KAYAKALP

by Arpita Aggarwal

Submission date: 09-May-2018 02:58PM (UTC+0530)
Submission ID: 961262646
File name: Arpita_Aggarwal.docx (959.18K)
Word count: 15021
Character count: 75137

Internship Training

at

International Institute of Health Management Research

New Delhi

Impact of implementation of 'KAYAKALP' initiative on Quality certification of public health facilities to National Quality Assurance Standards

by

Dr. Arpita Agrawal

PG/16/009

Under the guidance of

Dr. Manish Priyadarshi

Associate Professor, IIHMR

Post Graduate Diploma in Hospital and Health Management

2016-18

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This certificate is awarded to

Dr. Arpita Agrawal

in recognition of having successfully completed her Internship in

Quality Improvement Division, National Health Systems Resource Centre

and has successfully completed her project on

Impact of implementation of 'KAYAKALP' initiative on Quality certification of public health facilities to National Quality Assurance Standards

at

National Health System Resource Centre, New Delhi

She comes across as a committed, sincere and diligent person who has a strong drive and zeal for learning.

We wish her all the best for future endeavors

Date: 08th May 2018

Dr J.N Srivastava
Advisor, QI
NHSRC, New Delhi

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TO WHOMSOEVER IT MAY CONCERN

This is to certify that Dr. Arpita Agrawal student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at National Health System Resource Centre, New Delhi from February 2018 to April 2018.

The candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The internship is in fulfilment of the course requirements.

I wish her all success in all his future endeavors.

Dr. Supten Sarbhadhikari
Dean, Academics and Student Affairs
IIHMR, New Delhi

Dr. Manish Priyadarshi
Associate Professor and Mentor
IIHMR, New Delhi

CERTIFICATE OF APPROVAL

The following dissertation titled "**Impact of implementation of 'KAYAKALP' initiative on Quality certification of public health facilities to National Quality Assurance Standards**" at "**National Health System Resource Centre, New Delhi**" 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 Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Signature Date:

Certificate from Dissertation Advisory Committee

This is to certify that **Dr Arpita Agrawal,** a graduate student of the **Post- Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. She is submitting this dissertation titled "**Impact of implementation of 'KAYAKALP' initiative on Quality certification of public health facilities to National Quality Assurance Standards**" at "**National Health System Resource Centre, New Delhi**" in partial fulfillment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management.**

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INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

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FEEDBACK FORM

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Dissertation Organisation: National Health Systems Resource Centre, NIHFW Campus, New Delhi

Area of Dissertation: Impact of Implementation of Kayakalp Initiative on certification of Public Health Facilities to NQAS

Attendance: Punctual;

Objectives achieved: She applied herself well & delivered all tasks., sometimes going beyond her work.

Deliverables: She has proved herself well.

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Suggestions for Improvement: Public Health System Functions Knowledge, which will be gained in the course.

Suggestions for Institute (course curriculum, industry interaction, placement, alumni):

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ABSTRACT

IMPACT OF IMPLEMENTATION OF 'KAYAKALP' INITIATIVE ON QUALITY CERTIFICATION OF PUBLIC HEALTH FACILITIES TO NATIONAL QUALITY ASSURANCE STANDARDS

Background: Ministry of Health and Family Welfare (MoHFW) has developed National Quality Framework to assess quality of services for improvement and helps in certification of facilities while KAYAKALP was launched to promote cleanliness and hygiene in public health facilities. KAYAKALP is a sub-set of National Quality framework as they have common standards in their assessment checklist. We assessed if KAYAKALP implementation within the public health facilities support Quality Certification of health facilities. **Methods:** We designed Retrospective study to gathered data for 32 Quality certified and 06 deferred/declined district hospitals under National Quality Assurance Standards (NQAS) between May 2015 to April 2018 by reviewing records. Certification criteria and their External assessment checklist under NQAS & KAYAKALP program for district hospitals were extracted from their respective states. Data included their external assessment score, total no of facilities certified under NQAS and no of facilities scored more than 70% under KAYAKALP in external assessment and National assessment scores of declined/deferred district hospitals under NQAS. Data were analyzed using SPSS version 22 for Pearson Correlation Analysis, MS Excel 2016 for Pareto and Statistical Analysis. **Result:** Pearson Correlation Coefficient was 0.217, which means KAYAKALP implementation have less significance on the Quality certification of public health facilities to NQAS. In addition, coverage of Public Health Facilities as per their award criteria under NQAS & KAYAKALP was determined.

Name of the Program	Percentage of Health Facilities Coverage as per award criteria under NQAS & KAYAKALP (April 2018)		
	DH	SDH/CHC	PHC
NQAS Certified	3.4%	0.12%	0.17%
KAYAKALP Award	31.71%	13.34%	8.34%

After pareto analysis, done to identify major factors resulted in deferred/declined Quality Certification of district hospitals under NQAS, major area of concern Quality Management (49%) and Outcome (59%) were find out to be the responsible factors. **Conclusion:** Overall impact of implementation of KAYAKALP initiative on Quality Certification of Public Health Facilities to National Quality Assurance Standards was significantly low, however this could be due to many possible reasons which author have enumerated in detail in the subsequent report.

ACKNOWLEDGEMENTS

At the onset of the report, I would like to acknowledge my sincere thanks to the institute, **International Institute of Health Management Research,** for providing a platform to gain enough knowledge and skills in different aspects of health management. Most importantly I would like to thank **Dr Manish Priyadarshi, Associate Professor, IIHMR Delhi** for all encouragement and inspiring support in completion of this study. I would like to thank **Dr Kirti Udayai, Assistant Professor, IIHMR, New Delhi** for giving her valuable time and inputs during the study. I also owe a great debt to **Dr J.N. Srivastava, Advisor, and entire Quality Improvement Division, NHSRC,** for giving me an opportunity to conduct this study. I would also like to thank all team members of QI, Division who despite of their other busy schedule, were there to help and extend support during the study. Finally, and most importantly, I would like to thank my family for their blessings, wishes and support during internship and to my colleagues for their help in successful completion of this study.

Dr. Arpita Agrawal

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LIST OF ABBREVIATIONS

S. No	Symbol	Abbreviations
1	CHC	Community Health Centre
2	CQAC	Central Quality Supervisory Committee
3	DALY	Disability-adjusted Life Year
4	DH	District Hospital
5	FFHI	Family Friendly Hospital Initiative
6	GoI	Government of India
7	ICU	Intensive Care Unit
8	IOM	Institute of Medicine
9	IPD	In-patient Department
10	ISO	International Organization for Standardization
11	IT	Information Technology
12	KPI	Key Performing Indicators
13	MoHFW	Ministry of Health and Family Welfare
14	NABH	National Accreditation Board for Hospital and Healthcare Providers
15	NQAP	National Quality Assurance Program
16	NQAS	National Quality Assurance Standards
17	NRC	Nutrition Rehabilitation Centre
18	OPD	Out-patient Department
19	PHC	Primary Health Centre
20	PPU	Post-partum Unit
21	SDH	Sub-District Hospital
22	SNCU	Sick New-born Care Unit
23	UN	United Nations

LIST OF ANNEXURES

CHAPTER 1: INTRODUCTION

The Institute of Medicine (IOM) has defined Quality of care as "Degree to which healthcare services provided to individuals & patient populations to improve the desired health outcomes" (1). It includes a measure of scale, range of elements of care, includes targets (individual and population) for quality assurance as output, with desire for increase health outcomes, identifies speculative attribute of outcome which could be random or probability based but ultimately aims for the outcome by converting process of health care into health outcome. It assesses the individual patient's need and involves them in decision making and policymaking and undermines the barriers on performance of health care provider by using their technical, medical and scientific knowledge.

Desired outcome for healthcare provider are usually related to successful prevention or treatment of morbid conditions and averting deaths. While, for patient it is about clean & friendly atmosphere, speedy, low cost, lasting treatment without any harm/complication. Therefore, good quality services need to take into account both the health care providers' and the patient's perspective.

It's well known fact that poor quality of services leads to additional burden on health system by diminishing effectiveness of its interventions & increase the cost of care. To reduce the cost of poor quality Joseph Juran (2), an evangelist of Quality management, gave the famous trilogy of Quality planning, Quality control & Quality improvement.

In this regard "Indian Public Health Standard" were launched for District Hospital, Sub District Hospitals, PHC, CHC and Sub centers in the month of January/ February, 2007 and have been set as the benchmark for health facilities infrastructure planning and up-gradation but sooner it was

realized that in this process component was still missing. Further in this direction several approaches for certification/accreditation were being adopted by different states including NABH, ISO 9001:2008, FFHI (Family Friendly Hospital Initiative) and other initiatives in year 2008-2012. On evaluation by MoHFW, it was revealed that all these approaches have brought some positive changes but none of them is meeting requirements of Public Health.

Later, in 2013 MoHFW has developed "National Quality framework" which define their approach to Quality of care, its organizational arrangement & mandate in public healthcare institutions and it is named as 'Operational Guidelines for Quality Assurance for public health care facilities' and subsequently for CHC's, PHC's in 2014 and for UPHC's in 2016.

In 2015, Swatch Bharat Mission was launched by Hon. Prime Minister & to Complement it "Kayakalp" was launched by MoHFW. It focuses on promoting cleanliness and Hygiene in Public Health facilities, and also felicitates exemplary efforts of such facilities.

National Quality Assurance Standards have been developed keeping in the specific requirements for public health facilities as well global best practices. NQAS are designed for District Hospitals, CHCs, PHCs and Urban PHCs. Standards are made for service providers to assess quality of services for improvement and helps in certification of facilities. NQAS evaluation based on eight broad area of concern– Service Provision, Patient Rights, Inputs, Support Services, Clinical Care, Infection Control, Quality Management and Outcome. All standards are ISQUA accredited and meets global benchmarks in in terms of comprehensiveness, objectivity, austerity and evidence of development. Quality Certification program for public health facilities has been set in motion with desire of acknowledging the good preforming facilities as well improving credibility of public hospitals in community. Certification is provided against National Quality Assurance Standards

(NQAS) on meeting pre-determined criteria. Certified facilities are also provided financial incentives as recognition of their good work.

Kayakalp Award Scheme aspires to improving Cleanliness, Hygiene and waste management practices in Public Health Facilities. Facilities go through internal, peer and external assessment process against a predetermined criterion. The best facilities are given cash award as well as felicitation at state and National level

These programs are the key drivers for our citizens in carving a healthier and safer environment. The motives are generous; the goals are nourishing; but the process and outcomes are not a result of individual. It's a collaborative effort of local health agency and state health agency. States develops the system that measure the quality and capacity of health facilities but it's ultimately health facility that overcomes those gaps measured by state bodies and focus on improvement of services. Leadership at the local level is the key to success. State leadership provides resources, support, and coordination. These programs will bring in the accountability in the public heath leaders through standard setting and recognition of health facility through certification or award scheme. On the other hand, these programs have certain cons with them, since state authorities are under political pressure and sensitive with health officials avoid getting ahead without political commitment that could restrict budgetary decisions and limits flexibility. In addition, state officers have limited tenure and subjected to change with the change in ruling government parties. These programs require long-term investments and commitments to flourish and nourish themselves.

The emphasis is now on the evaluation of public health systems for delivery of quality assured services. National Quality Assurance Program (NQAP) and KAYAKALP are a dynamic mechanism of objectively assessing and facilitating the conversion of inputs/processes into the expected outputs and outcomes with quality ultimately borne out by the client satisfaction. This

study aims for how implementation of KAYAKALP initiative in the public health facilities have impacted on certification of facilities to National Quality Assurance Standards and comparative analysis between the two offshoot programme of Government of India (GoI) for health care facilities i.e. NQAP and KAYAKALP in terms of their assessment, coverage, accessibility and functionality of facilities.

CHAPTER 2: LITERATURE REVIEW

'Ensure healthy lives and promote well-being for all at all ages' is the 3rd goal out of the 17 Sustainable Development Goals as ratified in UN summit on September 25, 2015. The goal specified 13 targets out of which target 8 focuses on 'Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all by 2030' (3).

In India around 5.2 million injuries occur due to medical negligence, resulting in around 3 million preventable deaths every year, of these, the major factors are medications and hospital-acquired infections. This makes medical errors one of the major causes of death. More than 43 million people suffered across the world each year due to medical mishaps. These errors accounts for nearly 23 million years of Disability Adjusted Life Years (DALY). For every 100 Hospitalization average 12.7 adverse event occurs (4). This provides evidence that adverse events due to medical negligence represent a major cause of morbidity and mortality. And how it is important to critically evaluate the quality and safety of the care provided to the person when he/she accesses health services.

A study in Uganda 1994, says that implementation of national quality assurance programme in Uganda was done to strengthen primary health care services. Within 18 months significant objective and subjective improvement in the quality of services was observed. Reduction in the maternal mortality rate, waiting time and increased patient satisfaction was ultimate quantitative outcomes. Along with this marked increased morale of health care providers, greater involvement of local governing bodies in the decision-making was few qualitative outcomes (11).

Another study conducted in Primary care clinics in Guinea and Kenya where quality improvement approach called COPE (Client-Oriented, Provider-Efficient services) was used for strengthening of health systems and supporting Integrated Management of Child Health (IMCI) efforts. This study said how all areas of quality can be improved by empowering health care providers to take decision by using above mentioned approach. This approach was a mix of shared responsibility and ownership amongst health care providers, reduction in the hierarchy and bureaucracy, raised morale and commitment of staff, skills enhancement of service provider and support from the supervisor which at the end leads to satisfactory enhanced changes in the quality of services provided to children and their caregiver (12).

Another such programme was adopted by Delhi Hospitals and dispensaries to overcome shortage of essential medicines by developing list of essential drugs, setting a centralized pooled procurement system and promoting activities which supports rational use of drugs. This resulted in supply of good quality drugs with saving of nearly 30% on the annual drug bill for the Government of Delhi, which in turn improved approximately up-to 80% availability of drugs. This model of Delhi has clearly stated that such programmes can be implemented and can lead to better patient satisfaction (13).

A study was conducted in Uganda to assess the effects of scaling up Integrated Management of Child Illness on the quality of care. It was found that only training health worker will not improve absolute levels of service quality, other factors like quality of training provided, effective supervision and monitoring of processes, availability of essential drugs and equipment, are also included and policy should be made in such manner that it can combine all this into a single program (14).

Considering the above facts, figures and the current situation of the country, 'National Health Mission (NHM)' was launched with the goal "to enhance the availability of and access to good health care for people, especially for vulnerable population. "National Health policy 2017 envisages as its goal the attainment of the highest possible level of health and well- being for all at all ages, through a preventive and promotive health care orientation in all developmental policies, and universal access to good quality health care services without anyone having to face financial hardship as a consequence" (5). In this process different programme was launched by National Health Mission namely; National Quality Assurance Program, Kayakalp, Swachh Swasth Sarvatra and recently LaQshya to provide a mix of evidence based clinical practice and quality of care.

Both the programmes i.e. Quality Assurance for public health care facilities and Kayakalp have certain standards on basis of which assessment of health facilities have been done followed by award of certification based on certain criteria approved by Central Quality Supervisory Committee. On review of those guidelines it was observed that Kayakalp standards are directly or indirectly embedded in the National Quality Assurance Standards (NQAS). So, it could be said that there can be some co-relation in both the programmes. Till date as of now no such studies have been done. This study aims to assess Impact of implementation of 'KAYAKALP' initiative on Quality certification of public health facilities to National Quality Assurance Standards as KAYAKALP is considered as sub-set of NAQP.

CHAPTER 3: OBJECTIVES

General Objective-

To assess Impact of implementation of 'KAYAKALP' initiative on Quality certification of public health facilities to National Quality Assurance Standards

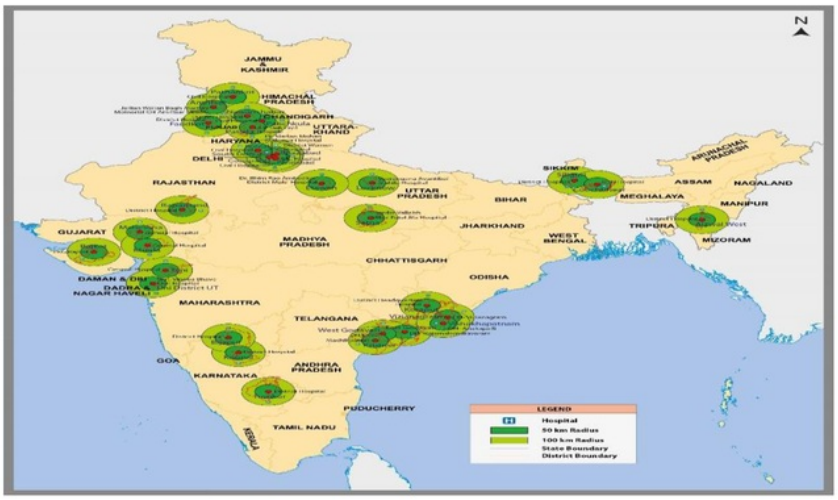
Specific Objective-

1. To assess the co-relation between NQAP and KAYAKALP's external assessment score for National Quality Assurance Standard (NQAS) certified district hospitals.
2. To analyze the coverage of certification of public health facilities under NQAP and KAYAKALP programme.
3. To do a comparison of NQAS assessment score between quality certified district hospitals and deferred quality certified district hospital under NQAS.

CHAPTER 4: METHODOLOGY

Study Area: The study was carried out in public health facilities including all the district hospitals who have undergone for National Quality Assurance Program (NQAP) for the external assessment and all the Primary Health Centres (PHC), Community Health Centres/Sub-district Hospitals (SDH/CHC) and District Hospitals (DH) underwent for KAYAKALP external assessment.

Figure 4.1: District-wise map of India showing location of NQAS certified DHs



Study Period: The study was carried out in three phases during 05th February 2018- 05th May 2018. In the first phase of the study organization protocols, framework, work culture and programmes running under organization, was understood followed by approval of study proposal. In the second phase data tools and techniques was selected and data collection was done. In third phase data, analysis was done out to find out the areas of concern.

Figure 4.2: Phases of the study

Study Design: The Retrospective study involving quantitative method was designed to do assess impact of implementation of 'KAYAKALP' initiative on Quality certification of public health facilities to National Quality Assurance Standards. Data collection involved a period of three years from May 2015 to April 2018.

Study Population: This study involves all the District Hospitals certified under National Quality Assurance Program (Annexure1) along with those DH who was deferred (Annexure2) under NQAS for not meeting their certification criteria (6) (Annexure3). It involved all the PHCs, CHC/SDH & DH scored more than 70% in their Kayakalp external assessment since last three years i.e. from May 2015 to April 2018 (Annexure4).

Sampling Technique: Purposive sampling technique was used because of small sample size, all district hospitals assessed for NQAS certification was included in the study.

Sample Size: Initially all the facilities certified under NQAS were planned to be included in the study. After considering paucity of time and scope of the study, only 32 district hospitals out of 91 certified facilities were considered for the study.

Table 4.1: Sample Size as per Specific Objectives

Specific Objective	Variable	Sample Size
1.	Certified DH under NQAS	32
2.	No of facilities for coverage DH/SDH CHC PHC	 1108 5624 25650 **(As per RHS 2017)**
3.	Deferred/Declined DH under NQAS	06

Study Variables:

1. External assessment score of the 32 NQAS certified district hospitals under NQAP and KAYAKALP.
2. Total no of facilities certified under NQAS and no of facilities scored more than 70% in their external assessment under KAYAKALP from May 2015 to April 2018.
3. External assessment checklist of 06 declined/deferred district hospitals under NQAS.

Tools and Techniques:

Table 4.2: Instrument Design

S. No	Objective	Variables	Study Population	Tools and Techniques
1	To assess the co-relation between NQAP and KAYAKALP's external assessment score for National Quality Assurance Standard (NQAS) certified district hospitals and all	External assessment score of the certified DHs under NQAP and KAYAKALP	32 Certified DHs under NQAS	Record Review

	other Non-NQAS certified health facilities			
2	To analyze the coverage of certification of public health facilities under NQAP and KAYAKALP programme	External assessment score of the public health facilities under NQAP and KAYAKALP	No of health care facilities underwent NQAP & KAYAKALP	Record Review
3	To do a comparison of NQAS assessment score between quality certified district hospitals and deferred quality certified district hospital under NQAS	External assessment checklist for NQAS	06 Deferred/declined district hospitals under NQAS	Record Review

Limitations of The Study:

- As both the programmes are in their proliferation phase, sample size was small.
- Data collection was difficult as assessment checklist have to be collected from respective states of the facility.
- Confidentiality and Privacy issue within the organization regarding declaration of certification of the facility under NQAS.
- Only certified district hospitals were included because of time constraint

CHAPTER 5: DATA ANALYSIS

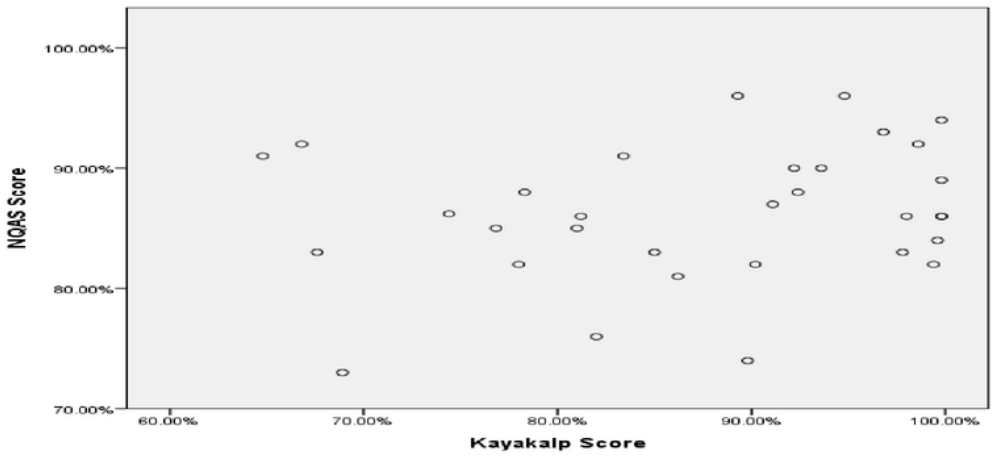
1. All the external assessment scores were checked, coded and entered in SPSS (Statistical Package for the Social Sciences) version 22. After entering scores Bivariate co-relation statistical tool was applied to find out co-relation between NQAP and KAYAKALP. In this objective district hospital's KAYAKALP score is **independent variable** while their NQAS score is **dependent variable**. So, here it was assumed that there is co-relation between these two programmes i.e. facilities certified under NQAS might be having good KAYAKALP score or KAYAKALP implementation supportNQAP. To check this null hypothesis was formulated which says there is no co-relation between these two programmes.

Table 5.1: Co-relation Analysis (Table showing external assessment score of DH under NQAS and KAYAKALP attached as Appendix 5)

Correlations

		NQAS Score	Kayakalp Score
NQAS Score	Pearson Correlation	1	.217
	Sig. (2-tailed)		.234
	N	32	32
Kayakalp Score	Pearson Correlation	.217	1
	Sig. (2-tailed)	.234	
	N	32	32

Figure 5.1: Co-relation Scatter-plot Chart



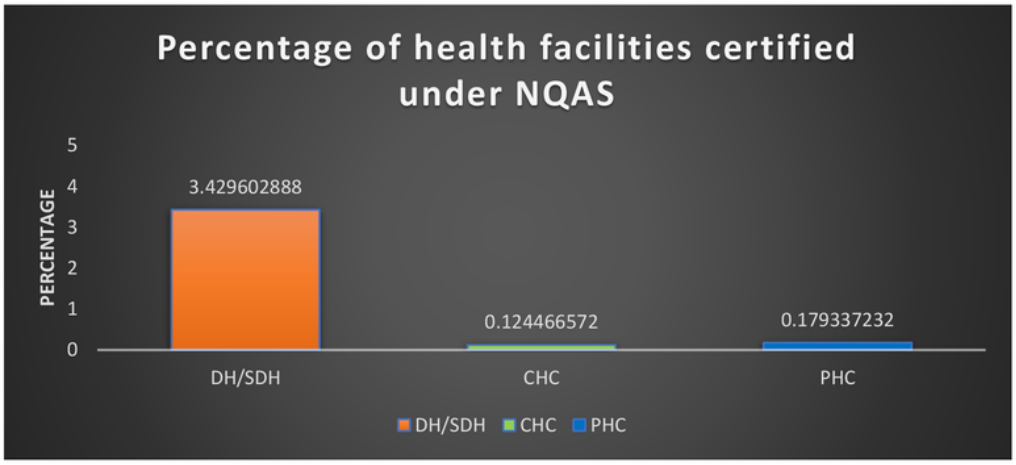
As seen in the Table no 5.1 and Figure 5.1, Pearson co-relation coefficient is 0.217, which shows that co-relation sign is positive but strength is weak means there is some co-relation between these two Quality of Care programme but of weak strength. But scatter-plot chart shows vague distribution of dots along the X-axis and Y-axis which says non-linear relationship between two variables means no co-relation. At this we can say that our null hypothesis is correct and there is no correlation between NQAP and KAYAKALP.

2. Data was collected and reviewed from organizations monitoring framework to include all the facilities that have been underwent NQAP and certified under the same. Out of total 166 applications received from the various states for National assessment only 105 was assessed against NQAS and only 91 facilities were certified against the same. Same procedure was followed for KAYAKALP programme and entered in MS Excel 2016 version, only those facilities were entered who have scored more than 70% in their external assessment score. All the facilities were included which fall from a period of April 2015 to April 2018.

Table 5.2: NQAS coverage

Type of the Facility	DH/SDH	CHC	PHC
Total	1108	5624	25650
NQAS Certified	38	7	46
Percentage of total	3.429603	0.124467	0.179337

Figure 5.2: Percentage of Health facilities certified under NQAS till April 2018

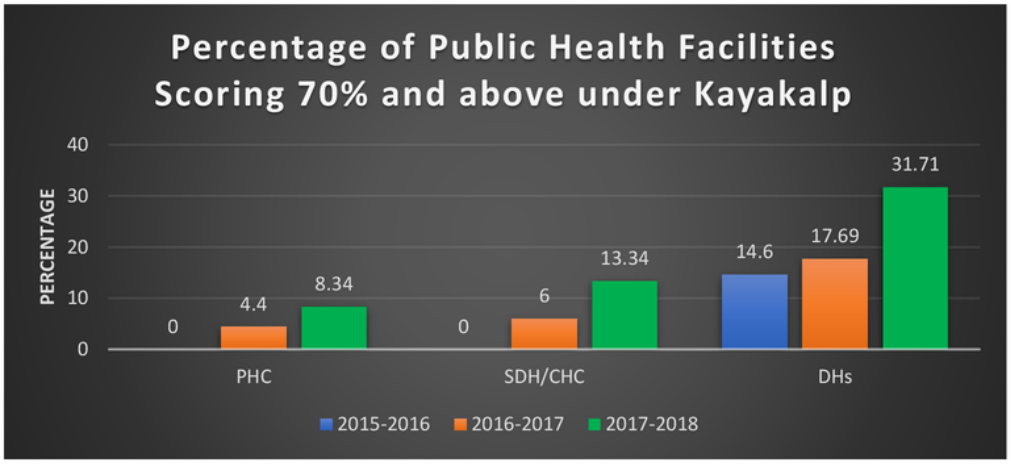


As seen in the table no 5.2 and figure no 5.2, out of total 1108 DH/SDH only 38 DHs (3.4% of total), out of 5624 CHCs only 7 CHCs (0.12% of total) and out of 25650 PHCs only 46 PHCs (0.17% of total) facilities have been certified under NQAS since the inception of programme in November 2014' till April 2014.

Table 5.3: Kayakalp Coverage

Kayakalp Award	PHC %	SDH/CHC %	DHs %
2015-2016	0	0	14.6
2016-2017	4.4	6	17.69
2017-2018	8.34	13.34	31.71

Figure 5.3: Percentage of Health facilities scored more than 70% and above under KAYAKALP programme in external assessment till April 2018



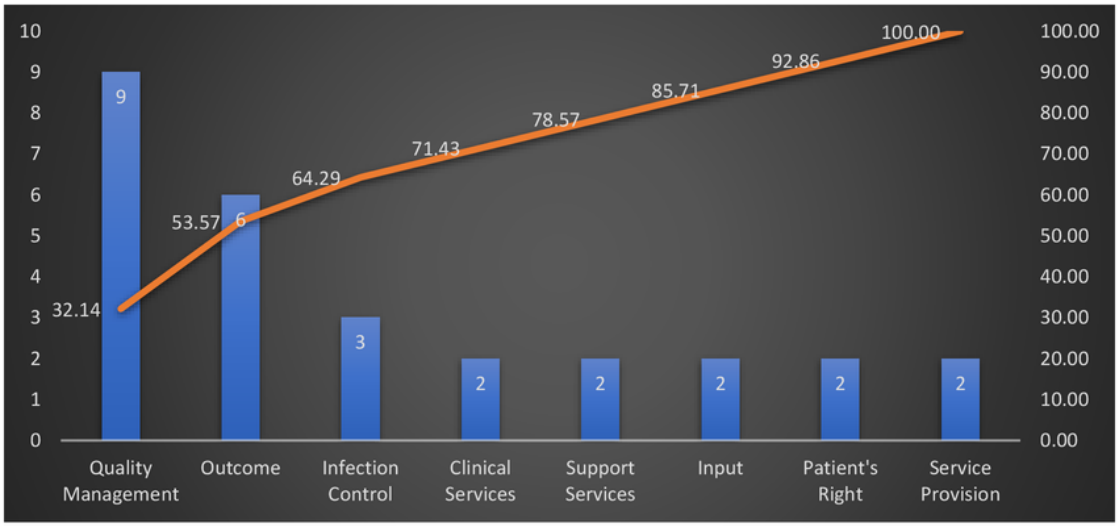
As depicted from the Table no 5.3 and figure no 5.3, trend pattern can be seen for three consecutive years from 2015 to 2018. Trend shows progressive increase in the coverage of facilities scored 70% and above in the external assessment under KAYAKALP programme since its inception. Involvement of PHC in the year 2018 up-to an extent of 8.34% of total PHCs, increase in the coverage for SDH/CHC from 0% to 13.34% of total, for DHs from 14.6% in 2015 to 31.71% in 2018.

3. To do a comparison of NQAS assessment score between quality certified district hospitals and deferred/declined quality certified district hospital under NQAS, Pareto analysis was done to apply 80/20 rule which underlines that in any process, 80% of problem or failure is just caused by 20% of few major factors, whereas remaining 20% of problem or failure is caused by 80% of many minor factors. The very purpose of Pareto Chart is to highlight the most important factors that are the reason for major cause of problem or failure. Pareto chart is made where bar graphs represented major area of concern in descending order of their impact and the cumulative total is shown by a line graph.

Table 5.4: Pareto analysis for certified and deferred/declined district hospitals

	Frequency	% Frequency	Cumulative Frequency
Quality Management	9	32.14	32.14
Outcome	6	21.43	53.57
Infection Control	3	10.71	64.28
Service Provision	2	7.14	71.43
Patient's Right	2	7.14	78.57
Input	2	7.14	85.71
Support Services	2	7.14	92.85
Clinical Services	2	7.14	100.00
Total	28	100	

Figure 5.4: Graph showing pareto analysis for area of concern-wise



As we can interpret with the help of Pareto Analysis shown in table no 5.4 and Pareto Chart, our major area or factor responsible for deferred/declined certification of district hospitals are Quality Management (32.14%), Outcome (53.57%) and Infection Control (64.29%) which constitutes nearly 70% of cumulative frequency. It means if we can improve these areas of concern significant gap closure can be done to achieve Quality Certification for DHs. For further analysis of individual

Area of Concern, their National assessment checklists were analyzed and entered in MS Excel 2016. After entering scores for all district hospital's checklist, median was calculated separately for identifying individual standards for certified and deferred/declined district hospitals under NQAS to rule out the outliers.

Table 5.5: Median score for certified and deferred/declined district hospitals

	Non-Certified	Certified
	Median	Median
Overall Score	72%	86%
Service Provision	74%	87%
Patient's Right	78%	86%
Input	72%	85%
Support Services	79%	86%
Clinical Services	74%	85%
Infection Control	76%	90%
Quality Management	49%	77%
Outcome	59%	85%
Department Wise Score		
Accident and Emergency	71%	84%
OPD	72%	82%
Labour Room	84%	89%
Maternity wards	80%	80%
IPD	68%	90%
NRC	0%	83%
Pediatric ward	74%	0%
SNCU	69%	85%
ICU	0%	62%
Operation Theatre	74%	89%
Post-partum Unit	64%	84%
Blood Bank	69%	83%
Laboratory	80%	82%
Radiology	68%	87%
Pharmacy and Stores	75%	80%
Auxillary Services	58%	88%
Mortuary	58%	75%
General Administration	74%	86%

Standard wise Score		
Standard A1.	69%	86%
Standard A2	77%	90%
Standard A3.	71%	85%
Standard A4	63%	81%
Standard A5.	87%	91%
Standard A6.	75%	86%
Standard B1.	74%	84%
Standard B2.	79%	85%
Standard B3.	86%	93%
Standard B4.	73%	85%
Standard B5.	91%	92%
Standard C1.	77%	83%
Standard C2.	64%	83%
Standard C3.	66%	80%
Standard C4.	68%	85%
Standard C5.	85%	94%
Standard C6.	73%	89%
Standard D1.	51%	79%
Standard D2.	74%	85%
Standard D3.	78%	86%
Standard D4.	84%	90%
Standard D5.	77%	88%
StandardD6	73%	75%
Standard D7.	79%	89%
Standard D8	90%	83%
Standard D9	100%	94%
Standard D10.	74%	85%
Standard D11.	87%	95%
Standard D12	70%	85%
Standard E1.	85%	90%
Standard E2.	83%	89%
Standard E3.	69%	79%
Standard E4.	79%	87%
Standard E5.	73%	92%
Standard E6.	57%	78%
Standard E7.	69%	83%
Standard E8.	79%	89%
Standard E9.	79%	91%
Standard E10.	50%	73%
Standard E11.	52%	69%

Standard E12.	73%	85%
Standard E13.	77%	92%
Standard E14	83%	96%
Standard E15.	89%	92%
Standard E16.	75%	92%
Standard E17	90%	97%
Standard E18	97%	97%
Standard E19	91%	94%
Standard E20	76%	85%
Standard E21	85%	100%
Standard E22	50%	99%
Standard E23	50%	51%
Standard F1.	60%	83%
Standard F2.	78%	91%
Standard F3.	80%	90%
Standard F4.	74%	86%
Standard F5.	73%	88%
Standard F6.	72%	89%
Standard G1	78%	93%
Standard G2	65%	78%
Standard G3.	50%	74%
Standard G4.	60%	84%
Standard G5.	12%	67%
Standard G6.	45%	81%
Standard G7.	39%	76%
Standard G8.	32%	58%
Standard H1.	68%	89%
Standard H2.	68%	83%
Standard H3.	51%	84%
Standard H4.	46%	81%

As we can see in the above table no 5.5, mean score written in the red font are our outlier values means these are the score which were not meeting the certification criteria as approved by Central Quality Supervisory Committee (CQAC) for district hospital to be certified under NQAS (Certification criteria attached as Annexure 3). Median score under certain standards namely; Standard G5 (12%), Standard G6 (45%), Standard G7 (39%), Standard G8 (32%) and Standard

H4 (46%) does not meet certification criteria which says standard score should be equal or above 50%. On the basis of these scores gap analysis was done, major gaps identified were as follows:

- These facilities do not map its key processes and don't seek to make them more efficient by reducing non-value adding activities and wastages
- The facilities have not established system of periodic review as internal assessment, medical & death audit and prescription audit
- The facilities have not defined and established Quality Policy & Quality Objectives.
- Facilities do not seek continually improvement by practicing Quality method and tools.
- The facilities do not measure Service Quality Indicators and endeavors to reach State/National benchmark.

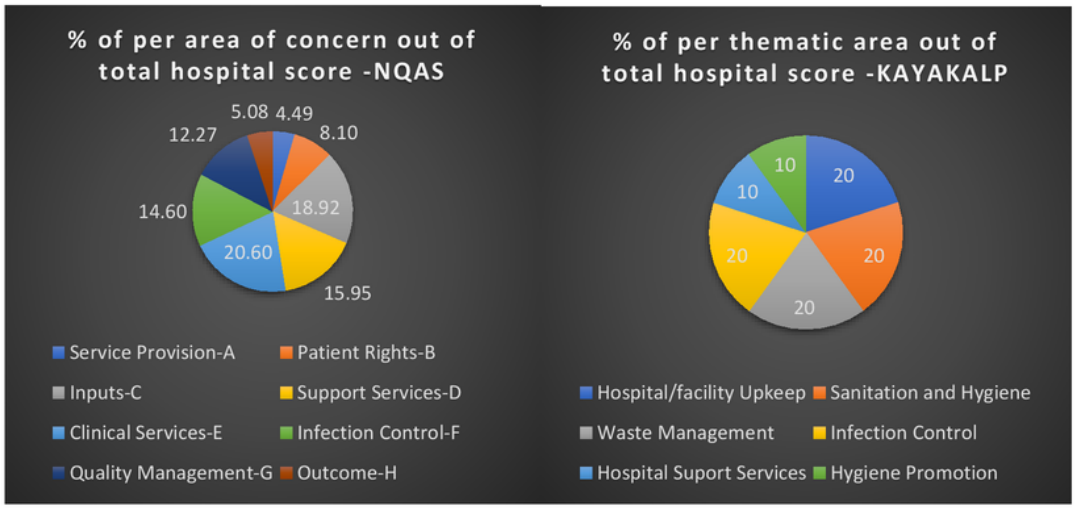
In short, all the gaps identified were Quality Management and Outcome oriented i.e. related to process component of Donabedian model (7).

Figure 5.5: Donabedian's framework for Quality Improvement

CHAPTER 6: DISCUSSION

- Considering the facts and figures in the data analysis section, though there is weak correlation (.217) between two programmes namely; NQAS and KAYAKALP but it is not indicating that KAYAKALP (independent variable) supports NQAS (dependent variable). There could be many reasons for this but few can be summarized on the basis of data availability. One reason could be small sample size taken for the study, on basis of which it is imperative to say that both programmes do not support each other. Second analytic reason could be that as it is already known KAYAKALP is a smaller component of NQAP so when we did a comparative analysis of standards common to both the programs, following result came out of the analysis:

Figure 6.1: Graphical presentation for percentage of share by individual area of concern under NQAS & KAYAKALP respectively



As depicted from figure 6.1, in NQAS area named "Infection control" covers only 14.6% of total score card while in KAYAKALP this segment comprises of 20% of total pie-chart. On further digging deep into this following observation are seen:

Table 6.1: Percentage of standard in their respective area of concern under NQAS Checklist

Kayakalp Thematic Area	NQAS Score Card			
	Standard Name	Standard Score	% of total of respective area of concern	
Hospital Support Services	Standard A5	52	8.87	
Hospital upkeep	Standard D4	414	19.90	
Waste Management	Standard F6	460	24.15	
Hygiene Promotion	Standard B1	308	29.16	
	Standard D8	20	0.96	5.24
	Standard D11	178	8.55	

As seen in the table 6.1, standard under NQAS are comparable to thematic area under KAYAKALP. Standard A5 (8.87%) of (4.49%) of Service Provision area of NQAS comparable to Hospital support services of KAYAKALP, similarly others like Standard D4 (19.9%) of (15.95%) of Support Services area is comparable to Hospital Upkeep of KAYAKALP, Standard F6 (24.15%) of (14.6%) of Infection Control is comparable to Waste management of KAYAKALP and Standard B1 (29.16% of 8.1% of Patient Right), Standard D8 & D11 (5.24% of 15.95% of Support Services) of NQAS are comparable to Hygiene Promotion of KAYAKALP. All earlier mentioned standards comprise little arc under NQAS pie chart as compared to similar standards under KAYAKALP, so this could also be an important reason for weak correlation of two programmes.

- Other possible reason could be with the sustainability of process variables under NQAS for long term as district hospital's KAYAKALP score has been recorded for current year (2017-18) while there NQAS score could be from last three years.
- As for the continued achievement of desirable outcomes, sustainability of the continued use of program activities and components are required. There is symbiotic relationship

between sustainability, outcome and process. If one component is missing from this trilogy, it could have dis-balance the desired results of the programme.

- So, in order to achieve sustainable outcomes, continuous monitoring and evaluation of the already planned interventions under the program must be done along with generation of evidence-based intervention outcomes.
- When we analyze the data for coverage of all the public health facilities which has been certified under NQAS, only 3.4% DH/SDH, 0.12% CHC and 0.18% PHC have been certified till now, while significant achievement has been made under KAYAKALP since its inception. Till date 8.3% PHCs, 13.34% CHC/SDH and 31.74% DHs have scored equal to or more than 70% in their external assessment score for award. After analysis it was found that National assessment is a long process consist of several steps which on an average took almost 6 months to take place per facility. Every step requires lot of paper work starting from dispatch of letters for assessment to the empaneled external assessors till the dissemination of final report of certification of facility to the ministry and respective State, which incur increased cost. Other reasons might be:

➢ As both the programs are still in their proliferation phase, when National Health Mission launched these program, it need several arrangements to be made like training of the external assessors for assessment of facilities, sensitization of State Nodal officers, facility doctors and staff for this program, awareness of the program protocols and framework to the facilities, long-term impact of programs etc. All of this process need time for completion.

- After doing gap analysis for deferred/declined district hospitals, area of concern was find out. Under findings, two areas were find out namely; Quality Management (49%) and Outcome (59%). On deep analysis of various checkpoints following points were identified:

Table 6.2: Gap analysis for Deferred/Declined District Hospitals under NQAS (8).

Area of Concern	Standard	Check-points
Quality Management (49%)	Standard G5 (12%)	• Process mapping not done for critical processes • Non-value adding activities are not identified • Processes are not rearranged as per requirement
	Standard G6 (45%)	• Internal assessment is not done at periodic interval • Medical audit is not performed • No prescription audits • No death audits • Non-compliance are not enumerated and recorded • Corrective and preventive action not taken
	Standard G7 (39%)	• Quality objectives not defined • Staff is not aware of quality policy and objectives • Quality objectives are not monitored and reviewed periodically
	Standard G8 (32%)	• PDCA not done • 5S not done for work place management • No visual management for mistake proofing • No use of six sigma • No use of tools for quality improvement in services
Outcome (59%)	Standard H4 (46%)	• Facility does not measure Key Performing Indicators* on monthly basis

*** List of Key Performing Indicators attached as Annexure 6**

CHAPTER 7: CONCLUSION

This study has done to assess Impact of implementation of 'KAYAKALP' initiative on Quality certification of public health facilities to National Quality Assurance Standards. Both the programs were launched by National Health Mission in order to provide quality services to the community. Significant findings have come out of this study, one of which states no correlation between aforesaid program despite of presence of some similar standards for assessment. Another interesting finding comes to notice that facility's National assessment is a long process but this process can be further streamlined to a short period by inculcating few management steps/technologies within the certification process in order to achieve greater number of NQAS certification for the public health facilities. Certain recommendation in this direction has been given by the researcher in the recommendation section. However, this area requires more in-depth analysis of various steps involved in the entire process in order to identify major loop-holes/lacunas in the certification process. Once the facility prepares itself for NQAS certification, in-directly it prepares itself for KAYAKALP external assessment as well.

Earlier no such studies have been done in this field, so another step was taken by the researcher in order to find out the gaps or reasons responsible for deferred/declined quality certification of district hospitals under NQAS. Major area of concern namely; Quality Management and Outcome were identified in gap analysis, for which necessary action plan need to be prepared in order to fill those identified gaps and should focus on other hurdles too so that other assessment will not face same concerned gaps in National Assessment for certification.

As NQAS is one such program which takes corrective actions that are process oriented and that can be improved by applying basic tools of quality for continuous improvement once need assessment has been done appropriately. Another significance of this program is that it uses already

available resources to generate evidence-based outcomes for better decision making in future. This study opens new platform for further research in this field in order to achieve more successful outcomes under National Quality Assurance Program.

CHAPTER 8: RECOMMENDATIONS

On the basis of facts and findings following actions can be planned:

- Use of IT enabled software in order to reduce paper work, financial expenditures and repetition of work for following activities-
  - Receiving of documents from States' respective health facility for verification required for NQAS assessment.
  - Standardized Performa for External Assessors with digital signature of respective authority for undertaking assessment.
  - Use of Dashboard for finalization of External Assessors to reduce drop rate by assessors.
  - Use of IT-based checklist for NQAS assessment so that direct transfer of files can be done on the same day of assessment rather than wasting paper in printing and time wastage in courier of those paper checklist.
- Capacity building of Health and Public Health Manager so that they can identify gaps during the internal assessment of the facility and can close them on the spot so that such gaps will not occur during National Assessment of the facility.
- Formulation of Quality policies and objectives as per respective department.
- Continuous monitoring and evaluation of Key Performing Indicators on monthly basis to generate evidence-based outcomes.
- Use of Lean Principal for continuous Quality Improvement after need assessment.
- Developing a model for sustainability of program activities and components in long run which should include two factors, one is ***Adaptation*** to the change in the program activities

and component with time and other is ***Threshold*** means to what extent or components of the program must be present for a program to be counted as sustained.

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ANNEXURE 1: List of Certified District Hospitals under National Quality Assurance Standards

State Name	Haryana				Gujarat			
Facility Name	Civil Hospital-Panchkula	Civil Hospital-Gurugram	Civil Hospital-Rohtak	B.K. Hospital Faridabad	General Hospital-Vyara(Tapi)	General Hospital-Mehsana	PKG Rajkot	General Hospital-Nadiad(Kheda)
Overall Score	86%	83%	96%	85%	86%	83%	84%	74%
Area of Concern								
Service Provision	84%	90%	85%	88%	87%	86%	71%	78%
Patient's Right	84%	85%	99%	81%	85%	85%	84%	73%
Input	89%	84%	97%	85%	84%	84%	77%	77%
Support Services	88%	84%	97%	83%	86%	82%	83%	71%
Clinical Services	85%	84%	95%	81%	89%	83%	74%	78%
Infection Control	93%	82%	99%	72%	90%	84%	83%	76%
Quality Management	76%	76%	92%	75%	74%	77%	74%	76%
Outcome	81%	86%	97%	85%	71%	83%	71%	88%
Department Wise Score								
Accident and Emergency	85%	78%	99%	86%	79%	82%	78%	74%
OPD	80%	86%	86%	79%	74%	84%	81%	78%
Maternity wards	87%	87%	98%	85%	92%	86%	87%	72%
IPD	87%	79%	92%	88%	88%	81%	84%	79%
Labour Room	96%	87%	99%	91%	92%	82%	90%	74%
Pediatric ward	90%	73%	95%	90%	89%	79%	83%	80%
NRC	91%				86%	83%	0%	72%
SNCU	88%	72%	99%	82%	85%	79%	88%	71%
ICU	91%	73%			82%	0%	0%	72%

Operation Theatre	87%	83%	98%	84%	86%	85%	85%	82%
Blood Bank	86%	71%		92%	0%	88%	0%	0%
Radiology	84%	96%	98%	93%	81%	80%	82%	58%
Laboratory	89%	85%	87%	84%	80%	79%	82%	71%
Pharmacy and Stores	77%	95%	93%	92%	89%	82%	91%	68%
Auxillary Services	76%	78%	98%	71%	84%	82%	77%	73%
Post-partum Unit	76%	96%	99%	81%	86%	87%	88%	87%
Mortuary	91%	72%		78%	83%	76%	0%	66%
General Administration	83%	93%	97%	82%	84%	84%	82%	74%
Standard-wise Score								
Standard A1.	78%	86%	76%	84%	81%	86%	64%	78%
Standard A2	97%	90%	98%	87%	91%	97%	83%	86%
Standard A3.	89%	90%	83%	87%	83%	76%	61%	63%
Standard A4	70%	88%	82%	93%	87%	74%	69%	67%
Standard A5.	87%	88%	90%	96%	96%	98%	79%	96%
Standard A6.	100%	88%	86%	81%	94%	88%	81%	86%
Standard B1.	81%	74%	99%	79%	77%	84%	79%	65%
Standard B2.	87%	89%	99%	86%	81%	66%	82%	61%
Standard B3.	94%	93%	99%	86%	92%	92%	87%	78%
Standard B4.	88%	88%	96%	71%	84%	79%	80%	77%
Standard B5.	78%	84%	99%	83%	96%	100%	91%	88%
Standard C1.	86%	72%	83%	81%	83%	84%	78%	69%
Standard C2.	84%	70%	97%	81%	84%	78%	81%	60%
Standard C3.	86%	70%	99%	84%	77%	75%	80%	82%
Standard C4.	86%	85%	97%	81%	88%	84%	70%	75%
Standard C5.	98%	92%	97%	91%	94%	96%	89%	97%
Standard C6.	92%	89%	97%	87%	89%	89%	77%	82%

Standard D1.	87%	70%	94%	91%	64%	55%	80%	15%
Standard D2.	82%	87%	96%	89%	90%	85%	84%	56%
Standard D3.	91%	85%	97%	83%	79%	80%	79%	70%
Standard D4.	96%	74%	98%	75%	88%	86%	86%	81%
Standard D5.	91%	91%	100%	91%	91%	81%	82%	71%
StandardD6	78%	51%	77%	53%	96%	95%	73%	77%
Standard D7.	88%	77%	99%	64%	89%	79%	85%	85%
Standard D8	100%	100%	100%	100%	90%	90%	80%	75%
Standard D9	75%	100%	100%	94%	69%	100%	100%	88%
Standard D10.	84%	100%	95%	93%	78%	74%	95%	64%
Standard D11.	84%	92%	99%	96%	100%	94%	88%	91%
Standard D12	79%	85%	100%	75%	100%	86%	52%	50%
Standard E1.	88%	93%	100%	89%	95%	92%	81%	86%
Standard E2.	86%	88%	100%	88%	96%	98%	66%	82%
Standard E3.	66%	71%	98%	75%	84%	81%	64%	63%
Standard E4.	90%	73%	95%	69%	98%	87%	69%	85%
Standard E5.	92%	79%	98%	90%	100%	100%	75%	81%
Standard E6.	80%	70%	98%	87%	82%	42%	48%	43%
Standard E7.	84%	70%	100%	75%	93%	82%	76%	68%
Standard E8.	86%	90%	98%	88%	88%	88%	71%	84%
Standard E9.	92%	82%	93%	76%	90%	91%	85%	91%
Standard E10.	77%	58%	100%	100%	92%	0%	50%	46%
Standard E11.	80%	62%	100%	69%	61%	55%	75%	45%
Standard E12.	84%	88%	93%	93%	88%	79%	82%	69%
Standard E13.	89%	82%	96%	92%	79%	94%	61%	100%
Standard E14	97%	100%	100%	97%	100%	86%	77%	100%
Standard E15.	80%	87%	100%	89%	100%	84%	74%	100%

Standard E16.	99%	81%	100%	86%	88%	96%	78%	88%
Standard E17	80%	98%	100%	93%	100%	93%	80%	93%
Standard E18	97%	90%	100%	99%	97%	97%	100%	97%
Standard E19	100%	97%	100%	94%	100%	100%	100%	88%
Standard E20	88%	77%	98%	86%	95%	88%	69%	66%
Standard E21	63%	100%	100%	83%	91%	100%	100%	100%
Standard E22	100%	100%	93%	83%	83%	100%	80%	100%
Standard E23	69%	96%	52%	76%	96%	52%	88%	88%
Standard F1.	87%	76%	97%	65%	81%	89%	73%	59%
Standard F2.	95%	82%	100%	75%	94%	86%	87%	91%
Standard F3.	93%	87%	100%	83%	98%	87%	82%	79%
Standard F4.	91%	77%	96%	72%	86%	82%	78%	67%
Standard F5.	89%	79%	99%	67%	88%	77%	83%	74%
Standard F6.	97%	80%	100%	72%	92%	86%	87%	80%
Standard G1	91%	98%	100%	94%	89%	80%	95%	63%
Standard G2	62%	72%	100%	67%	69%	78%	72%	67%
Standard G3.	68%	75%	86%	68%	65%	73%	70%	36%
Standard G4.	78%	83%	94%	87%	78%	92%	75%	84%
Standard G5.	92%	69%	96%	67%	67%	37%	72%	56%
Standard G6.	64%	77%	84%	60%	84%	89%	81%	76%
Standard G7.	89%	65%	100%	70%	64%	55%	46%	51%
Standard G8.	79%	51%	82%	61%	62%	43%	45%	52%
Standard H1.	77%	91%	100%	92%	79%	90%	79%	94%
Standard H2.	73%	80%	99%	84%	66%	83%	78%	82%
Standard H3.	89%	79%	96%	74%	70%	77%	55%	87%
Standard H4.	87%	77%	91%	80%	66%	78%	73%	86%

State Name	Punjab					Andhra Pradesh				
Facility Name	CH Amritsar (JBBM)	CH-Pathankot	CH Nawanshahar	DH Faridkot	A.P. Jain Civil Hospital Rajpura, Patiala	DH-Vizianagram	DH-Rajamahendravaram	DH-Anakapalli	DH Eluru, West Godavari District	DH Machilipatnm, Krishna Distt
Overall Score	88%	87%	90%	85%	92%	86%	93%	83%	94%	89%
Area of Concern										
Service Provision	95%	93%	88%	84%	88%	91%	94%	81%	93%	90%
Patient's Right	93%	95%	92%	89%	96%	84%	97%	82%	95%	88%
Input	89%	85%	90%	87%	92%	86%	93%	85%	93%	86%
Support Services	86%	90%	93%	87%	91%	90%	95%	89%	95%	89%
Clinical Services	86%	85%	93%	85%	93%	88%	93%	85%	93%	84%
Infection Control	93%	90%	94%	85%	93%	91%	96%	88%	97%	92%
Quality Management	77%	75%	79%	79%	87%	71%	84%	68%	90%	83%
Outcome	90%	85%	81%	85%	91%	93%	86%	81%	92%	89%
Department Wise Score										
Accident and Emergency	81%	91%	85%	89%	91%	85%	90%	83%	98%	84%
OPD	96%	91%	91%	86%	92%	83%	87%	84%	89%	89%
Maternity wards	76%	90%	90%	87%	96%	94%	93%	92%	92%	94%
IPD	91%	78%	92%	71%	93%	77%	95%	79%	97%	89%
Labour Room	78%	92%	92%	88%	94%	97%	96%	90%	94%	89%
Pediatric ward	83%	75%	91%	86%	0%	86%	94%	0%	95%	91%
NRC	0%	0%	0%	0%	0%	91%	0%	0%	96%	0%
SNCU	85%	85%	0%	0%	0%	99%	95%	0%	94%	83%
ICU	0%	0%	0%	0%	0%	52%	93%	0%	98%	84%
Operation Theatre	89%	88%	92%	89%	92%	84%	96%	88%	89%	86%

Blood Bank	94%	85%	0%	0%	95%	81%	97%	75%	91%	97%
Radiology	84%	89%	90%	91%	89%	73%	80%	77%	90%	92%
Laboratory	94%	81%	79%	82%	87%	94%	91%	78%	89%	84%
Pharmacy and Stores	97%	87%	91%	75%	90%	83%	88%	86%	90%	97%
Auxillary Services	89%	80%	86%	74%	88%	92%	90%	79%	98%	86%
Post-partum Unit	97%	93%	90%	89%	96%	91%	94%	93%	95%	93%
Mortuary	84%	91%	89%	0%	88%	75%	93%	80%	80%	82%
General Administration	89%	86%	93%	89%	88%	94%	95%	78%	98%	86%
Standard-wise Score										
Standard A1.	91%	0%	88%	80%	92%	87%	93%	72%	92%	92%
Standard A2	88%	0%	93%	76%	88%	96%	97%	87%	97%	89%
Standard A3.	86%	0%	72%	76%	85%	82%	91%	88%	91%	96%
Standard A4	96%	0%	92%	80%	83%	93%	91%	79%	88%	87%
Standard A5.	98%	0%	90%	80%	96%	96%	98%	96%	98%	90%
Standard A6.	94%	0%	86%	75%	81%	94%	94%	75%	94%	81%
Standard B1.	86%	0%	92%	76%	96%	70%	96%	72%	94%	86%
Standard B2.	94%	0%	90%	85%	94%	86%	91%	82%	92%	88%
Standard B3.	93%	0%	96%	86%	94%	88%	99%	96%	96%	96%
Standard B4.	85%	0%	98%	80%	98%	85%	99%	67%	90%	78%
Standard B5.	87%	0%	88%	79%	99%	100%	99%	99%	99%	92%
Standard C1.	82%	0%	85%	72%	94%	91%	94%	95%	90%	85%
Standard C2.	70%	0%	88%	78%	88%	80%	85%	83%	88%	86%
Standard C3.	76%	0%	88%	80%	97%	70%	88%	52%	80%	90%
Standard C4.	87%	0%	90%	79%	87%	89%	96%	81%	94%	82%
Standard C5.	88%	0%	97%	82%	97%	90%	97%	95%	99%	85%

Standard C6.	88%	0%	88%	79%	95%	93%	98%	89%	96%	87%
Standard D1.	73%	0%	89%	68%	95%	76%	89%	76%	89%	91%
Standard D2.	79%	0%	91%	75%	92%	87%	92%	85%	95%	81%
Standard D3.	86%	0%	91%	78%	93%	92%	95%	91%	96%	88%
Standard D4.	86%	0%	97%	82%	84%	91%	98%	98%	93%	93%
Standard D5.	78%	0%	86%	83%	83%	94%	98%	90%	99%	94%
StandardD6	50%	0%	88%	54%	78%	92%	100%	70%	98%	76%
Standard D7.	86%	0%	95%	74%	97%	95%	90%	92%	97%	88%
Standard D8	50%	0%	100%	100%	90%	85%	100%	70%	100%	65%
Standard D9	100%	0%	100%	100%	81%	100%	100%	88%	100%	100%
Standard D10.	83%	0%	89%	95%	93%	79%	88%	79%	97%	76%
Standard D11.	90%	0%	97%	83%	99%	95%	96%	96%	98%	96%
Standard D12	77%	0%	93%	81%	100%	94%	88%	95%	96%	90%
Standard E1.	84%	0%	94%	83%	98%	92%	100%	94%	98%	82%
Standard E2.	86%	0%	94%	78%	95%	93%	98%	95%	100%	89%
Standard E3.	72%	0%	100%	67%	83%	93%	91%	100%	90%	87%
Standard E4.	71%	0%	99%	74%	90%	91%	99%	90%	95%	86%
Standard E5.	71%	0%	94%	65%	100%	94%	98%	100%	98%	88%
Standard E6.	76%	0%	92%	68%	84%	93%	92%	69%	98%	90%
Standard E7.	75%	0%	89%	72%	89%	82%	95%	89%	96%	83%
Standard E8.	86%	0%	91%	77%	90%	82%	99%	83%	98%	82%
Standard E9.	80%	0%	99%	76%	100%	91%	99%	91%	100%	83%
Standard E10.	100%	0%	0%	50%	0%	15%	96%	0%	100%	62%
Standard E11.	68%	0%	85%	72%	79%	61%	67%	62%	83%	87%
Standard E12.	77%	0%	82%	88%	93%	83%	96%	88%	87%	93%
Standard E13.	85%	0%	96%	64%	99%	96%	98%	96%	98%	87%
Standard E14	93%	0%	100%	87%	100%	93%	100%	96%	97%	57%
Standard E15.	92%	0%	76%	95%	95%	89%	100%	92%	97%	84%

Standard E16.	85%	0%	98%	73%	100%	92%	100%	80%	92%	85%
Standard E17	92%	0%	91%	98%	100%	100%	98%	98%	97%	98%
Standard E18	92%	0%	94%	93%	97%	100%	100%	100%	100%	72%
Standard E19	91%	0%	91%	91%	88%	88%	100%	100%	94%	91%
Standard E20	84%	0%	99%	83%	90%	86%	95%	100%	100%	86%
Standard E21	96%	0%	100%	100%	100%	100%	100%	96%	91%	100%
Standard E22	100%	0%	73%	100%	100%	100%	100%	90%	100%	100%
Standard E23	100%	0%	87%	51%	92%	92%	51%	50%	51%	51%
Standard F1.	76%	0%	95%	72%	86%	86%	84%	81%	96%	88%
Standard F2.	91%	0%	100%	79%	98%	90%	98%	91%	97%	93%
Standard F3.	89%	0%	100%	77%	93%	96%	98%	90%	98%	90%
Standard F4.	85%	0%	91%	70%	92%	92%	96%	88%	96%	88%
Standard F5.	88%	0%	93%	71%	88%	92%	96%	87%	96%	93%
Standard F6.	91%	0%	89%	78%	96%	89%	99%	89%	98%	94%
Standard G1	84%	0%	90%	91%	100%	98%	100%	67%	100%	92%
Standard G2	69%	0%	98%	60%	90%	81%	84%	50%	98%	93%
Standard G3.	83%	0%	69%	74%	85%	74%	94%	66%	94%	86%
Standard G4.	81%	0%	84%	76%	94%	75%	93%	84%	95%	88%
Standard G5.	50%	0%	76%	61%	63%	36%	75%	29%	83%	79%
Standard G6.	71%	0%	73%	70%	83%	86%	92%	68%	86%	83%
Standard G7.	69%	0%	86%	75%	93%	78%	84%	62%	76%	78%
Standard G8.	54%	0%	73%	54%	75%	31%	41%	51%	81%	60%
Standard H1.	92%	0%	78%	87%	95%	96%	92%	86%	96%	93%
Standard H2.	81%	0%	81%	74%	95%	96%	88%	80%	96%	88%
Standard H3.	83%	0%	85%	73%	88%	91%	80%	78%	86%	85%
Standard H4.	88%	0%	81%	61%	82%	87%	81%	79%	84%	89%

State Name	West Bengal		Delhi	Karnataka			Mizoram
Facility Name	MJN Hospital, Coochbhear	Siliguri DH	Pt. Madan Mohan Malivaya Hospital	District Hospital-Koppal	District Hospital-Tumakuru	District Hospital-Vijayapura	District Hospital-Aizwal (West)
Overall Score	73%	88%	91%	92%	90%	86%	81%
Area of Concern							
Service Provision	85%	84%	78%	94%	92%	87%	87%
Patient's Right	80%	86%	92%	92%	86%	85%	84%
Input	82%	82%	89%	92%	83%	86%	82%
Support Services	77%	86%	92%	91%	95%	83%	80%
Clinical Services	78%	86%	90%	94%	91%	85%	83%
Infection Control	80%	89%	95%	95%	93%	93%	85%
Quality Management	29%	82%	92%	84%	91%	83%	72%
Outcome	10%	91%	91%	90%	82%	84%	76%
Department Wise Score							
Accident and Emergency	76%	87%	98%	0%	0%	0%	72%
OPD	67%	80%	89%	0%	0%	0%	75%
Maternity wards	75%	93%	88%	91%	95%	83%	83%
IPD	71%	76%	88%	0%	0%	0%	77%
Labour Room	76%	94%	89%	98%	83%	85%	83%
Pediatric ward	70%	80%	95%	87%	95%	81%	76%
NRC	0%	0%	0%	0%	0%	0%	0%
SNCU	77%	97%	90%	91%	95%	90%	81%
ICU	76%	90%	0%	92%	87%	83%	82%
Operation Theatre	75%	94%	91%	93%	92%	89%	86%
Blood Bank	70%	97%	0%	90%	97%	94%	91%
Radiology	75%	82%	87%	0%	0%	0%	83%
Laboratory	59%	76%	97%	0%	0%	0%	82%

Pharmacy and Stores	86%	87%	90%	0%	0%	0%	86%
Auxillary Services	73%	89%	97%	0%	0%	0%	88%
Post-partum Unit	71%	94%	88%	94%	77%	0%	80%
Mortuary	0%	0%	0%	0%	0%	0%	83%
General Administration	72%	86%	87%	0%	0%	0%	82%
Standard-wise Score							
Standard A1.	90%	88%	76%	94%	97%	86%	91%
Standard A2	86%	85%	81%	97%	99%	95%	86%
Standard A3.	89%	83%	89%	93%	64%	88%	93%
Standard A4	65%	71%	66%	82%	77%	59%	75%
Standard A5.	98%	87%	90%	0%	0%	0%	92%
Standard A6.	75%	94%	79%	100%	100%	75%	100%
Standard B1.	64%	84%	93%	84%	82%	78%	88%
Standard B2.	90%	70%	85%	81%	69%	95%	79%
Standard B3.	87%	89%	96%	98%	88%	85%	94%
Standard B4.	76%	94%	98%	96%	84%	78%	82%
Standard B5.	93%	94%	92%	100%	99%	92%	61%
Standard C1.	84%	75%	82%	87%	83%	81%	74%
Standard C2.	84%	77%	85%	94%	87%	78%	73%
Standard C3.	79%	86%	97%	86%	57%	73%	76%
Standard C4.	83%	85%	88%	94%	93%	83%	86%
Standard C5.	87%	91%	98%	98%	94%	97%	77%
Standard C6.	88%	83%	92%	97%	85%	91%	92%
Standard D1.	63%	85%	88%	95%	97%	59%	60%
Standard D2.	76%	85%	91%	86%	92%	82%	63%
Standard D3.	76%	88%	97%	81%	91%	87%	85%
Standard D4.	88%	86%	95%	97%	98%	99%	89%
Standard D5.	77%	82%	83%	97%	100%	83%	86%

StandardD6	46%	72%	100%	80%	100%	50%	63%
Standard D7.	72%	93%	96%	97%	94%	83%	93%
Standard D8	70%	55%	90%	0%	0%	0%	85%
Standard D9	50%	100%	88%	0%	0%	0%	81%
Standard D10.	79%	79%	86%	100%	100%	100%	83%
Standard D11.	91%	90%	92%	100%	100%	100%	89%
Standard D12	90%	77%	82%	81%	100%	57%	84%
Standard E1.	84%	89%	91%	100%	97%	99%	95%
Standard E2.	88%	88%	92%	97%	86%	95%	94%
Standard E3.	60%	79%	77%	87%	100%	84%	69%
Standard E4.	85%	88%	90%	96%	93%	81%	85%
Standard E5.	96%	92%	85%	93%	100%	50%	93%
Standard E6.	68%	90%	90%	100%	54%	52%	61%
Standard E7.	90%	84%	95%	93%	85%	80%	73%
Standard E8.	89%	90%	94%	99%	93%	94%	95%
Standard E9.	73%	90%	95%	98%	97%	88%	88%
Standard E10.	69%	96%	100%	100%	88%	54%	100%
Standard E11.	47%	73%	93%	68%	98%	54%	72%
Standard E12.	68%	84%	85%	77%	80%	100%	91%
Standard E13.	78%	88%	96%	93%	96%	96%	94%
Standard E14	87%	100%	96%	100%	100%	92%	93%
Standard E15.	100%	100%	89%	100%	88%	96%	92%
Standard E16.	75%	94%	99%	92%	96%	94%	82%
Standard E17	95%	97%	90%	100%	100%	100%	95%
Standard E18	86%	100%	92%	99%	88%	99%	99%
Standard E19	88%	88%	75%	100%	100%	84%	94%
Standard E20	67%	84%	100%	75%	100%	63%	77%
Standard E21	96%	96%	80%	100%	74%	0%	87%

Standard E22	93%	97%	90%	0%	0%	0%	100%
Standard E23	48%	51%	67%	0%	0%	0%	49%
Standard F1.	62%	88%	92%	90%	100%	88%	64%
Standard F2.	81%	90%	98%	91%	92%	98%	89%
Standard F3.	86%	94%	98%	96%	87%	94%	98%
Standard F4.	85%	89%	90%	100%	92%	88%	81%
Standard F5.	76%	89%	92%	94%	94%	91%	92%
Standard F6.	86%	88%	97%	96%	95%	97%	85%
Standard G1	52%	94%	100%	100%	100%	100%	95%
Standard G2	43%	74%	100%	92%	100%	100%	82%
Standard G3.	49%	81%	89%	95%	100%	85%	68%
Standard G4.	14%	90%	92%	84%	89%	91%	75%
Standard G5.	42%	67%	100%	71%	92%	69%	61%
Standard G6.	44%	81%	95%	92%	96%	92%	71%
Standard G7.	29%	80%	89%	79%	100%	69%	67%
Standard G8.	9%	58%	81%	72%	79%	55%	61%
Standard H1.	6%	96%	98%	92%	76%	94%	84%
Standard H2.	13%	84%	94%	91%	79%	90%	70%
Standard H3.	10%	91%	85%	86%	85%	73%	70%
Standard H4.	11%	94%	84%	94%	94%	75%	79%

State Name	Madhya Pradesh	Rajasthan	Odisha	Uttar Pradesh			Dadar & Nagar Haveli
Facility Name	Sardar Vallabh Bhai Patel Jila Hospital - Satna	DH Rajsamand	District Headquarters Hospital- Koraput	Veerangana Avantibai Mahila Hospital- Lucknow	Dr. Bhim Rao Ambedkar District Male Hospital- Etawah	District Women Hospital - Ghaziabad	Shri. Vinoba Bhave Civil Hospital- Silvassa
Overall Score	76%	82%	91%	82%	82%	86.20%	96%
Area of Concern							
Service Provision	87%	83%	74%	94.10%	75%	88.69%	98%
Patient's Right	79%	88%	79%	93.40%	86%	90.15%	93%
Input	79%	82%	77%	80.60%	85%	83.31%	94%
Support Services	76%	84%	79%	82.60%	83%	85.48%	96%
Clinical Services	78%	84%	76%	81.50%	81%	87.48%	99%
Infection Control	73%	88%	75%	84.50%	87%	86.56%	97%
Quality Management	74%	70%	71%	71.90%	76%	83.10%	93%
Outcome	69%	72%	71%	75.60%	85%	93.04%	93%
Department Wise Score							
Accident and Emergency	75%	84%	0%	87.30%	79%	80%	98%
OPD	63%	80%	0%	73.60%	77%	84.30%	95%
Maternity wards	74%	81%	95%	75.90%	0%	90.20%	97%
IPD	62%	87%	0%	0%	88%	0%	92%
Labour Room	81%	89%	94%	76%	0%	78%	98%
Pediatric ward	65%	80%	92%	0%	0%	0%	95%
NRC	87%	87%	95%	0%	83%	0%	0%
SNCU	94%	70%	93%	83.40%	0%	96.50%	97%
ICU	0%	80%	0%	0%	0%	0%	97%

Operation Theatre	81%	84%	93%	90%	90%	87%	97%
Blood Bank	80%	84%	89%	0%	80%	0%	0%
Radiology	73%	83%	88%	77.50%	90%	0%	94%
Laboratory	69%	82%	88%	83.70%	71%	78%	97%
Pharmacy and Stores	86%	76%	0%	80%	90%	87.90%	93%
Auxillary Services	64%	76%	0%	74.40%	85%	76.80%	89%
Post-partum Unit	88%	81%	0%	88.70%	0%	93%	0%
Mortuary	69%	78%	0%	0%	0%	0%	96%
General Administration	76%	76%	86%	86.20%	80%	87.80%	94%
Standard-wise Score							
Standard A1.	85%	79%	65%	99%	81%	80.43%	90%
Standard A2	97%	87%	86%	96%	100%	94%	84%
Standard A3.	86%	84%	77%	81%	75%	73.81%	96%
Standard A4	79%	81%	66%	96%	61%	95.83%	99%
Standard A5.	85%	94%	64%	97%	75%	100%	96%
Standard A6.	88%	75%	69%	75%	88%	75%	94%
Standard B1.	76%	84%	76%	94%	83%	86.52%	86%
Standard B2.	71%	76%	71%	90%	79%	91.13%	77%
Standard B3.	85%	93%	75%	96%	91%	95.10%	89%
Standard B4.	72%	90%	77%	91%	92%	86.46%	86%
Standard B5.	88%	96%	86%	95%	87%	94.53%	91%
Standard C1.	75%	83%	82%	87%	85%	77.85%	81%
Standard C2.	76%	74%	71%	83%	85%	84.25%	84%
Standard C3.	78%	68%	73%	70%	84%	86.15%	90%
Standard C4.	75%	75%	75%	79%	79%	80.12%	91%
Standard C5.	93%	97%	74%	82%	93%	97.27%	94%
Standard C6.	80%	92%	76%	73%	82%	82.35%	89%

Standard D1.	64%	53%	81%	77%	67%	88.28%	88%
Standard D2.	86%	79%	74%	67%	73%	86.97%	86%
Standard D3.	76%	85%	77%	86%	79%	82.17%	89%
Standard D4.	62%	96%	77%	97%	94%	89.02%	90%
Standard D5.	80%	90%	80%	94%	90%	78.43%	91%
StandardD6	71%	59%	74%	68%	95%	70.45%	82%
Standard D7.	77%	94%	72%	75%	89%	83.75%	89%
Standard D8	75%	95%	80%	60%	45%	60%	85%
Standard D9	100%	94%	100%	81%	75%	87.50%	100%
Standard D10.	79%	81%	83%	71%	85%	100%	93%
Standard D11.	96%	96%	80%	94%	90%	96.72%	93%
Standard D12	76%	100%	79%	75%	89%	65.79%	90%
Standard E1.	83%	92%	74%	85%	84%	89.66%	89%
Standard E2.	78%	85%	77%	81%	93%	91.89%	86%
Standard E3.	72%	76%	78%	72%	78%	93.08%	93%
Standard E4.	79%	90%	79%	78%	85%	83.02%	90%
Standard E5.	95%	90%	77%	84%	86%	90%	92%
Standard E6.	67%	68%	69%	81%	82%	73.96%	93%
Standard E7.	80%	84%	73%	78%	80%	76.35%	90%
Standard E8.	78%	84%	75%	73%	93%	89.24%	90%
Standard E9.	76%	91%	76%	92%	83%	98.81%	87%
Standard E10.	100%	38%	54%	100%	0%	100%	100%
Standard E11.	65%	47%	60%	71%	66%	80.91%	92%
Standard E12.	79%	87%	84%	89%	85%	70.69%	96%
Standard E13.	88%	86%	82%	95%	84%	92.42%	75%
Standard E14	93%	93%	90%	75%	100%	91.67%	97%
Standard E15.	95%	76%	84%	93%	93%	82.14%	89%

Standard E16.	86%	87%	67%	93%	94%	100%	97%
Standard E17	67%	97%	57%	70%	0%	100%	97%
Standard E18	97%	97%	100%	81%	0%	81.94%	100%
Standard E19	94%	97%	97%	89%	0%	78.13%	100%
Standard E20	72%	80%	68%	81%	63%	96.15%	88%
Standard E21	100%	100%	50%	100%	0%	100%	100%
Standard E22	70%	100%	50%	100%	0%	100%	100%
Standard E23	50%	50%	51%	47%	50%	88.89%	100%
Standard F1.	70%	65%	53%	82%	85%	80.56%	90%
Standard F2.	78%	92%	78%	85%	94%	91.67%	88%
Standard F3.	79%	87%	76%	90%	89%	91.67%	91%
Standard F4.	76%	90%	75%	77%	76%	85.98%	86%
Standard F5.	64%	88%	74%	77%	81%	86.24%	89%
Standard F6.	73%	93%	76%	83%	95%	92.05%	87%
Standard G1	94%	78%	78%	78%	85%	84.62%	95%
Standard G2	60%	47%	72%	87%	92%	78.57%	90%
Standard G3.	67%	68%	67%	94%	80%	72.83%	91%
Standard G4.	84%	48%	75%	69%	83%	88.91%	88%
Standard G5.	61%	1%	50%	81%	59%	74.24%	69%
Standard G6.	74%	39%	72%	66%	89%	82.69%	86%
Standard G7.	76%	11%	79%	67%	75%	86.11%	89%
Standard G8.	42%	5%	57%	70%	43%	77.59%	80%
Standard H1.	84%	81%	68%	65%	83%	92.06%	86%
Standard H2.	63%	54%	75%	84%	87%	90%	88%
Standard H3.	63%	48%	68%	85%	86%	95.76%	90%
Standard H4.	60%	49%	69%	63%	84%	94.44%	81%

ANNEXURE 2: List of Deferred/Declined District Hospitals Under National Quality Assurance Standards

State Name	Andhra Pradesh				Gujarat	Bihar	Uttar Pradesh
Facility Name	AH Gudur	AH Chirala	DH Tenali	AH Hindupur	DH Amreli	Sadar Hospital, Motihari	DWH Lalitpur
Overall Score	57%	75%	83%	81%	70%	62%	71.70%
Area of Concern							
Service Provision	65%	71%	79%	74%	78%	66%	85.60%
Patient's Right	61%	86%	88%	78%	75%	67%	86.80%
Input	55%	72%	86%	72%	74%	65%	76.50%
Support Services	58%	83%	89%	81%	73%	63%	78.90%
Clinical Services	64%	75%	83%	75%	74%	66%	70.90%
Infection Control	62%	76%	89%	77%	68%	60%	85.50%
Quality Management	38%	63%	69%	62%	43%	49%	37.50%
Outcome	59%	74%	75%	75%	41%	55%	42.50%
Department Wise Score							
Accident and Emergency	66%	82%	80%	79%	70%	69%	70.90%
OPD	53%	72%	77%	75%	63%	66%	72.60%
Labour Room	77%	84%	92%	88%	75%	86%	77.50%
Maternity wards	65%	80%	89%	86%	77%	82%	71.30%
IPD	50%	75%	86%	82%	68%	67%	0.00%
NRC	0%	0%	0%	0%	78%	0%	0.00%
Pediatric ward	63%	75%	75%	91%	74%	0%	0.00%
SNCU	0%	0%	89%	0%	69%	69%	74.80%
ICU	0%	0%	0%	0%	0%	0%	0.00%
Operation Theatre	60%	79%	88%	75%	68%	74%	72.70%
Post-partum Unit	51%	63%	91%	82%	70%	0%	64.40%
Blood Bank	69%	80%	85%	88%	0%	0%	0.00%
Laboratory	56%	81%	87%	91%	80%	44%	71.30%
Radiology	48%	79%	89%	79%	68%	0%	63.50%
Pharmacy and Stores	59%	81%	82%	83%	75%	0%	71.50%
Auxillary Services	15%	39%	78%	64%	58%	0%	70.70%
Mortuary	37%	62%	58%	0%	72%	70%	0.00%
General Administration	63%	78%	77%	74%	60%	68%	75.10%
Standard-wise Score							
Standard A1.	63%	70%	77%	69%	69%	66%	78%
Standard A2	74%	66%	84%	77%	87%	67%	93.10%
Standard A3.	59%	91%	93%	76%	71%	56%	70.80%

ANNEXURE 2: List of Deferred/Declined District Hospitals Under National Quality Assurance Standards

State Name	Andhra Pradesh				Gujarat	Bihar	Uttar Pradesh
Facility Name	AH Gudur	AH Chirala	DH Tenali	AH Hindupur	DH Amreli	Sadar Hospital, Motihari	DWH Lalitpur
Standard A4	57%	56%	61%	76%	75%	63%	91.60%
Standard A5.	70%	96%	96%	77%	98%	77%	86.80%
Standard A6.	69%	69%	75%	75%	81%	88%	87.50%
Standard B1.	40%	82%	86%	74%	62%	63%	82.90%
Standard B2.	64%	79%	76%	82%	80%	67%	85.90%
Standard B3.	67%	92%	90%	86%	82%	72%	90.90%
Standard B4.	59%	82%	90%	68%	73%	67%	83%
Standard B5.	91%	99%	99%	82%	87%	69%	94.10%
Standard C1.	57%	80%	87%	70%	85%	71%	76.50%
Standard C2.	56%	64%	79%	68%	54%	60%	80.60%
Standard C3.	29%	73%	83%	55%	65%	66%	87.10%
Standard C4.	62%	68%	85%	68%	68%	61%	68.80%
Standard C5.	83%	94%	94%	84%	85%	74%	85.80%
Standard C6.	56%	73%	89%	77%	82%	62%	71.50%
Standard D1.	49%	87%	93%	82%	45%	33%	50.60%
Standard D2.	46%	73%	83%	82%	74%	60%	79.40%
Standard D3.	68%	87%	89%	78%	72%	70%	82.60%
Standard D4.	63%	86%	92%	84%	74%	64%	88.20%
Standard D5.	61%	64%	88%	83%	77%	78%	77.30%
StandardD6	41%	81%	73%	68%	84%	49%	72.70%
Standard D7.	59%	81%	86%	81%	71%	70%	78.70%
Standard D8	90%	100%	80%	90%	60%	90%	60%
Standard D9	88%	100%	100%	100%	100%	100%	100%
Standard D10.	28%	79%	79%	67%	74%	64%	78.50%
Standard D11.	71%	91%	97%	84%	89%	76%	86.90%
Standard D12	67%	96%	100%	73%	69%	44%	70%
Standard E1.	79%	93%	85%	80%	90%	74%	85.80%
Standard E2.	76%	88%	95%	83%	85%	62%	81.00%
Standard E3.	68%	80%	83%	76%	69%	65%	58.20%
Standard E4.	67%	79%	80%	83%	80%	63%	66.90%
Standard E5.	67%	50%	90%	75%	73%	65%	84.30%
Standard E6.	62%	37%	72%	57%	46%	63%	45.80%
Standard E7.	69%	85%	78%	70%	64%	66%	68.20%
Standard E8.	57%	88%	87%	79%	85%	63%	60.80%
Standard E9.	62%	81%	89%	79%	80%	66%	67.80%
Standard E10.	NA	NA	50%	50%	50%	46%	50%
Standard E11.	35%	39%	71%	51%	52%	63%	74.10%
Standard E12.	56%	85%	85%	90%	73%	47%	68.60%
Standard E13.	67%	90%	83%	77%	72%	62%	78.70%
Standard E14	46%	64%	86%	67%	83%	83%	83.30%
Standard E15.	71%	82%	100%	95%	89%	84%	89.20%

ANNEXURE 2: List of Deferred/Declined District Hospitals Under National Quality Assurance Standards

State Name	Andhra Pradesh				Gujarat	Bihar	Uttar Pradesh
Facility Name	AH Gudur	AH Chirala	DH Tenali	AH Hindupur	DH Amreli	Sadar Hospital, Motihari	DWH Lalitpur
Standard E16.	68%	65%	88%	74%	76%	75%	77.10%
Standard E17	95%	83%	97%	93%	88%	90%	85.70%
Standard E18	89%	100%	100%	100%	97%	92%	86.10%
Standard E19	94%	91%	100%	88%	88%	100%	87.50%
Standard E20	63%	76%	76%	74%	90%	79%	94.20%
Standard E21	33%	57%	100%	87%	93%	50%	84.70%
Standard E22	23%	0%	90%	70%	20%	83%	50%
Standard E23	50%	48%	52%	52%	52%	49%	44.40%
Standard F1.	57%	73%	73%	72%	58%	37%	60%
Standard F2.	65%	78%	82%	83%	75%	66%	93.50%
Standard F3.	78%	81%	87%	80%	79%	75%	94.20%
Standard F4.	65%	80%	94%	75%	66%	63%	74.30%
Standard F5.	54%	74%	92%	79%	65%	65%	72.50%
Standard F6.	61%	72%	94%	72%	68%	56%	93.30%
Standard G1	80%	68%	81%	95%	63%	73%	77.70%
Standard G2	65%	91%	75%	72%	31%	40%	32.60%
Standard G3.	50%	77%	38%	78%	50%	40%	51.00%
Standard G4.	54%	83%	93%	71%	59%	60%	21.30%
Standard G5.	7%	0%	0%	20%	12%	31%	51.30%
Standard G6.	32%	82%	98%	71%	37%	45%	43.90%
Standard G7.	21%	10%	44%	43%	25%	39%	47.40%
Standard G8.	10%	36%	20%	27%	32%	35%	52.30%
Standard H1.	68%	81%	83%	76%	54%	68%	44.20%
Standard H2.	68%	70%	70%	73%	37%	51%	45%
Standard H3.	48%	74%	70%	73%	36%	51%	42.30%
Standard H4.	46%	66%	78%	80%	32%	44%	35%

ANNEXURE 3: Certification Criteria

Certification Criteria of DH under NQAS

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.

Award of Certification –

a) Certification – If health facility meets all of above-mentioned criteria.

i. Certification/recertification is valid for a period of three years, subject to validation of compliance to the QA Standards by the SQAC team every year for subsequent two years.

ii. In the third year, the facility would undergo re-certification assessment by the National Assessors after successful completion of two surveillance audits by the SQAC.

b) Certification with Conditionality – If a Health Facility's aggregate score is 70% or more (Criterion I), and also meets at least three criteria out of remaining five (Criterion II, III, IV, V & VI). Within agreed timeframe of six months, the facility is required to submit evidence of having addressed the reasons of conditionality, which may be verified by an external agency.

If the hospital does not meet the conditionality in stipulated time-frame, the QA certification may be revoked after giving one more chance for a period of six months.

c) Deferred Certification – The certification may be deferred until follow-up assessment if Hospital overall score is 70% in external assessment but does not meet the criteria for conditional certification as mentioned in Para (b) above. The window for follow-up assessment will be from 6 months to one year from the date of declaration of external assessment result.

d) Certification declined - If hospital does not score 70% in external assessment the certification will be declined. The hospital may freshly apply for certification but not before one year of declaration of external assessment result.

Criteria for Awards Scheme to the Public Health Facility under KAYAKALP

1. Constituted a Cleanliness and Infection Control Committee.
2. Instituted a mechanism of periodic internal assessment/peer assessment based on defined criteria.

3. Achieved at least 70% score in the criteria during the external assessment process

Selection of Facilities

a. **District Hospitals:** In the eligible States (States with more than 10 Districts), the number of Awards is based on number of District Hospitals as per following details.

State	No of District Hospitals	Number of Awards
Category A	10-25	One award plus commendation prize to other facilities scored over 70%
Category B	26-50	1st Prize, one runner up prize and commendation prize to other facilities scored over 70%
Category C	>50	1st Prize, two runners up prize and commendation prize to other facilities scored over 70%

b. **CHC/SDH Award:** In large state, the top two ranked CHCs/SDHs will receive an award. For small States, there will be only one award for the best facility in this category. In order to motivate, sustain and improve performance in facilities that score over 70%, a certificate of Commendation plus cash award would be given.

c. **PHC Award:** In every district, the best PHC (24×7) will receive a cash prize. In order to motivate, sustain and improve performance in facilities that score over 70%, a certificate of Commendation plus cash award would be given.

ANNEXURE 4: Number of winner Facilities scored 70% and above in KAYAKALP

S. No	Name of State/UT	DHs	Number of DHs under KAYAKALP Initiative scored more than 70%			SDH/CHC	Number of SDHs/CHC under KAYAKALP Initiative scored more than 70%			PHC	Number of PHC under KAYAKALP Initiative scored more than 70%		
			2015-2016	2016-2017	2017-2018		2015-2016	2016-2017	2017-2018		2015-2016	2016-2017	2017-2018
1	Andhra Pradesh	42	3		35	192	0	0	0	1157	0	0	0
2	Arunachal Pradesh	18	2	2	2	63	0	3	4	143	0	5	8
3	Assam	25	4	10	12	96	0	3	9	165	0	5	22
4	Bihar	35	4	4	2	200	0	1	2	347	0	10	0
5	Chandigarh	0	0	0	0	2	0	0	0	0	0	0	0
6	Chhattisgarh	23	8	5	4	172	0	11	22	630	0	34	62
7	Delhi	41	0	0	0		0	0	0	0	0	0	0
8	Goa	2	1	0	1	6	0	0	2	25	0	2	0
9	Gujarat	23	3	13	13	399	0	134	146	1474	0	361	440
10	Haryana	20	3	8	5	99	0	3	4	152	0	22	38
11	Himachal Pradesh	11	7	4	4	153	0	2	20	515	0	12	44
12	Jammu and Kashmir	23	2	0	3	76	0	0	2	204	0	6	0
13	Jharkhand	23	1	3	2	200	0	1	4	330	0	1	9
14	Karnataka	29	7	13	18	330	0	23	60	2190	0	69	212
15	Kerala	41	6	6	6	308	0	6	8	862	0	2	14
16	Madhya Pradesh	51	9	10	13	400	0	0	0	1170	0	22	0
17	Maharashtra	37	5	4	18	293	0	45	94	1259	0	60	0
18	Manipur	7	2	0	1	18	0	1	2	85	0	9	15
19	Meghalaya	12	2	3	6	28	0	4	5	110	0	16	17

20	Mizoram	9	2	5	7	11	0	7	6	57	0	42	45
21	Nagaland	11	2	3	0	21	0	3	0	126	0	9	0
22	Odisha	32	3	8	12	404	0	12	35	1226	0	0	13
23	Punjab	22	4	6	9	191	0	4	17	496	0	11	22
24	Rajasthan	27	4	12	8	569	0	24	46	895	0	0	77
25	Sikkim	0	2	0	2		0	2	0	16	0	13	4
26	Tamil Nadu	31	11	0	23	464	0	0	164	1362	0	0	186
27	Telangana	36	5	5	6	118	0	6	9	681	0	33	117
28	Tripura	7	1	1	2	31	0	2	6	94	0	6	14
29	Uttar Pradesh	157	11	13	37	260	0	11	25	350	0	2	54
30	Uttarakhand	20	3	5	7	70	0	2	4	255	0	4	5
31	West Bengal	21	6	6	9	409	0	25	51	908	0	5	30
32	Andaman and Nicobar Islands	0	0	0	0	4	0	0	0	22	0	0	0
33	Dadra and Nagar Haveli	0	0	0	0	3	0	1	0	7	0	3	0
34	Daman and Diu	0	0	0	0		0	0	0	0	0	0	0
35	Lakshadweep	1	0	0	0	4	0	0	0	4	0	0	0
36	Puducherry	5	0	0	0	4	0	0	0	39	0	0	0

ANNEXURE 5: Correlation Sheet

Facility Name	NQAS Score	Kayakalp Score
Civil Hospital- Panchkula	86%	98%
Civil Hospital- Gurugram	83%	85%
Civil Hospital- Rohtak	96%	94.80%
B.K. Hospital Faridabad	85%	76.83%
General Hospital- Vyara(Tapi)	81%	86.20%
General Hospital- Mehsana	91%	64.80%
PKG Rajkot	82%	78%
General Hospital- Nadiad(Kheda)	82%	90.20%
Jallian Wallan Bagh Martyrs Memorial CH Amritsar (JBBM)	86.20%	74.40%
Civil Hospital- Pathankot	86%	99.80%
CH Nawanshahar	83%	97.80%
DH Faridkot	84%	99.60%
A.P. Jain Civil Hospital Rajpura, Patiala	74%	89.80%
DH- Vizianagram	82%	99.40%
DH- Rajamahendravaram	88%	78.30%
DH- Anakapalli	87%	91.10%
DH Eluru, West Godavari District	90%	93.60%
DH Machilipatnm, Krishna Distt	85%	81%
MJN Hospital, Coochbhear	92%	66.80%
Siliguri DH	86%	99.80%
Pt. Madan Mohan Malivaya Hospital	93%	96.80%
District Hospital- Koppal	83%	67.60%
District Hospital- Tumakuru	94%	99.80%
District Hospital- Vijayapura	89%	99.80%
District Hospital- Aizwal (West)	96%	89.30%
Sardar Vallabh Bhai Patel Jila Hospital - Satna	92%	98.60%
DH Rajsamand	90%	92.20%
District Headquarters Hospital- Koraput	86%	81.20%
Veerangana Avantibai Mahila Hospital- Lucknow	76%	82%
Dr. Bhim Rao Ambedkar District Male Hospital- Etawah	91%	83.40%
District Women Hospital - Ghaziabad	73%	68.90%
Shri. Vinoba Bhave Civil Hospital- Silvassa	88%	92.40%

ANNEXURE 6: Key Performing Indicators for District Hospitals

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency
Productivity	1	Bed Occupancy Rate	Total Patient bed days (Midnight head count of each day added for the month of all patients) Exclusion – New-born in Maternity Wards and Day Care Patients	Product of Total number of functional beds in the hospital and days in the month Exclusion: - Labour Room Tables and Observation Beds	(Total Patient bed days *100/Functional beds*days in month)	Monthly
	2	Lab test done per thousand patients	Total number of tests done for both OPD and IPD patients Exclusion - Test done at Point of care	Total number of patients attended during the month Inclusion: - Both OPD and IPD cases	(Total number of lab tests done*1000/Total number of patients attended)	Monthly
	3	Percentage of cases of High Risk Pregnancy/obstetric complication out of total registered pregnancies at the facilities	Total number of high risk pregnancies registered at the facility Inclusion: -Severe Anaemia, PPH, PIH/Eclampsia/Pre-Eclampsia, Retained Placenta, HIV Positive Pregnant women, Septic Cases, Obstructed labour including C- Section Exclude: - Referral without any interventions	Total number of obstetric cases admitted in the hospital	Total number of complicated pregnancies registered at the facility*100/Total Obs admissions	Monthly

	4	Percentage of surgeries done in night out of total surgeries	Total major surgeries conducted during night including LSCS (8 PM to 8 AM) Exclusion – Minor Surgeries	Total major surgeries conducted in Hospital (Day+Night) Exclusion – Minor Surgeries	Total number of major surgeries conducted in night time*100/Total number of major surgeries conducted	Monthly
	5	Percentage of surgeries done during day out of total surgeries	Total number of planned major surgeries conducted during day time (8 AM TO 8 PM)	Total major surgeries conducted in Hospital (Day+Night)	Total number of planned major surgeries conducted*100/Total number of major surgeries	Monthly
	6	C-Section Rate	Total number of C-section delivery conducted	Total deliveries conducted	Total number of C-section deliveries conducted*100/ Total number of deliveries conducted	Monthly
Efficiency	7	Emergency Death Rate	Total number of deaths in emergency Exclusion: - Brought dead	Total number of registered patients in emergency Exclusion - Cases referred out	Total number of deaths in emergency*100/Total number of registered patients in emergency	Monthly
	8	Referral Out Rate	Total number of patients referred from the facility Inclusion: - Emergency and indoor cases Exclusion: - LAMA & absconding	Total admission in the facility Exclusion: - Day care Procedures	(No of cases referred out from the hospital*100/ Total no. of cases admitted)	Monthly

	9	Major Surgeries per surgeon	Total number of major surgeries conducted	Total number of surgeons appointed in the facility Inclusion: - Ortho, Gynae, Obs, General surgeon, EMOC trained doctors	Total number of major surgeries conducted/Total number of surgeons appointed	Monthly
	10	OPD Per doctor	Total number of patients attended in OPD	Total number of doctors available in the hospital Inclusion: Regular, contractual, Part Time Exclusion: - Doctors not engaged in OPD like MS, Radiologist, Microbiologist	Total number of Patient consulted in OPD/Total number of doctor appointed for OPD	Monthly
	11	External Quality Score for Lab tests (Median Value)			Take Median of all scores obtained (Arrange scores in increasing order- Pick the middle value if numbers are odd- Take average of middle two values if numbers are even)	Monthly

	12	Percentage of stock out of vital drugs (RMNCH+A)	Total stock outs occurred for essential commodities each day added for the month Inclusion – List of vital drugs(RMNCH+A)	Product of Total no. of Commodities and days in the month	Total no. of Stock out days for Essential Commodities*100/ Total no. of commodities*Days in Month	Monthly
Clinical care and safety	13	Maternal death rate	Total number of maternal deaths during the month	Total number of pregnant women admitted	Total maternal deaths*100/Total admission	Monthly
	14	Neonatal death rate	Total number of neonatal deaths Inclusion – Neonate died during first 28 days while admitted in the hospital including Out born admitted in neonate ward/SNCU Exclusion – Still Birth	Total no. of neonates admitted including live births in Hospital and out born admissions	Total number of neonatal deaths*100/No of Live births and Neonatal admission	Monthly
	15	Percentage of cases for which maternal death review done	Total number of maternal deaths review done during the month	Total number of maternal deaths occurred	Total number of maternal death review done*100/Total number of maternal deaths	Monthly
	16	Average length of stay	Total Patient bed days (Midnight head count of each day added for the month of all patients)	Total number of discharges. Inclusion: - Normal discharge, LAMA, Abscond, Referral, deaths	Total Patient bed days /Total Discharges	Monthly

	17	Surgical site infection rate	Total number of Surgical site infection detected (Any purulent discharge, absess, spreading cellulitis at surgical site during the month after the surgery)	Total number of surgeries conducted (major & minor surgeries)	(Total number of surgical site infection detected*100/Total number of surgeries Conducted)	Monthly
	18	Percentage of mortality out of total SNCU admissions	Total no of new-born deaths occurred in the SNCU Inclusion – Inborn and Out born	Total no of new born admitted in the SNCU Inclusion – Inborn and Out born	Total number of deaths in SNCU*100/Total new born admissions	Monthly
	19	Number of Sterilization failure			Total number of cases detected with sterilization failure Inclusion: -Failure cases after issuing of certificates of sterilization for both male and female sterilization	Monthly
	20	Number of Sterilization Complications			Total number of complications detected after male and female sterilization surgeries.	Monthly

	21	Number of deaths after Sterilization			Total number of deaths after male or female sterilization surgeries	Monthly
	22	Blood Replacement Rate	Total no. of Blood Unit issued on replacement in each day added for Month Exclusion – Blood Units issued without replacement	Total no of blood unit issued in the month Inclusion- Blood Unit issued without replacement	Total number of blood unit issued on replacement*100/Total number of blood units issued	Monthly
	23	Percentage of deliveries having partograph recorded	Total number of delivery cases where partograph filled completely Exclusion: - Partial or incomplete filled partograph	Total number of deliveries conducted Inclusion: - Cases shifted to OT	Number of delivery cases partograph recorded*100/Total number of deliveries conducted	Monthly
	24	Antibiotic Use Rate	No of OPD Slip/Indoor Case sheet found with prescription of IIIrd or IVth generation antibiotics during Monthly Prescription audit	Total no of case records reviewed during prescription audit (At least 30 each for OPD and IPD)	Total number of cases antibiotic prescribed*100/Total number of prescription audited	Monthly
Service Quality Indicator	25	Left against Medical advice (LAMA) Rate	Total number of LAMA patients from the facility Exclusion: - Abscond and referral cases	Total admission in the facility	(No. of LAMA Patients from the facility*100/Total no. of admission)	Monthly

	26	Patient Satisfaction Score (IPD)	Sum of *average satisfaction score* of each respondent (Average satisfaction score = sum total of scores of attributes/number of total attributes)	Total number of respondents	Mean of scores given by each patient in Patient satisfaction survey for indoor patients done each month on statistically adequate sample (at least 30)	Monthly
	27	Patient Satisfaction Score (OPD)	Sum of *average satisfaction score* of each respondent (Average satisfaction score = sum total of scores of attributes/number of total attributes)	Total number of respondents	Mean of scores given by each patient in Patient satisfaction survey for outdoor patients done each month on statistically adequate sample (at least 30)	Monthly
	28	Registration to Drug time			Average time taken by a patient from entering in queue for OPD registration to finally getting drugs at Pharmacy counter observed in time motion study done at peak hours on sample basis (at least 5% patients but not less than 30)	Monthly

	29	Percentage of JSY payments done before discharge	Total No. of JSY beneficiaries got payment before discharge	Total no. of JSY beneficiaries registered in the month	Total number of JSY payment before discharge*100/Total registered patients under JSY	Monthly
	30	Percentage of women provided drop back facility after delivery	Total no of women provided drop back each day added for month Exclusion – Referral transport to higher Centre	Total no. of deliveries conducted at the facility including C-Section	Total number of women provided drop back after delivery*100/Total number of deliveries conducted	Monthly

KAYAKALP

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