N. Doctor-Patient Communication: A Review. *Ochsner J*. 2010 Spring; 10(1): 38–43. Retrieved May 08, 2022 , from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3096184/>
6. Human rights and health. (2017). World Health Organisation. Retrieved May 08, 2022 , from <https://www.who.int/news-room/fact-sheets/detail/human-rights-and-health>
7. Kumar, A., Mullick, P., Prakash, S., & Bharadwaj, A. (2015). Consent and the Indian medical practitioner. *Indian Journal of Anaesthesia*, 59(11), 695-700. doi:10.4103/0019-5049.169989
8. Marcus, C. (2014). Strategies for improving the quality of verbal patient and family education: a review of the literature and creation of the EDUCATE model. *Health Psychology and Behavioral Medicine*, 2(1), 482-495. doi:10.1080/21642850.2014.900450
9. Munro, C. L., & Savel, R. H. (2013). Communicating and Connecting With Patients and Their Families. *American Journal of Critical Care*, 22(1), 4-6. doi:10.4037/ajcc2013249
10. Nandimath, O. (2009). Consent and medical treatment: The legal paradigm in India. *Indian Journal of Urology*, 25(3), 343. doi:10.4103/0970-1591.56202
11. Nouri, S. S., & Rudd, R. E. (2015). Health literacy in the “oral exchange”: An important element of patient–provider communication. *Patient Education and Counseling*, 98(5), 565-571. doi:10.1016/j.pec.2014.12.002
12. Olejarczyk JP and Young M. Patient Rights And Ethics. (2021). Retrieved May 08, 2022 , from <https://www.ncbi.nlm.nih.gov/books/NBK538279/>
13. Patient Rights: Confidentiality & Informed Consent. Emedicine health. (2020). Retrieved May 08, 2022, from [https://www.emedicinehealth.com/patient\\_rights/article\\_em.htm](https://www.emedicinehealth.com/patient_rights/article_em.htm)
14. Reader, T. W., Gillespie, A., & Roberts, J. (2014). Patient complaints in healthcare systems: a systematic review and coding taxonomy. *BMJ Quality & Safety*, 23(8), 678-689. doi:10.1136/bmjqs-2013-002437

15. Roberts, H., Zhang, D., & Dyer, G. S. (2016). The Readability of AAOS Patient Education Materials. *The Journal of Bone and Joint Surgery*, 98(17), e70. doi:10.2106/jbjs.15.00658
16. Williams, A. M., Muir, K. W., & Rosdahl, J. A. (2016). Readability of patient education materials in ophthalmology: a single-institution study and systematic review. *BMC Ophthalmology*, 16(1). doi:10.1186/s12886-016-0315-0

# Chapter 5

## Infection Prevention & Control (IPC)

**Intent of the chapter :** The standards guide the provision of an effective infection control programme in the DHSP. The programme is documented and aims at preventing, reducing/eliminating infection risks to patients, visitors and providers of care. The DHSP measures and takes action to prevent or reduce the risk of Healthcare Associated Infection (HAI) in patients and employees. The DHSP provides proper facilities and adequate resources to support the Infection Prevention and Control Programme. The programme includes an action plan to control outbreaks of infection, disinfection and /or, sterilization activities, biomedical waste (BMW) management, training of staff Resource allocation and employee health.

### Summary of Standards

IPC.1.	The DHSP has a comprehensive and coordinated Infection Control (IC) programme aimed at preventing, reducing / eliminating risks to patients, visitors, care providers and the community.
IPC.2.	The DHSP provides adequate and appropriate resources for infection prevention and control.
IPC.3.	The DHSP implements the infection prevention and control programme in clinical areas.
IPC.4.	The DHSP implements the infection prevention and control programme in non-clinical areas.
IPC.5.	The organisation performs surveillance to collect and monitor infection prevention and control data.
IPC.6.	Infection prevention measures include sterilisation and/or disinfection of instruments, equipment and devices.

Objective Element	IPC 1	IPC 2	IPC 3	IPC 4	IPC 5	IPC 6
a.	Core	Core	Core	Commitment	Core	Commitment
b.	Commitment	Commitment	Core	Commitment	Commitment	Core
c.	Commitment	Commitment	Core	Core	Commitment	Commitment
d.	Achievement	Commitment	Commitment	Core	Core	Commitment
e.	Commitment	Core	Core		Core	Commitment
f.	Commitment	Commitment	Excellence		Commitment	
g.	Commitment	Commitment			Commitment	
h.	Commitment				Commitment	
i.	Commitment					

## Standard

IPC.1.

The DHSP has a comprehensive and coordinated Infection Prevention Control (IC) programme aimed at preventing reducing / eliminating risks to patients, visitors, care providers and the community.

## Objective Elements

### CORE

- a. **The DHSP infection prevention and control programme is documented, which aims at preventing and reducing the risk of healthcare associated infections in the organisation. \***

**Interpretation:** The written guidance shall be directed at prevention and control of infection in all areas of the DHSP and include its monitoring. The organisation shall have infection prevention and control manual (IPC manual) that shall incorporate the structure of the programme, overall aims and objectives, all processes, activities and surveillance procedures related to the programme. This shall be based on organisational priorities, current scientific knowledge, guidelines from international/national and professional bodies and statutory requirements, wherever applicable.

Reference documents could include WHO guidelines, CDC Guidelines and Manual for Control of Hospital Associated Infections, Standard Operative Procedures by National AIDS Control Organisation (NACO), Ministry of Health and Family Welfare, Government of India, Indian Council of Medical Research and National Centre for Disease Control, and Kayakalp.

### Commitment

- b. **The infection prevention and control programme identify high-risk activities, and has written guidance to prevent and manage infections for these activities. \***

**Interpretation:** The high-risk activities are identified based on scientific literature, keeping in view the potential risk of transmission of infections to the patient, health care provider and attendants.

Examples of these activities include performing aerosol-generating procedures; handling blood and body fluids spills, and sharps; and exposure to contaminated medical and dental devices/equipment and bio-medical waste.

### Commitment

- c. **The infection prevention and control programme is reviewed and updated at least once a year.**

**Interpretation:** The update shall be done based on newer literature on infection prevention and outbreak prevention mechanisms, infection trends and outcomes of the audit processes.

In case the annual review does not identify any opportunities for improvement, the same shall be documented in the minutes of the infection control committee meeting.



**Achievement**

- d. **The infection prevention and control programme is reviewed based on infection control assessment tool.**

**Interpretation:** The organisation should use any validated tool for performing infection prevention and control assessment tool. Examples of validated tools include WHO's Infection Prevention and Control Assessment Framework at the Facility Level and CDC's Infection Prevention and Control Assessment Tool for Acute Care Hospitals.

**Commitment**

- e. **The DHSP has a multidisciplinary infection control committee, which co-ordinates all infection prevention and control activities. \***

**Interpretation:** This shall preferably have an administrator, microbiologist, physician/Infection control specialist, dental surgeon, infection control nurse(s), staff from central sterile services department (CSSD), operation theatre (OT) and support services(s). It could also include invitees from various departments as deemed necessary. The committee shall lay down the written guidance to guide the implementation. The composition, frequency of meetings (at least monthly), the minimum quorum required and the minutes of the meeting shall be documented.

Risk-reduction goals and measurable objectives are established by the committee at least annually and reviewed monthly.

**Commitment**

- f. **The DHSP has an infection control team, which coordinates the implementation of all infection prevention and control activities. \***

**Interpretation:** The team is responsible for the day-to-day functioning of infection prevention and control programme. It shall support the surveillance process and detect outbreaks. It shall also participate in audit activity and infection prevention and control on a day-to-day basis. Infection control team should be staffed according to the DHSP size, the level of risk of infection, and the programme's complexity and scope. However, at a minimum, the team shall at least comprise of infection control nurse(s). The committee and the team shall not be the same. However, the team shall be represented in the infection control committee.

**Commitment**

- g. **The DHSP has a designated infection control nurse(s) as part of the infection control team. \***

**Interpretation:** The criteria for designating shall be by qualification (Registered Nurse) and additional structured training. The responsibilities of the ICN(s) are defined in the manual. The responsibilities could include surveillance of healthcare associated infections and healthcare-associated organisms, compliance monitoring (hand hygiene, transmission-related precautions, isolation, infection-specific bundles, disinfection and sterilisation procedures, and checklists), education, working on outbreaks and documentation.

**Commitment**

- h. The DHSP implements information, education and communication programme for infection prevention and control activities for the community.**

**Interpretation:** The organisation could work with stakeholders and create information, education and communication messages. Examples of infection prevention and control activities include hand hygiene, appropriate use of antibiotics, use of personal protective equipment, preparedness towards pandemics etc.

**Commitment**

- i. The DHSP participates in managing community outbreaks.**

**Interpretation:** The organisation coordinates with external agencies, including statutory, to respond effectively to community outbreaks. This includes communication (both internal and external), roles and responsibilities for staff and training of staff.

**Standard****IPC.2.**

**The DHSP provides adequate and appropriate resources for infection prevention and control.**

**Objective Elements****CORE**

- a. DHSP management makes available resources required for the infection prevention and control program.**

**Interpretation:** The DHSP shall ensure that the resources required by the personnel should be available in a sustained manner. This includes both staff and materials which includes hand hygiene rubs, PPEs, BMW bags and bins etc.

**Commitment**

- b. The DHSP regularly earmarks adequate funds from its annual budget in this regard.**

**Interpretation:** There shall be a separate budget demarcated for infection prevention and control activity. This shall be prepared taking into consideration the scope of the activity and previous year's experience. Line items based expenses, training, pre and post exposure prophylaxis, BMW management, cleaning and dis-infection and sterilisation materials and resources to strengthening IPC activities should be included.

**Commitment**

- c. It also conducts regular "in-service" training sessions for all concerned categories of staff at least once in a year.**

**Interpretation:** All topics mentioned in IPC manual and related Patient safety issues should be covered

**Commitment**

- d. **Appropriate pre- and post- exposure prophylaxis is provided to all concerned staff members.**

**Interpretation:** Should include various vaccinations for all staff as deemed necessary. Required dose and vaccination schedule for Hepatitis B, Tetanus, Typhoid, Influenza, Pneumococcal when required shall be followed.

**CORE**

- e. **Adequate and appropriate facilities for hand hygiene in all patient-care areas are accessible to healthcare providers.**

**Interpretation:** The organisation provides at least one easily accessible washbasin with running water in every patient care area for health care providers. For hand wash, the organisation could consider providing large washbasins, hands-free tap, soap and facility for drying hands without contamination. Hand rub should be available in every patient care area. Hand rub dispensers can be installed at convenient points and can also be carried by staff as they move between patients.

**Commitment**

- f. **Compliance with proper hand washing/scrubbing is monitored regularly.**

**Interpretation:** The DHSP shall preferably display the necessary instructions near every hand washing/ scrubbing area. Compliance could be verified by random checking, observation, WHO's Hand Hygiene Audit tool may be used to monitor compliance etc.

**Commitment**

- g. **Adequate and appropriate personal protective equipment, soaps, and disinfectants are available and used correctly.**

**Interpretation:** They should be available at the point of use, and the organisation shall ensure that it maintains an adequate inventory.

Personal protective equipment includes:

- Gloves
- Protective eyewear (goggles)
- Mask
- Apron
- Gown
- Boots/shoe covers and
- Cap/hair cover

The staff use PPE appropriate to the risks involved. The PPE is removed as soon as the purpose is served.

## Standard

IPC.3.

The DHSP implements the infection prevention and control programme in clinical areas.

## Objective Elements

**CORE**

**a. The DHSP adheres to standard precautions at all times. \***

**Interpretation:** Adherence to standard precautions is one of the fundamental tenets of infection prevention and control. In every area of the organisation, standard precautions shall be adhered.

**CORE**

**b. The DHSP adheres to hand-hygiene guidelines. \***

**Interpretation:** The organisation shall adhere to international/national guidelines on hand hygiene. A good reference is the WHO Guidelines on Hand Hygiene in Health Care of 2009, MoHFW, ICMR and NCDC Guidelines

The organisation could display the necessary instructions near every hand-washing area.

**CORE**

**c. The DHSP adheres to safe injection and infusion practices.**

**Interpretation:** This shall include “One needle, One Syringe, Only One Time”, as recommended by the CDC. A good reference guide is “WHO Best Practices for Injections and Related Procedures Toolkit 2010”.

**Commitment**

**d. Appropriate antimicrobial usage policy is established and documented \***

**Interpretation:** The organisation shall identify clinical conditions in which antimicrobial agents (antibiotics, anti-fungal agents, anti-viral agents and anti-parasite agents) shall be used in terms of the type of the antimicrobial agent, monotherapy versus combination therapy, escalation and de-escalation of therapy, dose and duration of antimicrobial therapy. A good reference guide to develop antibiotic policy is Step-by-step Approach for Development and Implementation of Hospital Antibiotic Policy and Standard Treatment Guidelines by WHO-2011. Ministry of Health's National Treatment Guidelines for Antimicrobial Use in Infectious Diseases 2016, Indian Council of Medical Research's Treatment Guidelines for Antimicrobial Use in Common Syndromes 2019 shall be considered while framing the antimicrobial usage policy.

The organisation can also refer to national and international guidelines from professional societies while framing the policy.

It is preferable that the organisation has a standardised methodology for antibiotic susceptibility testing.

The antimicrobial usage policy should identify a list of restricted antimicrobial agents if any. Guidance note shall be from AWARE classification from WHO.

**CORE****e. The organisation implements the antimicrobial usage policy and monitors the rational use of antimicrobial agents.**

**Interpretation:** The antimicrobial agents should be prescribed as per the organisation's policy. The organisation needs to implement a mechanism for ordering restricted antimicrobial agents. Deviations are brought to the notice of concerned clinicians, and corrective and preventive actions are taken and documented.

The organisation should have a mechanism to monitor the appropriate use of restricted antimicrobial agents.

**Excellence****f. The DHSP implements an antibiotic stewardship programme. \***

**Interpretation:** The antibiotic stewardship programme must aim to guide efforts to improve appropriate and necessary antibiotic use. This shall include Right Indication, Right Drug, Right Dose, Right Frequency and Right Duration. It should include leadership commitment, accountability, drug expertise, action, tracking, reporting and education.

**Standard****IPC.4.**

**The DHSP implements the infection prevention and control programme in non-clinical areas.**

**Objective Elements****Commitment****a. The organisation has appropriate engineering controls to prevent infections. \***

**Interpretation:** This shall include the design of patient care areas (optimum spacing between dental chairs is one-two metres), operating rooms, air quality and water supply. Refer to NABH guidelines on OT air-conditioning. (For oral and maxillofacial surgery only)

Issues such as air-conditioning plant and equipment maintenance, cleaning of air-conditioning ducts/filters, air handling units, cleaning/replacement of filters, prevention of fungal colonisation should be included. Water-supply sources and system of supply, testing for water quality must be included. Engineering controls to handle aerosols generation and treatment shall also be practised.

## Commitment

**b. The organisation designs and implements a plan to reduce the risk of infection during construction and renovation. \***

**Interpretation:** A validated tool (for example infection control risk assessment tool) should be used to identify the risk of infection during construction and renovation. Facility construction/renovation could ensure that when new facilities are built, infection prevention and control is considered from the design stage onwards. Any renovation work in the clinic should be planned with the infection control team concerning architectural segregation, traffic flow, use of materials, and efforts to plan prevention of spread is considered etc.

**CORE**
**c. The organisation adheres to housekeeping procedures. \***

**Interpretation:** Housekeeping shall be addressed at all levels of the organisation, for example., ward, OT, public areas including toilets, corridors. Regular cleaning to remove visible dirt and dust is mandatory. This includes the environment, fixtures, fomites, furniture, furnishings, equipment, etc., as applicable. A risk stratification matrix may be used to determine the frequency of cleaning. The physical environment may be divided into several areas depending on the risk of transmitting microorganisms. The criteria used to identify these areas can include the number of footfalls, the type of activity performed (for example, clinical versus non-clinical) and the probability of being exposed to body fluid (for example., in an OT or dental laboratory). It is preferable that the organisation follows a uniform policy across different departments within the organisation.

The common disinfectants used are identified, dilution protocols are established, and its usage in the appropriate situation is complied with. It shall also include procedures for terminal cleaning, blood and body fluid clean up and isolation rooms. A dusting of any sorts inside the clinical areas should be avoided.

A good reference is “CDC Guidelines for Disinfection and Sterilization in Healthcare Facilities, 2008” and “Swachhta Guidelines for Public Health Facilities”.

**CORE**
**d. Biomedical waste (BMW) is handled appropriately and safely.**

**Interpretation:** Proper segregation and collection of biomedical waste from patient-care areas of the clinic are implemented. Waste is segregated and collected in different colour-coded bags and containers as per statutory provisions. Monitoring shall be done by members of the infection control committee/team. Biomedical waste shall be handled in the proper manner using appropriate personal protective equipment.

The organisation ensures that biomedical waste is stored in accordance with statutory provisions. Biomedical waste is handed over to the authorised vendor for transport to the site of treatment and disposal.

## Standard

IPC.5.

The organisation performs surveillance to capture and monitor infection prevention and control data.

## Objective Elements

### CORE

- a. **Surveillance activities are appropriately directed towards the identified high-risk areas.**

**Interpretation:** The organisation must be able to provide evidence of conducting periodic surveillance activities in its identified high-risk activities. It shall define the frequency and mode of surveillance. The surveillance system shall be appropriate and adhering to national/international guidelines. Surveillance activities include areas where demolition, construction or repairs are undertaken.

### Commitment

- b. **Verification of data is done regularly by the infection control team.**

**Interpretation:** The data collected shall be authenticated by the infection control team by going through every data or by using random sampling.

In case the collection of data is done only by the infection control team, verification is not necessary.

### Commitment

- c. **Scope of surveillance incorporates tracking and analysing of infection rates and trends.**

**Interpretation:** The organisation shall use a judicious mix of active and passive surveillance. The organisation could lay down the parameters that need to be captured and the process for reporting. The collection of surveillance data is an on-going process and is done at regular intervals (maybe monthly and consolidated into an annual report), and the organisation shall take suitable steps based on the analysis. A simple calculation of infected patients (numerator) provides only limited information which would be difficult to interpret. Risk factor analysis would require information for both infected and non-infected patients to calculate infection and risk-adjusted rates.

### CORE

- d. **Surveillance includes monitoring compliance with hand-hygiene guidelines.**

**Interpretation:** The monitoring shall be done at a minimum once every month. An appropriate sample size shall be chosen, and all categories of staff (involved in direct patient care) shall be monitored. The compliance levels shall be shared with the relevant staff. A good tool is the WHO's "Observation Form".

**CORE****e. Surveillance activities include monitoring the effectiveness of house-keeping services.**

**Interpretation:** Monitoring of the effectiveness of housekeeping services shall be done regularly. The organisation shall define the periodicity. This is applicable even if the housekeeping services are outsourced. It is mandatory to capture the effectiveness of the housekeeping activities and not just verify if the housekeeping activity has been done as per the defined frequency. To capture effectiveness, the organisation could identify desired outcome parameters for housekeeping activities. The data could be captured using a checklist. This need not mean routine environmental sampling.

**Commitment****f. Feedback regarding surveillance data is provided regularly to the appropriate health care provider.**

**Interpretation:** The feedback shall include the adherence rates, healthcare associated infection (HAI) rates, trends and opportunities for improvement, including data from other surveillance activities. It could also provide specific inputs to reduce the HAI rate. This could be in the form of a bulletin/newsletter.

**Commitment****g. The organisation identifies and takes appropriate action to control outbreaks of infections. \***

**Interpretation:** Surveillance should help early identification of outbreaks. To define as to what constitutes an outbreak, the organisation should have baseline rates. The organisation implements written guidance for handling such outbreaks which includes epidemics or pandemics.

**Commitment****h. Surveillance data is analysed, and appropriate corrective and preventive actions are taken.**

**Interpretation:** The Infection Control Committee analyses the surveillance data and based on this corrective and preventive actions are taken where necessary. This also includes taking appropriate corrective actions to prevent recurrence after an outbreak.

**Standard****IPC.6.**

**Infection prevention measures include sterilisation and/or disinfection of instruments, equipment and devices.**

**Objective Elements**



**Commitment**

- a. **The organisation provides adequate space and appropriate zoning for sterilisation activities. \***

**Interpretation:** Adequacy of space refers to the, proper layout (unidirectional flow, zoning) and separation of clean and dirty areas. Sufficient space shall be available to ensure that the activities can be performed properly. It is preferable to have separate areas for receiving, washing, cleaning, packing, sterilisation, sterile storage and issue. A good reference is Hospital Infection Society India (HISI) and WHO guidelines.

**CORE**

- b. **Cleaning, packing, disinfection and/or sterilisation, storing and the issue of items is done as per the written guidance. \***

**Interpretation:** The written guidance shall be in consonance with national and/or international guidelines. A good reference is "CDC Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008". Other references include the Hospital Infection Society India (HISI) guidelines.

Cleaning of used instrument/equipment/device shall preferably be done in house however such service can be outsourced to an organisation which will follow all the quality standards for CSSD ( from OE a to e). However, if the same is done in-house in patient care areas, adequate measures are taken for infection prevention. Cleaning ensures that visible biological material and dirt is removed. After cleaning the instrument, sets are prepared and packed using the appropriate material. Spaulding's classification guides the decision to do high/intermediate/low-level disinfection. Disinfection/sterilisation is performed as per the written guidance. Flash sterilisation shall only be done in exceptional situations when there is insufficient time to sterilise an item by the preferred method. The sterilised/disinfected equipment/sets shall be stored appropriately across the organisation . The expiry date of sterilised instruments/equipment shall be guided by the packing material used and the mode of sterilisation.

**Commitment**

- c. **Reprocessing of single-use instruments, equipment and devices are done as per written guidance. \***

**Interpretation:** The organisation identifies those single-use instruments, equipment and devices which are meant for re-use. The number of re-uses and the process of re-use of these items are defined and monitored. The patient is informed about the same. The written guidance addresses cleaning, disinfection or sterilisation between patients. The written guidance shall be in consonance with the available good practices. Guideline for Disinfection and Sterilization in Healthcare Facilities (2008); FDA document 2008 may be referred to.

**Commitment****d. Regular validation tests for sterilization are carried out and documented.**

**Interpretation:** This shall be done by accepted methods, e.g., bacteriologic, strips, etc. Physical/chemical tests shall be done daily, and biological tests at least weekly. Engineering validations like Bowie-Dick tape test and leak rate test need to be carried out.

Each load should have a unique number and content description. Where applicable, temperature, pressure and time-record chart shall be maintained. A good reference is “CDC Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008”.

**Commitment****e. There is an established recall and corrective audit procedure in case of breakdown in the sterilization system.**

**Interpretation:** The organisation shall ensure that the sterilisation procedure is regularly monitored and in the eventuality of a breakdown it has written guidance for withdrawal of such items. The organisation could have a batch-processing system with date and machine number for effective recall.

## References:

1. Banach, D. B., Bearman, G., Barnden, M., et al. (2018). Duration of Contact Precautions for Acute-Care Settings. *Infection Control & Hospital Epidemiology*, 39(2), 127-144. doi:10.1017/ice.2017.245
2. Banach, D. B., Johnston, B. L., Al-Zubeidi, D., Bartlett, A. H., Bleasdale, S. C., & Deloney, V. M. (2017). Outbreak Response and Incident Management: SHEA Guidance and Resources for Healthcare Epidemiologists in United States Acute-Care Hospitals. *Infection Control & Hospital Epidemiology*, 38(12), 1393-1419. doi:10.1017/ice.2017.212
3. Bearman, G., Bryant, K., Leekha, S., Mayer, J., Munoz-Price, L. S., Murthy, R., ... White, J. (2014). Healthcare Personnel Attire in Non-Operating-Room Settings. *Infection Control & Hospital Epidemiology*, 35(2), 107-121. doi:10.1086/675066
4. Best practices for injections and related procedures toolkit. World Health Organization. (2010). Retrieved May 08, 2022 , from [https://apps.who.int/iris/bitstream/handle/10665/44298/9789241599252\\_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/44298/9789241599252_eng.pdf?sequence=1)
5. Bloodborne Pathogens and Needlestick Prevention. Occupational Safety and Health Administration. (2018). Retrieved May 08, 2022 , from <https://www.osha.gov/SLTC/bloodbornepathogens/index.html>
6. Checklist for Prevention of Central Line Associated Blood Stream Infections. Centers for Disease Control and Prevention. (2014). Retrieved May 08, 2022 , from <https://www.cdc.gov/hai/pdfs/bsi/checklist-for-CLABSI.pdf>
7. Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals. Society for Healthcare Epidemiology of America. (2008). Retrieved May 08, 2022 , from <https://shea-online.org/compendium-of-strategies-to-prevent-healthcare-associated-infections-in-acute-care-hospitals/>
8. De Sousa Martins, B., Queiroz e Melo, J., Logarinho Monteiro, J., Rente, G., & Teixeira Bastos, P. (2019). Reprocessing of Single-Use Medical Devices: Clinical and Financial Results. *Portuguese Journal of Public Health*, 1-7. doi:10.1159/000496299
9. Dolan, S. A., Arias, K. M., Felizardo, G., Barnes, S., Kraska, S., Patrick, M., & Bumsted, A. (2016). APIC position paper: Safe injection, infusion, and medication vial practices in health care. *American Journal of Infection Control*, 44(7), 750-757. doi:10.1016/j.ajic.2016.02.033
10. Environmental Cleaning for the Prevention of Healthcare-Associated Infections (HAI). Agency for Healthcare Research and Quality. (2014). Retrieved May 08, 2022 , from <https://effectivehealthcare.ahrq.gov/products/healthcare-infections/research-protocol>
11. Fishman, N. (2012). Policy Statement on Antimicrobial Stewardship by the Society for Healthcare Epidemiology of America (SHEA), the Infectious Diseases Society of America (IDSA), and the Pediatric Infectious Diseases Society (PIDS). *Infection Control & Hospital Epidemiology*, 33(4), 322-327. doi:10.1086/665010
12. Global Guidelines for the Prevention of Surgical Site Infection. World Health Organization. (2016). Retrieved May 08, 2022 , from <https://apps.who.int/iris/bitstream/handle/10665/250680/9789241549882-eng.pdf>
13. Guideline for Disinfection and Sterilization in Healthcare Facilities (2008). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/disinfection/index.html>

14. Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>
15. Guideline for Prevention of Catheter-Associated Urinary Tract Infections (2009). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/CAUTI/index.html>
16. Guideline for Prevention of Surgical Site Infection (2017). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/ssi/index.html>
17. Guidelines for Environmental Infection Control in Health-Care Facilities: Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC). MMWR 2003;52(RR10):1-42. Retrieved May 08, 2022 , from <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5210a1.htm>
18. Guidelines for the Prevention of Intravascular Catheter-Related Infections (2011) Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/bsi/index.html>
19. Guidelines on Core Components of Infection Prevention and Control Programmes at the National and Acute Health Care Facility Level. World Health Organization. (2016). Retrieved May 08, 2022 , from <https://apps.who.int/iris/handle/10665/251730>
20. Guidelines on hand hygiene in health care. World Health Organization. (2019). Retrieved May 08, 2022 , from <https://www.who.int/publications/i/item/9789241597906>
21. Han, J. H., Sullivan, N., Leas, B. F., Pegues, D. A., Kaczmarek, J. L., & Umscheid, C. A. (2015). Cleaning Hospital Room Surfaces to Prevent Health Care–Associated Infections. *Annals of Internal Medicine*, 163(8), 598. doi:10.7326/m15-1192
22. Health Care Workers, Prevention Controls. (2016). Centers for Disease Control and Prevention. (2018). CDC -, Infectious Agents - The National Institute for Occupational Safety and Health (NIOSH). Retrieved May 08, 2022 , from <https://www.cdc.gov/niosh/topics/healthcare/prevention.html>
23. Healthcare-Associated Infections (HAIs). Centers for Disease Control and Prevention. (2021). Retrieved May 08, 2022 , from <https://www.cdc.gov/hai/index.html>
24. Hospital Infection Control Guidelines. Indian Council of Medical Research. (n.d.). Retrieved May 08, 2022 , from [https://www.icmr.nic.in/sites/default/files/guidelines/Hospital\\_Infection\\_control\\_guidelines.pdf](https://www.icmr.nic.in/sites/default/files/guidelines/Hospital_Infection_control_guidelines.pdf)
25. Infection Prevention and Control in Healthcare Settings. Standard Operating Procedures. (2018). Delhi State Health Mission. Government of NCT of Delhi, India. Retrieved May 08, 2022 , from [https://dshm.delhi.gov.in/\(S\(qohk5xwyvoyrqxje20uuyb0k\)\)/pdf/QAC/SoPs/IPC\\_FINAL\\_MANUAL.doc](https://dshm.delhi.gov.in/(S(qohk5xwyvoyrqxje20uuyb0k))/pdf/QAC/SoPs/IPC_FINAL_MANUAL.doc)
26. Lee, T. B., Montgomery, O. G., Marx, J., Olmsted, R. N., & Scheckler, W. E. (2007). Recommended practices for surveillance: Association for Professionals in Infection Control and Epidemiology (APIC), Inc. *American Journal of Infection Control*, 35(7), 427-440. doi:10.1016/j.ajic.2007.07.002
27. Management of Multidrug-Resistant Organisms in Healthcare Settings (2006). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/guidelines/mdro/index.html>

28. McDonald, L. C., Gerding, D. N., Johnson, S., et al. (2018). Clinical Practice Guidelines for Clostridium difficile Infection in Adults and Children: 2017 Update by the Infectious Diseases Society of America (IDSA) and Society for Healthcare Epidemiology of America (SHEA). *Clinical Infectious Diseases*, 66(7), 987-994. doi:10.1093/cid/ciy149
29. Munoz-Price, L., Banach, D., Bearman, G., et al. (2015). Isolation Precautions for Visitors. *Infection Control & Hospital Epidemiology*, 36(7), 747-758. doi:10.1017/ice.2015.67
30. Munoz-Price, L., Bowdle, A., Johnston, B., et al. (2019). Infection prevention in the operating room anesthesia work area. *Infection Control & Hospital Epidemiology*, 40(1), 1-17. doi:10.1017/ice.2018.303
31. National guidelines for infection prevention and control in healthcare facilities. (2020). National Centre for Disease Control, Directorate General of Health Services. Ministry of Health & Family Welfare, Government of India. Retrieved May 08, 2022 , from <https://www.mohfw.gov.in/pdf/National%20Guidelines%20for%20IPC%20in%20HCF%20-%20final%281%29.pdf>
32. National Technical Guidelines on Anti Retroviral Treatment. National AIDS Control Organization. Ministry of Health and Family Welfare, Government of India. (2018). Retrieved May 08, 2022 , from [http://naco.gov.in/sites/default/files/NACO%20-%20National%20Technical%20Guidelines%20on%20ART\\_October%202018%20%281%29.pdf](http://naco.gov.in/sites/default/files/NACO%20-%20National%20Technical%20Guidelines%20on%20ART_October%202018%20%281%29.pdf)
33. National Treatment Guidelines for Antimicrobial Use in Infectious Diseases. (2016). National Centre for Disease Control, Directorate General of Health Services. Ministry of Health & Family Welfare, Government of India. Retrieved May 08, 2022 , from <https://ncdc.gov.in/WriteReadData/l892s/File622.pdf>
34. Outline For Healthcare-Associated Infections Surveillance. Centers for Disease Control and Prevention. (2006). Retrieved May 08, 2022 , from <https://www.cdc.gov/nhsn/PDFS/OutlineForHAISurveillance.pdf>
35. Personal Protective Equipment in Medical Settings. Infectious Diseases Society of America (2022). Retrieved May 08, 2022 , from <https://www.idsociety.org/covid-19-real-time-learning-network/infection-prevention/personal-protective-equipment-in-medical-settings/>
36. Petersen, B. T., Cohen, J., Hambrick, R. D., Buttar, N., Greenwald, D. A., Buscaglia, J. M., ... Eisen, G. (2017). Multisociety guideline on reprocessing flexible GI endoscopes: 2016 update. *Gastrointestinal Endoscopy*, 85(2), 282-294.e1. doi:10.1016/j.gie.2016.10.002
37. Post-exposure prophylaxis (PEP). Centers for Disease Control and Prevention. (2021). Retrieved May 08, 2022 , from <https://www.cdc.gov/hiv/basics/pep.html>
38. Post-exposure prophylaxis to prevent HIV infection : joint WHO/ILO guidelines on post-exposure prophylaxis (PEP) to prevent HIV infection. World Health Organization. (2007). Retrieved May 08, 2022 , from <https://apps.who.int/iris/handle/10665/43838>
39. Postexposure Prophylaxis: Viral Hepatitis. Centers for Disease Control and Prevention. (2020). Retrieved May 08, 2022 , from <https://www.cdc.gov/hepatitis/hbv/pep.htm>
40. Recommended Vaccines for Healthcare Workers. (2016). Centers for Disease Control and Prevention. Retrieved May 08, 2022 , from <https://www.cdc.gov/vaccines/adults/rec-vac/hcw.html>

41. Recommended work restrictions for communicable diseases in health care workers. Association of Occupational Health Professionals in Healthcare. (2014). Retrieved May 08, 2022 , from <https://aohp.org/aohp/Portals/0/Documents/MemberServices/templateandform/WR4CD-HCW.pdf>
42. Reprocessed Single-Use Devices. ACOG Committee Opinion No. 769. (2019). *Obstetrics & Gynecology*, 133(3), e235-e237. doi:10.1097/aog.0000000000003124
43. Sfeir, M., Simon, M. S., & Banach, D. (2017). Isolation Precautions for Visitors to Healthcare Settings. *Infection Prevention*, 19-27. doi:10.1007/978-3-319-60980-5\_4
44. Silvia Munoz-Price L, Bowdle A, Johnston L et al. Infection Prevention in the Operating Room Anesthesia Work Area. *Infection Control & Hospital Epidemiology* 2019;40 (1): 1 – 17. Retrieved May 08, 2022 , from <https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/infection-prevention-in-the-operating-room-anesthesia-work-area/66EB7214F4F80E461C6A9AC00922EFC9>
45. Standard precautions in health care. World Health Organization. (2007). Retrieved May 08, 2022 , from <https://www.who.int/docs/default-source/documents/health-topics/standard-precautions-in-health-care.pdf>
46. Summary of WHO Position Papers – Immunization of Health Care Workers. World Health Organization. (2019). Retrieved May 08, 2022 , from [https://cdn.who.int/media/docs/default-source/immunization/immunization\\_schedules/immunization-routine-table4.pdf?sfvrsn=714e38d6\\_4&download=true](https://cdn.who.int/media/docs/default-source/immunization/immunization_schedules/immunization-routine-table4.pdf?sfvrsn=714e38d6_4&download=true)
47. Swachhta Guidelines for Public Health Facilities. Ministry of Health & Family Welfare, Government Of India. (2015). Retrieved May 08, 2022 , from <http://tripuranrhm.gov.in/QA/Guideline/SwachhtaGuidelinesforPublicHealthFacilities.pdf>
48. Swaminathan, S., Prasad, J., Dhariwal, A. C., et al. Strengthening infection prevention and control and systematic surveillance of healthcare associated infections in India. *BMJ* 2017: j3768. doi:10.1136/bmj.j3768
49. Transmission-Based Precautions. Centers for Disease Control and Prevention. (2016). Retrieved May 08, 2022 , from <https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>
50. Treatment Guidelines for Antimicrobial Use in Common Syndromes. Indian Council of Medical Research. (2019). Retrieved May 08, 2022 , from [https://main.icmr.nic.in/sites/default/files/guidelines/Treatment\\_Guidelines\\_2019\\_Final.pdf](https://main.icmr.nic.in/sites/default/files/guidelines/Treatment_Guidelines_2019_Final.pdf)

# Chapter 6

## Patient Safety and Quality Improvement (PSQ)

**Intent of the chapter :** The standards encourage an environment of patient safety and quality improvement. The quality and safety programme shall be documented and involve all areas of the DHSP and all staff members. The DHSP shall collect data on structures, processes and outcomes, especially in areas of high-risk situations. The collected data shall be collated, analysed and used for further improvements. The improvements shall be sustained. The quality programme of the diagnostic services shall be integrated into the DHSP's quality plan. Infection control and patient safety plans shall also be integrated into the DHSP's quality plan. The DHSP shall define its sentinel events and intensively investigate when such events occur. The quality programme shall be supported by the management.

### Summary of Standards

PSQ.1.	There is a structured quality assurance and continuous monitoring program in the DHSP.
PSQ.2.	The organisation identifies key indicators to monitor the structures, processes and outcomes, which are used as tools for continual improvement.
PSQ.3.	The quality improvement program is supported by the management.
PSQ.4.	There is an established system for clinical audit.
PSQ.5.	Incidents are collected and analysed to ensure continuous patient safety and quality improvement.

Objective Element	PSQ 1	PSQ 2	PSQ 3	PSQ 4	PSQ 5
a.	Core	Commitment	Achievement	Commitment	Core
b.	Commitment	Core	Commitment	Achievement	Commitment
c.	Commitment	Core	Achievement	Commitment	Commitment
d.	Excellence	Commitment	Achievement	Commitment	Commitment
e.	Commitment	Commitment		Commitment	
f.	Commitment	Commitment		Commitment	
g.	Commitment	Commitment			
h.		Achievement			



## Standard

PSQ.1.

**There is a structured quality assurance and continuous monitoring program in the DHSP.**

## Objective Elements

### CORE

- a. The quality improvement programme is developed, implemented and maintained by a committee. \***

**Interpretation:** The quality improvement programme shall be developed, implemented and maintained in a structured manner.

It shall be integrated across the organisation and provide a framework for risk management, ongoing monitoring and performing improvements based on reviews.

The roles and responsibilities of the committee are defined, and it shall have representation from management, various clinical and support departments of the organisation. This committee shall receive inputs on significant deliberations from other committees in the organisation. The committee may be called as the core committee, quality improvement committee etc.

### Commitment

- b. There are designated personnel for coordinating and implementing the quality assurance program.**

**Interpretation:** The designated individual (accreditation coordinator, quality management representative, quality manager) shall preferably have a good knowledge of accreditation standards, statutory requirements, DHSP quality improvement principles and evaluation methodologies, clinic functioning and operations. For example,.

The designated individual shall report directly to the top management. The role and responsibilities of the designated individual shall be defined.

Also, champions in quality improvement are identified and developed across the organisation and supported to drive improvement.

### Commitment

- c. The quality assurance program is comprehensive and covers all the major elements related to quality assurance and risk management.**

**Interpretation:** The quality improvement programme shall be documented in the form of quality improvement manual. The quality improvement programme shall incorporate the goals and objectives of the programme, framework for performing quality improvement activities including data collection, important indicators as identified, frequency of mock drills, audit schedules, committees and their terms of reference, review policy and implementation of corrective and preventive action. The quality assurance programme for specific areas like laboratory, imaging, emergency, operation theatre and the intensive care unit(s) is also summarised.

**Excellence****d. The quality improvement programme improves process efficiency and effectiveness.**

**Interpretation:** The quality improvement programme encourages the use of quality tools, novel strategies to improve both clinical and managerial processes. The impact of the managerial process innovations may be at the level of the department or organisation-wide. Innovations may be targeted to improve patient safety, improve care delivery, to reduce costs, to introduce environment friendly measures etc. The management of the organisation promotes these innovations.

**Commitment****e. The quality improvement programme identifies opportunities for improvement based on the review at pre-defined intervals.\***

**Interpretation:** The quality improvement programme is a dynamic process. There is an outline of the periodic review mechanisms at different levels, such as department/senior administration/management reviews, etc. The quality improvement programme needs to be reviewed by the quality improvement committee at regular pre-defined intervals as defined by the organisation in the quality improvement manual but at least once in three months. The review shall include findings of audits, organisational performance, analysis of key indicators as identified and determined by the organisation. The minutes of the review meetings shall be recorded and maintained.

**Commitment****f. The quality assurance program is a continuous process and updated at least once in a year.**

**Interpretation:** The update shall be done based on newer literature on quality improvement based on audits, feedback mechanisms, the review carried out by the quality improvement committee, etc.

In case the annual review does not identify any opportunities for improvement, the same shall be documented in the minutes of the quality improvement committee meeting.

**Commitment****g. Audits are conducted at regular intervals as a means of continuous monitoring.\***

**Interpretation:** Choice and frequency of audits shall be defined for priority areas in the organisation and for areas of concern as identified by trends in indicators, identified risk, etc. However, all the areas of the organisation shall be covered by a DHSP-wide internal audit at least once in 6 months as per a scheduled plan. This internal audit shall be done by an identified staff or a team trained in NABH standards. They shall assess areas independent of their area of work. The internal audit of a particular area shall include all the applicable standards and objective elements. At the end of the audit, there shall be a formal meeting to summarise the findings and corrective and preventive measures shall be taken and documented. Implementation of changes is verified and recorded.

## Standard

PSQ.2.

The organisation identifies key indicators to monitor the structures, processes and outcomes, which are used as tools for continual improvement.

## Objective Elements

### Commitment

- a. **The organisation identifies and monitors key indicators to oversee the clinical structures, processes and outcomes.**

**Interpretation:** The organisation identifies and monitors the priority aspects of its patient care. Any indicator mandated by the Government of India or the National Accreditation Board for Hospitals and Healthcare Providers (NABH) shall be monitored. These indicators are based on available literature or created in accordance with good practice. Every indicator shall have a defined numerator, denominator and multiplier. Where appropriate, the definition of terms shall be provided.

### CORE

- b. **The organisation identifies and monitors key indicators to oversee patient safety activities.**

**Interpretation:** The organisation shall identify and monitor appropriate key performance indicators suitable to it. Any indicator mandated by the Government of India or the National Accreditation Board for Hospitals and Healthcare Providers (NABH) shall be monitored.

Some of the indicators that could be monitored pertain to patient safety goals and risk management.

These indicators are based on available literature or created in accordance with good practice. Every indicator shall have a defined numerator, denominator and multiplier. Where appropriate, the definition of terms shall be provided.

### CORE

- c. **The organisation identifies and monitors the key indicators to oversee infection control activities.**

**Interpretation:** The organisation shall identify and monitor appropriate key performance indicators suitable to it. Any indicator mandated by the Government of India or the National Accreditation Board for Hospitals and Healthcare Providers (NABH) shall be monitored.

Some of the indicators that could be monitored include the dry socket, dental implantitis, surgical site infection.

These indicators are based on available literature or created in accordance with good practice. Every indicator shall have a defined numerator, denominator and multiplier. Where appropriate, the definition of terms shall be provided.

**Commitment**

- d. The organisation identifies and monitors key indicators to oversee the managerial structures, processes and outcomes.**

**Interpretation:** The organisation identifies and monitors priority managerial activities in the organisation. Any indicator mandated by the Government of India or the National Accreditation Board for Hospitals and Healthcare Providers (NABH) shall be monitored.

Some of the indicators that could be monitored pertain to medication procurement, utilisation rates, patient and staff satisfaction, waiting time for consultation and diagnostics, and availability and content of medical records.

These indicators are based on available literature or created in accordance with good practice. Every indicator shall have a defined numerator, denominator and multiplier. Where appropriate, the definition of terms shall be provided.

**Commitment**

- e. Verification of data is done regularly by the quality team.**

**Interpretation:** The data which is collected is verified from time to time and in response to queries or when an unexplained trend occurs, etc.

The data collected shall be authenticated by the quality coordinator by going through every data or by using random sampling.

Whenever errors are detected in the process of collection of data, they are corrected.

**Commitment**

- f. There is a mechanism for analysis of data which results in identifying opportunities for improvement.**

**Interpretation:** The data is analysed and based on this corrective and preventive actions are taken where necessary. The organisation could also consider developing benchmarks/acceptable quality levels based on national/international norms.

**Commitment**

- g. The improvements are implemented and evaluated.**

**Interpretation:** The improvement activities carried out by the organisation shall have an evaluable outcome. The same shall be documented.

**Achievement**

- h. Feedback about care and service is communicated to staff.**

**Interpretation:** The feedback shall include the rates, trends and opportunities for improvement. It could also provide specific inputs to improve/reduce the rate. This could be in the form of a bulletin/newsletter. It is equally important that positive feedback about care and service is communicated to staff.

## Standard

PSQ.3.

The quality improvement program is supported by the management.

## Objective Elements

### Achievement

#### a. The management creates a culture of safety.

**Interpretation:** The management needs to ensure the adoption of behaviours that promote patient safety. Some of the key features required for a culture of safety are sharing information, reporting occurrences of incidents, learning from safety incident analysis, blame-free culture and encouragement of collaboration across disciplines and departments. The key components of patient safety culture are informed culture, reporting culture, learning culture, just culture and flexible culture.

The management needs to measure its safety culture regularly (at least once a year). This shall be measured using validated surveys. For example, the Manchester Patient Safety Framework (MaPSaF), Safety Attitudes Questionnaire, AHRQ Surveys on Patient Safety Culture (SOPS™). The management shall act on their patient safety culture assessment results.

### Commitment

#### b. DHSP management makes available adequate resources including annual budget required for quality improvement program.

**Interpretation:** Resources shall include men, material, machine, money, milieu, measurement and method. These shall be in steady supply to ensure that the programme functions smoothly.

The budget could be earmarked based on previous year's spending. If no data is available, the organisation could make a beginning by earmarking a budget but reviewing it at the end of six months to make any necessary modifications.

### Achievement

#### c. The management identifies organisational performance improvement targets.

**Interpretation:** The management shall identify the organisation and department level quality objectives, set targets, monitor them (at least once in three months) and modify the target (at least annually). The targets shall be shared with the faculty and staff and regular feedback taken.

### Achievement

#### d. The management uses the feedback obtained from the workforce to improve patient safety and quality improvement programme.

**Interpretation:** The feedback shall be obtained from the staff on their understanding and use of the safety and quality systems. Feedback may be obtained once a year through staff surveys, but it is also important that staff workforce feel able to raise concerns whenever they occur. These inputs shall be used to improve patient safety and quality improvement programmes.

## Standard

PSQ.4.

There is an established system for clinical audit.

## Objective Elements

### Commitment

#### a. Clinical audits are performed to improve the quality of patient care.

**Interpretation:** The organisation shall use clinical audits as a quality improvement tool to improve the quality of patient care. The clinical audit could be retrospective/prospective in nature. The topic for audit could be Clinical based, cost-based or community-based. The organisation shall conduct one clinical audit per year. The organisation needs to take care to differentiate clinical audit from research projects.

### Achievement

#### b. Medical/Dental staff participates in this system.

**Interpretation:** The organisation shall identify such personnel. It could be a mix of dentists, dental surgeons, clinicians, administrators and hygienists, (dental technicians). These could be members of the core committee/quality assurance committee, etc.

### Commitment

#### c. The parameters to be audited are defined by the DHSP.

**Interpretation:** As clinical audits are standards-based, they must be done using predefined parameters so that there is no bias. The organisation shall lay down the objectives, the standards against which the audit shall be conducted, develop a checklist where required, sampling and data collection guidelines and preparation of the report. The audit shall encompass aspects of clinical care.

### Commitment

#### d. Patient, clinician and staff anonymity are maintained.

**Interpretation:** This means that the names of the patients and the DHSP staff who may figure in the audit documents must not be disclosed nor any reference is made to them in public discussions/conferences. This is at the stage of report preparation and dissemination. The staff participating in the audit shall maintain patient and staff anonymity and not reveal names.

### Commitment

#### e. Clinical audits are documented.

**Interpretation:** The organisation could use a checklist with the predefined parameters, and the audit findings could be recorded on this sheet. After the audit, a report shall be prepared, highlighting the key findings of the audit.

**Commitment****f. Remedial measures are implemented.**

**Interpretation:** All remedial measures as ascertained shall be documented and implemented, and improvements thereof recorded to complete the audit cycle. This shall preferably be done based on the root-cause analysis.

**Standard****PSQ.5.**

**Incidents are collected and analysed to ensure continuous patient safety and quality improvement.**

**Objective Elements****CORE****a. The organisation implements an incident management system. \***

**Interpretation:** The incident management system includes:

identification

reporting

review

action on incidents

This system supports factual reporting and learning and is based on the principle of just culture.

The organisation shall have a mechanism for reporting the occurrence of incidents on standardised incident report forms. It is preferable that the reporting system is simple (a few steps), clear (what needs to be reported, how to report, and to whom), confidential, and focused on process improvement.

While capturing the incidents, the organisation shall capture all incidents without going into the severity or whether harm was caused.

**Commitment****b. The organisation has a mechanism to identify sentinel events. \***

**Interpretation:** The sentinel events relating to system or process deficiencies that are relevant and important to the organisation must be clearly defined. The list of the identified and relevant sentinel events shall be documented.

Refer to the glossary for a definition of "sentinel events".

**Commitment****c. The DHSP has established processes for intense analysis of such events.**

**Interpretation:** The safety committee shall be responsible for this activity. This could preferably be done by identifying the root cause. Inputs could be sought from the units/discipline/departments concerned. Where possible, patients and other stakeholders could be included in analysing the feedback and complaint.

The immediate response to a safety incident shall be to address the urgent care and support needs of those involved. This shall not await analysis

In case of sentinel events, correction if any shall be initiated within 24-working hours of occurrence or reporting. The analysis of sentinel events shall be completed within seven working days of occurrence or reporting.

**Commitment****d. Corrective and Preventive Actions (CAPA) are taken upon findings of such analysis.**

**Interpretation:** The objective of this is to improve the quality of patient-care services continually. All such action shall be documented. The findings and recommendations arrived at after the analysis shall be communicated to all personnel concerned to correct the systems and processes to prevent recurrences. Any change in the policy or procedure is reflected as an amendment in the organisation's documentation.



## References:

1. Canadian Incident Analysis Framework. (2012). Canadian Patient Safety Institute. Retrieved May 08, 2022, from <https://www.patientsafetyinstitute.ca/en/toolsResources/IncidentAnalysis/Documents/Canadian%20Incident%20Analysis%20Framework.PDF>
2. Charles, R., Hood, B., Derosier, J. M., et al. (2016). How to perform a root cause analysis for workup and future prevention of medical errors: a review. *Patient Safety in Surgery*, 10(1). doi:10.1186/s13037-016-0107-8
3. Culture of Safety. Agency for Healthcare Research and Quality. Patient Safety Network. (2019). Retrieved May 08, 2022, from <http://psnet.ahrq.gov/primer.aspx?primerID=5>
4. Detection of Safety Hazards. (2019). Agency for Healthcare Research and Quality. Patient Safety Primers. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/primers/primer/24/Detection-of-Safety-Hazards>
5. Dimick, J. B. (2010). What Makes a “Good” Quality Indicator? *Archives of Surgery*, 145(3), 295. doi:10.1001/archsurg.2009.291
6. Donabedian, A. (1983). Quality Assessment and Monitoring. *Evaluation & the Health Professions*, 6(3), 363-375. doi:10.1177/016327878300600309
7. Doyle, C., Lennox, L., & Bell, D. (2013). A systematic review of evidence on the links between patient experience and clinical safety and effectiveness. *BMJ Open*, 3(1), e001570. doi:10.1136/bmjopen-2012-001570
8. Esposito P and Canton AD. Clinical audit, a valuable tool to improve quality of care: General methodology and applications in nephrology. *World J Nephrol*. 2014 Nov 6; 3(4): 249–255. Retrieved May 08, 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4220358/>
9. Ewen, B. M., & Bucher, G. (2013). Root Cause Analysis. *Home Healthcare Nurse*, 31(8), 435-443. doi:10.1097/nhh.0b013e3182a1dc32
10. Frankel A and Leonard M. Update on Safety Culture. (2013). Agency for Healthcare Research and Quality Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/perspective/update-safety-culture>
11. Fung, C. H., Lim, Y., Mattke, S., Damberg, C., & Shekelle, P. G. (2008). Systematic Review: The Evidence That Publishing Patient Care Performance Data Improves Quality of Care. *Annals of Internal Medicine*, 148(2), 111. doi:10.7326/0003-4819-148-2-200801150-00006
12. Gruen, R. L., Gabbe, B. J., Stelfox, H. T., & Cameron, P. A. (2011). Indicators of the quality of trauma care and the performance of trauma systems. *British Journal of Surgery*, 99(S1), 97-104. doi:10.1002/bjs.7754
13. How can leaders influence a safety culture? (2012). The Health Foundation. Retrieved May 08, 2022, from <https://www.health.org.uk/sites/default/files/HowCanLeadersInfluenceASafetyCulture.pdf>
14. How To Guides. Clinical audits. (n.d.). University Hospitals Bristol. Retrieved May 08, 2022, from <http://www.uhbristol.nhs.uk/for-clinicians/clinicalaudit/how-to-guides/>
15. Hughes, R. (2008). Chapter 44 Tools and Strategies for Quality Improvement and Patient Safety. In *Patient Safety and Quality: An Evidence-based Handbook for Nurses*.

16. Human Factors: Technical Series on Safer Primary Care. World Health Organization. (2016). Retrieved May 08, 2022, from <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjS1rnPrND3AhXU4HMBHaPYADEQFnoECAsQAQ&url=https%3A%2F%2Fapps.who.int%2Firis%2Frest%2Fbitstream%2F1070137%2Fretrieve&usg=AOvVaw2F7Ms2P-O-eEcMqTkLIP9f>
17. International Use of the Surveys on Patient Safety Culture. (2012). Agency for Healthcare Research and Quality. Retrieved May 08, 2022, from <http://www.ahrq.gov/professionals/quality-patient-safety/patientsafetyculture/pscintusers.html>
18. Jones, P., Shepherd, M., Wells, S., Le Fevre, J., & Ameratunga, S. (2014). Review article: What makes a good healthcare quality indicator? A systematic review and validation study. *Emergency Medicine Australasia*, 26(2), 113-124. doi:10.1111/1742-6723.12195
19. Kötter, T., Blozik, E., & Scherer, M. (2012). Methods for the guideline-based development of quality indicators--a systematic review. *Implementation Science*, 7(1). doi:10.1186/1748-5908-7-21
20. Krause, C. (2017). The Case for Quality Improvement. *Healthcare Quarterly*, 20(1), 25-27. doi:10.12927/hcq.2017.25138
21. Leonard, M. E. (2013). *The Essential Guide for Patient Safety Officers* (2nd ed.).
22. Leotsakos, A., Zheng, H., Croteau, R., Loeb, J. M., Sherman, H., Hoffman, C., ... Munier, B. (2014). Standardization in patient safety: the WHO High 5s project. *International Journal for Quality in Health Care*, 26(2), 109-116. doi:10.1093/intqhc/mzu010
23. Limb, C., Fowler, A., Gundogan, B., Koshy, K., & Agha, R. (2017). How to conduct a clinical audit and quality improvement project. *International Journal of Surgery Oncology*, 2(6), e24. doi:10.1097/ij9.0000000000000024
24. Lindblad, S., Ernestam, S., Van Citters, A., Lind, C., Morgan, T., & Nelson, E. (2016). Creating a culture of health: evolving healthcare systems and patient engagement. *QJM*, hcw188. doi:10.1093/qjmed/hcw188
25. Medicine, I. O., Board on Health Care Services, & Committee on Patient Safety and Health Information Technology. (2012). *Health IT and Patient Safety: Building Safer Systems for Better Care*. Washington, DC: National Academies Press.
26. Patient safety incident reporting and learning systems: technical report and guidance. (2020). World Health Organization. Retrieved May 08, 2022, from <https://www.who.int/publications/i/item/9789240010338>
27. Patient Safety Solutions. (2017). World Health Organization. Retrieved May 08, 2022, from <https://www.who.int/teams/integrated-health-services/patient-safety/research/patient-safety-solutions>
28. Quality Improvement Essentials Toolkit. (n.d.). Institute for Healthcare Improvement. Retrieved May 08, 2022, from <http://www.ihl.org/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx>
29. Quality Statistics - Statistical Methods for Quality Improvement. (n.d.). American Society for Quality. Retrieved May 08, 2022, from <https://asq.org/quality-resources/statistics>

30. RCA2 Improving Root Cause Analyses and Actions to Prevent Harm. (2015). National Patient Safety Foundation. Retrieved May 08, 2022, from <https://www.ashp.org/-/media/assets/policy-guidelines/docs/endorsed-documents/endorsed-documents-improving-root-cause-analyses-actions-prevent-harm.ashx>
31. Reporting Patient Safety Events. (2019). Agency for Healthcare Research and Quality. Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/primers/primer/13/reporting-patient-safety-events%20on%20April%2016>
32. Root Cause Analysis. (2019). Agency for Healthcare Research and Quality. Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/primers/primer/10/Root-Cause-Analysis>
33. Rubin, H. R. (2001). The advantages and disadvantages of process-based measures of health care quality. *International Journal for Quality in Health Care*, 13(6), 469-474. doi:10.1093/intqhc/13.6.469
34. Santana, M., Ahmed, S., Lorenzetti, D., et al. (2019). Measuring patient-centred system performance: a scoping review of patient-centred care quality indicators. *BMJ Open*, 9(1), e023596. doi:10.1136/bmjopen-2018-023596
35. Secanell, M., Groene, O., Arah, O. A., et al. (2014). Deepening our understanding of quality improvement in Europe (DUQuE): overview of a study of hospital quality management in seven countries. *Int J Qual Health Care*, 2014(1), 5-15. doi:10.1093/intqhc/mzu025
36. Seven basic quality tools for process improvement. (n.d.). American Society for Quality. Retrieved May 08, 2022, from <https://asq.org/quality-resources/seven-basic-quality-tools>
37. Shaikh U. Strategies and Approaches for Investigating Patient Safety Events. (2022). Retrieved May 08, 2022, from <https://psnet.ahrq.gov/primer/strategies-and-approaches-investigating-patient-safety-events>
38. Shaikh U. Strategies and Approaches for Tracking Improvements in Patient Safety. (2021). Agency for Healthcare Research and Quality Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/primer/strategies-and-approaches-tracking-improvements-patient-safety>
39. Swensen, S. J., Dilling, J. A., Mc Carty, P. M., et al. (2013). The business case for health-care quality improvement. *J Patient Saf*, 9(1), 44-52. doi:10.1097/PTS.0b013e3182753e33
40. Systematic review: the evidence that publishing patient care performance data improves quality of care. (2009). *Clinical Governance: An International Journal*, 14(1). doi:10.1108/cgij.2009.24814aae.006
41. Thomas, E. J. (2015). The future of measuring patient safety: prospective clinical surveillance. *BMJ Quality & Safety*, 24(4), 244-245. doi:10.1136/bmjqs-2015-004078
42. Thomas, L., & Galla, C. (2012). Building a culture of safety through team training and engagement. *BMJ Quality & Safety*, 22(5), 425-434. doi:10.1136/bmjqs-2012-001011
43. Trbovich, P. L., & Griffin, M. (2015). Measuring and improving patient safety culture: still a long way to go. *BMJ Quality & Safety*, 25(3), 209-211. doi:10.1136/bmjqs-2015-005038
44. Tsai, T. C., Jha, A. K., Gawande, A. A., Huckman, R. S., Bloom, N., & Sadun, R. (2015). Hospital Board And Management Practices Are Strongly Related To Hospital Performance On Clinical Quality Metrics. *Health Affairs*, 34(8), 1304-1311. doi:10.1377/hlthaff.2014.1282

45. Wagner, C., Smits, M., Sorra, J., & Huang, C. C. (2013). Assessing patient safety culture in hospitals across countries. *International Journal for Quality in Health Care*, 25(3), 213-221. doi:10.1093/intqhc/mzt024
46. Ways To Approach the Quality Improvement Process. (2017). Agency for Healthcare Research and Quality. Retrieved May 08, 2022, from <https://www.ahrq.gov/cahps/quality-improvement/improvement-guide/4-approach-qi-process/index.html>
47. Weaver, S. J., Lubomksi, L. H., Wilson, R. F., Pfoh, E. R., Martinez, K. A., & Dy, S. M. (2013). Promoting a Culture of Safety as a Patient Safety Strategy. *Annals of Internal Medicine*, 158(5\_Part\_2), 369. doi:10.7326/0003-4819-158-5-201303051-00002
48. What is Risk Management in Healthcare? (2019). NEJM Catalyst. Retrieved May 08, 2022, from <https://catalyst.nejm.org/what-is-risk-management-in-healthcare/>
49. What is Root Cause Analysis (RCA)?. (n.d.). American Society for Quality. Retrieved May 08, 2022, from <https://asq.org/quality-resources/root-cause-analysis>

# Chapter 7

## Responsibilities of Management (ROM)

**Intent of the chapter :** The standards encourage the governance of the DHSP in a professional and ethical manner. The responsibilities of the management are defined. The DHSP complies with all applicable regulations. The DHSP is led by a suitably qualified and experienced individual. The responsibilities of the leaders at all levels are defined. The services provided by each department are documented. DHSP ensures that patient safety and risk management issues are an integral part of patient care and management.

### Summary of Standards

ROM.1.	The responsibilities of the management are defined.
ROM.2.	The leaders manage the organisation in an ethical manner.
ROM.3.	A suitably qualified and experienced individual heads the DHSP.
ROM.4.	The organisation displays professionalism in its functioning.
ROM.5.	Leaders ensure that patient safety aspects and risk management issues are an integral part of patient care and management.

Objective Element	ROM 1	ROM 2	ROM 3	ROM4	ROM 5
a.	Core	Commitment	Commitment	Excellence	Core
b.	Commitment	Core	Commitment	Achievement	Achievement
c.	Commitment	Commitment		Commitment	Commitment
d.	Commitment	Commitment		Excellence	Commitment
e.	Commitment				Commitment
f.	Commitment				
g.	Excellence				
h.					
i.					

## Standard

**ROM.1.**
**The responsibilities of the management are defined.**

## Objective Elements

### CORE

- a. Those responsible for governance are identified, and their roles and responsibilities are defined and documented. \***

**Interpretation:** Those responsible for governance are accountable for the quality of care and help the healthcare organisation achieve its goals. The terms of reference, by-laws and membership of those responsible for governance is documented. This may require that those responsible for governance receive formal orientation and ongoing education regarding their role. Those responsible for governance meet at regular intervals and minutes of the meeting are maintained.

### Commitment

- b. Those responsible for governance lay down the organisation's vision, mission and values. \***

**Interpretation:** The organisation shall enunciate its vision, mission and values through an authorised document. These shall be developed and reviewed by those responsible for governance in consultation with the organisation's leaders. Further, inputs could be from external stakeholders, including patients and families.

For the definition of "mission", "vision" and "values" refer to the glossary.

### Commitment

- c. Those responsible for governance approve the strategic and operational plans and the organisation's annual budget.**

**Interpretation:** The methodology and frequency of preparation of strategic plan may differ according to the size and type of organisation. Operational plans and budget/expenditure shall be approved annually. The operational plan should be linked to the strategic plan. The strategic and operational plans should identify responsibility and possible timeframes for achievement. The annual budget should include both capital expenditure and operating expenditure.

Refer to the glossary for "strategic and operational plans".

### Commitment

- d. Those responsible for governance establish the DHSP's organogram.**

**Interpretation:** The DHSP shall have the reporting structure/chart and this shall clearly document the hierarchy, line of control and function.

**Commitment****e. Those responsible for governance appoint the senior leaders in the DHSP.**

**Interpretation:** At a minimum, the person responsible for managing the day-to-day functioning of the organisation shall be appointed by those responsible for governance. This may be based on qualifications, training, experience, skills.

**Commitment****f. Those responsible for governance support safety initiatives and quality improvement plans.**

**Interpretation:** Reports of the safety and quality improvement committee's discussions are shared with those responsible for governance, and funds and resources allocated for corrective and preventive action. The information shared shall include the salient points of risk management and quality improvement activities.

**Excellence****g. Those responsible for governance inform the public of the quality and performance of services.**

**Interpretation:** This could be done in the form of displays or brochures or on the website. This could include positive and negative feedback received from the stakeholders, results of surveys done by independent third parties, results of benchmarking done by professional bodies, etc.

**Standard****ROM.2.****The leaders manage the organisation in an ethical manner.****Objective Elements****Commitment****a. The leaders make public the vision, mission and values of the organisation.**

**Interpretation:** The vision, mission and values of the organisation should be displayed prominently. Only a display on its website would not be appropriate. The same could be translated and displayed in the local language also.

For the definition of "mission", "vision" and "values" refer to the glossary.

**CORE****b. The leaders establish the DHSP's ethical management framework.**

**Interpretation:** The organisation shall function ethically. Transparency in its actions shall be one of its guiding principles. Handling of complaints, grievances, clinical care delivery and research shall be some of the areas to address. The framework includes codes of conduct. A good reference guide for minimum code of conduct for dentist is "Code of Dental Ethics" published by the Dental Council of India.



**Commitment****c. The DHSP discloses its ownership.**

**Interpretation:** The ownership of the DHSP, for example, trust, private, public with the name of the ownership has to be disclosed. The disclosure could be in the form of a registration certificate.

**Commitment****d. The DHSP honestly portrays its affiliations and accreditations.**

**Interpretation:** It implies that the organisation conveys its affiliations, accreditations for specific departments or whole DHSP in an honest manner, wherever such exist.

**Standard****ROM.3.****A suitably qualified and experienced individual heads the DHSP.****Objective Elements****Commitment****a. The designated individual has requisite and appropriate administrative qualifications.**

**Interpretation:** Appropriate implies qualification in DHSP management / administration.

**Commitment****b. The designated individual has requisite and appropriate administrative experience.**

**Interpretation:** Appropriate implies administrative experience in a DHSP.

**Standard****ROM.4.****The organisation displays professionalism in its functioning.****Objective Elements****Excellence****a. The organisation has strategic and operational plans, including long-term and short-term goals commensurate to the organisation's vision, mission and values in consultation with the various stakeholders.**

**Interpretation:** The leader(s) shall define and develop the process for strategic and operational plans to achieve the organisational vision and mission statement and adhere to the values. It shall be discussed with all stakeholders. The strategic plan development should take into consideration both external and internal scan. The external scan includes a scan of the environment. The same can be done using relevant tools.. Some of the inputs that should be considered while finalising these

plans shall be the findings of the risk management plan, patient safety goals and results of facility rounds. Operational plan(s) shall at least be done on an annual basis.

Refer to the glossary for “strategic plan” and operational plan”.

#### Achievement

#### b. The functioning of committees is reviewed for their effectiveness.

**Interpretation:** The review shall be done by the management. The review of the functioning shall include whether the purpose of having the committee is being met, whether the committee is meeting at the prescribed frequency and whether the committee is suggesting remedial measures and if there is adequate monitoring of the corrective and preventive action suggested by the committee by way of risk mitigation within the scope of the particular committee Minutes of the meeting for each committee meeting will be maintained.

#### Commitment

#### c. The organisation documents staff rights and responsibilities. \*

**Interpretation:** The organisation shall define the same in consonance with statutory requirements.

## Standard

### ROM.5.

**Leaders ensure that patient safety aspects and risk management issues are an integral part of patient care and management.**

## Objective Elements

### CORE

#### a. Management ensures proactive risk management across the organisation. \*

**Interpretation:** Risk management shall include clinical and non-clinical (strategic, financial, operational and hazard) risks. It shall include risk identification at every level of the organisation, analysis, prioritisation and risk alleviation. The same shall be documented. At a minimum, analysis of potential risks must include the likelihood of its occurrence and the potential severity of the impact or consequences. The identified risks shall be documented in a risk register, which shall be updated at regular intervals.

The clinical-risk assessment could include:

- Medication management, covering issues such as patient/service-user allergies and antibiotic resistance,
- Equipment risks, e.g., fire/injury risks from the use of LASER, and
- Risks resulting from long-term conditions.

**Achievement****b. Management ensures implementation of systems for internal and external reporting of system and process failures.**

**Interpretation:** The organisation has a system in place for internal and external reporting of system and process failures. The contingency plan shall be in place to deal with the situation of system and process failure anticipated within the organisation. For example, in case of fire incidents, strong internal and external reporting systems are required. The system for reporting shall be documented.

**Commitment****c. Management provides resources for proactive risk assessment and risk reduction activities.**

**Interpretation:** There shall be sufficient resources kept as a contingency to address the risk reduction activities as and when the leaders proactively suggest. These shall be directed at preventive actions wherever feasible. Management ensures integration between quality improvement, risk management and strategic planning within the organisation. Refer to the glossary for a definition of “risk assessment” and “risk reduction”.

**Commitment****d. Management ensures that it has a documented agreement for all outsourced services that include service parameters.**

**Interpretation:** The agreement shall specify the service parameters. Examples of service parameters include quality, numbers, reports and timelines. The agreement should include agreed dispute resolution mechanisms. Even if a group/affiliate concern is providing services, there shall be an agreement with that unit.

## References:

1. Alam, A. Y. (2016). Steps in the Process of Risk Management in Healthcare. *Journal of Epidemiology and Preventive Medicine*, 02(02). doi:10.19104/jepm.2016.118
2. Arnwine, D. L. (2002). Effective Governance: The Roles and Responsibilities of Board Members. *Baylor University Medical Center Proceedings*, 15(1), 19-22. doi:10.1080/08998280.2002.11927809
3. Baba, V. V., & HakemZadeh, F. (2012). Toward a theory of evidence based decision making. *Management Decision*, 50(5), 832-867. doi:10.1108/00251741211227546
4. Balding, C. (2008). From quality assurance to clinical governance. *Australian Health Review*, 32(3), 383. doi:10.1071/ah080383
5. Barends E, Rousseau DM and Briner RB. (2014). Evidence-Based Management: The Basic Principles. Center for Evidence-Based Management. Retrieved May 08, 2022, from <https://www.cebma.org/wp-content/uploads/Evidence-Based-Practice-The-Basic-Principles-vs-Dec-2015.pdf>
6. Biller-Andorno, N. (2004). Ethics, EBM, and hospital management. *Journal of Medical Ethics*, 30(2), 136-140. doi:10.1136/jme.2003.007161
7. Braithwaite, J., Herkes, J., Ludlow, K., Testa, L., & Lamprell, G. (2017). Association between organisational and workplace cultures, and patient outcomes: systematic review. *BMJ Open*, 7(11), e017708. doi:10.1136/bmjopen-2017-017708
8. Bruning, P. (2013). Improving Ethical Decision Making in Health Care Leadership. *Business and Economics Journal*, 04(02). doi:10.4172/2151-6219.1000e101
9. Chatterjee, C., & Srinivasan, V. (2013). Ethical issues in health care sector in India. *IIMB Management Review*, 25(1), 5. doi:10.1016/j.iimb.2012.12.007
10. Choudhuri, D. (2015). Strategic Planning: A Comprehensive Approach. Retrieved May 08, 2022, from <https://www.structuremag.org/wp-content/uploads/2015/08/D-BusinessPrac-Choudhuri-Sept151.pdf>
11. Clay-Williams, R., Ludlow, K., Testa, L., Li, Z., & Braithwaite, J. (2017). Medical leadership, a systematic narrative review: do hospitals and healthcare organisations perform better when led by doctors? *BMJ Open*, 7(9), e014474. doi:10.1136/bmjopen-2016-014474
12. Combes, J. R. (2009). Effective boards begin with effective board members. *Trustee*, 62(9), 26-29.
13. Common Ethical Dilemmas for Doctors. *Medscape*. (n.d.). Retrieved May 08, 2022, from <https://www.medscape.com/courses/section/898063>
14. Daly, J., Jackson, D., Mannix, J., Davidson, P., & Hutchinson, M. (2014). The importance of clinical leadership in the hospital setting. *Journal of Healthcare Leadership*, 75. doi:10.2147/jhl.s46161
15. Davies, H. T. (2000). Organisational culture and quality of health care. *Quality in Health Care*, 9(2), 111- 119. doi:10.1136/qhc.9.2.111

16. Determining Your Core Values, Mission, and Vision. (2015). Complete Guide to Practice Management, 3-18. doi:10.1002/9781119204312.ch1
17. Doran, E., Fleming, J., Jordens, C., Stewart, C. L., Letts, J., & Kerridge, I. H. (2015). Managing ethical issues in patient care and the need for clinical ethics support. *Australian Health Review*, 39(1), 44. doi:10.1071/ah14034
18. Effective board members have three qualities. (2019). *Board & Administrator for Administrators Only*, 35(S7), 2-2. doi:10.1002/ban.30866
19. Feudtner, C., Schall, T., Nathanson, P., & Berry, J. (2018). Ethical Framework for Risk Stratification and Mitigation Programs for Children With Medical Complexity. *Pediatrics*, 141(Supplement 3), S250-S258. doi:10.1542/peds.2017-1284j
20. Frankel A and Leonard M. Update on Safety Culture. (2013). Agency for Healthcare Research and Quality Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/perspective/update-safety-culture>
21. G20/OECD Principles of Corporate Governance. (2015). OECD. Retrieved May 08, 2022, from <https://www.oecd.org/daf/ca/Corporate-Governance-Principles-ENG.pdf>
22. Govind, N. (2014). Between families and doctors. *Indian Journal of Medical Ethics*. doi:10.20529/ijme.2014.016
23. India Code: Home. Digital repository of all central and state acts. (n.d.). Government of India. Retrieved May 08, 2022, from <https://indiacode.nic.in/>
24. Ingersoll, G. L., Witzel, P. A., & Smith, T. C. (2005). Using Organizational Mission, Vision, and Values to Guide Professional Practice Model Development and Measurement of Nurse Performance. *JONA: The Journal of Nursing Administration*, 35(2), 86-93. doi:10.1097/00005110-200502000-00008
25. Jondle, D., Maines, T. D., Burke, M. R., & Young, P. (2013). Modern risk management through the lens of the ethical organizational culture. *Risk Management*, 15(1), 32-49. doi:10.1057/rm.2012.11
26. Kaya, G. K., Ward, J. R., & Clarkson, P. J. (2018). A framework to support risk assessment in hospitals. *International Journal for Quality in Health Care*, 31(5), 393-401. doi:10.1093/intqhc/mzy194
27. Kaya, G. K., Ward, J. R., & Clarkson, P. J. (2018). A framework to support risk assessment in hospitals. *International Journal for Quality in Health Care*, 31(5), 393-401. doi:10.1093/intqhc/mzy194
28. Kuhn, A. M. (2002). The need for risk management to evolve to assure a culture of safety. *Quality and Safety in Health Care*, 11(2), 158-162. doi:10.1136/qhc.11.2.158
29. Mannion, R., & Davies, H. (2018). Understanding organisational culture for healthcare quality improvement. *BMJ*, k4907. doi:10.1136/bmj.k4907
30. McDonagh, K. J. (2006). Hospital Governing Boards: A Study of Their Effectiveness in Relation to Organizational Performance. *Journal of Healthcare Management*, 51(6), 377-389. doi:10.1097/00115514-200611000-00007
31. McSherry, R., Wadding, A., & Pearce, P. (n.d.). Healthcare Governance Through Effective Leadership. *Effective Healthcare Leadership*, 58-75. doi:10.1002/9780470774984.ch5

32. Organizational Management—How to Run a Meeting and Make Decisions. (n.d.). Developing Human Service Leaders, 149-168. doi:10.4135/9781506330389.n11
33. Orlikoff, J. E., & Totten, M. K. (2007). Center for Healthcare Governance: effective board development: showing the way toward exceptional governance. *Healthc Exec.*, 22(3), 68-70.
34. Personal Characteristics of Effective Boards and Members. (2015). *Audit Committee Essentials*, 33-39. doi:10.1002/9781119201472.ch3
35. Phrampus PE. Building a Safety Program in a Vast Health Care Network. (2019). Agency for Healthcare Research and Quality. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/perspective/building-safety-program-vast-health-care-network>
36. Quality and Patient Safety Directorate. (2012). Quality and Patient Safety Clinical Governance Development: an assurance check for health service providers. Retrieved May 08, 2022, from <https://www.pna.ie/images/0405124.pdf>
37. Rego, A., Araújo, B., & Serrão, D. (2015). The mission, vision and values in hospital management. *Journal of Hospital Administration*, 5(1). doi:10.5430/jha.v5n1p62
38. Risk management -- Guidelines. (2018). International Organization for Standardization. ISO 31000:2018 Retrieved May 08, 2022, from <https://www.iso.org/standard/65694.html>
39. Schmets G, Rajan D, Kadandale S. Strategizing National Health in the 21st Century: A Handbook. World Health Organization. (2016). Retrieved May 08, 2022, from <http://apps.who.int/iris/bitstream/10665/250221/41/9789241549745-eng.pdf?ua=1>
40. Stern RJ and Sarkar U. Update: Patient Engagement in Safety. (2018). Agency for Healthcare Research and Quality. Patient Safety Network. Retrieved May 08, 2022, from <https://psnet.ahrq.gov/perspective/update-patient-engagement-safety>
41. Strategic Planning: Why It Makes a Difference, and How to Do It. (2009). *Journal of Oncology Practice*, 5(3), 139-143. doi:10.1200/jop.0936501
42. Suchy, K. (2010). A Lack of Standardization: The Basis for the Ethical Issues Surrounding Quality and Performance Reports. *Journal of Healthcare Management*, 55(4), 241-251. doi:10.1097/00115514-201007000-00005
43. Trybou, J., Gemmel, P., Desmidt, S., & Annemans, L. (2017). Fulfillment of administrative and professional obligations of hospitals and mission motivation of physicians. *BMC Health Services Research*, 17(1). doi:10.1186/s12913-017-1990-0
44. Useem, M. (n.d.). How well-run boards make decisions. *Harv Bus Rev.*, 84(11), 130-6.

# Chapter 8

## Facility Management and Safety (FMS)

**Intent of the chapter :** The standards guide the provision of a safe and secure environment for patients, their families, staff and visitors. To ensure this, the DHSP conducts regular facility inspection rounds and takes the appropriate action to ensure safety. The DHSP provides for safe water, electricity, medical gases and vacuum systems. The DHSP has a programme for clinical and support service equipment management. The DHSP plans for emergencies within the facilities and the community. The DHSP is a no smoking area and manages hazardous materials in a safe manner.

### Summary of Standards

<b>FMS.1.</b>	The DHSP has a system in place to provide a safe and secure environment.
<b>FMS.2.</b>	The organisation's environment and facilities operate in a planned manner and promotes environment-friendly measures.
<b>FMS.3.</b>	The DHSP's environment and facilities operate to ensure safety of patients, their families, staff and visitors.
<b>FMS.4.</b>	The organisation has a programme for medical and support service equipment management.
<b>FMS.5.</b>	The organisation has a programme for medical gases, vacuum and compressed air.
<b>FMS.6.</b>	The DHSP has plans for fire and non-fire emergencies within the facilities.

Objective Element	FMS 1	FMS 2	FMS 3	FMS 4	FMS 5	FMS 6
a.	Core	Commitment	Excellence	Commitment	Commitment	Core
b.	Commitment	Excellence	Commitment	Commitment	Core	Commitment
c.	Core	Core	Achievement	Core	Commitment	Commitment
d.	Commitment	Core	Commitment	Commitment	Commitment	Commitment
e.	Commitment	Commitment	Core	Commitment		
f.		Commitment	Commitment	Achievement		
g.		Excellence		Achievement		



## Standard

**FMS.1.**
**The DHSP has a system in place to provide a safe and secure environment.**

## Objective Elements

**CORE**

- a. Patient-safety devices and infrastructure are installed across the organisation and inspected periodically.**

**Interpretation:** For example, grab bars, bed rails, signposting, safety belts on wheelchairs, warning signs like radiation or biohazard, fire-safety devices, etc.

**Commitment**

- b. The organisation has facilities for the differently-abled.**

**Interpretation:** Provisions are made for differently-abled persons like the physically challenged, the visually impaired and mentally impaired person. At a minimum, this shall be as per regulatory requirement. For example, wheelchair accessible entrance.

**CORE**

- c. Facility inspection rounds to ensure safety are conducted at least once a month.**

**Interpretation:** Potential safety risks are identified during the rounds using a checklist. The potential security risk areas and restricted areas are identified and are monitored. The organisation plans and budgets for upgrading or replacing key systems, buildings, or components based on the facility inspection. Inspection reports of facility rounds are documented, and corrective and preventive measures are undertaken.

**Commitment**

- d. The DHSP defines its policies to eliminate smoking.**

**Interpretation:** DHSP should follow Government guidelines of no-smoking in public places strictly. The policy has provisions for motivating patients and families and its staff not to smoke. HSP should sensitize its staff towards the no-smoking policy

## Standard

**FMS.2.**
**The organisation's environment and facilities operate in a planned manner and promotes environment-friendly measures.**

## Objective Elements

**Commitment**

- a. Facilities and space provisions are appropriate to the scope of services.**

**Interpretation:** The basis of the appropriateness of facilities and space provisions will be as per the national/international guidelines. For example, regulatory requirements, the directive of government agencies like AERB guidelines.

**Excellence****b. As-built and updated drawings are maintained as per statutory requirements.**

**Interpretation:** A designated person maintains as-built and updated site layout, floor drawings, floor wise fire evacuation plans, separate civil, electrical, plumbing, HVAC and piped medical gas drawings.

**CORE****c. There are internal and external sign postings in the organisation in a manner understood by the patient, families and community.**

**Interpretation:** Manner implies language and/or pictorial. Signage could be bi-lingual and should meet statutory requirements.

**CORE****d. Potable water and electricity are available round the clock.**

**Interpretation:** The organisation shall make arrangements for the supply of adequate potable water and electricity. Potable water quality is monitored and documented. Water testing includes bio-chemical (once in three months) and microbiological analysis (once in three months). Water shall be collected at the user end (tap). For water quality, refer to the current version IS 10500. Alternate sources for electricity and water are provided as a backup for any failure/shortage. The organisation tests the functioning of these alternate sources at a predefined frequency.

**Excellence****e. The organisation takes initiatives towards an energy-efficient and environmentally friendly DHSP. \***

**Interpretation:** This includes using the concepts of reduce, recycle and reuse in promoting the basic concepts of the green clinic. e.g. energy-efficient lighting, rainwater harvesting, increase usage of solar power, wind energy, use of battery-operated or e-vehicles, recycling of STP/ETP water for gardening and flush water, reduction of plastic usage where possible, use of 'green' materials in construction, use of volatile organic compounds free paints. The organisation should focus on efficient and sustainable use of energy, water and other utilities.

**Standard****FMS.3.**

**The DHSP's environment and facilities operate to ensure safety of patients, their families, staff and visitors.**

**Objective Elements****Commitment****a. Operational planning identifies areas which need to have extra security and describes access to different areas in the hospital by staff, patients, and visitors.**

**Interpretation:** The planning process shall begin by identifying various categories of people in a DHSP. At a minimum, this shall include staff, patients and visitors, in the DHSP. The DHSP shall have a mechanism to identify the defined categories. The DHSP shall define access to different areas in the clinic for the defined categories as per the operational security plan. Vulnerable areas like, long corridors, entrances to critical areas need to be identified, and appropriate security is in place such as CCTV coverage.

**Achievement****b. The organisation conducts electrical safety audits for the facility.**

**Interpretation:** The intent of electrical safety audits is to minimise the electrical risks to persons and property and ensure that occurrence of fire due to short-circuiting is prevented. It should be performed at least once a two years. It could be incorporated into the electric system maintenance plan. The help of new technology like thermal imaging equipment can help detect loose connections in the system and thereby prevent fire incidents. This shall incorporate statutory requirements where applicable. National electrical code 2011 could be used as a reference document.

**Commitment****c. There is a procedure which addresses the identification and disposal of material(s) not in use in the organisation. \***

**Interpretation:** Organisation shall condemn and dispose of the material which is not in usage such as non-functioning items, excess unwanted material, general waste, scrap material etc.

**CORE****d. Hazardous materials are identified and used safely within the organisation. \***

**Interpretation:** The organisation shall identify and document the hazardous materials and has a documented procedure for their sorting, storage, handling, transportation and disposal. In addition to chemicals, biological materials like blood, body fluids and microbiological cultures, mercury, medical gases, LPG gas, steam, etc. are some of the other common hazardous materials.

The organisation could develop its procedures based on Material Safety Data Sheets (MSDS). Applicable statutory requirements shall be complied.

**Commitment****e. The plan for managing spills of hazardous materials is implemented. \***

**Interpretation:** The plan shall be developed based on information provided in MSDS. The key elements shall be summarised in a manner that is easy to understand (if necessary, translated in local language) and available for staff to refer to wherever such materials are stored. Personnel who handle such material are accordingly trained. The organisation has a HAZMAT kit(s) for handling spills of hazardous materials.

**Standard****FMS.4.**

**The organisation has a programme for medical and support service equipment management.**

**Objective Elements****Commitment****a. The organisation plans for medical and support service equipment in accordance with its services and strategic plan.**

**Interpretation:** This shall also take into consideration future requirements. The medical equipment shall be appropriate to its scope of services. A good reference for minimum medical equipment is the IPHS guideline. Medical equipment is selected, rented, updated or upgraded by a collaborative process. Collaborative process implies that during equipment selection, there is involvement of end-user, management, finance, engineering and biomedical departments. The organisation could define differential financial clearance in accordance with the policy. For example, the purchase of BP apparatus can be made by the departmental head.

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**Commitment**
**b. Medical equipment and support service equipment are inventoried, and proper logs are maintained as required.**

**Interpretation:** Medical equipment and medical devices will be classified as per the risk defined by medical devices regulations. A unique identifier is provided for each equipment. This includes equipment on a rental basis and equipment kept for demonstration purpose. The relevant quality conformance certificates/marks along with manufacturer factory test certificate need to be retained as part of the documentation for all equipment.

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**CORE**
**c. The documented operational and maintenance (preventive and breakdown) plan for medical and support service equipment is implemented. \***

**Interpretation:** The operator is trained in handling the medical equipment. The operational plan must assist the operator in operating the medical equipment daily. The original equipment manual is a good source for this. In case this is not available, the organisation shall develop the operational plan for the concerned equipment. The operational plan of medical equipment includes evaluation of safe usage of equipment like validation with respect to the instruction manual, user training on equipment, operational check of equipment and verification of set parameter. This includes plans for all utility equipment, engineering equipment, electrical systems, water management, HVAC, facility and furniture. The maintenance plan includes periodic checks, execution of timely preventive maintenance, and response to any breakdown issues including at night and weekends. There shall be a planned preventive maintenance tracker.

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**Commitment**
**d. Medical and support service equipment are periodically inspected and calibrated for their proper functioning.**

**Interpretation:** The organisation has weekly/monthly/annual schedules of inspection and calibration of equipment, which involve measurement, appropriately. The organisation either calibrates the equipment in-house or outsources, maintaining traceability to national or international or manufacturer's guidelines/standards. The organisation shall ensure that calibration and conformance testing of the equipment has been done before commissioning. Medical equipment is re-calibrated after its repairs/breakdown.

**Commitment**

- e. **Qualified and trained personnel operate and maintain medical and support service equipment.**

**Interpretation:** The operator of the medical equipment is trained to use medical equipment safely and effectively. eMaintenance of medical equipment shall be done by a bio-medical engineer/technologist or instrumentation engineer/technologist with relevant training and experience.

**Achievement**

- f. **There is monitoring of medical equipment and medical devices related to adverse events, and compliance hazard notices on recalls. \***

**Interpretation:** The monitoring shall include medical device-related adverse events. All statutory requirements and procedures shall be adhered to (Gazette of India GSR 78(E) 2017. Medical device rules 2017).

**Achievement**

- g. **Downtime for critical equipment breakdown is monitored from reporting to inspection and implementation of corrective actions**

**Interpretation:** The organisation shall define critical medical equipment.. The organisation shall define the critical engineering and utility equipment. At a minimum, this shall include DG set, lifts, UPS, and water pumps. A complaint attendance register is to be maintained (physical or electronic) to indicate the date and time of receipt of the complaint, allotment of job and completion of the job. Completion of the job should always be ratified by the user department. The start of downtime shall be the time when the complaint was lodged, and the end of the downtime shall be the time at which completion of the job was ratified by the user department.

**Standard****FMS.5.**

**The organisation has a programme for medical gases, vacuum and compressed air.**

**Objective Elements****Commitment**

- a. **The DHSP procedures for medical gasses address the safety issues at all levels.**

**Interpretation:** This shall include from the point of storage/ source area, gas supply lines and the end user area. Appropriate safety measures shall be developed and implemented for all levels. These shall include alarm units and valve boxes installation at various locations and monitoring of alarm units for gas pressure going beyond the limit.

**CORE****b. The written guidance governs the handling, storage, distribution and use of medical gases in a safe manner**

**Interpretation:** Regular testing of medical gases cylinder will be carried out as per supplier recommendations. The standardized colour coding of the cylinder and pipe line should be maintained. The good reference for medical gas systems HTM02-01, ISO 7396-1; 2016 (medical gas pipeline system).

**Commitment****c. The organisation regularly tests the functioning of these alternate sources.**

**Interpretation:** The results of these tests shall be documented.

**Commitment****d. There is a maintenance plan for centralized compressed air supply system, if installed.**

**Interpretation:** This shall adhere to the manufacturer's recommendations.

**Standard****FMS.6.**

**The DHSP has plans for fire and non-fire emergencies within the facilities.**

**Objective Elements****CORE****a. The DHSP has plans and provisions for early detection, abatement and containment of fire and non-fire emergencies.**

**Interpretation:** The organisation shall:

- I. has a fire plan covering fire arising out of burning of inflammable items, explosion, electric short-circuiting or acts of negligence or due to the incompetence of the staff on duty;
- II. deploy adequate and qualified personnel for this;
- III. follow NABH minimum fire safety guidelines;
- IV. have safety measures in place to minimise the effect of smoke during the fire;
- V. has adequate training plans;
- VI. have schedules for the conduct of mock fire drills;
- VII. maintain mock drill records;
- VIII. display exit plans prominently;
- IX. have a dedicated emergency illumination system, which comes into effect in case of fire.

The organisation shall take care of non-fire emergencies by identifying them and by deciding the appropriate course of action. The organisation shall establish liaison with civil and police authorities and fire brigade as required by law for enlisting their help and support in case of an emergency.

**Commitment**

- b. **The DHSP has a documented safe exit plan in case of fire and non-fire emergencies.**

**Interpretation:** Exit plan shall be displayed on each floor, particularly close to the lifts and inside all enclosed areas like individual rooms and laboratories. Exit doors should remain open or have push bars on them. Fire signage should follow the norms laid down by respective statutory body (for example, fire service) and/or National Building Code. Signage and maintenance of refuge area as applicable should be done.

**Commitment**

- c. **Staff is trained for their role in case of such emergencies.**

**Interpretation:** In case of fire, designated persons are assigned particular work.

**Commitment**

- d. **Mock drills are held at least twice in a year.**

**Interpretation:** Testing the plan twice a year is only the minimum frequency, and this may be increased. This includes fire and important non-fire emergencies (as identified by the organisation).

The plan can be tested using a table-top exercise, or a mock drill. At a minimum, at least one mock drill should be held once in 12 months. This shall test all the components of the plan and not just awareness/demonstration of practices. In the case of a mock drill, simulated patients (not real) shall be used. After every table-top exercise/mock drill, the variations are identified, the reason for the same is analysed, debriefing conducted and where appropriate the necessary corrective and/or preventive actions are taken.

## References:

1. Aggarwal, R., Mytton, O. T., Greaves, F., & Vincent, C. (2010). Technology as applied to patient safety: an overview. *Quality and Safety in Health Care*, 19 (Suppl 2), i3-i8. doi:10.1136/qshc.2010.040501
2. Medical Gases. (n.d.). British Compressed Gases Association. Retrieved May 08, 2022, from [http://www.bcgas.co.uk/pages/index.cfm?page\\_id=29&title=medical\\_gases](http://www.bcgas.co.uk/pages/index.cfm?page_id=29&title=medical_gases)
3. Respiratory equipment. Compressed gases for breathing apparatus. BS EN 12021:2014. (2014). British Standards Institution. Retrieved May 08, 2022, from <https://shop.bsigroup.com/ProductDetail?pid=000000000030315779>
4. National Building Code of India, 2016. (2016). Bureau of Indian Standards. New Delhi. Retrieved May 08, 2022, from <https://www.bis.gov.in/index.php/standards/technical-department/national-building-code/>
5. Coulliette, A. D., & Arduino, M. J. (2015). Hemodialysis and Water Quality. *Semin Dial*, 26(4), 427-438.
6. Medical Gas Pipeline Systems. (2006). Department of Health: Estates and Facilities Division. London, England: The Stationery Office.
7. Dhillon, V. S. (2015). Green Hospital and Climate Change: Their Interrelationship and the Way Forward. *JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH*. doi:10.7860/jcdr/2015/13693.6942
8. Medical Devices and Diagnostics. Government of India. Ministry of Health and Family Welfare. (n.d.). Retrieved May 08, 2022, from <https://cdsco.gov.in/opencms/opencms/en/Medical-Device-Diagnostics/Medical-Device-Diagnostics/>
9. National Disaster Management Guidelines. Hospital Safety. (2016). Government of India. National Disaster Management Authority. Retrieved May 08, 2022, from <https://nidm.gov.in/PDF/pubs/NDMA/18.pdf>
10. Biomedical Equipment Management and Maintenance Program. Government of India. National Health Mission. (n.d.). Retrieved May 08, 2022, from [https://nhm.gov.in/New\\_Updates\\_2018/NHM\\_Components/Health\\_System\\_Strengthening/BEMMP/Biomedical\\_Equipment\\_Revised\\_Guidelines.pdf](https://nhm.gov.in/New_Updates_2018/NHM_Components/Health_System_Strengthening/BEMMP/Biomedical_Equipment_Revised_Guidelines.pdf)
11. Gudlavalleti, V. (2018). Challenges in Accessing Health Care for People with Disability in the South Asian Context: A Review. *International Journal of Environmental Research and Public Health*, 15(11), 2366. doi:10.3390/ijerph15112366
12. Hart, J. R. (2018). Medical Gas and Vacuum Systems Handbook. National Fire Protection Association.
13. Infrastructures to improve patient safety. *Health Facilities Management*. (2015, December 2). Retrieved May 08, 2022, from <https://www.hfmmagazine.com/articles/1827-infrastructures-to-improve-patient-safety>
14. Pressure regulators for use with medical gases — Part 1: Pressure regulators and pressure regulators with flow-metering devices. ISO 10524-1:2018. (2018). International Organization for Standardization. Retrieved May 08, 2022, from <https://www.iso.org/standard/67190.html>



15. Pressure regulators for use with medical gases — Part 2: Manifold and line pressure regulators. International Organization for Standardization. ISO 10524-2:2018. (2018). Retrieved May 08, 2022, from <https://www.iso.org/standard/66690.html>
16. Pressure regulators for use with medical gases — Part 3: Pressure regulators integrated with cylinder valves (VIPRs). ISO 10524-3:2019. (2019). International Organization for Standardization. Retrieved May 08, 2022, from <https://www.iso.org/standard/66691.html>
17. Medical Gas Cylinder Storage. (2018). National Fire Protection Association. Retrieved May 08, 2022, from <https://www.nfpa.org/~media/4B6B534171E04E369864672EBB319C4F.pdf>
18. Indian Public Health Standards. (2022). National Health Mission. Ministry of Health & Family Welfare, Government of India. Retrieved May 08, 2022, from <https://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=971&lid=154>
19. Sarangi, S., Babbar, S., & Taneja, D. (n.d.). Safety of the medical gas pipeline system. *Journal of Anaesthesiology Clinical Pharmacology*, 34(1), 99-102. Retrieved May 08, 2022, from <http://www.joacp.org/text.asp?2018/34/1/99/227571>
20. Guidelines for Drinking-water Quality (4th Edition). World Health Organization. (2011). Retrieved May 08, 2022, from [https://apps.who.int/iris/bitstream/handle/10665/44584/9789241548151\\_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/44584/9789241548151_eng.pdf?sequence=1)
21. Safe Management of Wastes from Health-Care Activities (2nd ed.). World Health Organization. (2014). Retrieved May 08, 2022, from [https://apps.who.int/iris/bitstream/handle/10665/85349/9789241548564\\_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/85349/9789241548564_eng.pdf?sequence=1)
22. Hospital safety index: guide for evaluators – 2nd ed. World Health Organization. (2015). Retrieved May 08, 2022, from [https://www.who.int/hac/techguidance/hospital\\_safety\\_index\\_evaluators.pdf](https://www.who.int/hac/techguidance/hospital_safety_index_evaluators.pdf)
23. Handle medical gases safely. BOC. (2017). Retrieved May 08, 2022, from [http://www.boc-healthcare.com.au/en/images/HCD186\\_Gases%20safety%20pocket%20guide\\_V3\\_FA\\_web\\_tcm350-131320.pdf](http://www.boc-healthcare.com.au/en/images/HCD186_Gases%20safety%20pocket%20guide_V3_FA_web_tcm350-131320.pdf)

# Chapter 9

## Human Resource Management (HRM)

**Intent of the chapter :** The most important resource of a DHSP and health care system is the human resource. Human resources are an asset for effective and efficient functioning of a DHSP. Without an equally effective human resource management system, all other inputs like technology, infrastructure and finances come to naught. Human resource management is concerned with the “people” dimension in management. The goal of human resource management is to acquire, provide, retain and maintain competent people in right numbers to meet the needs of the patients and community served by the DHSP. This is based on the DHSP's mission, objectives, goals and scope of services. Effective Human Resource Management involves the following processes and activities: -

- a. Acquisition of Human Resources which involves human resource planning, recruiting and socialization of the new employees.
- b. Training and development relate to the performance in the present and future anticipated jobs. The employees are provided with opportunities to advance personally as well as professionally.
- c. Motivation relates to job design, performance appraisal and discipline
- d. Maintenance relates to safety and health of the employees

The term “employee” refers to all salaried personnel working in the DHSP.

The term “staff” refers to all personnel working in the DHSP including employees, “fee for service” medical professionals, part time workers, contractual personnel and volunteers.

## Summary of Standards

HRM.1.	The DHSP has a documented system of human resource planning.
HRM.2.	The organisation implements a defined process for staff recruitment.
HRM.3.	Staff are provided induction training at the time of joining the organisation.
HRM.4.	There is an ongoing program for professional training and development of the staff.
HRM.5.	Staff are trained in safety and quality-related aspects.
HRM.6.	An appraisal system for evaluating the performance of an employee exists as an integral part of the human resource management process.
HRM.7.	Process for disciplinary and grievance handling is defined and implemented in the organisation.
HRM.8.	The organisation promotes staff well-being and addresses their health and safety needs.
HRM.9.	There is a documented personal record for each staff member.
HRM.10.	There is a process for collecting, verifying and evaluating the credentials (education, registration, training and experience) of dental/medical professionals permitted to provide patient care without supervision.
HRM.11.	There is a process for collecting, verifying and evaluating the credentials (education, registration, training and experience) of para-dental staff (nursing staff/dental hygienist /dental technician and dental assistant.

Objective Element	HRM1	HRM 2	HRM 3	HRM 4	HRM 5	HRM 6	HRM 7	HRM 8	HRM 9	HRM 10	HRM 11
a.	Core	Core	Core	Core	Commitment	Commitment	Commitment	Achievement	Commitment	Core	Commitment
b.	Achievement	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Core
c.	Commitment	Core	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment
d.	Commitment	Commitment	Commitment	Commitment	Commitment	Achievement	Core	Commitment	Commitment	Core	Commitment
e.	Commitment		Commitment	Achievement	Commitment	Commitment	Commitment	Core		Commitment	Commitment
f.			Commitment		Commitment		Commitment			Commitment	
g.											
h.											

## Standard

**HRM.1.**
**The DHSP has a documented system of human resource planning.**

## Objective Elements

### CORE

- a. The DHSP maintains an adequate number and mix of staff to meet the care, treatment and service needs of the patient.**

**Interpretation:** The staff should be commensurate with the workload and the clinical requirement of the patients. Whenever there is a shortfall of staff, contingency plans to meet the workforce shortage exists. This includes support staff too.

### Achievement

- b. The DHSP has contingency plans to manage long- and short-term workforce shortages, including unplanned shortages.**

**Interpretation:** At various times, the mix of skills required for the DHSP to function at peak efficiency may not be immediately available due to workforce shortages, which can occur on a shift-by-shift, short-term or long-term basis. Existing staff crises can be managed using a contingency plan, which may include strategies such as reprioritising tasks, allocating tasks to different staff members, and relying on a pool of filler staff, which may consist predominantly of previous employees and casual staff sourced from agencies.

### Commitment

- c. The required job specifications and job description are well defined for each category of staff.**

**Interpretation:** The content of each job should be defined, and the qualifications, skills and experience required for performing the job should be laid down. The job description should be commensurate with the qualification. Refer to the glossary for a definition of "job description" and "job specification".

### Commitment

- d. The organisation performs a background check of new staff.**

**Interpretation:** The organisation can have a suitable methodology to implement the same. This should be done either before the person joins the organisation or within one month of joining.

### Commitment

- e. Reporting relationships are defined for each category of staff. \***

**Interpretation:** The DHSP could document this as the organisation structure/chart, and this shall document the hierarchy, line of control, along with the functions at various levels. The clinical's organogram is transparent and is disseminated to all stakeholders.

## Standard

**HRM.2.**
**The organisation implements a defined process for staff recruitment.**

## Objective Elements

**CORE**
**a. Written guidance governs the process of recruitment. \***

**Interpretation:** Recruitment of staff shall be based on defined criteria. The recruitment process ensures an adequate number and skill mix of staff to provide the organisation's services. The procedure shall ensure that the staff has the necessary registration, qualifications, skills and experience to perform its work. Recruitment is undertaken following statutory requirements, where applicable. The process shall be documented and carried out transparently.

**Commitment**
**b. A pre-employment medical examination is conducted on the staff.**

**Interpretation:** The purpose of this examination is to ensure that the staff is fit to provide safe care to patients. Performance of diagnostic tests could be guided by the nature of the job of the staff in the organisation. However, any such test done shall be in accordance with the law of the land. For example, performing pre-employment HIV testing without consent is illegal. The organisation shall bear the cost of the pre-employment medical examination.

**CORE**
**c. The organisation defines and implements a code of conduct for its staff.**

**Interpretation:** The code of conduct should outline the do's and don'ts for staff behaviour at the workplace. It should be aligned with the organisation's values and ethics framework.

Code of conduct shall include protection of patient confidentiality. It is preferable that the staff sign the code of conduct at the time of joining.

**Commitment**
**d. Administrative procedures for human resource management are documented. \***

**Interpretation:** This shall include administrative procedures like attendance, leave, conduct, replacement, etc.

## Standard

**HRM.3.**
**Staff are provided induction training at the time of joining the organisation.**

## Objective Elements

**CORE**
**a. Staff are provided with induction training.**

**Interpretation:** The DHSP's staff, including dentists, consultants (including visiting) and the outsourced staff, are provided induction training.

The DHSP shall determine as to when induction training shall be conducted. However, it shall be within 15 days of the staff joining. Similarly, all other requirements of this standard could be covered. The contents of this training could be provided to every staff in the form of a booklet.. The records of the training shall be maintained.

#### Commitment

- b. The induction training includes orientation to the DHSP's vision, mission and values.**

**Interpretation:** The DHSP's staff, including the outsourced staff, should be aware and should correctly interpret the vision, mission and values of the organisation.

#### Commitment

- c. The induction training includes training on safety.**

**Interpretation:** The training shall incorporate aspects of patient, visitor and staff safety. This includes training on safety codes.

#### Commitment

- d. The induction training includes training on cardio-pulmonary resuscitation for staff providing direct patient care.**

**Interpretation:** All dentists, nursing staff and dental Assistants must at least be trained to provide basic life support (BLS). In case the staff has a valid training certificate, the same is not necessary. The training could be imparted by trainers from within or outside the organisation using established evidence-based protocols.

#### Commitment

- e. The induction training includes training in infection prevention and control.**

**Interpretation:** The training should include the policies, procedures and practices of the infection prevention and control programme.

#### Commitment

- f. All employees are oriented to the service standards of the DHSP.**

**Interpretation:** This shall include all administrative procedures like attendance, leave, conduct, etc. This shall also include awareness of organisation-wide policies and procedures.

## Standard

**HRM.4.**

**There is an ongoing program for professional training and development of the staff.**

## Objective Elements

**CORE**

- a. Written guidance governs training and development policy for the staff. \***

**Interpretation:** A training manual incorporating the procedure for identification of training needs, the training methodology, documentation of training, training assessment, the impact of training and the training calendar should be prepared. At a minimum staff shall be trained on occupational safety aspects and soft skills. In addition, the staff shall be educated on various aspects of patient-centred care like respecting patient preferences, shared decision-making and provision of integrated care. The training shall be for all categories of staff, including doctors and outsourced staff (wherever applicable).

**Commitment****b. The organisation maintains the training record.**

**Interpretation:** The Human Resources Department shall maintain a record of all training provided. At a minimum, it shall include the title of the training, the trainer(s), list of trainees (with signatures). Where possible, the contents of the training may also be captured.

**Commitment****c. Training also occurs when job responsibilities change/new equipment is introduced.**

**Interpretation:** The training should focus on the revised job responsibilities as well as on the newly introduced equipment and technology. In the case of new equipment, the operating staff should receive training on operational as well as daily-maintenance aspects.

**Commitment****d. Feedback mechanisms are in place for improvement of training and development programme.**

**Interpretation:** This shall include both internal and external training. Feedback includes collecting information on the appropriateness of course material, facilities for the training programme and capability of the trainer.

**Achievement****e. The organisation supports continuing professional development and learning.**

**Interpretation:** The purpose of this is to ensure that staff can keep up with advancements in their field and develop skills and improve their skill sets and competency. This includes encouraging and providing resources for staff to attend courses or conferences. It can also include providing access to distance learning and e-learning resources. The organisation should specify minimum mandatory hours of training that every staff must attend in a year.

**Standard****HRM.5.****Staff are trained in safety and quality-related aspects.****Objective Elements**



**Commitment****a. Staff are trained in the organisation's safety programme.**

**Interpretation:** This could be done through a regular training programme or printed materials. Staff working in dental laboratory and imaging services are trained in their respective safety programmes.

**Commitment****b. Staff are provided training in the detection, handling, minimisation and elimination of identified risks within the organisation's environment.**

**Interpretation:** Interpretation: The organisation shall define such risks that shall include patient, visitors and staff-related risks. These risks could be physical (poor lighting, slippery floors, blind corners, open electrical points, naked wires etc.), chemical (improper handling, spills, aerosolization etc.), environmental (noise, smoke, dampness, heat etc.) or process-related (needle-stick injury, blood and body fluid spills, soiled linen etc.).

Further, staff should be able to practically demonstrate actions like taking care of blood spills, handling hazardous materials etc.

**Commitment****c. Staff members are made aware of procedures to follow in the event of an untoward incident.**

**Interpretation:** The staff should be able to intimate the sequence of events that they will undertake in the eventuality of occurrence of any incident.

**Commitment****d. Staff are trained in occupational safety aspects**

**Interpretation:** The organisation shall identify the areas with potential occupational hazards. Staff are made aware of the possible risks involved and the preventive actions to avoid risks. For example, needle stick injury and blood/body fluid exposure, radiation exposure.

**Commitment****e. Staff are trained in handling fire and non-fire emergencies.**

**Interpretation:** In case of fire, training shall include the various classes of fires, information and demonstration on how to use fire extinguishers, evacuation plans and other procedures to be followed in case of fire. They are also trained on their specific role in such emergencies.

**Commitment****f. Staff are trained in the organisation's quality improvement programme.**

**Interpretation:** Staff is made aware of the structure of the quality improvement programme of the organisation. The staff are also made aware of their roles in contributing to the quality improvement programme.

**Standard****HRM.6.**

**An appraisal system for evaluating the performance of an employee exists as an integral part of the human resource management process.**

**Commitment****a. Performance appraisal is done for staff within the organisation. \***

**Interpretation:** Performance appraisal shall be done for all categories of staff starting from the person heading the organisation and including dentist/dental surgeon. Where appropriate, the performance appraisal should include competency assessment. In the case of outsourced staff, the performance appraisal could be done by the contractor.

For the definition of "performance appraisal" refer to the glossary.

**Commitment****b. The employees are made aware of the system of appraisal at the time of induction.**

**Interpretation:** Awareness could be incorporated in the service booklet and included in the induction training.

**Commitment****c. Performance is evaluated based on the pre-determined criteria.**

**Interpretation:** Criteria shall be done based on key performance indicators/key result areas which are derived from the job description.

**Achievement****d. The appraisal system is used as a tool for further development.**

**Interpretation:** This can be done by identifying training requirements and accordingly providing for the same (wherever possible). Key result areas are identified for each staff and training need assessment is also done. The organisation should have written guidance for management of underperformance effectively.

**Commitment****e. Performance appraisal is carried out at pre defined intervals and is documented.**

**Interpretation:** The performance appraisal shall be done at least once a year.

**Standard****HRM.7.**

**Process for disciplinary and grievance handling is defined and implemented in the organisation.**

**Objective Elements****Commitment****a. Written guidance governs disciplinary and grievance handling mechanisms. \***

**Interpretation:** The documentation shall be done keeping in mind objective elements "c, d and e". Grievances should include workplace issues like bullying and harassment.

For the definition of "disciplinary procedure" and "grievance handling" refer to the glossary.

**Commitment**

- b. The disciplinary policy and procedure is based on the principles of natural justice.**

**Interpretation:** Principles of natural justice imply that both parties (employee and employer) are allowed to present their case and decision is taken accordingly.

**Commitment**

- c. The disciplinary and grievance handling mechanism is known to all categories of staff of the organisation.**

**Interpretation:** All staff should be aware of the disciplinary procedure and the process to be followed in case they feel aggrieved.

**CORE**

- d. The disciplinary and grievance procedure is in consonance with the prevailing laws.**

**Interpretation:** Refer to relevant labour laws and CCS (CCA) rules. Internal Complaints Committee should be established in the organisation to handle complaints of sexual harassment.

**Commitment**

- e. There is a provision for appeals in all disciplinary cases.**

**Interpretation:** The organisation shall designate an appellate authority to consider appeals in disciplinary cases. The appellate authority should be higher than the disciplinary authority.

**Commitment**

- f. Actions are taken to redress the grievance.**

**Interpretation:** The redress procedure addresses the grievance. Actions that are taken shall be documented and communicated to the aggrieved staff.

**Standard****HRM.8.**

**The organisation promotes staff well-being and addresses their health and safety needs.**

**Objective Elements****Achievement**

- a. Staff well-being is promoted.**

**Interpretation:** Organisation takes proactive steps to ensure staff well-being. Examples of these include promoting healthy lifestyle programmes, having defined work hours and workload monitoring, providing scheduled breaks, stress management, access to dining facilities, rewards and recognition, staff engagement activities etc.

Tracking absenteeism or over-time could help organisations to monitor stress and fatigue indirectly. The staff satisfaction survey is another tool to capture this data.

The organisation should have facilities for staff to seek support and advice when necessary.

**Commitment**

- b. Health problems of the staff, including occupational health hazards, are taken care of in accordance with the organisation's policy.**

**Interpretation:** The organisation's policy shall be in consonance with the law of the land and good work practices. For example, staff health and safety policy.

Appropriate personal protective equipment is provided to the staff concerned, and they are educated on how to use them.

For the definition of "occupational health hazard" refer to the glossary.

**Commitment**

- c. Health checks of staff dealing with direct patient care are done at least once a year and the findings/results are documented.**

**Interpretation:** The results of examination, investigations (if any) and outcome of the evaluation should be documented in the personal file. The staff member shall not be charged for this health check.

**Commitment**

- d. Organisation provides treatment to staff who sustain workplace-related injuries.**

**Interpretation:** Examples of workplace-related injuries are needlestick injuries, back injuries sustained during patient transport, hearing impairments due to noise levels etc. Treatment also includes counselling where appropriate. Injuries due to workplace violence are included.

**CORE**

- e. The organisation has measures in place for prevention and handling workplace violence.**

**Interpretation:** An integrative and participative approach is used to address this. Key aspects include workplace risk assessment, including identifying situations at special risk, workplace interventions including information and communication, environmental interventions including signage, security and restricted access and individual interventions like training. The organisation shall have a mechanism in place to handle these situations, including liaison with law enforcement agencies where applicable and provision of counselling to affected staff.

Refer to the glossary for a definition of "workplace violence".

**Standard****HRM.9.****There is a documented personal record for each staff member.****Objective Elements****Commitment**

- a. Personal files are maintained with respect to all staff, and their confidentiality is ensured**

**Interpretation:** Each file must be current and updated. The organisation maintains confidentiality and access to personal files is restricted.

**Commitment**

- b. **The personal files contain personal information regarding the staff's qualification, job description, verification of credentials and health status.**

**Interpretation:** The personal file should contain these records.

**Commitment**

- c. **All records of in-service training and education are contained in the personal files.**

**Interpretation:** In the case of internal training, the organisation could file a summary of all trainings attended by the staff on an annual basis. However, there shall be a supporting document (hard/soft copy) to verify that the staff has attended the training. In case the organisation maintains training records elsewhere, traceability shall be provided in the personal file to ensure that the intent of the objective element is addressed.

**Commitment**

- d. **Personal files contain results of all evaluations.**

**Interpretation:** Evaluations would include performance appraisals, training assessment and outcome of health checks. The personal file would include records of achievement/ appreciation/ complaint/ warning/ memo.

**Standard****HRM.10.**

**There is a process for collecting, verifying and evaluating the credentials (education, registration, training and experience) of dental/medical professionals permitted to provide patient care without supervision.**

**Objective Elements****CORE**

- a. **Dental/Medical professionals permitted by law/regulation in the DHSP to provide patient care without supervision are identified.**

**Interpretation:** The organisation identifies the individuals who have the required qualification(s), training and experience to provide patient care in consonance with the law. For the definition of "credentialing" refer to the glossary.

**Commitment**

- b. **The education, registration, training and experience of the identified Dental/Medical professionals is documented and updated periodically.**

**Interpretation:** Update is done after the acquisition of new skills and/or qualification.

**Commitment**

- c. **All such information pertaining to the dental/ medical professionals is appropriately verified when possible.**

**Interpretation:** The organisation shall do the same by verifying the credentials from the organisation which has awarded the qualification/training.

**CORE**

- d. **Dental/medical professionals are granted privileges to care for patients in consonance with their qualification, training, experience and registration.**

**Interpretation:** The organisation shall identify clinical services which each dental/medical professional is authorised to do. This shall be done based on qualification, experience and any additional training received.

Privileges have to be reviewed every year and where necessary revised.

**Commitment**

- e. **The requisite services to be provided by the medical professionals are known to them as well as the various departments/units of the organisation.**

**Interpretation:** This could be done through internal communication. The communication to the dental professionals should include aspects like OP consultation rights, admission rights and rights to certain procedures and/or surgeries (either by inclusion or exclusion). Concerned departments are informed of the relevant privileging rights of medical professionals.

**Commitment**

- f. **Dental/ medical professionals admit and care for patients as per their privileging.**

**Interpretation:** A standardised format can be used for each faculty, and a norm for providing privilege should be practised uniformly. New faculty members can be under proctorship till independent privileges are provided. The organisation could evolve a mechanism to ensure that medical professionals are providing only those services that they have been privileged to offer.

**Standard****HRM.11.**

**There is a process for collecting, verifying and evaluating the credentials (education, registration, training and experience) of para-dental staff (nursing staff/dental hygienist /dental technician and dental assistant.**

**Objective Elements****Commitment**

- a. **The education, registration, training and experience of nursing staff/dental hygienist and assistant is documented and updated periodically.**

**Interpretation:** Updating is done after the acquisition of new skills and/or qualification. The organisation shall do the same by verifying the credentials from the organisation which has awarded the qualification/training.

**CORE**

- b. **Para-clinical professionals are granted privileges in consonance with their qualification, training, experience and registration.**

**Interpretation:** The organisation shall identify as to what each para-clinical professional is authorised to do. Where applicable, the para-clinical professional shall have the requisite registration/license.

**Commitment**

- c. **The requisite services to be provided by the para-clinical professionals are known to them as well as the various departments/units of the organisation.**

**Interpretation:** This could be done through internal communication.

**Commitment**

- d. **Para-clinical professionals care for patients as per their privileging.**

**Interpretation:** New staff members can be under supervision until independent privilege is provided for each staff. The organisation could evolve a mechanism to ensure that para-clinical professionals are providing only those services that they have been privileged to offer.

**Commitment**

- e. **All such information pertaining to the para-dental staff is appropriately verified when possible.**

**Interpretation:** The DHSP shall do the same by verifying the credentials from the authority which has awarded the qualification/training.

## References:

1. Aswathappa, K. (2013). *Human Resource Management 6E* (7th ed.). New York, NY: Tata McGraw-Hill Education.
2. Barnett, S. D. (2015). Growing Pains of Credentialing Research: Discussions from the Institute of Medicine Workshop. *The Journal of Continuing Education in Nursing*, 46(2), 53-55. doi:10.3928/00220124-20150121-11
3. Baumann, A., Norman, P., Blythe, J., Kratina, S., & Deber, R. (2014). Accountability: The Challenge for Medical and Nursing Regulators. *Healthcare Policy | Politiques de Santé*, 10(SP), 121-131. doi:10.12927/hcpol.2014.23911
4. Baumann, M. H., Simpson, S. Q., Stahl, M., Raoof, S., Marciniuk, D. D., & Gutterman, D. D. (2012). First, Do No Harm: Less Training != Quality Care. *American Journal of Critical Care*, 21(4), 227-230. doi:10.4037/ajcc2012825
5. Chhabra, S. (2016). Health hazards among health care personnel. *Journal of Mahatma Gandhi Institute of Medical Sciences*, 21(1), 19. doi:10.4103/0971-9903.178074
6. Chhabra, T. N., & Chhabra, M. S. (2014). *Human Resources Management* (1st ed.). India: Sun publications.
7. Cook, D. A., Blachman, M. J., Price, D. W., West, C. P., Berger, R. A., & Wittich, C. M. (2017). Professional Development Perceptions and Practices Among U.S. Physicians. *Academic Medicine*, 92(9), 1335-1345. doi:10.1097/acm.0000000000001624
8. Credentialing and privileging of pharmacists: A resource paper from the Council on Credentialing in Pharmacy. (2014). *American Journal of Health-System Pharmacy*, 71(21), 1891-1900. doi:10.2146/ajhp140420
9. Gesme, D. H., Towle, E. L., & Wiseman, M. (2010). Essentials of Staff Development and Why You Should Care. *Journal of Oncology Practice*, 6(2), 104-106. doi:10.1200/jop.091089
10. Gillespie, G. L., Fisher, B. S., & Gates, D. M. (2015). Workplace Violence in Healthcare Settings. *Work*, 51(1), 3-4. doi:10.3233/wor-152017
11. Gorman, T., Dropkin, J., Kamen, J., et al. (2014). Controlling Health Hazards to Hospital Workers: A Reference Guide. *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy*, 23(1\_suppl), 1-169. doi:10.2190/ns.23.suppl
12. Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers. (2016). Occupational Safety and Health Administration. Retrieved May 08, 2022, from <https://www.osha.gov/Publications/osh3148.pdf>
13. Health Care Workers. (2019). National Institute for Occupational Safety and Health. Retrieved May 08, 2022, from <https://www.cdc.gov/niosh/topics/healthcare/default.html>
14. Healthcare. (2019). Occupational Safety and Health Administration. United States Department of Labor. Retrieved May 08, 2022, from <https://www.osha.gov/SLTC/healthcarefacilities/index.html>
15. Hravnak, M., & Baldisseri, M. (1997). Credentialing and Privileging. *AACN Clinical Issues: Advanced Practice in Acute and Critical Care*, 8(1), 108-115. doi:10.1097/00044067-199702000-00014



16. Is credentialing a solution to the workforce crisis? (2017). *Emergency Nurse*, 25(1), 5-5.  
doi:10.7748/en.25.1.5.s1
17. Izadi, N. (2018). Occupational Health Hazards among Health Care Workers. *Public Health Open Access*, 2(1).  
doi:10.23880/phoa-16000120
18. Jones, L., & Moss, F. (2018). What should be in hospital doctors' continuing professional development? *Journal of the Royal Society of Medicine*, 112(2), 72-77. doi:10.1177/0141076818808427
19. Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). *Kirkpatrick's Four Levels of Training Evaluation*. Association for Talent Development.
20. Medical Surveillance for Healthcare Workers Exposed to Hazardous Drugs. (2013). Department of Health and Human Services, Centers for Disease Control and Prevention National Institute for Occupational Safety and Health. Retrieved May 08, 2022, from <https://www.cdc.gov/niosh/docs/wp-solutions/2013-103/pdfs/2013-103.pdf>
21. Niles, N. J. (2012). *Basic Concepts of Health Care Human Resource Management* (1st ed.). Burlington, MA: Jones & Bartlett Publishers.
22. Pearl, J., Fellingner, E., Dunkin, B., Pauli, E., Trus, T., Marks, J., ... Richardson, W. (2016). Guidelines for privileging and credentialing physicians in gastrointestinal endoscopy. *Surgical Endoscopy*, 30(8), 3184-3190.  
doi:10.1007/s00464-016-5066-8
23. Position Statement on Credentialing and Privileging for Nurse Practitioners. (2016). *Journal of Pediatric Health Care*, 30(2), A20-A21. doi:10.1016/j.pedhc.2015.11.006
24. Sarre, S., Maben, J., Aldus, C., Schneider, J., Wharrad, H., Nicholson, C., & Arthur, A. (2018). The challenges of training, support and assessment of healthcare support workers: A qualitative study of experiences in three English acute hospitals. *International Journal of Nursing Studies*, 79, 145-153.  
doi:10.1016/j.ijnurstu.2017.11.010
25. Singh, S. (2014). Credentialing and Privileging in Healthcare Organizations. *Handbook of Healthcare Quality and Patient Safety*, 114-114. doi:10.5005/jp/books/12287\_9
26. Srinivasan, A. V. (2008). *Human Resource Management in Hospitals*. In *Managing a Modern Hospital* 2nd ed.). New Delhi, India: SAGE Publications India.
27. Steege, A. L., Boiano, J. M., & Sweeney, M. H. (2014). NIOSH Health and Safety Practices Survey of Healthcare Workers: Training and awareness of employer safety procedures. *American Journal of Industrial Medicine*, 57(6), 640-652. doi:10.1002/ajim.22305
28. STRESS...At Work. (2018). National Institute for Occupational Safety and Health. Retrieved May 08, 2022, from <https://www.cdc.gov/niosh/docs/99-101/default.html>
29. Tam, V., Zeh, H. J., & Hogg, M. E. (2017). Incorporating Metrics of Surgical Proficiency Into Credentialing and Privileging Pathways. *JAMA Surgery*, 152(5), 494. doi:10.1001/jamasurg.2017.0025

30. The Kirkpatrick Model. (2019). Kirkpatrick Partners. Retrieved May 08, 2022, from <https://kirkpatrickpartners.com/Our-Philosophy/The-Kirkpatrick-Model>
31. Wilburn, S. Q., & Eijkemans, G. (2004). Preventing Needlestick Injuries among Healthcare Workers: A WHO-ICN Collaboration. *International Journal of Occupational and Environmental Health*, 10(4), 451- 456. doi:10.1179/oeh.2004.10.4.451
32. Zhao, S., Liu, H., Ma, H., Jiao, M., Li, Y., Hao, Y., ... Qiao, H. (2015). Coping with Workplace Violence in Healthcare Settings: Social Support and Strategies. *International Journal of Environmental Research and Public Health*, 12(11), 14429-14444. doi:10.3390/ijerph121114429

# Chapter 10

## Information Management System (IMS)

**Intent of the chapter :** Information is an important resource for effective and efficient delivery of health care. Provision of health care and its continued improvement is dependent to a large extent on the information generated, stored and utilized appropriately by the DHSPs. One of the major intents of this chapter is to ensure data and information meet the DHSP's needs and support the delivery of quality care and service. Provision of patient care is a complex activity that is highly dependent on communication of information. The goal of Information management in a DHSP is to ensure that the right information is made available to the right person. An effective Information management system is based on the information needs of the DHSP. The system is able to capture, transmit, store, analyse, utilize and retrieve information as and when required for improving clinical outcomes as well as individual and overall DHSP performance. Although a digital based information system improves efficiency, the basic principles of a good information management system apply equally to a manual/paper-based system. These standards are designed to be equally compatible with non-computerized systems and future technologies.

### Summary of Standards

IMS.1.	Information needs of the patients, visitors, staff, management and external agencies are met.
IMS.2.	The organisation has processes in place for management and control of data and information.
IMS.3.	The DHSP has a complete and accurate dental record of every patient.
IMS.4.	The clinical record reflects continuity of care.
IMS.5.	The DHSP maintains confidentiality, integrity and security of records, data and information.
IMS.6.	The DHSP ensures availability of current and relevant documents, records, data and information and provides for retention of the same.
IMS.7.	The DHSP regularly carries out review of clinical records.

Objective Element	IMS 1	IMS 2	IMS 3	IMS 4	IMS 5	IMS 6	IMS 7
a.	Core	Commitment	Commitment	Commitment	Core	Core	Core
b.	Commitment	Commitment	Commitment	Commitment	Core	Core	Commitment
c.	Commitment	Commitment	Commitment	Commitment	Core	Commitment	Commitment
d.	Achievement	Commitment	Achievement	Commitment	Achievement	Commitment	Commitment
e.		Commitment	Commitment	Commitment	Commitment		Commitment
f.			Core	Commitment			Commitment
g.							

## Standard

**IMS.1.**
**Information needs of the patients, visitors, staff, management and external agencies are met.**

## Objective Elements

### CORE

- a. The DHSP identifies the information needs of the patients, visitors, staff, management external agencies and community. \***

**Interpretation:** Information needs of various stakeholders are identified by the DHSP through a systematic process. Some of the mechanisms to identify the information needs include feedback forms, patient calls, focus group interviews and benchmarking. The identified information needs shall be documented.

For example, the information needs of the patient could be met through information on OPD timings, availability of services etc.. For the staff, it would include information on leave policy, standard operating procedures etc. For the community, it could be information on the addition of new service, induction of new dental staff etc.

### Commitment

- b. Information management and technology acquisitions are commensurate with the identified information needs.**

**Interpretation:** The organisation shall define the needs for software and hardware solutions as per current and future information needs. In case the organisation uses electronic medical records, they could refer to Electronic Health Report/Electronic Medical Record guidelines published by the Ministry of Health and Family Welfare. The organisation shall ensure that it has the necessary license for the software.

### Commitment

- c. A maintenance plan for information technology and communication network is implemented.**

**Interpretation:** IT maintenance plans shall include specific fire protection plan for IT network and servers. This shall include Data Server units, telephone exchange units, computers, telephone lines, nurse call system etc. This shall adhere to manufacturer's recommendations, regular inspections etc. This includes timely repair of telephone, printer unit.

### Commitment

- d. Contingency plan ensures continuity of information capture, integration and dissemination.**

**Interpretation:** The DHSP should have a plan to ensure that in case the electronic HIS is experiencing downtime, the capture, integration and dissemination of information are not interrupted.

## Standard

### IMS.2.

The organisation has processes in place for management and control of data and information.

## Objective Elements

### Commitment

#### a. Processes for data collection are standardised.

**Interpretation:** Process includes formats and frequency of data collection. Formats for data collection include forms- physical and/or electronic. The capture of data can be event-based or as per defined frequency such as daily, weekly, monthly, quarterly, yearly etc.

### Commitment

#### b. Data is analysed to meet the information needs.

**Interpretation:** The collected data is analysed using appropriate tools and techniques to ensure that the information needs are met.

### Commitment

#### c. The organisation disseminates the information in a timely and accurate manner.

**Interpretation:** Timely and accurate information is given to relevant stakeholders after analysis of data.

### Commitment

#### d. The organisation stores and retrieves data according to its information needs. \*

**Interpretation:** Storage could be physical or electronic. Wherever electronic storage is done, the DHSP shall ensure that there are adequate safeguards for the protection of data.

### Commitment

#### e. Clinical and managerial staff participate in selecting, integrating and using data for meeting the information needs.

**Interpretation:** Appropriate clinical and managerial staff are responsible for the selection of relevant indicators, measurement of trends, and initiating action, wherever required.

## Standard

### IMS.3.

The DHSP has a complete and accurate dental record of every patient.

## Objective Elements

### Commitment

#### a. A unique identifier is assigned to the dental record.

**Interpretation:** The dental record shall have a unique identifier number. This shall also apply to records on digital media. In case of electronic records, all entries for one unique identifier shall be available in one place.

**Commitment****b. Authorised staff make the entry in the dental record. \***

**Interpretation:** DHSP shall have written guidance authorising who can make entries and the content of entries. This could be a different category of staff for different entries, but it shall be uniform across the DHSP. For example, medication orders by the doctor, orthodontic treatment by dentist etc.

**Commitment****c. Entry in the dental record is signed, dated and timed.**

**Interpretation:** All entries should be documented immediately but no later than one hour of completion of the assessment/procedure. For records on electronic media, it is preferable that the date and time are automatically generated by the system.

**Achievement****d. The author of the entry can be identified.**

**Interpretation:** This could be-by writing the full name or by mentioning the employee code number, with the help of stamp, etc. In case of electronic based records, authorized e-signature provision as per statutory requirements must be kept.

**Commitment****e. The contents of dental record are identified and documented.**

**Interpretation:** The DHSP identifies the documents that are part of the dental record and implements the same. For example, admission orders, IP sheet, discharge summary, dental Surgeon's order sheet, consent form, etc. The contents of the dental record can be hand-written, typed, printed or in electronic form. There can be a mix of these, but appropriate linkages must be available.

**CORE****f. The record provides an up-to-date and chronological account of patient care.**

**Interpretation:** The dental record has all the identified sheets filed in sequential order. Entries in the components of the record are filed in chronological order. It shall ensure that all medico-legal case records have mandatory information. In case a sheet is missing note to that effect would be put in the medical record. It is preferable that the pages in the dental record are numbered.

**Standard****IMS.4.****The clinical record reflects continuity of care.****Objective Elements****Commitment****a. The clinical record contains information regarding diagnosis and plan of care.**

**Interpretation:** For The diagnosis must be documented by the treating doctor or a doctor member of the treating team in all records.

**Commitment**

- b. **The clinical record contains the results of investigations and the details of the care provided.**

**Interpretation:** The results of all investigations shall be a part of the medical record either in physical or electronic form.

**Commitment**

- c. **Operative and other procedures performed are incorporated in the clinical record.**

**Interpretation:** This includes the name and details of the operative and other procedures performed.

**Commitment**

- d. **When a patient is transferred to another organisation, the clinical record contains the details of the transfer.**

**Interpretation:** The clinical record should contain the date of transfer, the reason for transfer and the name of the receiving organisation. It is mandatory to mention the clinical condition of the patient before transfer. If the patient has been transferred at his/her request, a note may be added to that effect.

**Commitment**

- e. **The clinical record contains a copy of the case summary.**

**Interpretation:** The case summary should be signed by appropriate and qualified personnel.

**Commitment**

- f. **All dental care providers attending to the patient should have access to current and past clinical record.**

**Interpretation:** The DHSP provides access to clinical records to designated healthcare providers (those involved in the care of that patient). For electronic medical record system, identified care providers shall have a user ID and a password.

## Standard

**IMS.5.**

**The DHSP maintains confidentiality, integrity and security of records, data and information.**

## Objective Elements

**CORE**

- a. **The organisation maintains the confidentiality of records, data and information. \***

**Interpretation:** Confidentiality implies that only authorised persons have access to the contents of the record. This shall align with the applicable laws.

The DHSP shall control the accessibility to the clinical records department and its information system. In electronic systems, the access should be different for



different types of personnel and specific for that user. For physical records, it shall ensure the usage of tracer card for movement of the file in and out of the MRD. Similarly, for data and information, it shall ensure that records and data are not taken out from the areas where they are stored.

**CORE****b. The organisation maintains the integrity of records, data and information. \***

**Interpretation:** Integrity implies that the entries are not tampered. Any corrections shall be done in accordance with the DHSP's defined written guidance.

**CORE****c. The organisation maintains the security of records, data and information. \***

**Interpretation:** Security refers to the protection of the record, data and information against loss and destruction. For physical records, the DHSP shall ensure that there are adequate pest and rodent control measures. For electronic data, there should be protection against virus/trojans, and a proper backup procedure is implemented.

**Achievement****d. The DHSP uses developments in appropriate technology for improving confidentiality, integrity and security.**

**Interpretation:** The organisation shall review and update its technological features to improve confidentiality, integrity and security of information. For example, moving from physical to electronic format, remote backup of data, etc.

**Commitment****e. A documented procedure for responding to patients/physicians and other public agencies requests for access to information in the clinical record exists.**

**Interpretation:** In the case of patients, the release of information is in accordance with the Code of Medical Ethics 2002. Grievances concerning RTI shall be addressed by the government and other applicable bodies, as per the written guidance.

Request from dentist/dental surgeon for access to clinical records of patients treated by him/her shall be addressed in accordance with the written guidance.

## Standard

**IMS.6.**

**The DHSP ensures availability of current and relevant documents, records, data and information and provides for retention of the same.**

## Objective Elements

**CORE****a. The organisation has an effective process for document control. \***

**Interpretation:** The DHSP ensures that all documents including forms, formats, policies and procedures in use are current and relevant. They are created, reviewed for adequacy, authorised and released by designated individuals.

**CORE**

- b. **The DHSP retains patient's clinical records, data and information according to its requirements. \***

**Interpretation:** The DHSP shall define the retention period for each category of medical records: out-patient and MLC. The retention period shall be in consonance with rules laid down by respective state authority. It shall also do the same for various data and the formats (for example registers and forms) that have been used for capturing this data.

**Commitment**

- c. **The retention process provides expected confidentiality and security.**

**Interpretation:** This is applicable for both manual and electronic system.

**Commitment**

- d. **The destruction of medical records, data and information are in accordance with the written guidance. \***

**Interpretation:** Destruction can be done after the retention period is over and after taking the approval of the concerned authority (internal/external).

**Standard****IMS.7.**

**The DHSP regularly carries out review of clinical records.**

**Objective Elements****CORE**

- a. **The clinical records are reviewed periodically.**

**Interpretation:** The DHSP defines the periodicity. A checklist can be used for this purpose.

**Commitment**

- b. **The review uses a representative sample based on statistical principles.**

**Interpretation:** The DHSP shall define the principles on which sampling is based. For example, simple random, systemic random sampling, etc.

**Commitment**

- c. **The review is conducted by identified care providers.**

**Interpretation:** The DHSP shall identify and authorise such individuals.

**Commitment**

- d. **The review focuses on the timeliness, legibility and completeness of the clinical records.**

**Interpretation:** At a minimum, the review should include timeliness, legibility and completeness of the medical records. Other parameters which could be included are the completeness of consent forms, availability of operation/procedure notes, etc.

**Commitment****e. The review points out and documents any deficiencies in records.**

**Interpretation:** For example, missing a final diagnosis, absence of OT notes in an operated patient, etc.

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**Commitment****f. Appropriate corrective and preventive measures undertaken are documented.**

**Interpretation:** Based upon the deficiencies recorded, appropriate corrections are carried out in a defined time, and the same is documented. The preventive actions are disseminated to the relevant staff.

## References:

1. Aguiar T, Gomes SB, de Cunha PR, da Silva MM. (2021). Identifying the Practices of Digital Transformation: Based on a Systematic Literature Review. ISACA Journal, Vol1. Retrieved May 08, 2022, from [https://www.isaca.org/-/media/files/isacadp/project/isaca/articles/journal/2021/volume-1/identifying-the-practices-of-digital-transformation\\_joa\\_eng\\_0121.pdf](https://www.isaca.org/-/media/files/isacadp/project/isaca/articles/journal/2021/volume-1/identifying-the-practices-of-digital-transformation_joa_eng_0121.pdf)
2. Alotaibi, Y., & Federico, F. (2017). The impact of health information technology on patient safety. Saudi Medical Journal, 38(12), 1173-1180. doi:10.15537/smj.2017.12.20631
3. Anderson, J. G. (2010). Improving Patient Safety with Information Technology. Handbook of Research on Advances in Health Informatics and Electronic Healthcare Applications, 144-152. doi:10.4018/978-1-60566-030-1.ch009
4. Blum, B. I. (1986). Clinical Information Systems—A Review. West J Med., 145(6), 791-797. Retrieved May 08, 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1307152/pdf/westjmed00160-0055.pdf>
5. Borycki, E., & Kushniruk, A. (2017). Patient Safety and Health Information Technology. E-Health Two- Sided Markets, 19-31. doi:10.1016/b978-0-12-805250-1.00004-6
6. Electronic Health Record (EHR) Standards for India -2016. Ministry of Health and Family Welfare, Government of India. (2016). Retrieved May 08, 2022, from <https://www.nhp.gov.in/NHPfiles/EHR- Standards-2016-MoHFW.pdf>
7. Feldman, S. S., Buchalter, S., & Hayes, L. W. (2018). Health Information Technology in Healthcare Quality and Patient Safety: Literature Review. JMIR Medical Informatics, 6(2), e10264. doi:10.2196/10264
8. Generic medical record keeping standards. Royal College of Physicians. (2015). Retrieved May 08, 2022, from <https://www.rcplondon.ac.uk/projects/outputs/generic-medical-record-keeping-standards>
9. Guidance Document of ABDM Compliant HMIS/LMIS. (2022). Ayushman Bharat Digital Mission (ABDM). National Health Authority. Ministry of Health and Family Welfare. Government of India. Retrieved May 08, 2022, from [https://abdm.gov.in/assets/uploads/Guidance\\_Document\\_for\\_ABDM\\_Compliant\\_HMIS\\_LMIS.pdf](https://abdm.gov.in/assets/uploads/Guidance_Document_for_ABDM_Compliant_HMIS_LMIS.pdf)
10. Hamiel, U., Hecht, I., Nemet, A., Pe'er, L., Man, V., Hilely, A., & Achiron, A. (2018). Frequency, comprehension and attitudes of physicians towards abbreviations in the medical record. Postgraduate Medical Journal, 94(1111), 254-258. doi:10.1136/postgradmedj-2017-135515
11. Haux, R. (2006). Health information systems – past, present, future. International Journal of Medical Informatics, 75(3-4), 268-281. doi:10.1016/j.ijmedinf.2005.08.002
12. Health Informatics -- Information Security Management in Health Using ISO/IEC 27002. ISO 27799:2016. International Organization for Standardization. (2016). Retrieved May 08, 2022, from <https://www.iso.org/standard/62777.html>
13. Koppel R. (2012). Patient Safety and Health Information Technology: Learning from Our Mistakes. Patient Safety Network, Agency for Healthcare Research and Quality. (2012). Retrieved May 08, 2022, from <https://psnet.ahrq.gov/perspective/patient-safety-and-health-information-technology-learning-our-mistakes>
14. Mann, R., & Williams, J. (2003). Standards in medical record keeping. Clinical Medicine, 3(4), 329-332. doi:10.7861/clinmedicine.3-4-329

15. Mathiharan, K. (2001). Medical Records. *Indian Journal of Medical Ethics*, 1(2), 59.  
doi:10.20529/IJME.2004.029
16. Myuran, T., Turner, O., Ben Doostdar, B., & Lovett, B. (2017). The e-CRABEL score: an updated method for auditing medical records. *BMJ Quality Improvement Reports*, 6(1), u211253.w4529.  
doi:10.1136/bmjquality.u211253.w4529
17. National Digital Health Mission: Health Data Management Policy. (2020). Ayushman Bharat Digital Mission (ABDM). National Health Authority. Ministry of Health and Family Welfare. Government of India. Retrieved May 08, 2022, from [https://abdm.gov.in/publications/policies\\_regulations/health\\_data\\_management\\_policy](https://abdm.gov.in/publications/policies_regulations/health_data_management_policy)
18. National Digital Health Mission: Personal Data Processing Model Consent Form. (2020). Ayushman Bharat Digital Mission (ABDM). National Health Authority. Ministry of Health and Family Welfare. Government of India. Retrieved May 08, 2022, from <https://abdm.gov.in/documents/hdmpolicy/consentform>
19. Patient Safety and Health Information Technology. (2015). Committee Opinion; 621. American College of Obstetricians and Gynaecologists. Retrieved May 08, 2022, from <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2015/01/patient-safety-and-health-information-technology.pdf>
20. Planning for and Implementing ISO 27001. (2011). ISACA Journal. Retrieved May 08, 2022, from <https://www.isaca.org/resources/isaca-journal/past-issues/2011/2011-planning-for-and-implementing-iso-27001>
21. Schneider EC, Ridgely MS, Meeker D, Hunter LE, Khodyakov D, Rudin R. (2014). Promoting Patient Safety Through Effective Health Information Technology Risk Management. RAND Health. Washington, DC: Office of the National Coordinator for Health Information Technology; May 2014. RR-654- DHHSNCH. Retrieved May 08, 2022, from [https://www.healthit.gov/sites/default/files/rr654\\_final\\_report\\_5-27-14.pdf](https://www.healthit.gov/sites/default/files/rr654_final_report_5-27-14.pdf)
22. Schweitzer, M., & Hoerbst, A. (2015). A Systematic Investigation on Barriers and Critical Success Factors for Clinical Information Systems in Integrated Care Settings. *Yearbook of Medical Informatics*, 24(01), 79-89.  
doi:10.15265/iy-2015-018
23. Thomas, J. (2009). Medical records and issues in negligence. *Indian Journal of Urology*, 25(3), 384.  
doi:10.4103/0970-1591.56208
24. Tuffaha, H., Amer, T., Jayia, P., Bicknell, C., Rajaretnam, N., & Ziprin, P. (2012). The STAR score: a method for auditing clinical records. *The Annals of The Royal College of Surgeons of England*, 94(4), 235-239.  
doi:10.1308/003588412x13171221499865
25. Winter, A., Ammenwerth, E., Bott, O., et al. (2001). Strategic information management plans: the basis for systematic information management in hospitals. *International Journal of Medical Informatics*, 64(2- 3), 99-109.  
doi:10.1016/s1386-5056(01)00219-2

## GLOSSARY

The commonly-used terminologies in the NABH standards are briefly described and explained herein to remove any ambiguity regarding their comprehension. The definitions narrated have been taken from various authentic sources as stated, wherever possible. Notwithstanding the accuracy of the explanations given, in the event of any discrepancy with a legal requirement enshrined in the law of the land, the provisions of the latter shall apply.

<b>Accreditation</b>	Accreditation is self-assessment and external peer review process used by health care organisations to accurately assess their level of performance in relation to established standards and to implement ways to improve the health care system continuously.
<b>Accreditation assessment</b>	The evaluation process for assessing the compliance of an organisation with the applicable standards for determining its accreditation status.
<b>Advance life support</b>	Emergency medical care for sustaining life, including defibrillation, airway management, and drugs and medications.
<b>Adverse drug reaction</b>	A response to a drug which is noxious and unintended and which occurs at doses normally used in man for prophylaxis, diagnosis, or therapy of disease or for the modification of physiologic function.
<b>Adverse event</b>	An injury related to medical management, in contrast to complications of the disease. Medical management includes all aspects of care, including diagnosis and treatment, failure to diagnose or treat, and the systems and equipment used to deliver care. Adverse events may be preventable or non-preventable. (WHO Draft Guidelines for Adverse Event Reporting and Learning Systems)
<b>Anaesthesia Death</b>	It is defined as death occurring within 24 hours of administration of anaesthesia due to cases related to anaesthesia. However, death may occur even afterwards due to the complications.
<b>Assessment</b>	All activities including history taking, physical examination, laboratory investigations that contribute towards determining the prevailing clinical status of the patient.
<b>Barrier nursing</b>	The nursing of patients with infectious diseases in isolation to prevent the spread of infection. As the name implies, the aim is to erect a barrier to the passage of infectious pathogenic organisms between the contagious patient and other patients and staff in the hospital, and thence to the outside world. The nurses wear gowns, masks, and gloves, and they observe strict rules that minimise the risk of passing on infectious agents.
<b>Basic life support</b>	Basic life support (BLS) is the level of medical care which is used for patients with life-threatening illnesses or injuries until the patient can be given full medical care.
<b>Breakdown maintenance</b>	Activities which are associated with the repair and servicing of site infrastructure, buildings, plant or equipment within the site's agreed building capacity allocation which have become inoperable or unusable because of the failure of component parts.

<b>Byelaws</b>	A rule governing the internal management of an organisation. It can supplement or complement the government law but cannot countermand it, e.g. municipal by-laws for construction of hospitals/nursing homes, for disposal of hazardous and/or infectious waste
<b>Calibration</b>	Set of operations that establish, under specified conditions, the relationship between values of quantities indicated by a measuring instrument or measuring system, or values represented by a material measure or a reference material, and the corresponding values realised by standards.
<b>Care Plan</b>	A plan that identifies patient care needs, lists the strategy to meet those needs, documents treatment goals and objectives, outlines the criteria for ending interventions, and documents the individual's progress in meeting specified goals and objectives. The format of the plan may be guided by specific policies and procedures, protocols, practice guidelines or a combination of these. It includes preventive, promotive, curative and rehabilitative aspects of care.
<b>Citizen's charter</b>	Citizen's Charter is a document which represents a systematic effort to focus on the commitment of the organisation towards its citizens in respects of standard of services, information, choice and consultation, non-discrimination and accessibility, grievance redress, courtesy and value for money. (Reference: <a href="https://goicharters.nic.in/faq.htm">https://goicharters.nic.in/faq.htm</a> )
<b>Clinical audit</b>	A quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change. (Reference: Principles for Best Practice in Clinical Audit 2002, NICE/CHI)
<b>Clinical care pathway</b>	Clinical care pathways are standardised evidence-based, multidisciplinary management plans. They identify an appropriate sequence of clinical interventions, timeframes, milestones and expected outcomes for a homogenous patient group.
<b>Clinical practice guidelines</b>	Clinical practice guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances.
<b>Competence</b>	Demonstrated ability to apply knowledge and skills (para 3.9.2 of ISO 9000: 2015). Knowledge is the understanding of facts and procedures. Skill is the ability to perform a specific action.
<b>Confidentiality</b>	Restricted access to information to individuals who have a need, a reason and permission for such access. It also includes an individual's right to personal privacy as well as the privacy of information related to his/her healthcare records.
<b>Consent</b>	<ol style="list-style-type: none"> <li>1. The willingness of a party to undergo examination/procedure/ treatment by a healthcare provider. It may be implied (e.g. patient registering in OPD), expressed which may be written or verbal. Informed consent is a type of consent in which the healthcare provider has a duty to inform his/her patient about the procedure, its potential risk and benefits, alternative procedure with their risk and benefits so as to enable the patient to make an informed decision of his/her health care.</li> <li>2. In law, it means active acquiescence or silent compliance by a person legally capable of consenting. In India, the legal age of consent is 18 years. It may be evidenced by words or acts or by silence when silence implies concurrence. Actual or implied consent is necessarily an element in every contract and every agreement.</li> </ol>

<b>Control Charts</b>	The statistical tool used in quality control to (1) analyse and understand process variables, (2) determine process capabilities, and to (3) monitor effects of the variables on the difference between target and actual performance. Control charts indicate upper and lower control limits, and often include a central (average) line, to help detect the trend of plotted values. If all data points are within the control limits, variations in the values may be due to a common cause and process is said to be 'in control'. If data points fall outside the control limits, variations may be due to a special cause, and the process is said to be out of control.
<b>Correction</b>	Action to eliminate the detected non-conformity (Reference: ISO 9000:2015)
<b>Corrective action</b>	Action to eliminate the cause of a non-conformity and to prevent recurrence. (Reference: ISO 9000:2015)
<b>Credentialing</b>	The process of obtaining, verifying and assessing the qualification of a healthcare provider.
<b>Data</b>	Data is a record of the event.
<b>DHSP</b>	Dental Health Care Service Providers
<b>Discharge summary</b>	A part of a patient record that summarises the reasons for admission, significant clinical findings, procedures performed, treatment rendered, patient's condition on discharge and any specific instructions given to the patient or family (for example follow-up medications).
<b>Disciplinary procedure</b>	A sequence of activities to be carried out when staff does not conform to the laid-down norms, rules and regulations of the healthcare organisation.
<b>Drug dispensing</b>	The preparation, packaging, labelling, record keeping, and transfer of a prescription drug to a patient or an intermediary, who is responsible for the administration of the drug. (Reference: Mosby's Medical Dictionary, 9th edition, 2009, Elsevier.)
<b>Drug Administration</b>	The giving of a therapeutic agent to a patient, e.g. by infusion, inhalation, injection, paste, pessary, suppository or tablet.
<b>Effective communication</b>	Effective Communication is a communication between two or more persons wherein the intended message is successfully delivered, received and understood. The effective communication also includes several other skills such as non-verbal communication, engaged listening, ability to speak assertively, etc.
<b>Employees</b>	All members of the healthcare organisation who are employed full time and are paid suitable remuneration for their services as per the laid-down policy.
<b>End-of-life Care</b>	Helps all those with an advanced, progressive, incurable illness to live as well as possible until they die. It enables the supportive and palliative care needs of both patient and family to be identified and met throughout the last phase of life and into bereavement. It includes management of pain and other symptoms and provision of psychological, social, spiritual and practical support.
<b>Enhanced communication</b>	Enhanced communication is using the methods of communication to ensure meaning and understanding through the recognition of the limitations of others. The intent is to ensure purposeful, timely and reliable communication. The communication must be sensitive, empathetic and inclusive.



<b>Ethics</b>	Moral principles that govern a person's or group's behaviour.
<b>Evidence-based medicine</b>	Evidence-based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.
<b>Family</b>	The person(s) with a significant role in the patient's life. It mainly includes spouse, children and parents. It may also include a person not legally related to the patient but can make healthcare decisions for a patient if the patient loses decision-making ability.
<b>Failure Mode and Effect Analysis (FMEA)</b>	A method used to prospectively identify error risks within a particular process.
<b>Formulary</b>	An approved list of drugs. Drugs contained in the formulary are generally those that are determined to be cost-effective and medically effective.
<b>Goal</b>	A broad statement describing a desired future condition or achievement without being specific about how much and when. (Reference: American Society for Quality) The term "goals" refers to a future condition or performance level that one intends to attain. Goals can be both short- and longer-term. Goals are ends that guide actions. (Reference: Malcolm Baldrige National Quality Award)
<b>Grievance- handling procedures</b>	The sequence of activities carried out to address the grievances of patients, visitors, relatives and staff.
<b>Hazardous materials</b>	Substances dangerous to human and other living organisms. They include radioactive or chemical materials.
<b>Hazardous waste</b>	Waste materials dangerous to living organisms. Such materials require special precautions for disposal. They include the biologic waste that can transmit disease (for example, blood, tissues) radioactive materials, and toxic chemicals. Other examples are infectious waste such as used needles, used bandages and fluid soaked items.
<b>Healthcare- associated infection</b>	Healthcare-associated infection (HAI), also referred to as "nosocomial" or "hospital" infection, is an infection occurring in a patient during the process of care in a hospital or other health care facility which was not present or incubating at the time of admission. (Reference: World Health Organization)
<b>Healthcare organisation</b>	The generic term is used to describe the various types of organisation that provide healthcare services. This includes ambulatory care centres, hospitals, laboratories, etc.
<b>High-dependency unit</b>	A high-dependency unit (HDU) is an area for patients who require more intensive observation, treatment and nursing care than are usually provided for in a ward. It is a standard of care between the ward and full intensive care.
<b>High Risk/High Alert Medications</b>	High-risk/high-alert medications are medications involved in a high percentage of medication errors or sentinel events and medications that carry a high risk for abuse, error, or other adverse outcomes. Examples include medications with a low therapeutic index, controlled substances, psychotherapeutic medications, and look-alike and sound-alike medications.

<b>Incident reporting</b>	It is defined as written or verbal reporting of any event in the process of patient care, that is inconsistent with the deserved patient outcome or routine operations of the healthcare facility.
<b>In-service education/training</b>	Organised education/training usually provided in the workplace for enhancing the skills of staff members or for teaching them new skills relevant to their jobs/tasks.
<b>Indicator</b>	A statistical measure of the performance of functions, systems or processes over time. For example, hospital acquired infection rate, mortality rate, caesarean section rate, absence rate, etc.
<b>Information</b>	Processed data which lends meaning to the raw data.
<b>Intent</b>	A brief explanation of the rationale, meaning and significance of the standards laid down in a particular chapter.
<b>Inventory control</b>	The method of supervising the intake, use and disposal of various goods in hands. It relates to supervision of the supply, storage and accessibility of items in order to ensure an adequate supply without stock-outs/excessive storage. It is also the process of balancing ordering costs against carrying costs of the inventory so as to minimise total costs.
<b>Isolation</b>	Separation of an ill person who has a communicable disease (e.g., measles, chickenpox, mumps, SARS) from those who are healthy. Isolation prevents transmission of infection to others and also allows the focused delivery of specialised health care to ill patients. The period of isolation varies from disease-to-disease. Isolation facilities can also be extended to patients for fulfilling their individual, unique needs.
<b>Job description</b>	<ol style="list-style-type: none"> <li>1. It entails an explanation pertaining to duties, responsibilities and conditions required to perform a job.</li> <li>2. A summary of the most important features of a job, including the general nature of the work performed (duties and responsibilities) and level (i.e., skill, effort, responsibility and working conditions) of the work performed. It typically includes job specifications that include employee characteristics required for competent performance of the job. A job description should describe and focus on the job itself and not on any specific individual who might fill the job.</li> </ol>
<b>Job specification</b>	<ol style="list-style-type: none"> <li>1. The qualifications/physical requirements, experience and skills required to perform a particular job/task.</li> <li>2. A statement of the minimum acceptable qualifications that an incumbent must possess to perform a given job successfully.</li> </ol>
<b>Maintenance</b>	The combination of all technical and administrative actions, including supervision actions, intended to retain an item in, or restore it to, a state in which it can perform a required function. (Reference: British Standard 3811:1993)
<b>Medical equipment</b>	Any fixed or portable non-drug item or apparatus used for diagnosis, treatment, monitoring and direct care of a patient.

<b>Medication error</b>	<p>A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer.</p> <p>Such events may be related to professional practice, health care products, procedures, and systems, including prescribing; order communication; product labelling, packaging, and nomenclature; compounding; dispensing; distribution; administration; education; monitoring; and use. (Reference: The National Coordinating Council for Medication Error Reporting and Prevention)</p>
<b>Medication order</b>	A written order by a physician, dentist, or other designated health professionals for a medication to be dispensed by a pharmacy for administration to a patient. (Reference: Mosby's Medical Dictionary, 10th edition, Elsevier)
<b>Mission</b>	An organisation's purpose. This refers to the overall function of an organisation. The mission answers the question, "What is this organisation attempting to accomplish?" The mission might define patients, stakeholders, or markets served, distinctive or core competencies or technologies used.
<b>Monitoring</b>	The performance and analysis of routine measurements aimed at identifying and detecting changes in the health status or the environment, e.g. monitoring of growth and nutritional status, air quality in operation theatre. It requires careful planning and use of standardised procedures and methods of data collection.
<b>Multidisciplinary</b>	A generic term which includes representatives from various disciplines, professions or service areas.
<b>Near-miss</b>	<p>A near-miss is an unplanned event that did not result in injury, illness, or damage--but had the potential to do so.</p> <p>Errors that did not result in patient harm, but could have, can be categorised as near-misses.</p>
<b>No harm</b>	<p>This is used synonymously with a near miss. However, some authors draw a distinction between these two phrases.</p> <p>A near-miss is defined when an error is realised just in the nick of time, and abortive action is instituted to cut short its translation. In no harm scenario, the error is not recognised, and the deed is done, but fortunately for the healthcare professional, the expected adverse event does not occur. The distinction between the two is important and is best exemplified by reactions to administered drugs in allergic patients. A prophylactic injection of cephalosporin may be stopped in time because it suddenly transpires that the patient is known to be allergic to penicillin (near-miss). If this vital piece of information is overlooked, and the cephalosporin administered, the patient may fortunately not develop an anaphylactic reaction (no harm event).</p>

<b>Notifiable disease</b>	<p>Certain specified diseases, which are required by law to be notified to the public health authorities. Under the international health regulation (WHO's International Health Regulations 2005), the following diseases are always notifiable to WHO:</p> <ul style="list-style-type: none"> <li>(a) Smallpox</li> <li>(b) Poliomyelitis due to wild-type poliovirus</li> <li>(c) Human influenza caused by a new subtype</li> <li>(d) Severe acute respiratory syndrome (SARS).</li> </ul> <p>In India, the following is an indicative list of diseases which are also notifiable, but may vary from state to state:</p> <ul style="list-style-type: none"> <li>(a) Polio</li> <li>(b) Influenza</li> <li>(c) Malaria</li> <li>(d) Rabies</li> <li>(e) HIV/AIDS</li> <li>(f) Louse-borne typhus</li> <li>(g) Tuberculosis</li> <li>(h) Leprosy</li> <li>(i) Leptospirosis</li> <li>(j) Viral hepatitis</li> <li>(k) Dengue fever</li> </ul>
<b>Nursing empowerment</b>	<p>Empowerment for nurses may consist of three components: a workplace that has the requisite structures to promote empowerment; a psychological belief in one's ability to be empowered; and acknowledgement that there is power in the relationships and caring that nurses provide.</p> <p>It could include structural empowerment and psychological empowerment. Structural empowerment refers to the presence or absence of empowering conditions in the workplace. Kanter's (1993) theory of structural empowerment includes a discussion of organisational behaviour and empowerment. According to this theory, empowerment is promoted in work environments that provide employees with access to information, resources, support, and the opportunity to learn and develop. Psychological empowerment is related to a sense of motivation towards the organisational environment, based on the dimensions of meaning, competence, self-determination, and impact</p> <p>Evidence of nursing empowerment include initiating and carrying out CPR even in the absences of physicians, implementing standard protocols in the ICU such as weaning a patient off ventilator, tapering or titrating inotropic as per standard policies, nurse-led discussions during patient rounds, preparing nursing budgets, decisions to procure equipment that aid and ease nursing care, empowered to correct, stop non-compliance to protocols defined by the hospital.</p>
<b>Objective</b>	<p>A specific statement of a desired short-term condition or achievement includes measurable end-results to be accomplished by specific teams or individuals within time limits. (Reference: American Society for Quality)</p>

<b>Objective element</b>	It is that component of standard which can be measured objectively on a rating scale. Acceptable compliance with the measurable elements will determine the overall compliance with the standard.
<b>Occupational health hazard</b>	The hazards to which an individual is exposed during the course of the performance of his job. These include physical, chemical, biological, mechanical and psychosocial hazards.
<b>Operational plan</b>	The operational plan is the part of your strategic plan. It defines how you will operate in practice to implement your action and monitoring plans - what your capacity needs are, how you will engage resources, how you will deal with risks, and how you will ensure the sustainability of the organisation's achievements.
<b>Organogram</b>	A graphic representation of the reporting relationship in an organisation.
<b>Outsourcing</b>	Hiring of services and facilities from other organisation based upon one's own requirement in areas where such facilities are either not available or else are not cost-effective. For example, outsourcing of house-keeping, security, laboratory/certain special diagnostic facilities. When an activity is outsourced to other institutions, there should be a memorandum of understanding that clearly lays down the obligations of both organisations: the one which is outsourcing and the one who is providing the outsourced facility. It also addresses the quality-related aspects.
<b>Patient-care setting</b>	The location where a patient is provided health care as per his needs, e.g. ICU, speciality ward, private ward and general ward.
<b>Patient record/ medical record/ clinical record</b>	A document which contains the chronological sequence of events that a patient undergoes during his stay in the healthcare organisation. It includes demographic data of the patient, assessment findings, diagnosis, consultations, procedures undergone, progress notes and discharge summary.
<b>Patient Satisfaction</b>	Patient satisfaction is a measure of the extent to which a patient is content with the health care which they received from their health care provider. Patient satisfaction is thus a proxy but a very effective indicator to measure the success of Health care providers.
<b>Patient Experience</b>	Patient Experience is the sum of all interactions, shaped by an organisation's culture, that influence patient perceptions across the continuum of care. It is a holistic perception that the patient forms about the healthcare provider based on the overall interactions/ care touchpoints.
<b>Performance appraisal</b>	It is the process of evaluating the performance of staff during a defined period of time with the aim of ascertaining their suitability for the job, the potential for growth as well as determining training needs.
<b>Point of care equipment</b>	Medical Equipment that is used to deliver care/intervene at or near the site of patient care. These are primarily Point-of-care testing (POCT), or bedside testing equipment that helps in reducing turn-around times. POCT Machine examples; Glucometer, ABG Analyser, Stat Lab at ICU/ER, portable USG etc.

<b>Policies</b>	They are the guidelines for decision-making, e.g. admission, discharge policies, antibiotic policy, etc.
<b>Preventive action</b>	Action to eliminate the cause of a potential non-conformity. (Reference ISO 9000:2015)
<b>Preventive maintenance</b>	It is a set of activities that are performed on plant equipment, machinery, and systems before the occurrence of a failure in order to protect them and to prevent or eliminate any degradation in their operating conditions. The maintenance carried out at predetermined intervals or according to prescribed criteria and intended to reduce the probability of failure or the degradation of the functioning of an item.
<b>Prescription</b>	A prescription is a document given by a physician or other healthcare practitioner in the form of instructions that govern the care plan for an individual patient. Legally, it is a written directive, for compounding or dispensing and administration of drugs, or for other service to a particular patient. (Reference: Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, Seventh Edition, Saunders)
<b>Privileging</b>	It is the process for authorising all medical professionals to admit and treat patients and provide other clinical services commensurate with their qualifications and skills.
<b>Privileged communication</b>	Confidential information furnished (to facilitate diagnosis and treatment) by the patient to a professional authorised by law to provide care and treatment.
<b>Procedural sedation</b>	Procedural sedation is a technique of administering sedatives or dissociative agents with or without analgesics to induce a state that allows the patient to tolerate unpleasant procedures while maintaining cardiorespiratory function. Procedural sedation and analgesia (PSA) is intended to result in a depressed level of consciousness that allows the patient to maintain oxygenation and airway control independently. (Reference: The American College of Emergency Physicians)
<b>Procedure</b>	<ol style="list-style-type: none"> <li>1. A specified way to carry out an activity or a process (Para 3.4.5 of ISO 9000: 2015).</li> <li>2. A series of activities for carrying out work which when observed by all help to ensure the maximum use of resources and efforts to achieve the desired output.</li> </ol>
<b>Process</b>	A set of interrelated or interacting activities which transforms inputs into outputs (Para 3.4.1 of ISO 9000: 2015).
<b>Programme</b>	A sequence of activities designed to implement policies and accomplish objectives.
<b>Protocol</b>	A plan or a set of steps to be followed in a study, an investigation or an intervention.

<b>Quality</b>	<p>1. Degree to which a set of inherent characteristics fulfil requirements (Para 3.1.1 of ISO 9000: 2015). Characteristics imply a distinguishing feature (Para 3.5.1 of ISO 9000: 2015). Requirements are a need or expectation that is stated, generally implied or obligatory (Para 3.1.2 of ISO 9000:2015).</p> <p>2. Degree of adherence to pre-established criteria or standards.</p>
<b>Quality assurance</b>	Part of quality management focussed on providing confidence that quality requirements will be fulfilled (Para 3.2.11 of ISO 9000:2015).
<b>Quality improvement</b>	Ongoing response to quality assessment data about a service in ways that improve the process by which services are provided to consumers/patients.
<b>Radiation Safety</b>	<p>Radiation safety refers to safety issues and protection from radiation hazards arising from the handling of radioactive materials or chemicals and exposure to Ionizing and Non-Ionizing Radiation. This is implemented by taking steps to ensure that people will not receive excessive doses of radiation and by monitoring all sources of radiation to which they may be exposed. (Reference: McGraw-Hill Dictionary of Scientific &amp; Technical Terms)</p> <p>In a Healthcare setting, this commonly refers to X-ray machines, CT/PET CT Scans, Electron microscopes, Particle accelerators, Cyclotron etc. Radioactive substances and radioactive waste are also potential Hazards.</p> <p>Imaging Safety includes safety measures to be taken while performing an MRI, Radiological interventions, Sedation, Anaesthesia, Transfer of patients, Monitoring patients during imaging procedure etc.</p>
<b>Re-assessment</b>	It implies a continuous and ongoing assessment of the patient, which is recorded in the medical records as progress notes.
<b>Reconciliation of medications</b>	Medication reconciliation is the process of creating the most accurate list possible of all medications a patient is taking — including drug name, dosage, frequency, and route — and comparing that list against the physician's admission, transfer, and/or discharge orders, with the goal of providing correct medications to the patient at all transition points within the hospital. (Reference: Institute for Healthcare Improvement)
<b>Resources</b>	It implies all inputs in terms of men, material, money, machines, minutes (time), methods, metres (space), skills, knowledge and information that are needed for the efficient and effective functioning of an organisation.
<b>Restraints</b>	Devices used to ensure safety by restricting and controlling a person's movement. Many facilities are "restraint-free" or use alternative methods to help modify behaviour. Restraint may be physical or chemical (by use of sedatives).
<b>Risk abatement</b>	Risk abatement means minimising the risk or minimising the impact of that risk.

<b>Risk assessment</b>	Risk assessment is the determination of the quantitative or qualitative value of risk related to a concrete situation and a recognised threat (also called hazard). Risk assessment is a step in a risk management procedure.
<b>Risk management</b>	Clinical and administrative activities to identify, evaluate and reduce the risk of injury.
<b>Risk mitigation</b>	Risk mitigation is a strategy to prepare for and lessen the effects of threats and disasters. Risk mitigation takes steps to reduce the negative effects of threats and disasters.
<b>Risk reduction</b>	<p>The conceptual framework of elements considered with the possibilities to minimise vulnerabilities and disaster risks throughout society to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.</p> <p>It is the decrease in the risk of a healthcare facility, given activity, and treatment process with respect to patient, staff, visitors and community.</p>
<b>Root Cause Analysis (RCA)</b>	<p>Root Cause Analysis (RCA) is a structured process that uncovers the physical, human, and latent causes of any undesirable event in the workplace. Root cause analysis (RCA) is a method of problem-solving that tries to identify the root causes of faults or problems that cause operating events.</p> <p>RCA practice tries to solve problems by attempting to identify and correct the root causes of events, as opposed to simply addressing their symptoms. By focusing correction on root causes, problem recurrence can be prevented. The process involves data collection; cause charting, root cause identification and recommendation generation and implementation.</p>
<b>Safety</b>	The degree to which the risk of an intervention/procedure, in the care environment is reduced for a patient, visitors and healthcare providers.
<b>Safety programme</b>	A programme focused on patient, staff and visitor safety.
<b>Scope of services</b>	Range of clinical and supportive activities that are provided by a healthcare organisation.
<b>Security</b>	Protection from loss, destruction, tampering, and unauthorised access or use.
<b>Sedation</b>	<p>The administration to an individual, in any setting for any purpose, by any route, moderate or deep sedation. There are three levels of sedation:</p> <p>Minimal sedation (anxiolysis) - A drug-induced state during which patients respond normally to verbal commands. Although cognitive function and coordination may be impaired, ventilatory and cardiovascular functions are not affected.</p> <p>Moderate sedation/analgesia (conscious sedation) - A drug-induced depression of consciousness during which patients respond purposefully to verbal commands either alone or accompanied by light tactile stimulation. No interventions are needed to maintain a patent airway.</p> <p>Deep sedation/analgesia - A drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully after repeated or painful stimulation. Patients may need help in maintaining a patent airway.</p>



<b>Sentinel events</b>	<p>A relatively infrequent, unexpected incident, related to system or process deficiencies, which leads to death or major and enduring loss of function for a recipient of healthcare services.</p> <p>Major and enduring loss of function refers to sensory, motor, physiological, or psychological impairment not present at the time services were sought or begun. The impairment lasts for a minimum period of two weeks and is not related to an underlying condition.</p>
<b>Social responsibility</b>	A balanced approach for an organisation to address economic, social and environmental issues in a way that aims to benefit people, communities and society, e.g. adoption of villages for providing health care, holding of medical camps and proper disposal of hospital wastes.
<b>Sound clinical practice</b>	Practitioner decisions based on available knowledge, principles and practices for specific clinical situations.
<b>Special educational needs of the patient</b>	In addition to routine carried by the healthcare professionals, patients and family have special educational needs depending on the situation. For example, a post-surgical patient who has to take care of his wound, nasogastric tube feeding, patient on tracheostomy getting discharged who has to be taken care of by the family etc. The special educational needs are also greatly influenced by the literacy, educational level, language, emotional barriers and physical and cognitive limitations. Hence it is important for the staff to determine the special educational needs and the challenges influencing the effective education.
<b>Staff</b>	All personnel working in the organisation including employees, "fee-for-service" medical professionals, part-time workers, contractual personnel and volunteers.
<b>Standard precautions</b>	<ol style="list-style-type: none"> <li>1. A method of infection control in which all human blood and other bodily fluids are considered infectious for HIV, HBV and other blood-borne pathogens, regardless of patient history. It encompasses a variety of practices to prevent occupational exposure, such as the use of personal protective equipment (PPE), disposal of sharps and safe housekeeping</li> <li>2. A set of guidelines protecting first aiders or healthcare professionals from pathogens. The main message is: "Don't touch or use anything that has the victim's body fluid on it without a barrier." It also assumes that all body fluid of a patient is infectious, and must be treated accordingly.</li> </ol> <p><b>Standard Precautions</b> apply to blood, all body fluids, secretions, and excretions (except sweat) regardless of whether or not they contain visible blood, non-intact skin and mucous membranes</p>
<b>Standards</b>	A statement of expectation that defines the structures and process that must be substantially in place in an organisation to enhance the quality of care.
<b>Sterilisation</b>	It is the process of killing or removing microorganisms including their spores by thermal, chemical or irradiation means.
<b>Strategic plan</b>	<p>Strategic planning is an organisation's process of defining its strategy or direction and making decisions on allocating its resources to pursue this strategy, including its capital and people. Various business analysis techniques can be used in strategic planning, including SWOT analysis (Strengths, Weaknesses, Opportunities and Threats), e.g. Organisation can have a strategic plan to become a market leader in the provision of cardiothoracic and vascular services. The resource allocation will have to follow the pattern to achieve the target.</p> <p>The process by which an organisation envisions its future and develops strategies, goals, objectives and action plans to achieve that future.</p>

<b>Surveillance</b>	The continuous scrutiny of factors that determines the occurrence and distribution of diseases and other conditions of ill health. It implies watching over with great attention, authority and often with suspicion. It requires professional analysis and sophisticated interpretation of data leading to recommendations for control activities.
<b>Table-top exercise</b>	A table-top exercise is an activity in which key personnel assigned emergency management roles and responsibilities are gathered to discuss, in a non-threatening environment, various simulated emergency situations. (Reference: <a href="https://uwpd.wisc.edu/content/uploads/2014/01/What_is_a_tabletop_exercise.pdf">https://uwpd.wisc.edu/content/uploads/2014/01/What_is_a_tabletop_exercise.pdf</a> )
<b>Traceability</b>	Traceability is the ability to trace the history, application, use and location of an item or its characteristics through recorded identification data. (Reference: ISO 9000:2015)
<b>Transfusion reaction</b>	A transfusion reaction is a problem that occurs after a patient receives a transfusion of blood.
<b>Triage</b>	Triage is a process of prioritising patients based on the severity of their condition so as to treat as many as possible when resources are insufficient for all to be treated immediately.
<b>Turn-around-time</b>	Turnaround Ttime (TAT) means the amount of time taken to complete a process or fulfil a request.
<b>Unstable patient</b>	A patient whose vital parameters need external assistance for their maintenance.
<b>Validated tool</b>	A validated tool refers to a questionnaire/scale that has been developed to be administered among the intended respondents. The validation processes should have been completed using a representative sample, demonstrating adequate reliability (the ability of the instrument to produce consistent results) and validity (the ability of the instrument to produce true results).
<b>Validation</b>	Validation is verification, where the specified requirements are adequate for the intended use.
<b>Values</b>	The fundamental beliefs that drive organisational behaviour and decision-making. This refers to the guiding principles and behaviours that embody how an organisation and its people are expected to operate. Values reflect and reinforce the desired culture of an organisation.
<b>Verbal order</b>	Verbal orders are those orders given by a physician with prescriptive authority to a licensed person who is authorised by the organisation.
<b>Verification</b>	Verification is the provision of objective evidence that a given item fulfils specified requirements.
<b>Vision</b>	An overarching statement of the way an organisation wants to be, an ideal state of being at a future point. This refers to the desired future state of an organisation. The vision describes where the organisation is headed, what it intends to be, or how it wishes to be perceived in the future.
<b>Vulnerable patient</b>	Those patients who are prone to injury and disease by virtue of their age, sex, physical, mental and immunological status, e.g. infants, elderly, physically- and mentally-challenged, semiconscious/unconscious, those on immunosuppressive and/or chemotherapeutic agents.
<b>Workplace violence</b>	Incidents where staff are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well-being or health. (Adapted from European Commission)

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admission	clinical audit
adverse drug reaction	clinical care pathways
adverse events	clinical pharmacist
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antimicrobial	commensurate
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assignment	communication
audit	community
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critical results	effectiveness
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HVAC	logs
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implantable prosthesis	managerial
incident	medical consumables
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induction training	medical equipment
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	surveillance
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SBAR	traceability
scope	training calendar
security	training effectiveness
sedation	training record

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transfer-in	workplace-related injuries
transfusion	written guidance
transfusion services	wrong patient
transmission	wrong procedure
transplant	wrong site
transport	wrong surgery
treating doctor	zoning
triage	
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uniform	
unique ID	
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vulnerable	



# ANNEXURE 1

## NABH Key Performance Indicators

The concept of performance in health services represents an instrument for bringing quality, efficiency and efficacy together. Performance represents the extent to which set objectives are accomplished. Performance is a multidimensional one, covering various aspects, such as evidence-based practice (EBP), continuity and integration in healthcare services, health promotion, orientation towards the needs and expectation of patients and family members.

Key Performance Indicators (KPIs) help to systematically monitor, evaluate, and continually improve service performance. By themselves, KPIs cannot improve performance. However, they do provide “signposts” that signal progress toward goals and objectives as well as opportunities for sustainable improvements.

Well-designed KPIs should help the organisation to do a number of things, including:

- Establish baseline information i.e., the current state of performance
- Set performance standards and targets to motivate continual improvement
- Measure and report improvements over time
- Compare performance across geographic locations
- Benchmark performance against regional and international peers or norms
- Allow stakeholders to independently judge health sector performance.

Healthcare organisations (HCO) are encouraged to capture all data which involves clinical and support services. The data needs to be analysed and risks, rates and trends for all the indicators have to be demonstrated for appropriate action.

The intent of the NABH KPIs is to have comprehensive involvement of scope of services for which a HCO has applied for the accreditation program. Standardised definitions for each indicator along with numerator and denominator have been explained. Each HCO can have the data set measure, analyse the aggregated data and appropriate correction, corrective and preventive action can be formulated. Each HCO can also design their own methodology of data collection but a broad guidance note has been given to facilitate organisation's compliance.

Suggested minimum sample size to be taken for various audits and KPIs as applicable has been specified.

## NABH KEY PERFORMANCE INDICATORS

The Key performance indicators expected to be monitored by healthcare organisation:

S. No.	Standards	Indicator	Definition	Formula		Unit	Frequency of Data Collation/ Monitoring	Remarks
1.	PSQ2b	Incidence of medication errors	A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the healthcare professional, patient or consumer.	Total number of medication errors	X 100	Percentage	Monthly	The methodology for capture shall be as stated in NABH's document on medication errors. The indicator shall be captured for admitted patients Sampling: Yes Sampling methodology: Stratified random *Total number of opportunities monitored.
				Total number of opportunities*				
2.	PSQ2c	Surgical site infection rate (only for Hospitals)	As per the latest CDC/NHSN definition	Number of surgical site infections in a given month	X 100	/100 procedures	Monthly	Keeping in mind the definition of SSI, the numbers would have to be updated on a continual basis until such time that the monitoring period is over. For example, in January, the data of December would be reported. The denominator would be the number of surgeries performed in December, and that would not change. With respect to the numerator, there would be some data but it would not be complete data. Hence, whatever value the organisation gets at this stage would at best be a preliminary value.
				Number of surgeries performed in that month*				

S. No.	Standards	Indicator	Definition	Formula		Unit	Frequency of Data Collation/ Monitoring	Remarks
								<p>The organisation will continue to monitor the patients and by end of January, would have got complete data with respect to procedures which have a 30-day surveillance period. At this point in time, based on the data that the organisation has collated the numerator may change and hence, the SSI rate. However, this again would not be the final data. The organisation will continue to monitor procedures which have a 90-day surveillance period, and if there are new SSIs, it would get added to the numerator and thus the rate would change. The surveillance period for surgeries which are done in December and have a 90-day surveillance period would end on March 30th (give or take a few days). It is only at this point in time that the organisation can have the final SSI rate for December.</p>

S. No.	Standards	Indicator	Definition	Formula		Unit	Frequency of Data Collation/ Monitoring	Remarks
3.	PSQ2c	Compliance to Hand hygiene practice.		Total number of actions performed	X 100	Percentage	Monthly	Observation involves directly watching and recording the hand hygiene behaviour of health care workers and the physical environment. Good reference is WHO hand hygiene compliance monitoring tool. Please refer: <a href="http://www.who.int/gpsc/5may/tools/en/">http://www.who.int/gpsc/5may/tools/en/</a> <a href="http://www.who.int/entity/gpsc/5may/Observation_Form.doc?ua=1">http://www.who.int/entity/gpsc/5may/Observation_Form.doc?ua=1</a> Sampling: Yes Sampling methodology: Stratified random
				Total number of hand hygiene opportunities				
4.	PSQ2b	Percentage of cases who received appropriate prophylactic antibiotics within the specified timeframe (only for Hospitals)		Number of patients who did receive appropriate prophylactic antibiotic(s)	X 100	Percentage	Monthly	Appropriate prophylactic antibiotic should be according to hospital policy. The numerator shall include patients who received the appropriate drug (and dose) within the appropriate time. A patient who was not given prophylactic antibiotic because it was not indicated (e.g. clean surgery) shall be included in the numerator. A patient, who is given prophylactic antibiotic even though it was not indicated, shall be considered as having received it inappropriately.
				Number of patients who underwent surgery*				

S. No.	Standards	Indicator	Definition	Formula		Unit	Frequency of Data Collation/ Monitoring	Remarks
								Sampling: No *If all surgeries are not monitored for antibiotic prophylaxis during a particular time period, the number of surgeries monitored for SSI shall be denominator. Additionally, the difference between surgeries done and monitored shall be documented with reasons of such difference.
5	PSQ 2d	Waiting time for OPD	Waiting time for OPD is the time from which the patient has come to the OPD (requisition form has been presented to the counter) till the time that the consultation is done.	Sum total time		Minutes	Monthly	Waiting time for OPD is applicable only for out-patients and for laboratory and imaging. In case of appointment patients, the time shall begin with the scheduled appointment time and end when the consultation, diagnostic procedure begins. Sampling: No
				Number of patients reported in OPD				
6.	PSQ2d	Rate of sharp injuries	Needle stick injury is a penetrating stab wound from a needle (or other sharp object) that may result in exposure to blood or other body fluids. Needle stick injuries are wounds caused by needles that accidentally puncture the skin.  (Canadian Centre for Occupational Health and Safety)	Number needlestick injuries	X 100	/100 occupied beds	Monthly on a cumulative basis	Number of occupied beds is the average of the sum of the daily figures for the number of beds occupied by patients. The rate will be monitored on a monthly basis but reported cumulatively i.e. in the form of year to date. For example, in January it would be January data but in February it would be January + February data, in July it would be data from January to July and so on so that by the end of the year the annual rate is obtained. Sampling: No
				Number of OPD's				

S. No.	Standards	Indicator	Definition	Formula		Unit	Frequency of Data Collation/ Monitoring	Remarks
7.	PSQ2d	Rate of re-dos for X- ray	This shall also include x ray repeated before release of the result (to confirm the finding).	Number of re-dos	X1000	Percentage	Monthly	This shall be captured in the radiology.
				Number of x ray performed performed				
8.	PSQ2d	Percentage of cases where the organisation procedure to prevent adverse events like wrong site, wrong patient and wrong surgery have been adhered to.		Number of cases where the procedure was followed	X100	Percentage		This could be checked in the post-op/recovery room and documented in a register / system (Includes adherence to Surgical Safety Check List)
				Number of surgeries performed	X100			
9.	PSQ2d	Number of variations observed in mock drills	Mock drill is a simulation exercise of preparedness for any type of event. It could be event or disaster. This is basically a dry run or preparedness drill. For example, fire mock drill, disaster drill, Code Blue Drill.	Total number of variations in a mock drill		B	Continuous	To capture the variation it is suggested that every organisation develop a checklist to capture the events during a mock drill
10.	PSQ2d	Dental equipment down time	The term downtime is used to refer to periods when a system is unavailable. Downtime or outage duration refers to a period of time that a system fails to provide or perform its primary function	Sum of down time for all critical equipment in hours in a month.			Continuous	Critical equipments shall include devices essential for delivering critical care such as ventilators, anaesthesia machine, steam autoclave, CT, ABG machine, Pulse oxymeter etc.

S. No.	Standards	Indicator	Definition	Formula		Unit	Frequency of Data Collation/ Monitoring	Remarks
11.	PSQ2d	Out patient satisfaction index	Patient Satisfaction is defined in terms of the degree to which the patient's expectations are fulfilled. It is an expression of the gap between the expected and perceived characteristics of a service.	Average Score achieved	X 100		Continuous	
				Maximum possible score Maximum possible score				
112	PSQ2d	Employee satisfaction index	Employee satisfaction index is an index to measure satisfaction of employee in an organisation	Average Score achieved	X 100	Percentage	Monthly	Refer to remark for out- patient satisfaction index (serial number 49). The satisfaction shall be captured from all categories of staff and at least once in six months.
				Maximum possible score				
13.	PSQ2b	Number of sentinel events, near miss reported, collected and analysed within the defined timeframe	Refer to glossary	Number of sentinel events analysed within the defined timeframe	X 100	Percentage	Monthly	<p>If there is deviation in either reporting/collecting/analysis it shall not be included in the numerator. Organisations should consider using a portfolio of tools-including incident reporting, medical record review, and analysis of patient claims-to gain a comprehensive picture of sentinel events.</p> <p>A key to any near miss report is the "lesson learned". Near miss reporters can describe what they observed of the beginning of the event, and the factors that prevented loss from occurring.</p>
				Number of sentinel events reported/collected				

S. No.	Standards	Indicator	Definition	Formula		Unit	Frequency of Data Collation/ Monitoring	Remarks
14.	PSQ2b	Incidence of blood body fluid exposures	An exposure is when blood, blood components or other potentially infectious materials come in contact with a staff's eyes, mucous membranes, non-intact skin or mouth. (Adopted from Joan Viteri Memorial Clinic "PEP" Post Exposure Prophylaxis)	Number of blood body fluid exposures		Percentage	Monthly	All exposures to blood/body fluids should be assessed on a case-by-case basis.
				Number of Patient visits				
15.	PSQ2d	Percentage of incomplete case records	Documented individualised patient-focused case plan includes case analysis and evaluation, miasmatic analysis, totality formation, repertorisation, remedy differentiation, choice of remedy and posology for each patient	Number of incomplete case management records	X100	Percentage	Monthly	It will improve the qualitative application of record keeping and documentation
				Total number of case management records				



## SAMPLE SIZE CALCULATION (MONTHLY)

Solvent formula

$$n = N / (1 + Ne^2)$$

(Where n=Number of samples, N = Total population and e=Error tolerance)

Using 95% confidence interval (margin of error 95%), the values are calculated as follows:

Screening Population#	Sample Size*
50	44
100	79
150	108
200	132
500	217
1000	278
2000	322
5000	357
10000	370
20000	377

# Screening population is the 'base' from which the samples would be selected. The 'base' shall be the average of the previous three months. For example, in the case of time for initial assessment of patients, this would be the average number of patients admitted per month in the preceding three months. Assuming that the average is 200, this would constitute the screening population and the organisation would have to sample 132 patients over the entire month.

\* It is preferred to take samples on Stratified random basis where indicated to eliminate the bias that can occur due to convenient sampling.

No sampling means that all the occurrence in the numerator shall be recorded irrespective of rate of occurrence.

## ANNEXURE 2

# Guidance on Monitoring Medication Errors

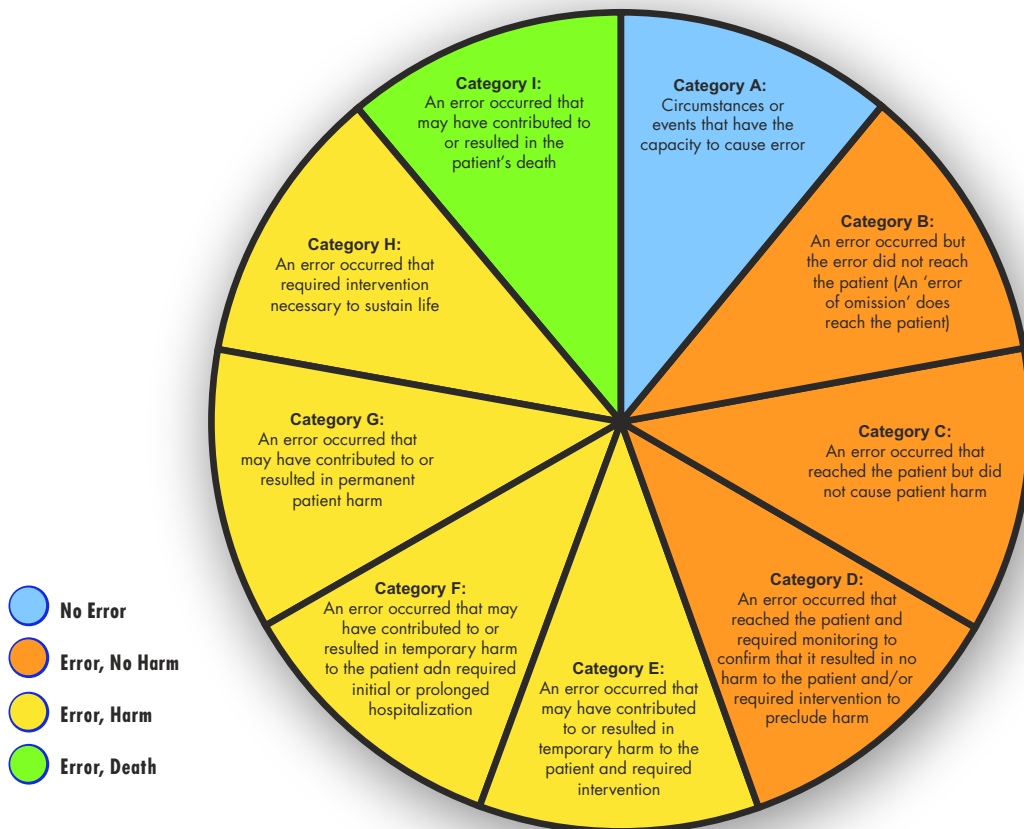
**Definition:** NCC-MERP (National Coordinating Council for Medication Error Reporting and Prevention) defines medication error as

"A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient or consumer. Such events may be related to professional practice, health care products, procedures and systems, including prescribing, order communication, product labelling, packaging and nomenclature, compounding, dispensing, distribution, administration, education, monitoring and use."

### CATEGORIES OF MEDICATION ERROR

Level of Harm	Category of Error	Explanation of events/ error
NO ERROR	Category A	Circumstances or events that have the capacity to cause error
ERROR, NO HARM	Category B	An error occurred, but the error did not reach the patient (An "error of omission" does reach the patient.)
	Category C	An error occurred that reached the patient but did not cause patient harm.
	Category D	An error occurred that reached the patient and required monitoring to confirm that it resulted in no harm to the patient and/or required intervention to preclude harm
ERROR, HARM	Category E	An error occurred that may have contributed to or resulted in temporary harm to the patient and required intervention
	Category F	An error occurred that may have contributed to or resulted in temporary harm to the patient and required initial or prolonged hospitalization
	Category G	An error occurred that may have contributed to or resulted in permanent patient harm
	Category H	An error occurred that required intervention necessary to sustain life
ERROR , DEATH	Category I	An error occurred that may have contributed to or resulted in the patient's death.

## NCC MERP Index for Categorizing Medication Errors



### Definitions

#### Harm

Impairment of the physical, emotional, or psychological function or structure of the body and/or pain resulting therefrom.

#### Monitoring

To observe or record relevant physiological or psychological signs.

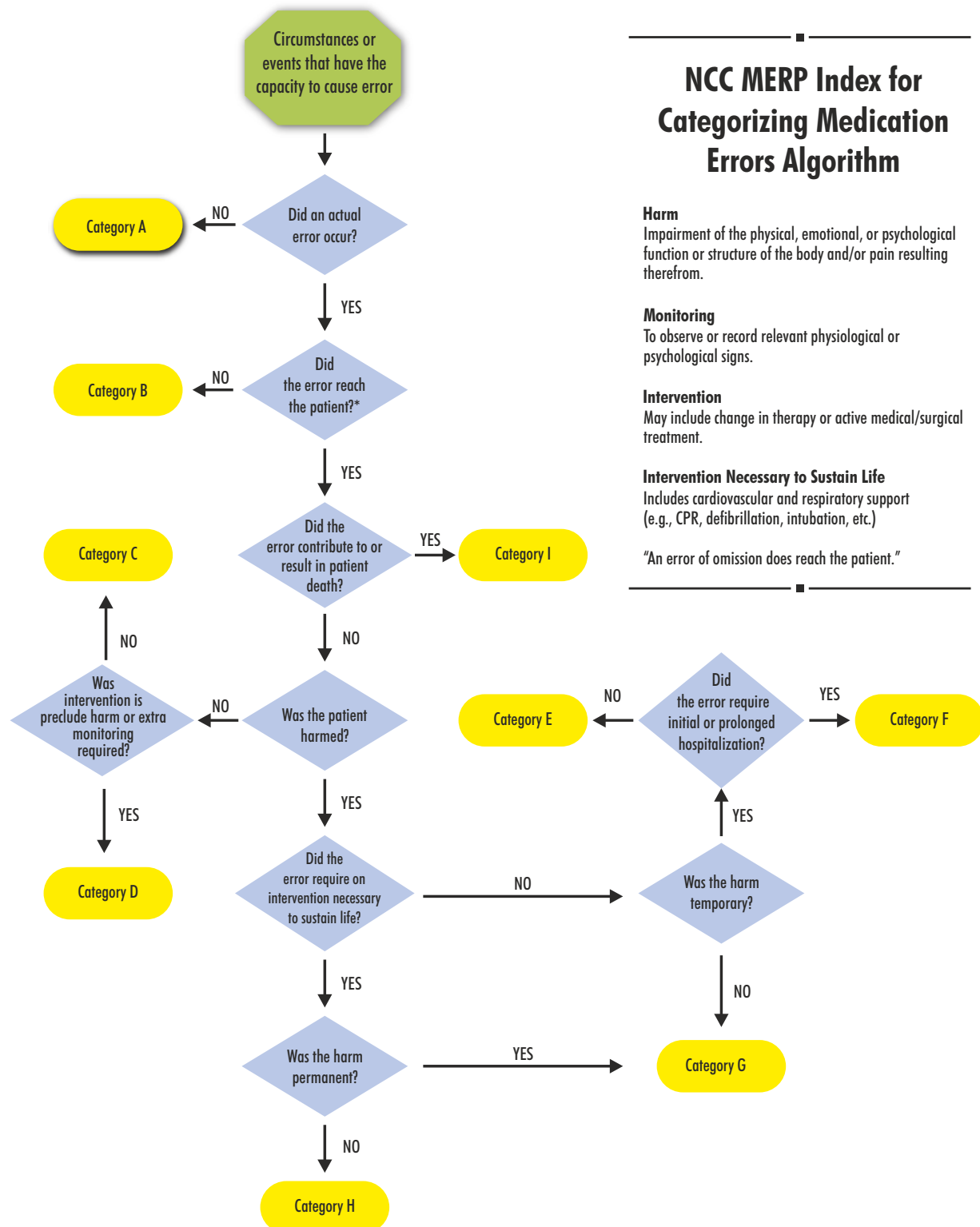
#### Intervention

May include change in therapy or active medical/surgical treatment.

#### Intervention Necessary to Sustain Life

Includes cardiovascular and respiratory support (e.g., CPR, defibrillation, intubation, etc.)

National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) index for categorizing medication errors. © 2001 National Coordinating Council for Medication Error Reporting and Prevention.



Algorithm developed by the National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) for applying the NCC MERP index for categorizing medication errors. © 2001, National Coordinating Council for Medication Error Reporting and Prevention.

## METHODOLOGY:

Chart Review, Audit and Self Reporting of Medication Errors are preferred methods in case medication charts are documented manually in the HCO. Software programmes can be used where prescriptions are generated online.

The format for capturing medication errors by routine chart review is provided in Annexure.

The idea of trying to identify personnel involved in errors is to ensure that the organisation does a proper root cause analysis and takes appropriate corrective and/or preventive action. It is not meant for punitive action. Process improvements are a must to reduce errors.

## FORMULA:

Total number of errors identified	X100
Total number of opportunities	

Note:

- Self-reported medication errors, medication errors identified during audits or medication errors identified by any other methodology shall be added to the numerator i.e. the total number of errors identified.

## SAMPLE SIZE:

Adhere to the formula stated by NABH in its document on indicators for sample size calculation. The 'population' would be calculated from the running average of the previous three months of admissions.

Care needs to be taken to ensure that files from all clinical specialities are included. Stratified sampling will help the organisation achieve this.

## CORRECTION:

Pending analysis, it is imperative that the organisation do a correction to mitigate the effect(s) of the error. An example of how correction could be done is provided below.

For category A and B	Administer the drug within a reasonable time frame
For Category C and D	Consult the clinician and follow orders accordingly

## ANALYSIS:

The first step in the analysis is the collation of data. This would help identify

- Categories of error
- Personnel involved in error

The data could be collated as per the table below.

	A	B	C	D	E	F	G	H	I	TOTAL
DOCTORS										
NURSES										
PHARMACISTS										
TOTAL										

The organisation should identify the proper root cause to ensure that effective corrective and/ or preventive action are taken. It is suggested that appropriate tools are used for the same.

Some of the possible causes of medications errors are provided in the table below.

People	Environment	Equipment	Process
Casual Attitude	Pharmacy- poor drug storage- poor ventilation, lighting, humidity	Defective syringe pumps	'Ten' rights not observed
Inexperienced/ New staff	Pharmacy space constraint for storage		Wrong stocking
Untrained staff	Pharmacy manpower constraint for dispensing		Wrong labelling
Shift change time/ in a hurry			Inappropriate syringe/ diluent
Emotionally unfit			No cross-checking
Physically unfit			Stock-outs
Wrong indent/ receiving			Unauthorized replacement of the drug
Patient identification error			LASA medicine error
Wrong dispensing pharmacy			
Wrong distribution GDA			
Illegible handwriting of doctors			

Some of the common corrective actions include

- Training
- Manpower recruitment
- Pharmacy stock rectification
- Equipment replacement/ rectification

## SUGGESTED READING:

1. [www.nccmerp.org](http://www.nccmerp.org). National Coordinating Council for Medication Error Reporting and Prevention
2. American Society of Health-System Pharmacists. ASHP guidelines on preventing medication errors in hospitals. *Am J Health-Syst Pharm*. 2018; 75:1493–1517.
3. Nrupal Patel, Mira Desai, Samdih Shah et al. A study of medication errors in a tertiary care hospital. *Perspect Clin Res*. 2016 Oct-Dec; 7(4): 168–173.
4. Khandelwal AK. Getting it Right. *Healthcare Radius* 2014; March: 32-34

# ANNEXURE 3

## Medication Chart Review Checklist

Auditor:

Date of Audit:

Location:

UHID:

Date of Admission:  
documented: Yes/No

Primary Consultant:

Drug allergies

	Error Perpetuation (Write Category of error from A to I)# In case of no error, kindly write 0; if a particular parameter is not applicable, kindly write NA (Multiple errors can be there and documented for each row and column)									
	Drug 1	Drug 2	Drug 3	Drug 4	Drug 5	Drug 6	Drug 7	Drug 8	Drug 9	Drug 10
Doctors										
1. Incorrect drug selection										
2. No/wrong dose										
3. No/wrong unit of measurement										
4. No/wrong frequency										
5. No/wrong route										
6. No/wrong concentration										
7. No/wrong rate of administration										
8. Illegible handwriting										
9. Non-approved abbreviations used										
10. Non-usage of capital letters for drug names										



	Error Perpetuation (Write Category of error from A to I) # In case of no error, kindly write 0; if a particular parameter is not applicable, kindly write NA (Multiple errors can be there and documented for each row and column)									
	Drug 1	Drug 2	Drug 3	Drug 4	Drug 5	Drug 6	Drug 7	Drug 8	Drug 9	Drug 10
11. Non-usage of generic names										
12. Non-modification of drug dose keeping in mind drug-drug interaction										
13. Non-modification of time of drug administration/dose/drug keeping in mind food-drug interaction										
Doctor and/or Nurse										
14. Wrong formulation transcribed/indented										
15. Wrong drug transcribed/indented										
16. Wrong strength transcribed/indented										
Pharmacist										
17. Wrong drug dispensed										
18. Wrong dose dispensed										
19. Wrong formulation dispensed										
20. Expired/Near-expiry drugs dispensed										
21. No/wrong labelling										
22. Delay in dispense > defined time										
23. Generic or class substitute done without consultation with the prescribing doctor										

	Error Perpetuation (Write Category of error from A to I) # In case of no error, kindly write 0; if a particular parameter is not applicable, kindly write NA (Multiple errors can be there and documented for each row and column)									
	Drug 1	Drug 2	Drug 3	Drug 4	Drug 5	Drug 6	Drug 7	Drug 8	Drug 9	Drug 10
Nurses										
24. Wrong Patient										
25. Dose Omission										
26. Improper Dose										
27. Wrong Drug										
28. Wrong Formulation Administered										
29. Wrong Route of Administration										
30. Wrong Rate										
31. Wrong Duration										
32. Wrong Time*										
33. No documentation of drug administration										
34. Incomplete/Improper documentation by nursing staff **										
35. Documentation without administration										
Others										

**Number of errors (Number of cells having a value between A to I) =**

For example, if drug 1 has an error of category C for doctors and an error of category B for Pharmacists and drug 4 has an error of category C for nurses; numerator will be 3.

**Number of opportunities {Number of cells having a value of either 0 or a value between A to I (excluding NA)} =**

For example, if the case sheet had ten drugs and all the cells had values, then the number would be 350. However, if there were six drugs and there were 24 cells with a value of 'NA' the number of opportunities would be  $186\{(35 \times 6) - 24\}$ .

#Select only one of the medication error categories or subcategories, whichever best fits the error that is being reported. In selecting the patient outcome category, select the highest level severity that applies during the course of the event. For example, if a patient suffers a severe anaphylactic reaction (Category H) and requires treatment (Category F) but eventually recovers completely, the event should be coded as Category H.

\* Deviation from the organisation's defined timeframe for the administration of drugs for which the time has not been written. The basis for stating 'wrong time' should be evidence-based. The organisation could adopt/adapt the ISMP Acute Care Guidelines for Timely Administration of Scheduled Medications.

\*\*Incomplete documentation includes the missing date, time, signature. Improper documentation includes writing the wrong dose like instead of stating ½ tablet of 500 mg is administered, stating that 1 tablet of 250 mg was administered (based on how the medication order was written) or not stating the actual brand that was administered in cases of brand substitution.

## ANNEXURE 3

### Quality tools

**Quality Tools:** QI data should be analysed using statistical/quality tools to assess compliance with the targets and identify areas for improvement.

**Root cause analysis(RCA):** RCA a very commonly used tool and is carried out for establishing causality when adverse trends are noted for any parameter or in the case of errors/incidents. RCA is a systematic, extensive and in-depth analysis of a problem with the view to get to the bottom of the problem. RCA is carried out by using either the 5 Why's Tool or the Cause and Effect Diagram.

**5 Whys' tool(Taiichi Ohno),** helps teams look beyond obvious and initial symptoms by asking “Why?” five times, sequentially in response to the first answer, till one reaches the root cause. As a result the focus(blame) shifts from individuals to the process. There may be multiple root causes of a problem; different people who see different parts of the system may answer the questions differently. The 5 whys has come under criticism for overly simplifying the problem on hand. The cause(s) of a problem and how to address them are likely to be understood more effectively by using multiple 5 Whys in conjunction with a Cause and Effect Diagram.



Figure Illustration of 5-Why's Approach for carrying out a root cause analysis.  
(<https://www.aafp.org/fpm/2007/0500/p30.html> accessed on April 30, 2022)

**Cause and Effect Diagram:** Also known as Ishikawa or fishbone diagram, graphically displays the relationship of the many causes to the effect, and to each other; helping teams identify areas for improvement. A line runs horizontally from the tail to the head of the fish, where the effect is written. Causes are grouped under the categories of Materials, Methods, Equipment, Environment, and People or as required.

The tool is used extensively to reach the root cause of deviations from any policy, procedure or protocol and outliers for indicator data and for detailed analysis of incidents and adverse events.

For e.g. Fish bone/cause and effects diagrams can be used to identify the causes of underuse of the electronic health records in a hospital setting by the doctors and nurses.

**Affinity Diagram:** These diagrams serve the same purpose as the Ishikawa charts but the visual presentation differs.

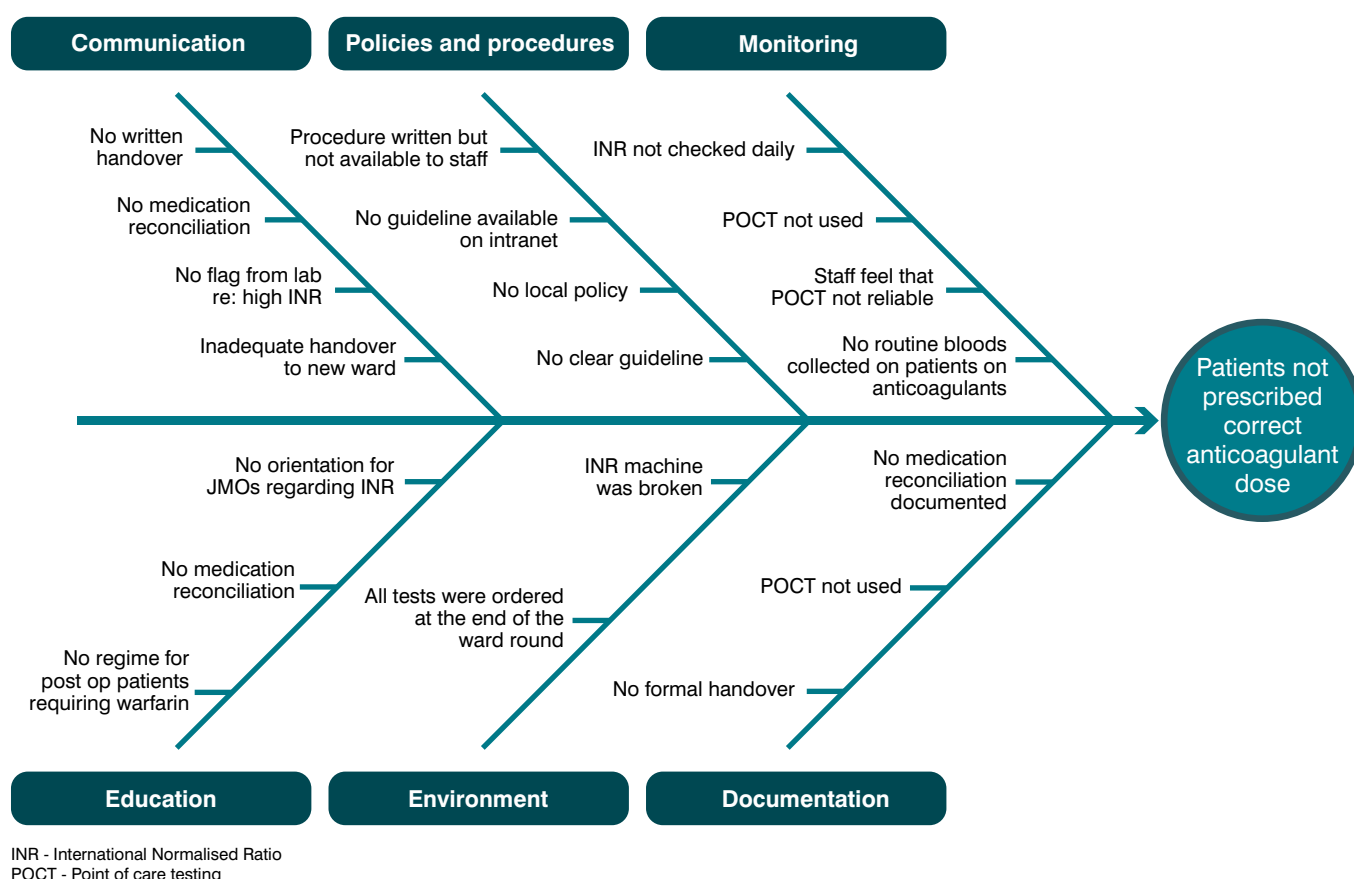


Figure Example of a Cause and Effect Diagram by Clinical Excellence Commission. Reasons why patients are not on a standardised anticoagulation pathway  
<https://www.cec.health.nsw.gov.au/CEC-Academy/quality-improvement-tools/cause-and-effect-diagrams>

**Histogram:** A histogram is a bar chart used to display variation in continuous data like time, weight, size, or temperature. It helps to recognize and analyse patterns not apparent by looking at data tables, or by finding the average or median and will effectively highlight the interval that is most frequently occurring.

### Histogram of Pharmacy Drug Dispensing Turn Around Times

*Example data only*

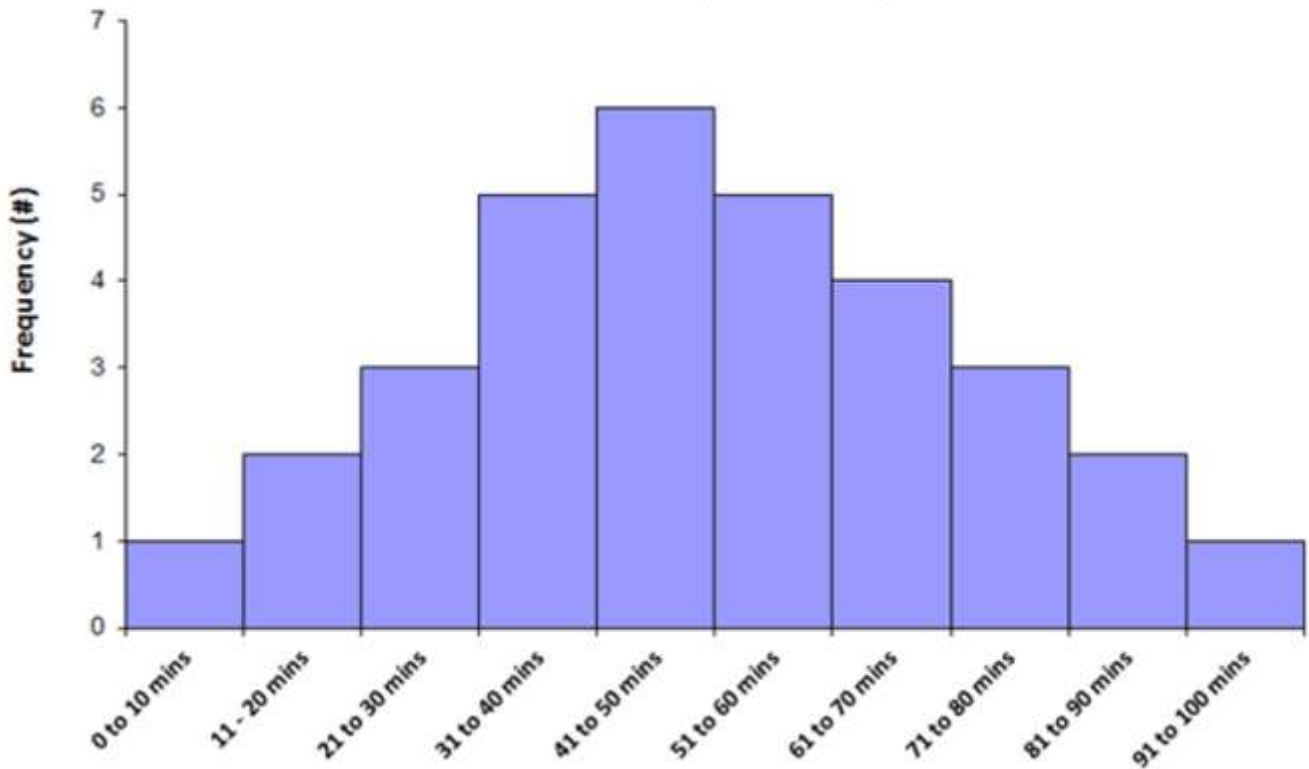


Figure Histogram on turnaround time for dispensing of the drug  
(<https://www.cec.health.nsw.gov.au/CEC-Academy/quality-improvement-tools/histogram> accessed on April 30, 2022)

**Failure Modes and Effects Analysis(FMEA):** FMEA is a tool for conducting a systematic, proactive analysis of a process in which harm may occur and prevent it by correcting the processes proactively, rather than reacting to adverse events after failures have occurred. The FMEA tool prompts teams to review, evaluate, and record the following:

- Steps in the process
- Failure modes (What could go wrong?)
- Failure causes (Why would the failure happen?)
- Failure effects (What would be the consequences(severity and frequency) of each failure?)
- How can the failure be prevented?

The tool forms the core of risk assessment and risk mitigation. FMEA is particularly useful in evaluating a new process prior to implementation and in assessing the impact of a proposed change to an existing process.

Steps in the Process	Failure Mode	Failure Causes	Failure Effects	Likelihood of Occurrence (1-10)	Likelihood of Detection (1-10)	Severity (1-10)	Risk Profile Number (RPN)	Actions to Reduce Occurrence of Failure
1								
2								
3								

Figure 4 Institute of Healthcare Improvement's format for Failure Mode Effect Analysis  
(<http://www.ihl.org/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx> accessed on April 30, 2022)

**Flowchart (process map):** Flow charts help understand a process in depth through visual representation of its steps; and should be prepared in early phase of improvement work. It is a road map of where things are happening, the order in which things happen and the relationships between parts of a process. A Flow Chart is recommended as the first step in almost any study. Often a Flow Chart may reveal that a process does not operate the way management or the operators in the process actually think it does. A high level flow is chart is prepared first to give a helicopter's view of the process followed by a detailed flow chart. Flow charts help identify gaps in the process, its bottlenecks, wasteful/unnecessary processes, delays, duplication, breakdowns in communication, and also how to improve the process. Improvement work can be focussed on these steps. An example of the same is given below-

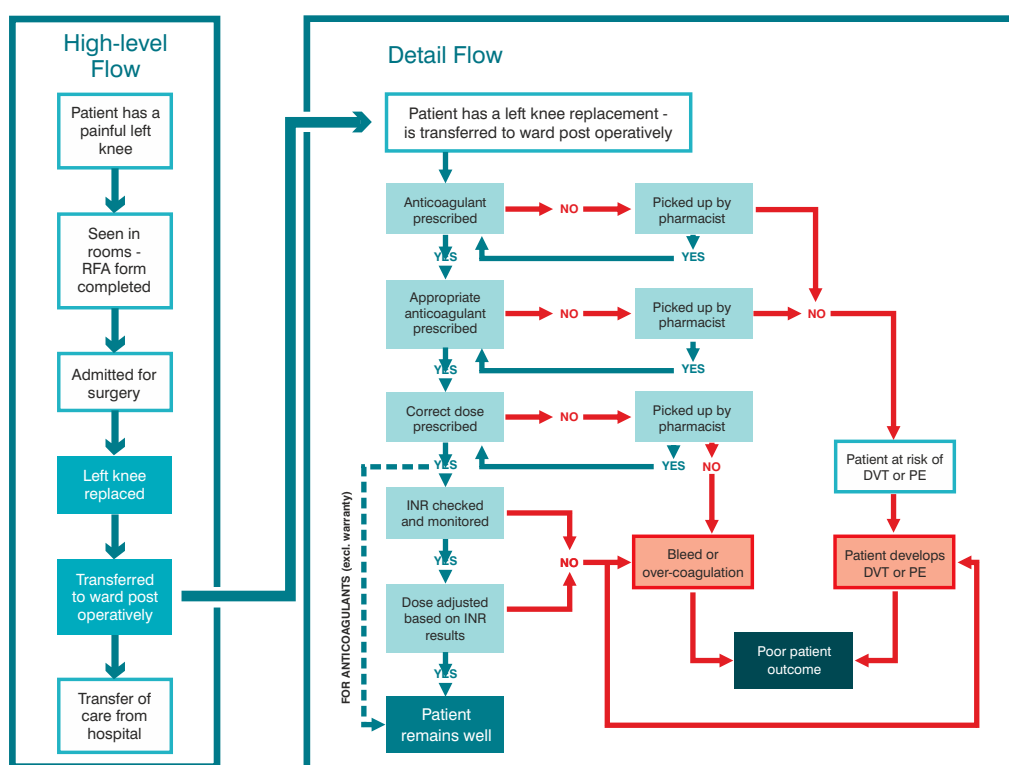


Figure 5 Flow chart of a patient's journey within the hospital  
(<https://www.cec.health.nsw.gov.au/CEC-Academy/quality-improvement-tools/flow-charts> accessed on April 30, 2022)

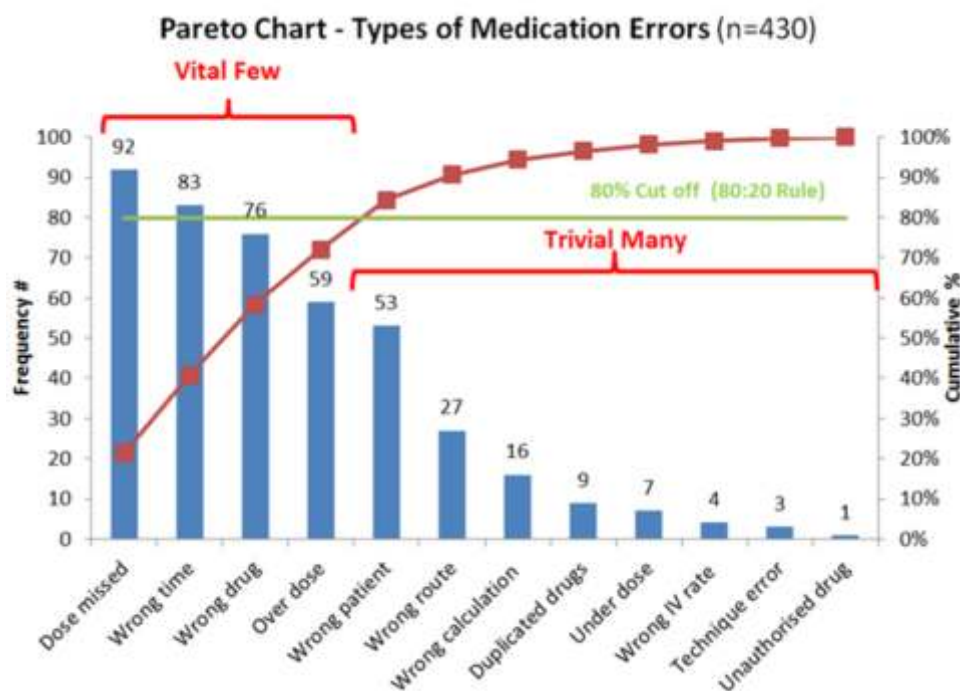
**Pareto Chart:** The “Pareto Principle” is the “80/20 rule” and works on the theory that roughly 80% of the effect comes from 20% (“the vital few”) of the causes. The “vital few” are easily distinguished from the “useful many” by plotting them as a bar diagram. Teams can prioritize and focus improvement efforts on the vital few. The example given below shows a Pareto Chart of types of medication errors. An audit of 430 medication errors was conducted to determine the categories (types) of errors and their frequency. The results were collected initially in a Tally Sheet (a simple sheet which collects data real time and indicates the frequency of occurrence of events) then the data was placed in descending order of frequency in a Pareto Chart Template in Excel. The types of errors that fall under the 80% cut off line indicate the 'vital few' types of medication error that should be addressed as a priority as they contribute most to the problem ie:

- Dose missed
- Wrong time
- Wrong drug
- Over dose

The types of medication errors that fall above the 80% cut off line are known as the 'trivial many' and are generally seen as not a high priority to address when compared to the 'vital few' factors.

A Pareto chart can also be used to study the occurrence of incidents/care management events (medication errors, pressure ulcers, IV complications etc.).

Data for a Pareto Chart can also be collected after a brainstorming session by putting together the number of votes cast for the proposed reasons for incidents, adverse trends of indicator data etc.



**Run Chart and Control Chart :** A run chart is a graph of data over time and assess variations in performance over a period of time and indicate trends. A control chart, with an upper(UCL) and a lower control limit (LCL), distinguishes between common and special causes of variation within a process.



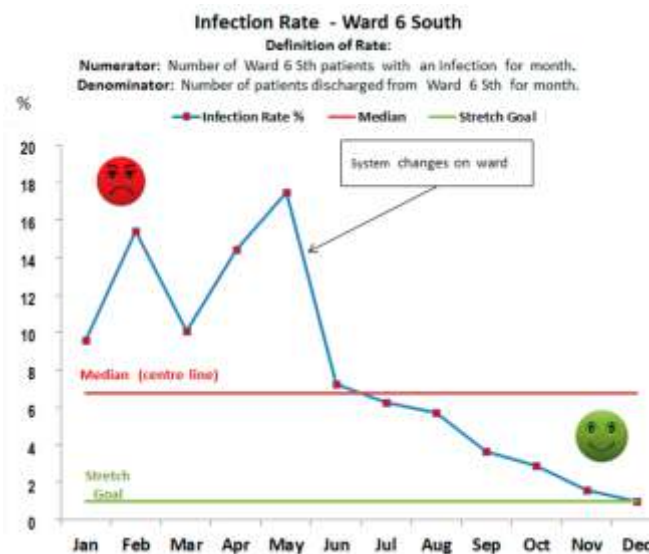


Figure 7. Simple Annotated Run chart with UCL and LCL of an infection rate over time  
 (<https://www.cec.health.nsw.gov.au/CEC-Academy/quality-improvement-tools/run-charts> accessed on April 30, 2022)

**Driver Diagram:** A driver diagram is a visual display of what “drives,” or contributes to, the achievement of a project aim. driver diagram organises information on proposed activities so the relationships between the aim of the improvement project and the changes to be tested and implemented are made clear. The primary drivers (sometimes called “key drivers”) contribute directly to achieving the aim. The secondary drivers are components of the primary drivers, and specific change ideas to test for each secondary driver.

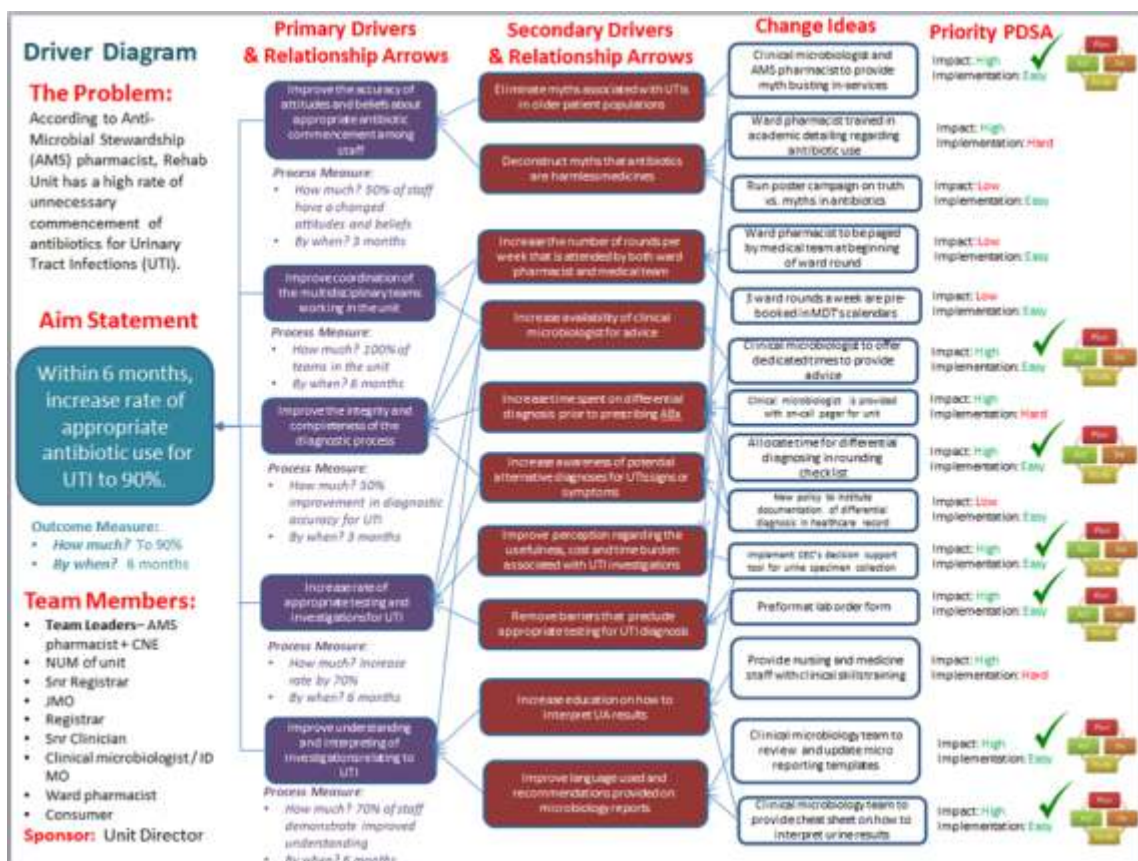


Figure 8 Driver Diagram  
 (<https://www.cec.health.nsw.gov.au/CEC-Academy/quality-improvement-tools/driver-diagrams> accessed on April 30, 2022)

**Scatter Diagram/Plot:** Scatter diagrams are used to identify cause-and-effect relationships between two variables. A scatter diagram does not prove causation.

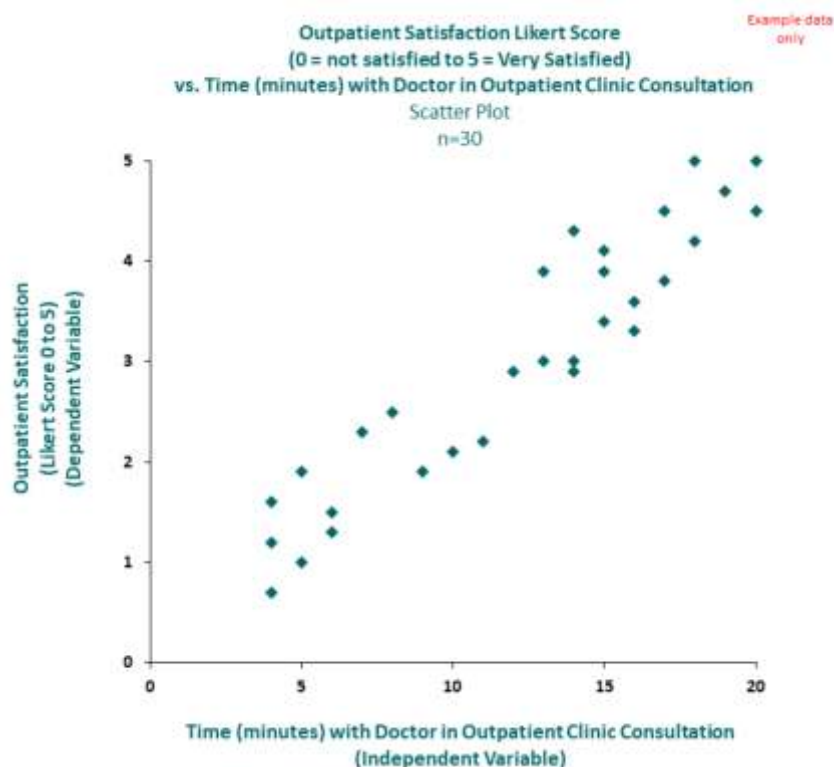


Figure 9 Scatter diagram showing patient satisfaction using likert's score v/s time with doctor consultation  
(<https://www.cec.health.nsw.gov.au/CEC-Academy/quality-improvement-tools/scatter-plot> accessed on April 30, 2022)

**Project Planning Form:** This tool helps teams think systematically about their improvement project. It tracks various elements like Plan-Do-Study-Act (PDSA) cycles.

Table 1. Quality improvement tool applications adapted from Butch S.

Quality improvement technique/tool	Decisions	Describe problem	Cause analysis	Develop action plan	Monitor progress
Histogram		Yes		Yes	Yes
Pareto Chart	Yes	Yes		Yes	Yes
Driver Diagram	Yes	Yes		Yes	
Flow chart/ Process Map		Yes		Yes	
Run chart	Yes				Yes
Scatter Diagram/Plot	Yes	Yes			
Fishbone diagram		Yes	Yes		

**Continuous Quality Improvement(CQI):** CQI is a progressive incremental improvement of processes, safety, and patient care. Introduced by Shewhart and propagated by Deming, CQI is an analytical decision making tool which allows one to see when a process is working predictably and when it is not.

**The Model for Improvement(MFI):** The MFI asks three fundamental questions before embarking on a quality improvement project, which can be addressed in any order.

- What are we trying to achieve?
- What changes can we make that will result in an improvement?
- How will know that the change is an improvement?

This is followed by PDSA cycles to test changes in real work settings to determine if the change is an improvement.

**Models for CQI:** The most common CQI methodologies used in healthcare are the API's Model for improvement(MFI), FOCUS plan-do-study-act (PDSA), Six-Sigma, and Lean strategies. They typically include testing of ideas and redesign of process or technology based on lessons learned. Steps involved in CQI are Plan-Do-Study-Act (PDSA) cycle. The MFI and FOCUS frameworks have been developed to precede the use of PDSA and PDCA cycles respectively.

**PDSA/PDCA cycle:** Involves a sequence of 4 repetitive steps, Plan-Do-Study/Control-Act, eventually leading to exponential improvements 'Plan' phase involves detailing ideas for improvement, 'Do' phase involves implementation and defect prevention. 'Study' phase involves review and analysis of data(Adapt/Adopt/Abandon the change and repeat PDSA). 'Act' phase includes incorporation of lessons learnt into the test cycle. The cycle is repeated again and again as waves of small improvements are considered, tested, evaluated, and incorporated, if effective. This is the most commonly used tool for clinical audits.

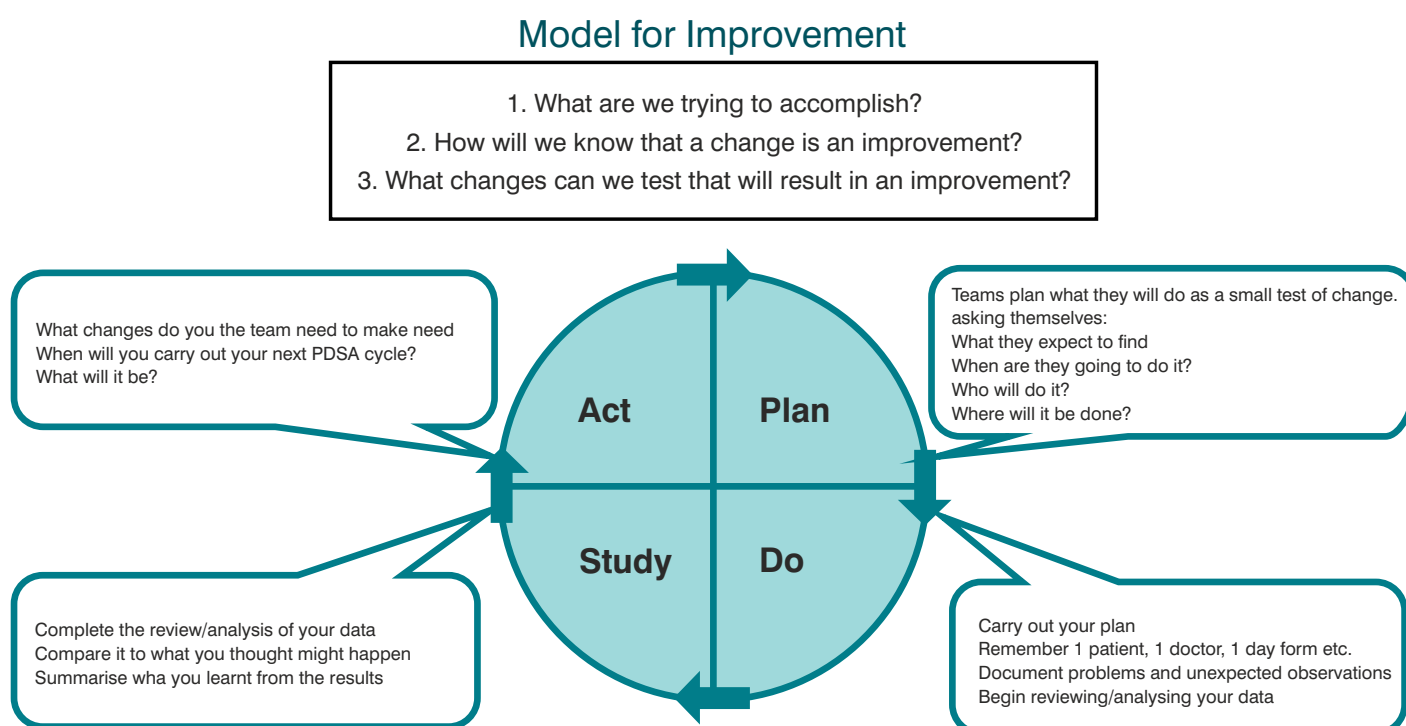


Figure 10: Model for Improvement and PDSA

(<https://www.cec.health.nsw.gov.au/CEC-Academy/quality-improvement-tools/model-for-improvement-and-pdsa-cycles> accessed on April 30, 2022)

**FOCUS-PDCA:** This model also has two phases. The 'FOCUS' phase focusses attention at the opportunity to improve, and the 'PDCA' phase for pursuit of improvement and assessment of effectiveness of the interventions.

- F = Find what needs to be improved on;
- O = Organize team with good knowledge in the process
- C = Clarify the present knowledge of the process
- U = Understand factors responsible for variations
- S = Select interventions that evidently might improve process

**Six-sigma:** Six-sigma is a widely used model that is now making steady in-roads into medicine. It seeks to improve performance through identifying causes of process defects/errors and eliminating them. At Six Sigma, error rates should be less than 3.7/million opportunities. Two methods have mainly been employed- DMAIC and DMADV. DMAIC is applicable for existing process improvement; DMADV is used for new design process optimization.

**Lean and Lean-Sigma :** Originated by Toyota Inc., Japan, this model is essentially geared towards improving process / product / service flow and eliminates waste by identifying and removing non-value added steps. Embracing Lean in healthcare, eliminates waste throughout the entire operational system; whilst simplifying and improving the processes, resulting in low cost of production and fast through-put times. A few establishments, have combined Lean and Six Sigma concepts to obtain better quality improvement effects. Such a combination is known as Lean-Sigma.

## References:

1. Quality Improvement Essentials Toolkit, Institute of Healthcare Improvement, launched on February 22, 2019. Accessed on September 27, 2021.
2. Card AJ The problem with '5 whys' BMJ Quality and Safety 2016;0:1–7. doi:10.1136/bmjqs-2016-005849
3. Butch SH. Applying Quality Improvement Tools in the Transfusion Service Clin Lab Sci 2007;20(2):113
4. Brian O'Donnell; Vikas Gupta. Continuous Quality Improvement. Treasure Island (FL): StatPearls Publishing; 2021 Jan-.Last updated April 7,2021. <https://www.ncbi.nlm.nih.gov/books/NBK559239/>.
5. Varkey P, Reller K, Bsn, RN, Resar RK, Basics of Quality Improvement in Health Care, concise review for clinicians, 2007;82(6):735-739.
6. Juran, J.M. 1988. Juran on Planning for Quality. New York:1994. Achieving Sustained Quantifiable Results in an Interdepartmental Quality Improvement Project. Joint Commission Journal on Quality Improvement 20;3:105–19.
7. Langley GL, Nolan KM, Nolan TW, Norman CL, Provost LP. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (2nd edition). San Francisco: Jossey-Bass Publishers; 2009
8. Speroff T, O'Connor GT. Study designs for PDSA quality improvement research. Qual Manag Health Care. 2004;13:17-32.
9. Gerard J, Arnold FL: Performance improvement with a hybrid FOCUS-PDCA methodology. Jt Comm J Qual Improv 1996; 22:660–672
10. Designs for PDSA quality improvement research. Qual Manag Health Care. 2004;13:17-32.
11. Niñerola A, Rebull M2, Lara A Quality improvement in healthcare: Six Sigma systematic review2020 Apr;124(4):438-445. doi:10.1016/j.healthpol.2020.01.002. Epub 2020 Feb 28.
12. Rogenski LL, Wilson K, Turner M, et al.: Six sigma applied to capacity utilization. Transfusion 2005; 45(Suppl. AP29):168A
13. Suman G, Prajapati Utilization of Lean & Six Sigma quality initiatives in Indian healthcare sector. DR.PLoS One. 2021 Dec 23;16(12):e0261747. doi: 10.1371/journal.pone.0261747. eCollection 2021.PMID: 34941958
14. Quality Improvement Tools - Clinical Excellence Commission <https://www.cec.health.nsw.gov.au/CEC-Academy/quality-improvement-tools>
15. Section 4: Ways to Approach the Quality Improvement Process <https://www.ahrq.gov/cahps/quality-improvement/improvement-guide/4-approach-qi-process/index.html>
16. Healthcare Management Workflow Diagrams | How to Create a Healthcare Management Workflow Diagram | Flowchart Marketing Process. Flowchart Examples | Hospital Management Application Flowchart
17. <https://www.conceptdraw.com/examples/hospital-management-application-flowchart>

18. NAPA Advisory Council 2018 Meeting Material | ASPE January 26, 2018 - Advisory Council Meeting. <https://aspe.hhs.gov/.../napa-past-meetings/napa-2018-meeting-material>
19. Ahmed, Selim. (2019). Integrating DMAIC approach of Lean Six Sigma and theory of constraints toward quality improvement in healthcare. *Reviews on Environmental Health*. 34. 427-434. 10.1515/reveh-2019-0003.
20. Scatter Plot - Clinical Excellence Commission <https://www.cec.health.nsw.gov.au/CEC-Academy/quality-improvement-tools/scatter-plot>
21. Quality Digest [https://www.qualitydigest.com/june08/articles/03\\_article.shtml](https://www.qualitydigest.com/june08/articles/03_article.shtml)
22. Chandrasekar, Thangavelu & Sharma, Asheesh & Tennent, Lucinda & Wong, Christopher & Chamberlain, Peter & Abraham, Kottarathil. (2017). A Whole System Approach to Improving Mortality associated with Acute Kidney Injury. *QJM : monthly journal of the Association of Physicians*. 110. 10.1093/qjmed/hcx101.
23. Pareto Chart - MITE MMC Institute for Teaching Excellence <https://www.mitemmc.org/monthly-tips/pareto-chart/>
24. Pawar M. Getting beyond blame in your practice (5Why's). *Fam Pract Manag*. 2007 May;14(5):30-4. PMID: 17523378.



# Annexure-1

## REFERENCE GUIDE ON SENTINEL EVENTS

### Definition:

An unexpected incident, related to system or process deficiencies, which leads to death or major and enduring loss of function\* for a recipient of health care services.

Major and enduring loss of function refers to sensory, motor, physiological, or psychological impairment not present at the time services were sought or begun. The impairment lasts for a minimum period of two weeks and is not related to an underlying condition.

### Event type description:

#### 1. Surgical events

- Surgery performed on the wrong body part.
- Surgery performed on the wrong patient.
- Wrong surgical procedure performed on the wrong patient.
- Retained instruments in patient discovered after surgery/procedure.
- Patient death during or immediately post surgical procedure.
- Anesthesia related event (anaphylactic shock due to local anesthesia).

#### 2. Device or product events Patient death or serious disability associated with:

- the use of contaminated drugs, devices, products supplied by the DHSP.
- the use or function of a device in a manner other than the device's intended use.
- the failure or breakdown of a device or medical equipment.
- intravascular air embolism.

#### 3. Patient protection events

- Discharge of an infant to the wrong person.
- Patient death or serious disability associated with elopement from the health care facility.
- Patient suicide, attempted suicide, or deliberate self-harm resulting in serious disability.
- Intentional injury to a patient by a staff member, another patient, visitor, or other.
- Any incident in which a line designated for oxygen or other came to be delivered to a patient and contains the wrong gas or is contaminated by toxic substances.
- Nosocomial infection or disease causing patient death or serious disability.

#### 4. Environmental events

Patient death or serious disability while being cared for in a health care facility associated with:

- a burn incurred from any source.
- a slip, trip, or fall.
- an electric shock.
- the use of restraints or bedrails.

#### 5. Care management events

- Patient death or serious disability associated with a hemolytic reaction due to the administration of ABO-incompatible blood or blood products.
- Maternal death or serious disability associated with labor or delivery in a low-risk pregnancy.
- Medication error leading to the death or serious disability of patient due to incorrect administration of drugs, for example:
  - omission error.
  - dosage error.
  - dose preparation error.
  - wrong time error.
  - wrong rate of administration error.
  - wrong administrative technique error.
  - wrong patient error.

Patient death or serious disability associated with an avoidable delay in treatment or response to abnormal test results.

#### 6. Criminal events

- Any instance of care ordered by or provided by an individual impersonating a clinical member of staff.
- Abduction of a patient.
- Sexual assault on a patient within or on the grounds of the health care facility.
- Death or significant injury of a patient or staff member resulting from a physical assault or other crime that occurs within or on the grounds of the health care facility.



## Annexure-2

### ESSENTIAL DOCUMENTATION

Like all quality management systems documentation is an essential component of NABH accreditation. NABH standards require documentation. It is suggested that the DHSP prepare an apex manual (quality manual) incorporating the various standards and objective elements and providing appropriate linkages.

The apex manual could be distributed to all individuals in the first rung of the organogram. It is preferable that procedures and processes (refer to glossary for definition) are not incorporated in the apex manual (only linkages to be provided).

The policies (refer to glossary for definition) for various objective elements could be incorporated in the apex manual. The procedures and processes have to be distributed to all areas where the concerned activities are taking place.

Wherever, the DHSP feels that only a policy would not suffice it can instead document a procedure.

It is essential that document control be followed during documentation and distribution.

A suggested content is given below.

Introduction of the DHSP

Management including ownership, vision, mission, ethical management etc.

Quality policy and objectives including service standards

Scope of services provided by the DHSP and the details of services provided by every department

Composition and role of various committees (in alphabetical order)

- CPR analysis
- Clinical audit
- Ethics
- Infection control
- Pharmacy
- Quality
- Safety

Organogram

Statutory and regulatory requirements

Chapter wise documentation

Annexure (if any)

For example, for AAC 2a which states that “Documented policies and procedures are used for registering and admitting patients” the DHSP could mention its policy for admission in the apex manual and for procedure in the apex manual just mention as “Refer to AAC/SOP/01”.

**In addition to the apex manual the DHSP covered in Section A need to have the following manuals:**

Infection Control Manual

Quality Improvement Manual which also incorporates the quality assurance activities of pathological laboratory, dental lab, imaging, inpatient care and surgical services.

Safety manual which also incorporates pathological lab, dental lab safety and radiation safety.

**The DHSPs covered in Section B can have a single manual covering all the above aspect.**

Some sample headings for a documented procedure are given below:

Scope / Aim / Objective

Definition

Applicable areas

Responsibility

Contents / explanations / detailing or various processes

Monitoring and analysis/Indicators

References

Document control shall be adhered to for all documentation.

## Annexure-3

### LIST OF ACTS, LICENSES AND REGULATIONS APPLICABLE TO DHSP

This list may be considered just for the reference. The DHSP may consider whatever is applicable to their organization. In some cases there might be some act or license which may not be listed, but may be applicable as per the local law the DHSP should make an effort to be aware of them and follow it.

#### LIST OF LICENSES AND MOUs

##### S.N. Name of License/MOU

1. No objection certificate from the Chief fire Officer
2. Bio-medical Management and handling Rules, 1998
3. Retail and Bulk drug License (Pharmacy)
4. Authorization for operating (Bio Medical Waste)
5. Building permit (from the Municipality) & Map.
6. Income tax Pan Card
7. MOU between Hospital & Out source management.
8. AERB approval for the OPG machine.
9. AERB approval for the layout plan of the OPG x-ray room
10. TLD Badges.
11. Registrations of all vehicles under motor vehicles act.
12. Licenses to operate lifts.

#### LIST OF ACT'S

1. Constitution of India. (Book)
2. Insecticides Act, 1968.
3. Payment of gratuity Act, 1972.
4. Payment of wages Act, 1936.
5. Protection of human right Act, 1993.
6. Central Sales Tax Act, 1956.
7. Indian Nursing council Act, 1947.
8. Employees provident fund Act, 1952.
9. Air (prevention and control of pollution) Act, 1981 and License.
10. Cable Television Networks Act, 1995.
11. Contract Act, 1982.
12. Employment exchange Act, 1969.
13. Equal Remuneration Act, 1976.
14. Explosives Act, 1884.

15. Hire Purchase Act, 1972
16. Registration of births and deaths Act, 1969.
17. The Lepers Act, 1898.
18. The Maternity benefit Act, 1961.
19. The Minimum wages Act, 1948.
20. The Public Provident Fund (PPF) Act, 1968.
21. Repeal of Urban land ceiling & regulation Act, 1976.(ULCRA)
22. The Environment (protection) Act, 1986.
23. The Indian Boilers Act, 1923.
24. The Fatal accidents Act, 1855.
25. The Pharmacy Act, 1948.
26. Central Sales Tax Act, 1956.
27. The Indian Contract Act, 1972.
28. Electricity Act, 1998.
29. Indian penal code.
30. Persons with disability Act, 1995
31. Payment of bonus Act, 1965
32. Consumer Protection Act, 1986. & Rules, 1987.
33. Workers compensation Act, 1923.
34. Indian Copyright Act, 1957.
35. The Drugs and Cosmetics Act, 1940.
36. The Insurance Act, 1938.
37. Arms Act,1950 (if guards have weapons)
38. Copyright Act, 1982.
39. Dentists Regulations, 1976.
40. Electricity Rules, 1956.
41. Income Tax Act, 1961.
42. National building code.
43. National holidays under shops Act.
44. Tax deducted at source Act.
45. Sales tax Act.
46. SC and ST Act, 1989.
47. Occupational health act.
48. Dentist act and Code of Ethics.





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