SUMMER INTERNSHIP AT
NHM PUNJAB
(MAY 23rd TO 18th JUNE 2022)

"Quality Assessment of Public Health Facilities"
IN
PUNJAB

A REPORT BY
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(PG/21/97)

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TO WHOMSOEVER IT MAY CONCERN

This is to certify that **SHIVAM KUMAR SHUKLA** student of PGDHM from the IIHMR Delhi has undergone internship training at NHM Punjab from 23rd MAY, **2022** to **18th JUNE, 2022.** The candidate has successfully fulfilled his roles and responsibilities designated to him during internship training and approach to concerned program have been sincere, scientific and analytical. The Internship is in fulfilment of the course requirements. I wish him all the success in all his shinning future.

Dr Siddhart Sekhar Mishra
Assistant Professor

CERTIFICATE OF APPROVAL

The following summer internship project if titled **"Quality assessment of public health facilities"** at **NHM Punjab** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Hospital and Health Management** for which it has been submitted by **SHIVAM KUMAR SHUKLA.** It is understood that by this approval the undersigned do not necessarily endorse or approve the report only for the purpose it is submitted.

ACKNOWLEDGEMENT

It is esteemed pleasure to present this research project by thanking each and every one who helped me in this task.

I would like to express my sincere gratitude towards my guide **Dr. Siddharth Sekhar Mishra,** Assistant professor IIHMR, who helped me immensely throughout the tenure of my summer internship. He inspired me greatly to work in this project with his valuable guidance, support, interest, encouragement, involvement and advice.

I would like to thanks **DR. INDERDEEP KAUR,** programme officer (MCH) and whole NHM Punjab team for allowing us to experience such great opportunities and for providing data for our learning.

I would also like to express my special thanks to **Dr. Sumesh Kumar and Dr Nikita Sabherwal and** IIHMR placement team and Dean for providing such great opportunity which helps in to grow and learn about many interesting aspects.

And I would like special thanks to my team members for all the help, guidance and support which makes this project possible.

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ABBREVIATIONS

MoHFW	Ministry of health and family welfare
NQAS	National quality assurance standards
LaQshay	Labour room quality assurance standards
OT	Operation theatre
SNCU	Special new-born care units
PDCA	Point do check action
SDG	Sustainable development goals
UHC	Universal health coverage

QUALITY ASESSMENT OF PUBLIC HEALTH FACILITIES IN PUNJAB

INTRODUCTION

BACKGROUND

National Rural Health Mission (NRHM) which was launched in 2005 and subsequently it became National Health Mission (NHM) in 2013 after launch of National Urban Health Mission (NUHM) focuses to provide quality healthcare services which are accessible, affordable, to all sections of population, especially to the marginalized and vulnerable. Under the NHM, substantial money has been invested for developing state-of-the-art infrastructure and induction of skilled human resource and strengthening supply chain for ensuring availability of drugs and diagnostics. (1)Without outstanding, safe, and high-quality care, it is impossible to achieve the health results or effect that the National Health Policy envisions.

Quality is described as desirable qualities that a good or service should have in order to be fit for use, and it has two components (a) Establishing standards or specifications (b) Complying with requirements reduction of variability in its processes and statistical descriptions There are many different definitions and approaches to quality in the literature. Quality Control, Quality Assurance, and Quality Improvement are some of the most popular methods to quality. Quality improvement is widely thought to encompass the wider picture, but everyone's perception of QI also varies when we conduct literature searches on terms like "quality control," "quality assurance," or "quality improvement." These words are frequently used in place of one another. Although they are distinct facets of quality management, QA, QC, and QI are closely linked concepts. (1)

Table 1 Difference between Quality Improvement, Quality Planning and Quality Assurance

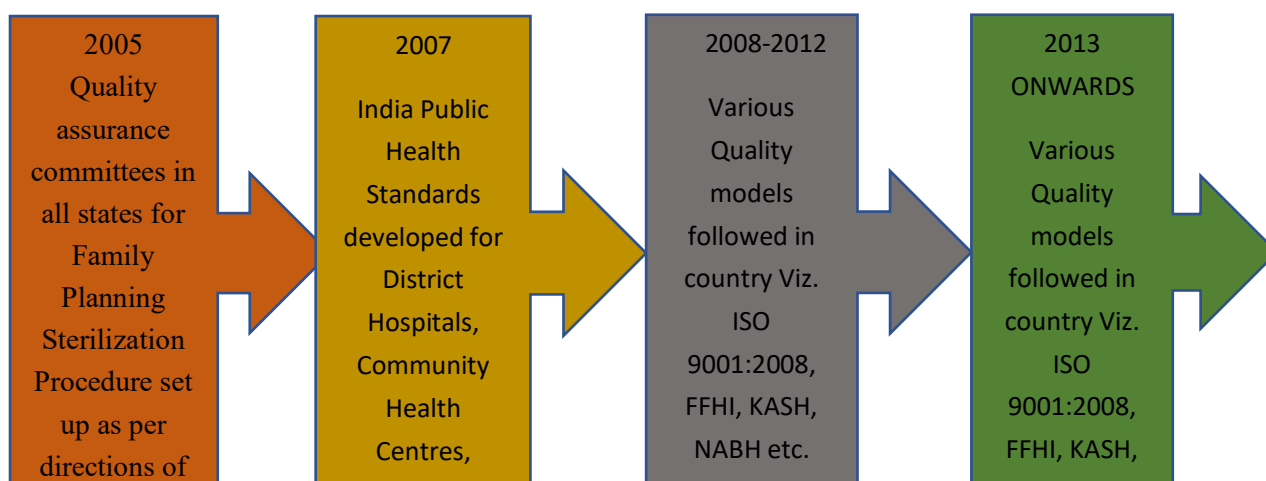| Quality improvement	Quality planning	Quality assurance
• Evolving quality teams, quality circles and champions • Testing and implementing improvement ideas / planned actions through pdca cycle	• Defining policy framework at National and State level • Defining organization framework and quality committee	• Internal, peer and external assessment against defined standards • Periodic reviews and clinical audits • Gap analysis and action plan

• Use of basic and advance tools through QI trainings and practice • Addressing human side of change	• Defining standards of care for various level of facilities • Defining reporting and feedback mechanism	• Scoring and ranking of healthcare facilities • Legal compliances and licensure

Health Care of High Quality has Two components: (a) Technical Quality: This factor affects the outcome or final result of services provided and is typically of greater interest to service providers (doctors, nurses, and paramedical workers). (b) Service Quality: Has an impact on patient experience, including satisfaction, and relates to those areas of facility-based care and services about which patients are frequently more concerned.

The 2013 introduction of the National Quality Framework is based on the Health System's philosophy of care quality. It has worked to create the institutional framework, define the care standards, its measuring system, build capacity, and allocate resources. The program's main treatments include checklist-based assessments of healthcare facilities, gap analysis, prioritisation, and quality improvement utilising PDCA methods, such as quality circles and champions, testing and implementing improvement ideas, and eventually certification. Even though Quality Improvement is a part of the current systems, there are still isolated local improvement projects that continue to show modest improvements, particularly at departmental levels. From the standpoint of the health system, these isolated efforts may not ultimately provide the desired result and the best improvement.

Therefore, continuous quality assurance and quality planning are required to channel these discrete improvement initiatives. As the nation's quality system develops and matures, it is necessary to integrate quality approaches like quality assurance, quality improvement, and certification to provide a whole picture of the care's level of quality. The activities for operationalizing quality committees, activities for quality assessment, certification programmes, and regional quality improvement events will all be seamlessly integrated.

JOURNEY TILL NOW

| 2005 Quality assurance committees in all states for Family Planning Sterilization Procedure set up as per directions of | 2007 India Public Health Standards developed for District Hospitals, Community Health Centres, | 2008-2012 Various Quality models followed in country Viz. ISO 9001:2008, FFHI, KASH, NABH etc. | 2013 ONWARDS Various Quality models followed in country Viz. ISO 9001:2008, FFHI, KASH, |

Brief overview of NQAS:

National Quality Assurance Standards have been developed keeping in the specific requirements for public health facilities as well global best practices. NQAS are currently available for District Hospitals, CHCs, PHCs and Urban PHCs. Standards are primarily meant for providers to assess their own quality for improvement through pre defined standards and to bring up their facilities for certification. The National Quality Assurance Standards are broadly arranged under 8 "Areas of Concern"– Service Provision, Patient Rights, Inputs, Support Services, Clinical Care, Infection Control, Quality Management and Outcome. These standards are ISQUA accredited and meets global benchmarks in terms of comprehensiveness, objectivity, evidence and rigour of development.(1)

Service Provision: It measures availability of services. "Availability" of functional services means service is available to end-users.

Patient Rights: Accessibility to the users, with dignity and confidentiality. Accessibility here refers to physical and financial.

Inputs: Predominantly covers the structural part of the facility

Support Services: This area of concern includes equipment maintenance, calibration, drug storage and inventory management, security, facility management, water supply, power backup, dietary services and laundry. Administrative processes like RKS, Financial

management, legal compliances, staff deputation and contract management have also been included in this area of concern.

Infection Control: This area of concern covers Infection control practices, hand-hygiene, antisepsis, Personal Protection, processing of equipment, environment control, and Biomedical Waste Management.

Clinical Services: Standards under this can be grouped into three categories:

Clinical processes that ensure adequate care to the patients. It includes registration, admission, consultation, clinical assessment, continuity of care, nursing care, identification of high risk and vulnerable patients, prescription practices, safe drug administration, maintenance of clinical records and discharge from the hospital.

Specific clinical and therapeutic processes including intensive care, emergency care, diagnostic services, transfusion services, anaesthesia, surgical services and end of life care.

Maternal, New-born, Child, Adolescent & Family Planning services and National Health Programmes.

Quality Management: Assure quality of services as per standards. Measured through systematic planning, implementation, checking and acting upon the compliances

Outcome: Standard measures for quality - Productivity, Efficiency, Clinical Care and Service quality in terms of measurable indicators. Every standard under this area has two aspects – Firstly, there is a system of measurement of indicators at the health facility; and secondly, how the hospital meets the benchmark.

Strengthening the quality assurance framework has been a priority for the Ministry of Health and Family Welfare by implementing a multi-pronged strategy in terms of healthcare worker availability and retention, improving their knowledge and skill to deliver quality care, periodic monitoring and evaluations, ensuring safe and effective use of medications and devices, integrating quality activities within the functioning of the health facilities, and measuring their impact on patient outcomes. Operational Recommendations to Improve the Quality of Public Healthcare Facilities 5 In a vast country like India, where population, literacy, socioeconomic position, and other health variables vary greatly, it might be difficult to ensure quality. MoHFW has used two strategies to ensure the quality of these variations and to keep encouraging healthcare practitioners to enhance quality continuously.

One quick strategy is to establish a culture of quality by emphasising cleanliness, infection control (Kayakalp), care for new mothers (LaQshya), breastfeeding practises, etc. A second gradual strategy focuses on establishing and supporting quality and safety in all vertical programmes, clinical, and administrative activities carried out in public health care institutions, such as NQAS.

The initial strategy guarantees adherence to minimal department- or function-specific requirements of quality and safety. It also aids in achieving certain immediate benefits that serve to further increase capacity and confidence among healthcare practitioners and their end customers. While the second approach focuses on the horizontal integration of all hospital functions, quality and patient safety requirements, public health functions, and hospital functions under a single set of standards and measurement (NQAS), which in turn helps to achieve more significant goals outlined in universal health coverage (UHCs) and SDGs.

1 Setting up Organizational Framework
(Constitution & operationalization of SQAC, DQAC, SQAU, DQAU.)

2 Empanelment of Assessors
(Internal and External Assessors)

3 Adaptation of Standards and Measurement System
(Customization of Checkpoints or Checklists as per state requirements & in alignment with IPHS and program guidelines.)

4 Training and Capacity Building
(Awareness workshop, Internal and External Assessors' Training, IA cum SPT, and Thematic Training)

5 Facility Level Quality Improvement

Gap Identification

Internal Assessment
Patient Satisfaction Survey
Key Performance Indicators
Competence and Performance Assessment
Rapid Improvement Events

Root Cause Analysis and Objective Setting

Quality Policy & Objectives
Medical & Death Audits
Standard Operating Procedures
Calibration & EQUAS
Regulatory compliances

Planning of Quality Improvement Activities

6 Accept /alteration or tweak then accept / discard the idea

Implementation of Quality Assurance Mechanisum

Implementing a Change idea

Check

7 Certification & Accreditation

DQAC recommends to SQAU for State Level Certification

Facility assessment & certification by SQAC

SQAC recommend for National Certification.

Certification unit coordinate External Assessment by pool of Empaneled external assessors

If facility meets all the criteria, NHSRC recommends to MoHFW for Certification

Issue of the certificate by MoHFW

8 Sustenance & Incentives
Felicitation and recognition of Achievement, Financial Incentives, Surveillance every year and Recertification after three years
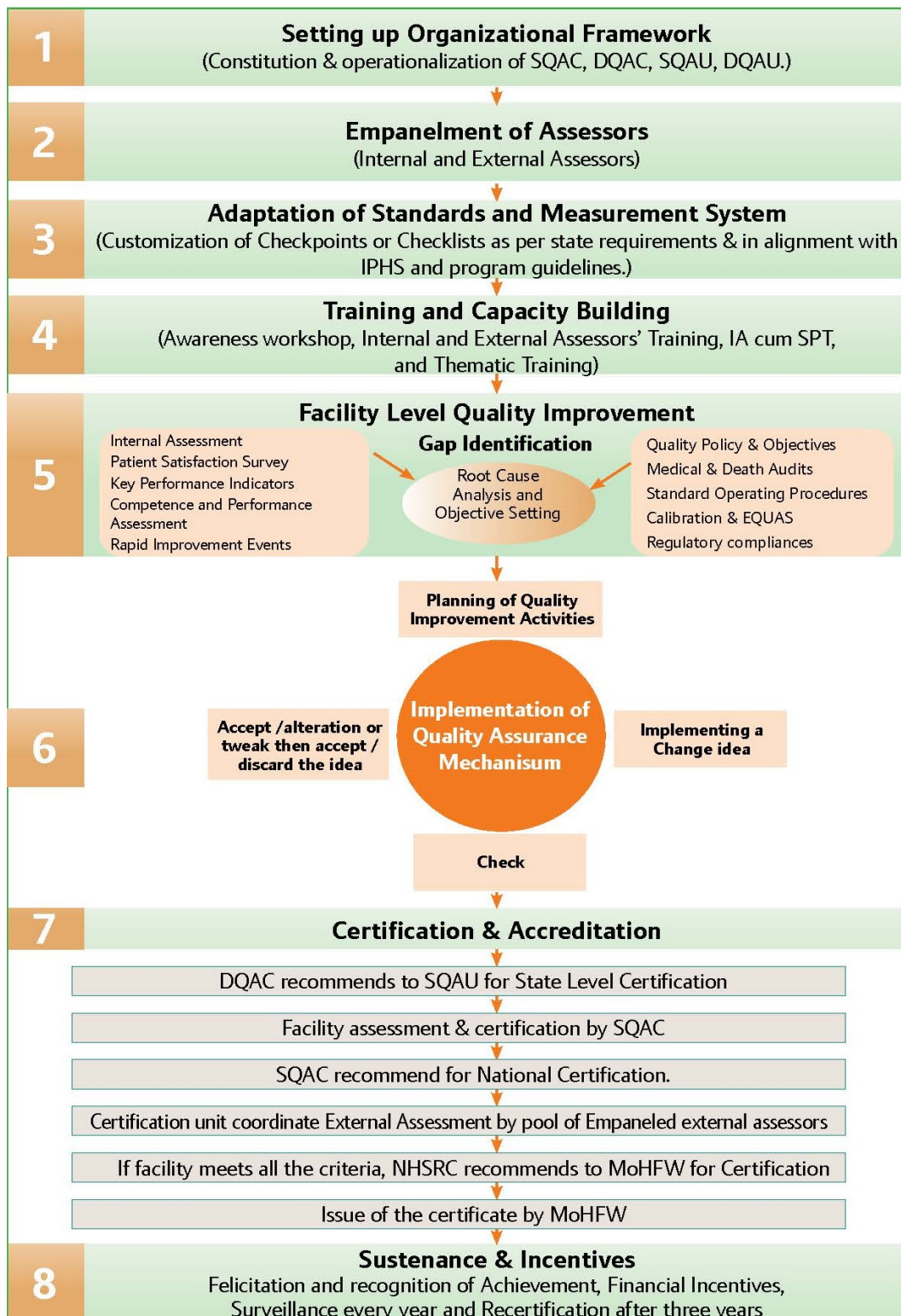
Figure 1 IMPLEMENATION PROCESS OF NQAS

OBJECTIVES OF   THE STUDY

- To carry out a critical gap analysis of the public health facilities of Punjab based on the National Quality Assurance Standards (NQAS) framework.
- To recommend actions based on gap analysis of each facility.

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METHODOLOGY

There was primary data collection by the assessors through on-site visit to the facility. The data was collected based on the comprehensive checklist released under NQAS framework. The facilities were secondary care level public healthcare facilities i.e. district hospitals which have either undergone assessment under NQAS or are preparing go in future. Each facility had different level of services offered so all the departmental checklist was not applicable to each facility. However, the Labour room & Maternity OT (which come under LaQshya) were available and assessed in each of the facility.

STUDY DESIGN: Mixed method cross- sectional study

STUDY SETTINGS:

- DR BR AMBEDKAR INSTITUTE OD MEDICAL SCIENCES, MOHALI
- SUB DISTRICT HOPITAL RAJPURA
- MATA KUSHILYA CIVIL HOSPITAL, PATIALA
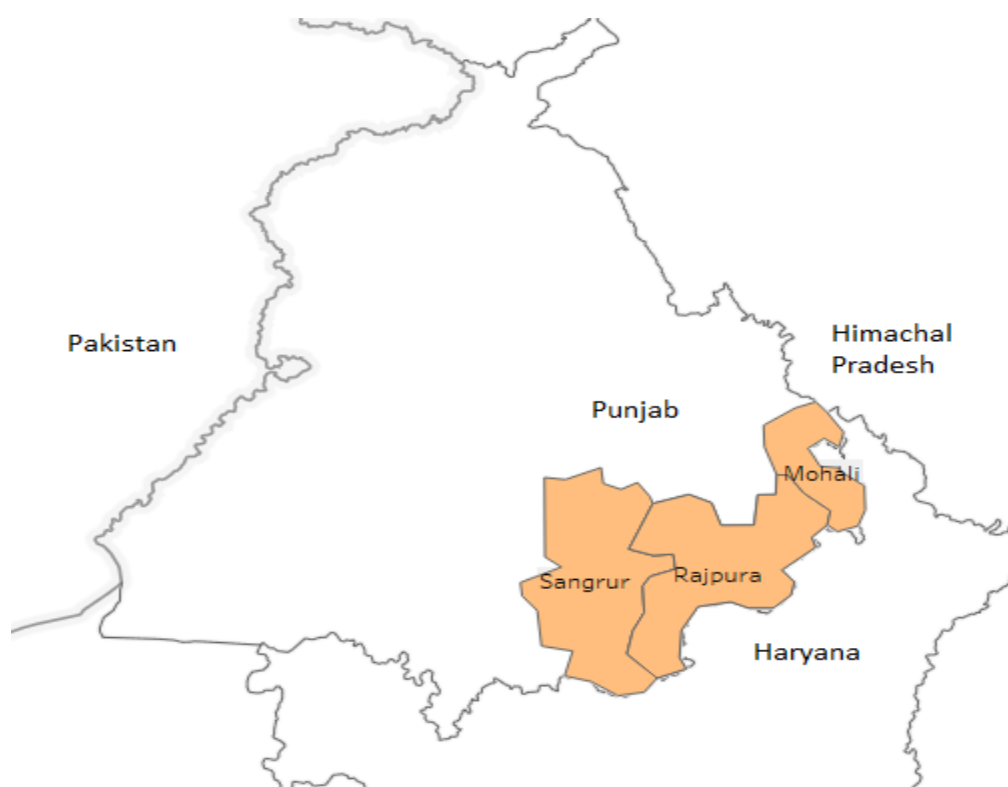- CIVIL HOSPITAL, SANGRUR

Figure 2: Districts of Assessment, Mohali, Patiala, Sangrur

DURATION OF STUDY: 25 days (23 May to 18 June)

Table 2 TEAM PLAN

TEAMS	LOCATION	PRE-ASSESSMENT DAYS	POST ASSESSMENT DAYS
Team 1	Dr BR Ambedkar State Institute of Medical Sciences /Civil Hospital, Mohali	20 days	5 days
Team 2	Civil Hospital, Patiala	20 days	5 days
Team 3	Sub-district Hospital, Rajpura	20 days	5 days
Team 4	Civil Hospital, Sangrur	20 days	5 days

STUDY VARIABLES:

Exposure variables – No exposure variable as it was not an interventional study

Outcome variable – Based on the initial assessment, the critical gaps affecting service delivery were identified, and a list of priority actions for infection control, biomedical waste management, infrastructure and equipment availability and maintenance was developed. Interventions were planned to address and overcome these critical gaps.

ELIGIBILITY CRITERIA

Exclusion criteria – Facilities which are not interested for baseline assessment of NQAS

Inclusion criteria- Facilities who want to apply for NQAS assessment or want to improve their services and quality of care**.**

METHOD OF DATA COLLECTION

The Assessors independently assessed the different areas of concern of checklist of their respective departments/ domains; and filled the sheets as per full, partial or non-compliance. Assessment process would comprise gathering the information from many sources, such as

TABLE 3: METHODS OF DATA COLLLECTION

1	Record review	Stock registers, human resources, admission registers, referral registers, immunization records etc. to check for implementation of services
2	Interview of Providers	Staff and personal interview to assess knowledge
3	Observation	Facility readiness in terms of IEC, drugs, storage/ stocks., cold chain equipment as well demonstration of skills during provision of actual care
4	Interviews with the patients and attendant	To check patient satisfaction and quality of care provided as well problems faced by the patients

Verification criteria for provider knowledge were evaluated through interviews, those for provider skills were evaluated through observations, those for facility routine practises were evaluated through record reviews, and those for drug and equipment availability were evaluated through physical verification.

DATA MANAGEMENT

Data collection – Data was collected on hardcopy, department wise and then entered on NQAS checklist on NHRSC website. This checklist rates the quality of various departments based on eight criteria: service delivery, patient rights, inputs, support services, clinical services, infection control, quality management, and outcome. Data for each of these criteria was gathered using the various methods listed in the checklist, including staff interviews, record reviews, client interviews, and observation. Data on a few crucial variables/checkpoints were gathered for each of the eight factors given in the checklist, and each variable was scored. A score of 2 indicated complete compliance, 1 indicated moderate compliance, and 0 indicated noncompliance with the variable. For scoring, each checkpoint received the same amount of weight. Since there were eight parameters, the ultimate score given to each department ranged from a maximum of 100 for each parameter, since there were eight parameters, the final score assigned to a particular department was from a maximum of 800. On summation of the scores of all eight parameters, each facility was graded as being either fully complaint (100%), partially compliant (50%–99%), or

noncompliant (Scores were given between 0-2 for 8 major areas of concern,74 standards, and nearly 808 checkpoints).

DATA VALIDATION: Data collected was cross checked by the supervisor assigned.

Scores are automatically calculated department wise and as well as area of concern wise (8 areas of concern)- checklist are attached in **Annexure 4**

Department wise critical gaps were identified and written under their respective standard in separate excel sheets – excel sheets are attached in Annexure 5

Certification criteria:

Certification of District Hospital

I. Criterion 1 - Aggregate score of the health facility ≥ 70%

II. Criterion 2 – Score of each department of the health facility ≥ 70%

III. Criterion 3 – Segregated score in each Area of Concern (Service Provision, Patient's Right, Inputs, Support Services, Clinical Services, Infection Control, Quality Management, Outcome Indicator) ≥ 70%

IV. Criterion 4 – Score of Standard A2, Standard B5 and Standard D10 is >70% in each applicable department.

- Standard A2 States "The facility provides RMNCHA services".
- Standard B5 states that "the facility ensures that there are no financial barriers to access, and that there is financial protection given from the cost of hospital services".
- Standard D10 states "the facility is compliant with all statutory and regulatory requirement imposed by local, state or central government."

V. Criterion 5 - Individual Standard wise score ≥ 50%

VI. Criterion 6 – Patient Satisfaction Score of 70% in the preceding Quarter or more

(Satisfied & Highly Satisfied on Mera-Aspataal) or Score of 3.5 on Likert Scale

Criteria for Certification (LaQshya) – To reduce preventable maternal and new born mortality, morbidity and stillbirths associated with the care around delivery in Labour room and Maternity Operation Theatre and ensure respectful maternity care Government of India launched LaQshya initiative in 2019. Criteria for NQAS certification has been already been

approved by CQSC (Central Quality Supervisory Committee) of MoHFW. The same criteria will be used for LaQshya Certification. Only critical standards have been revised to give emphasis on Respectful Maternal Care and Intrapartum Clinical Protocols. Following are criteria for LaQshya certification of Labour and OT –

- Criterion 1 - Overall Score of the department (LR/OT) shall be ≥70%
- Criterion 2- Score of each Area of Concern of department (LR/OT) shall be ≥70%
- Criterion 3- Individual scores of three core Standards (B3, E18 and E19) shall be ≥70%
- Criterion 4- Individual Score in each Applicable Quality Standard > 50%
- Criterion 5 – Client Satisfaction of the department shall be more ≥70%

TABLE 4 SHOWS ALL CERTIFIED FACILITIES OF PUNJAB

Table 4 CERTIFIED FACILITIES OF PUNJAB

PUNJAB				
Sr No.	Facility Name	No. of department assessed	Certified	Validity Date
857	UPHC Bara, Fatehgarh Sahib	All 12 department	Certified	12-08-22
858	Civil Hospital Jagraon, Ludhiana	15th department (Excluding SNCU, NRC, ICU)	Certified	12-08-22
859	UPHC Ranjit Avenue, Amritsar, Punjab	All 12 Departments	Certified	19-01-23
860	Civil Hospital Mansa	16 departments (excluding NRC & ICU)	Certified	19-01-23
861	CH Nawanshahr	14 departments excluding ICU, NRC, Blood Bank, SNCU	Certified	26-09-20
862	A.P. Jain Civil Hospital, Rajpura	14 departments excluding SNCU, ICU, NRC & Paeds ward	Certified	03-10-20
863	DH Faridkot	13 departments (A&E, OPD, LR, Mtty Ward, IPD, Paeds ward, OT, PPU, Lab, Radiology, Pharmacy, Auxiliary Services, General Administration)	Certified	08-03-21
864	PHC Ballauana, Bathinda	All 6 departments	Certified	11-02-23

865	SDH Dasuya (Hoshiarpur)	15 departments (excluding ICU, SNCU, NRC)	Certified	19-09-21
866	Civil Hospital Mukerian	Fifteen department (Excluding SNCU, ICU & NRC)	Certified	15-09-22
867	Civil Hospital-Pathankot	16 excluding NRC & ICU	Certified	08-06-20
868	Jalliawallah Bagh Marty's Memorial Hospital (JBMM) Civil Hospital Amritsar	16 departments excluding NRC & ICU	Certified	26-03-20
869	CHC Goniana (Bathinda)	All 12 departments	Certified	04-02-22
870	UPHC Bishan Nagar (Patiala)	All 12 departments	Certified	21-02-22

Reference: http://qi.nhsrcindia.org/national-level-certification

RESULTS

LAQSHYA PRE ASSESSMENT

Data was collected using labour room and maternity OT checklist in all 4 districts of Punjab-Mohali, Rajpura, Patiala, Sangrur. During baseline assessment scores were given between 0-2. On entering data on soft copy of checklist, following scores were recorded.

Table 3 shows pre-assessment scores of both the departments (labour room and maternity OT) and Figure 3 shows graphical representation of the same

Maternity OT is not functional at civil hospital of Sangrur

TABLE 5: PRE-ASESSMENT OF LAQSHYA

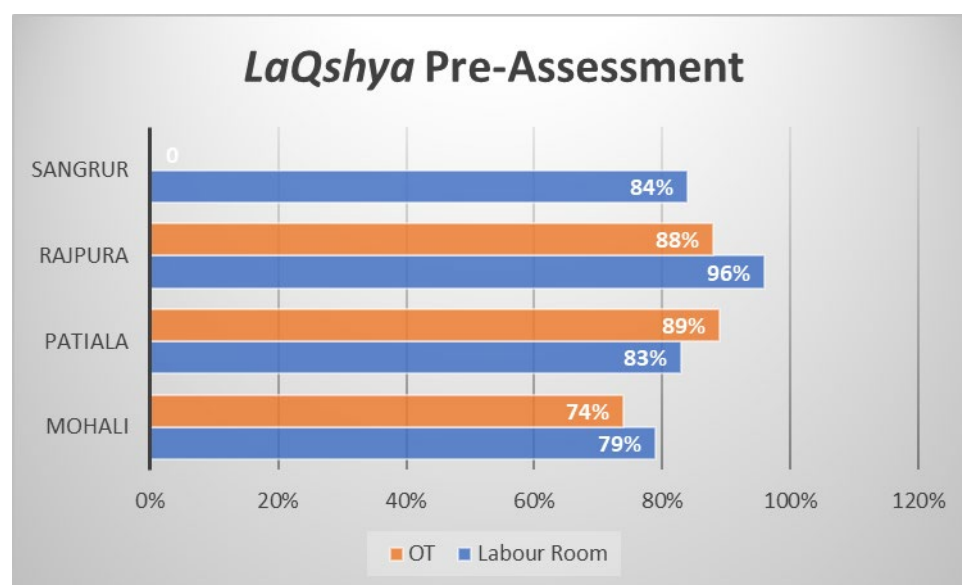| Facility Name	Labour Room	OT
Mohali	79%	82%
Patiala	83%	89%
Rajpura	96%	88%
Sangrur	84%	-----

FIGURE 3. PRE-ASSESSMENT SCORES

LAQSHYA POST- ASSESSMENT

After critical gap analysis certain interventions were given to improve quality of care. post interventions, scores were recorded in Table 4 and graphical representation of the same in figure 4

Maternity OT is not functional at civil hospital of Sangrur

TABLE 6: POST -ASESSMENT SCORES OF LAQSHYA

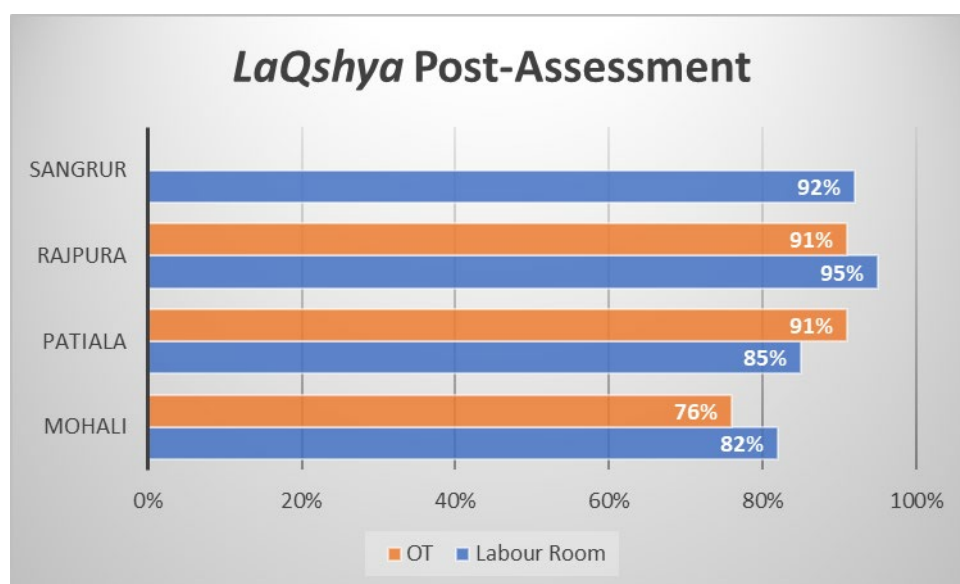| Facility Name	Labour Room	OT
Mohali	74%	79%
Patiala	85%	91%
Rajpura	95%	91%
Sangrur	92%	----

FIGURE 4: POST ASSESSMENT SCORES

NQAS ASSESSMENT

NQAS assessment was done at 2 facilities following under same district (civil hospital Patiala and sub district hospital Rajpura)

Table 6 shows comparison of scores of pre-assessments at Patiala and Rajpura. Rajpura is 2 times NQAS certified facility.

Mortuary and blood bank department is not functional at Patiala.

TABLE 7: COMPARISON OF PRE-ASESSMENT SCORES OF CERTIFIED AND NON-CERTIFIED FACILITY

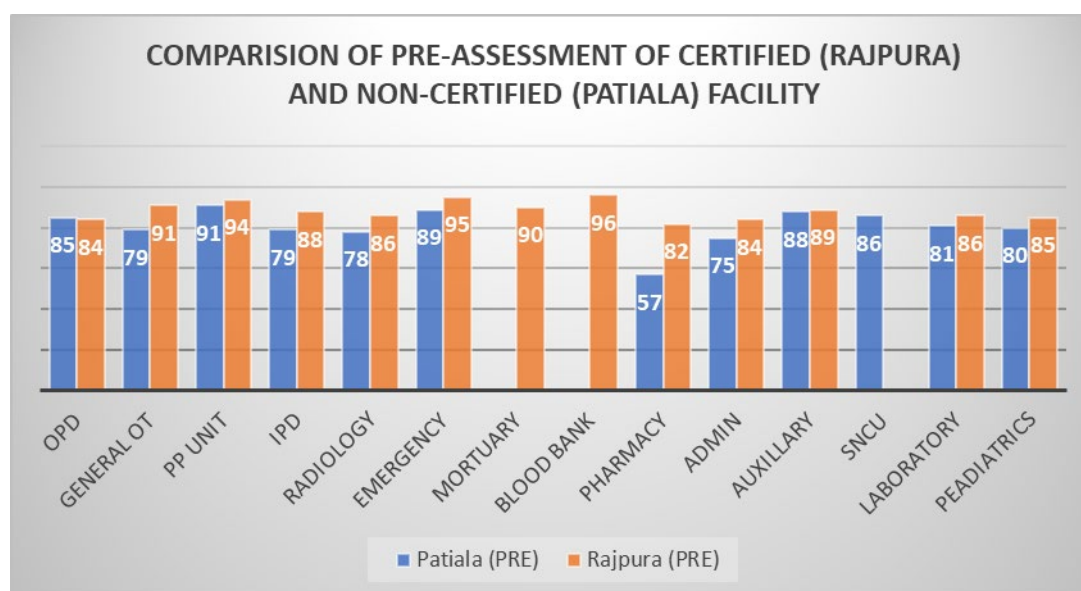| DEPARTMENT	PATIALA		RAJPURA	
	PRE	POST	PRE	POST
OPD	85	88	84	84
General OT	79	80	91	94
PP Unit	91	94	94	96
IPD	79	85	88	96
Radiology	78	82	86	87
Emergency	89	92	95	96
Mortuary	NA	NA	90	94
Blood Bank	NA	NA	96	97
Pharmacy	57	62	82	90
Admin	75	78	84	85
Auxiliary	88	88	89	94
SNCU	86	90	NA	NA
Laboratory	81	83	86	95
Paediatrics	80	80	85	90

FIGURE 5: COMAPRISON BETWEEN CERTIFIED AND NON-CERTIFIED FACILITY

TABLE 8: AREAS OF CONCERN WISE SCORE OF ALL FACILITIES

PRE-ASSESSMENT SCORE				
Area of Concern	RAJPURA	PATIALA	MOHALI	SANGRUR
Service provision	83%	87%	95%	100%
Patient Rights	91%	84%	85%	90%
Inputs	89%	83%	79%	86%
Support Services	90%	80%	69%	92%
Clinical Service	95%	93%	91%	89%
Infection Control	97%	90%	93%	64%
Quality Management	89%	65%	37%	66%
Outcome	96%	83%	93%	66%
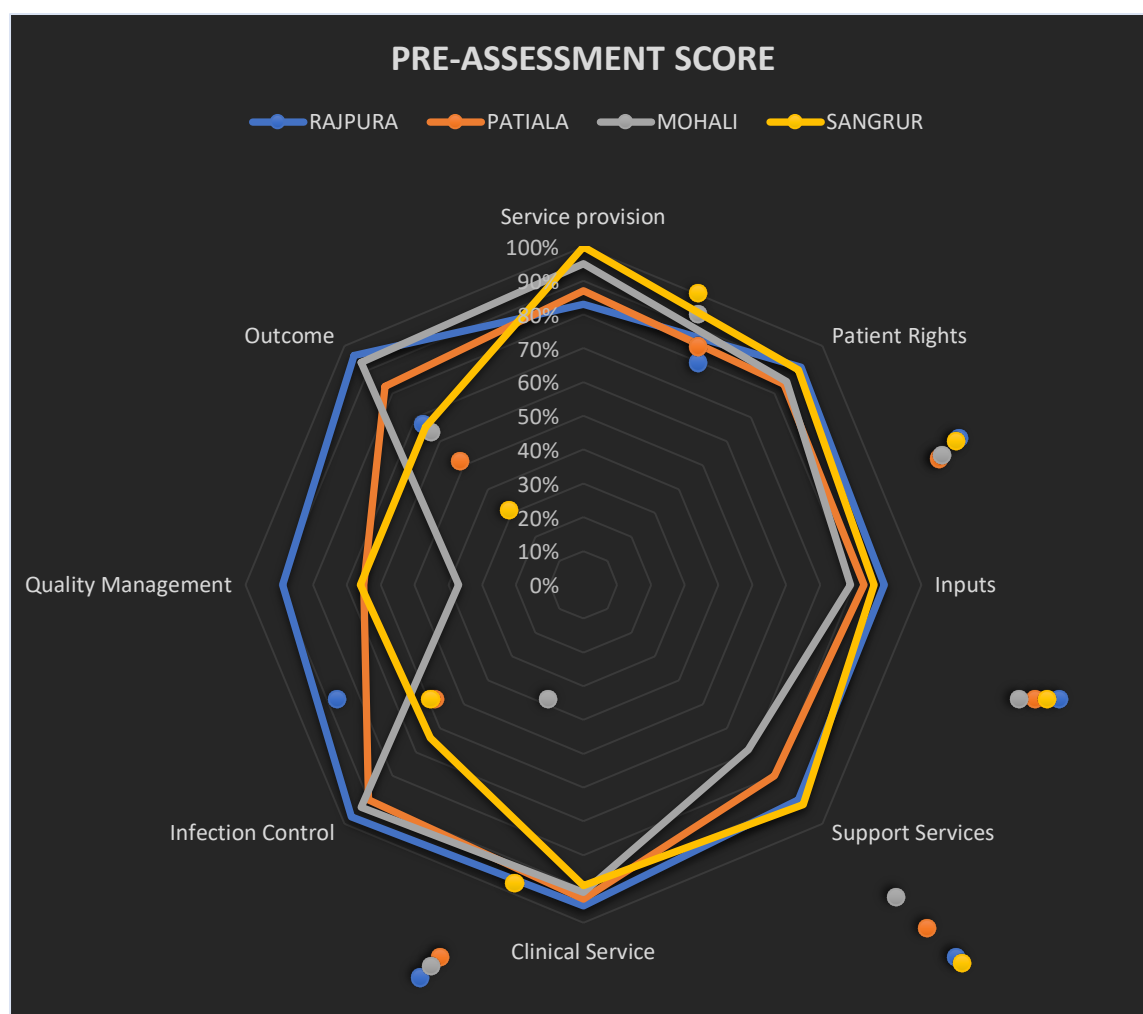
TABLE 9: AREAS OF CONCERN WISE SCORES (POST ASESSMENT)

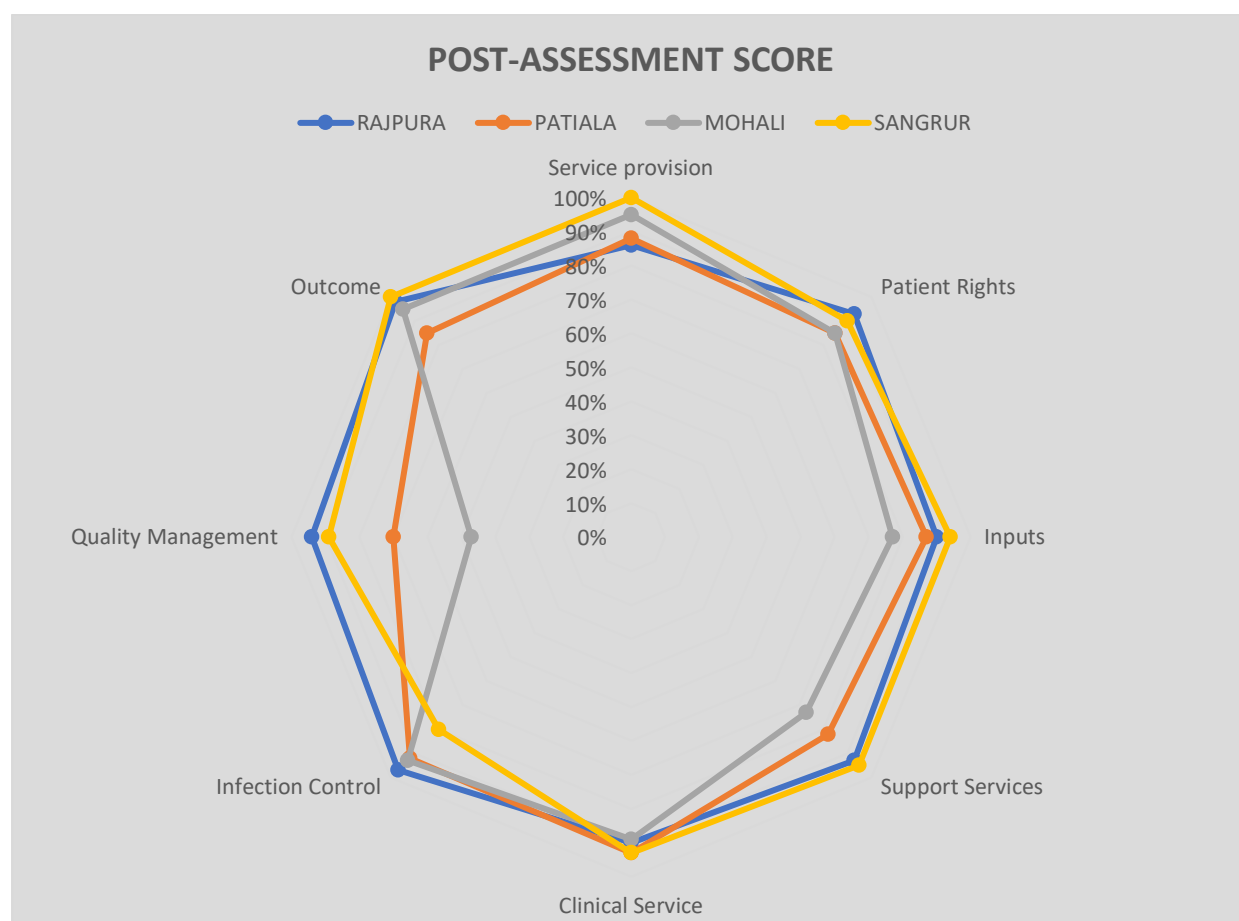| POST-ASSESSMENT SCORE				
Area of Concern	RAJPURA	PATIALA	MOHALI	SANGRUR
Service provision	86%	88%	95%	100%
Patient Rights	93%	85%	85%	90%
Inputs	90%	87%	77%	94%
Support Services	93%	82%	73%	95%
Clinical Service	90%	93%	89%	93%
Infection Control	97%	92%	93%	80%
Quality Management	94%	70%	47%	89%
Outcome	98%	85%	95%	100%

POST-ASSESSMENT SCORE

FIGURE 6: GRAPHICAL REPRESENTATION OF MAJOR AREA OF CONCERN (POST ASESSMENT)

TABLE 10: FACILITIES UNDER LAQSHAY INTERVENTION

LaQshay				
CRITERIA	MOHALI	RAJPURA	PATIALA	SANGRUR
I (Overall Score of the department (LR/OT) shall be ≥70%)	Y	Y	Y	----------
II (Score of each Area of Concern of department (LR/OT) shall be ≥70%)	N	Y	N	-------------
III (Individual scores of three core Standards (B3, E18 and E19) shall be ≥70%)	Y	Y	Y	-----------
IV (Individual Score in each Applicable Quality Standard > 50%)	N	Y	N	-------------
V (Client Satisfaction of the department shall be more ≥70%)	N	Y	N	--------------

TABLE 11: FACILTIES UNDER NQAS INTERVENTION

NQAS		
CRITERIA	RAJPURA	PATIALA
I Aggregate score of the health facility ≥ 70%	Y	Y
II Score of each department of the health facility ≥ 70%	Y	Y
III [Segregated score in each Area of Concern (Service Provision, Patient's Right, Inputs, Support Services, Clinical Services, Infection Control, Quality Management, Outcome Indicator) ≥ 70%]	Y	N
IV [Score of Standard A2, Standard B5 and Standard D10 is >70% in each applicable department]	Y	N
V Individual Standard wise score ≥ 50%	Y	Y
VI [Patient Satisfaction Score of 70% in the preceding Quarter or more (Satisfied & Highly Satisfied on Mera-Aspataal) or Score of 3.5 on Likert Scale]	Y	N

PRE-ASSESSMENT

TABLE 12: QUALITATIVE GAPS INDETIFIED

Ancillary area is not present as per requirement	Unavailability of OT assistant
Not aware about 7 quality objectives	Unavailability of security staff
No post mortem technician is available	SMART objectives is not framed
No technician in emergency ward	Telephone and intercom services are not available
No security staff is available in mortuary	Radiologist not present
Surgeon is not available	All kind of ultrasound services are not available
Work instructions and other signages are not available due to construction	Unavailability of power backup
Hospital had not provided security system to manage overcrowding in emergency	Blood bank has no facility for blood components AMC services are not provided
Trained paramedical staff for ambulance not available	Action plan is not prepared
Unavailability of functional skin and VD clinic	No action plan prepared
Important numbers like ambulance are not displayed	X ray system has not identified radiographer who has taken x ray
Unavailability of enquiry desk with dedicated staff	Paediatric blood collection bags are not available
Unavailability of complaint box	7 basic quality tools
Unavailability of ECG technician	Unavailability of dietician
No surgeon available	Unavailability of data entry operator
Unavailability of OT assistant	Unavailability of MRD technician
Unavailability of security staff	Stray animals in the facility
SMART objectives are not framed	MDR doesn't have system of ICD coding
Telephone and intercom services are not available	Security staff is not available
Radiologist not present	Signages and information are not available in local languages
All kind of ultrasound services are not available	MDR doesn't have system of ICD coding
Unavailability of power backup	Security staff is not available
Blood bank has not facility for blood components AMC services are not provided	Signages and information are not available in local languages
Action plan is not prepared	No demarcated are for keeping inflammables
No action plan prepared	No demarcated are for keeping near expiry drugs
X ray system has not identified radiographer who has taken x ray	Pharmacy doesn't have license for storing spirit
Paediatric blood collection bags are not available	Pharmacists are not aware of hospital antibiotic policy

7 basic quality tools	Staffs are not aware of hold over time of cold storage equipment
Unavailability of dietician	24*7 diagnostic tests not available.
Unavailability of data entry operator	Two women are treated on common bed /delivery table.
Unavailability of MRD technician	No dedicated nursing station and duty rooms.
Stray animals in the facility	No follow up of referral cases
Security staff is not available	Unavailability of functional needle cutters and puncture proof, leak proof, team.
Signages and information are not available in local languages	There are no standard treatment protocols.
No demarcated are for keeping inflammables	Unavailability of housekeeping staff and security guards.
No demarcated are for keeping near expiry drugs	Availability of maternity HDU/ICU services in the facility.
Pharmacy doesn't have license for storing spirit	Demarcated sterile zone
Pharmacists are not aware of hospital antibiotic policy	AMC services are not provided
Staffs are not aware of hold over time of cold storage equipment	Unavailability of housekeeping staff and security guards.
24*7 diagnostic tests not available.	Availability of maternity HDU/ICU services in the facility.
Two women are treated on common bed /delivery table.	Demarcated sterile zone
No dedicated nursing station and duty rooms.	Availability of functional telephone and intercom services.
No follow up of referral cases	No security arrangement at OT
Unavailability of functional needle cutters and puncture proof, leak proof, team.	Unavailability of disinfectant as per requirement
No standard treatment protocols.	
Unavailability of housekeeping staff and security guards.	Unavailability of OT technician
Availability of maternity HDU/ICU services in the facility.	Unavailability of psychiatry ward
Demarcated sterile zone	Unavailability of ophthalmic ward
Availability of functional telephone and intercom services.	Visiting hours and visitor policy are not displayed
No security arrangement at OT	Unavailability of screens / Curtains
Unavailability of gum boots.	TV for entertainment and health promotion not available
Unavailability of disinfectant as per requirement	Unavailability of separate Doctor's Duty room and nurses' room.
Unavailability of OT technician	Unavailability of functional telephone and Intercom Services
Unavailability of psychiatry ward	Visiting hours and visitor policy are not displayed

Unavailability of ophthalmic ward	Unavailability of separate Doctor's Duty room and nurses' room
Visiting hours and visitor policy are not displayed	Unavailability of functional telephone and Intercom Services
Unavailability of screens / Curtains	Unavailability of hot water
TV for entertainment and health promotion not available	Unavailability of Breast-feeding corner
Unavailability of separate Doctor's Duty room and nurses' room.	Curtains have not been provided at windows
Unavailability of functional telephone and Intercom Services	Unavailability of RMNCH counsellor
Unavailability Security staff	Unavailability Security staff
Unavailability of dresser in surgical ward	
Visiting hours and visitor policy are not displayed	Unavailability of isolation room
Unavailability of separate Doctor's Duty room and nurses' room	Unavailability of free diet to patient
Unavailability of functional telephone and Intercom Services	7 Basic quality tools
Unavailability of hot water	Unavailability of play room
Unavailability of Breast-feeding corner	Visiting hours are not fixed and maintained
Curtains have not been provided at windows	Expiry date is not mention in fire extinguisher
Unavailability of RMNCH counsellor	Don't know about basic quality improvement method
Unavailability Security staff	7 quality objectives and action plan is not prepared
TV for entertainment and health promotion not available	Education material for counselling are not available in counselling room
Unavailability of isolation room	Don't know about basic quality improvement method
Unavailability of free diet to patient	7 quality objectives and action plan is not prepared
Visiting hours are not fixed and maintained	Education material for counselling are not available in counselling room
Unavailability of play room	Unavailability of functional telecom and intercom services
Expiry date is not mention in fire extinguisher	TV for entertainment and health promotion not available

POST-ASSESSMENT

TABLE 13: GAPS CORRECTED (POST ASESSMENT)

7 quality objectives	Smart quality signage
Provided new sops	
Helped in making poster for display hours and policy	Helped in maintaining duty roster
Helped in labelling the empty and filled cylinders	Explain them about to make poster for educational counselling
Explain about 7 quality objectives and help in plotting the chart and graph	Explain them about the 7 quality objectives and how to make action plan
Helped in making poster for ambulance services	Counselled them about to mention expiry date in fire extinguisher
Helped in labelling filled and empty cylinder	Helped in making complaint box
Explain taught and helped in making 7 quality objectives	Helped in making action plan
Helped in maintaining their duty roster	No stray animals in the facility
Counselled them about to provide their signature after who has taken x ray	Security staff available at night
Signages and information are available in local languages	Two women are not treated on common bed /delivery table.
Demarcated are for keeping inflammables	follow up of referral cases
Demarcated are for keeping near expiry drugs	Availability of functional needle cutters and puncture proof, leak proof, team.
Pharmacists are aware of hospital antibiotic policy	Visiting hours and visitor policy are not displayed
Staffs are aware of hold over time of cold storage equipment	Tv for entertainment and health promotion available
Two women are not treated on common bed /delivery table.	Demarcated sterile zone
follow up of referral cases	Security arrangement for nigh
Availability of functional needle cutters and puncture proof, leak proof, team.	Availability of gum boots.
	Disinfectant are available as per requirement
Visiting hours and visitor policy are not displayed	Visiting hours and visitor policy are not displayed
Tv for entertainment and health promotion available	Unavailability of functional telephone and intercom services
	hot water available
	breast feeding corner available
	Security staff available at night

DISCUSSION

In this study, three separate districts and four institutions were evaluated. These were public facilities that are virtually entirely supported by government. They were chosen based on two criteria: whether they wanted to pursue certification for the first time or whether they failed their previous assessment and wanted to try again. Facilities are subject to a different level of assessment. While all four facilities have undertaken LaQshay evaluations, all departments at Patiala and Rajpura have received full NQAS evaluations.

During LaQshay pre - assessment, scores were recorded and gaps were identified. Highest scores were recorded at labour room of Rajpura (Table 4). Major gaps identified were – lack of knowledge about (AMTSL)- active management of third stage of labour, no follow of referral cases, non-availability of 24*7 diagnostic services, needle cutters not functional, no standard treatment protocols followed etc, labour room registers were not filled properly, furniture and fixtures were broken etc (Table 9)

Interventions in the form of trainings were given- staff nurses were taught about PPH (post-partum haemorrhage), Dakshata and SBA trainings were initiated, staff was made competent to fill all columns of labour room and how to make partograph. (images attached in annexure)

Scores were again recorded following the intervention (Table 5). Scores of the labour room and maternity (OT) improved after evaluation, while at the labour room in Rajpura, scores dropped from 96 to 95 percent because several signages had been taken down and the facility was undergoing construction at the time of the intervention.

NQAS ASESSMENT

Facilities (sub district hospital Rajpura and civil hospital Patiala) underwent NQAS examination. Scores from the pre-assessment were compared between the two

facilities. In comparison to Patiala civil hospital, Rajpura sub district hospital performed better across the board Therefore, based on these findings, it is evident that NQAS accreditation is crucial for offering patients high-quality care and services. However, it can argue that some other factors other than NQAS accreditation may be the reason for facility to perform well like better funding and administration. But it Is to noted that both facilities are funded by government and come under same administration (civil surgeon)

Some of the major gaps identified at both the facilities were shortage of manpower, disposal of biomedical waste ,problems related to infection control, shortage of essential drugs, many of the laboratory equipment's used for basin tests were non-functional, shortage of oxygen cylinders , , no mopping system, fire extinguishers were expired and no proper training regarding operating of fire extinguishers were given , staff lacked knowledge regarding 7 quality tools, SMART objectives, PDCA cycle .

(See table 12 for detailed description of all gaps)

Further when areas of concern (8 areas of concern in NQAS checklist) wise scoring was calculated, Rajpura performed best in outcome, quality management, infection control, inputs, clinical services while Sangrur was ahead of Rajpura in service provision and patient rights. in support services both facilities were equivalent. outcome and infection control are major areas of concern in Sangrur (figure 6)

POST ASESSMENT

The intervention was planned with the cooperation of administration staff. Doctors, nurses, paramedical staff participated in meetings to explore the problems and the best solutions within the district- and facility-specific limitations. The goal was to instil a sense of responsibility and ownership for running the facility. The administration staff produced official letters and the appropriate approvals were obtained to help implement the intervention actions

In the post assessment quality management became major area of concern at Mohali while Rajpura performed best in infection control and quality management (figure 7)

Infection control procedures, support services, and clinical services that don't heavily rely on things like infrastructural problems and human resources that typically take a while to modify have all seen improvements as a result of post-assessment reflections.

It was still extremely difficult to follow sterilising process for infection control and maintain clean practises, especially during rush hour. Long-term service quality has been linked to a gap that has been implicated as the lack of workers. A fundamental obstacle in any quality improvement project is the uneven distribution of the professional health care staff, as well as the inadequate quality of post-training follow-ups and supervision. This was partially addressed by routine employee engagement to maintain high levels of motivation, as well as by routine monitoring visits. This may have been effective in the short term, but it does little to address the problems associated with a staffing shortage, particularly in labour rooms where having a qualified worker is crucial.

Criteria for LaQshay and NQAS accreditation

There are requirements that must be met for every facility to receive LaQshya and NQAS accreditation. There are five criteria included in the guidelines for LaQshay accreditation. As a result, all facilities met criteria number 1 with the exception of Sangrur because that facility's maternity OT is not operational. Only Rajpura met requirement of criteria no 2. All three facilities met the third requirement, which calls for maintaining patient dignity, ensuring privacy, and having defined procedures for intranatal and postoperative care. Only

RAJPURA facility met criteria No. 4 and No. 5, hence it is safe to conclude that customer satisfaction was low in MOHALI and PATIALA. (table 7)

To receive NQAS accreditation, seven requirements must be completed.

While the Rajpura facility satisfies all seven requirements, the civil hospital Patiala fails to meet requirements three, four, and six. (table 8)

RECOMMENDATIONS

Irrespective of the approach or methodology, first step in Quality is 'Measurement' because:

"If you can't measure something, you cannot understand it, if you cannot understand it, you cannot control it, and if you cannot Control it, you cannot Improve it."(1)

Measurement gives findings objectivity. Measurement aids in analysing the current condition and identifying any gaps or potential improvement areas. Gap refers to the distinction between "What is" and "What should be or ought to be."

Unfortunately, the majority of implementers believe that the best tools for improvement are "Measuring Quality." Instead of using these exercises as a tool for assessment and gap analysis, people start to see them as a way to improve. Because of this, people stop at Step 1 (Measuring Quality) and continue doing the same exercises repeatedly without seeing any noticeable and beneficial outcomes.

For instance, when we ask "do you do patient satisfaction surveys at your facility"? They'll reply "Yes" right away. They will present you with a pile of completed survey forms when you ask for records. However, when will you ask them what they plan to do after the survey? "We again conduct patient satisfaction surveys," is the most typical response. The pattern continues.

Now the question arises where is the improvement, to bring about improvement, we have to change because it is said if u always do what u have always done, you will always get what you have always got. "The organised creation of beneficial change" is what improvement is. It is a planned creation that includes all interested parties in order to bring about real, beneficial changes for everyone.

All parties benefit when improvements are made, creating a "Win-Win" scenario.

The goal of improvement is to perform at previously unheard-of levels. Quality in healthcare is defined by Bat Alden - Davidoff as "the combined and ongoing efforts of everyone, including healthcare workers, clients and their families, researchers, and the government

To implement the improvements that would improve patient outcomes (health), better system performance (care), and better professional development (learning

Improvement can be made by lowering the quantity and number of resources needed to finish a task or objective. For instance, a process can be made better by reducing the quantity of people needed, the amount of money needed, the amount of time needed, the amount of raw materials needed, and the amount of equipment needed to complete the process.

We can make improvements by reducing the errors.

By meeting and exceeding expectations of external customers. By making the process safer.

By making the process more satisfying for the person doing it.

The philosophy of Quality Improvement under NQAS follows a simple strategy of "Making CHANGES that will result in IMPROVEMENT".

And the universal methodology of QI i.e., PDCA (Plan-Do-Check-Act) or Deming's Cycle is followed for Quality improvement. This includes but not limited to the following:

1. Teamwork
2. Leadership
3. Motivation
4. Reward and recognitions.
5. Quality methods.
6. Quality tools
7. Root Cause Analysis.
   Some of the Tools used are: Brain storming, Why-why Analysis, Cause and effect Diagram
8. Prioritization. Some of the Tools used are: PICK Chart, Pareto's Analysis.
9. Action planning. Preparation of a Time-bound Action Plan with detail of Gap identified, actions to be taken, responsibility, timeline and mechanism of monitoring and feedback.
10. Feedback and monitoring of the QI process. Gap Closure.

CONCLUSION

Any quality improvement measure must be sustainable. As a result, we took the route of improving the healthcare system. That actually indicated that the improvement was less than what we had anticipated, but the little improvement that has occurred is likely to last past the intervention time. At the state and district levels, there is a desire to increase the calibre of health service delivery. With perseverance and dedication, it is feasible to achieve consistent progress

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