

**A STUDY TO FIND OUT THE GAPS IN THE SUSTENANCE OF
CERTIFICATION STATUS OF NQAS-CERTIFIED PUBLIC
HEALTH FACILITIES IN INDIA**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of

Master of Business Administration (MBA)

in

Hospital and Health Management

by

Dr. Shikha Sharma

Under the Supervision and Guidance of

Dr. Susmit Jain

2023

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2023

DECLARATION BY STUDENT

I hereby declare that this dissertation titled *A study to find out the gaps in the sustenance of certification status of NQAS-certified Public Health Facilities in India* is the bona fide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.



Name of Student: Dr. Shikha Sharma

Date: 22nd May 2023

CERTIFICATE



National Health Systems Resource Centre

Technical Support Institution with National Health Mission
Ministry of Health & Family Welfare, Government of India



CERTIFICATE

This is to certify that Dr. Shikha Sharma in partial fulfilment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur has undertaken her internship at National Health Systems Resource Centre (NHSRC), Delhi during April- 11th - July 10th 2023.

Place: *New Delhi*

Date: *25 May 2023*

Preceptor/Head of the Organization

Name of the organization

CERTIFICATE

This is to certify that the dissertation titled *A study to find out the gaps in the sustenance of certification status of NQAS-certified public health facilities in India* is a record of the research work undertaken by Dr. Shikha Sharma in partial fulfilment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.

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Date: 22nd May 2023

Date: 22nd May 2023

Abstract

Title: A study to find out the gaps in the sustenance of certification status of NQAS-certified public health facilities in India.

The National Quality Assurance Standards (NQAS) initiative was introduced by the Ministry of Health & Family Welfare in India to recognize and incentivise high-performing public health facilities that meet specific criteria, thereby bolstering the reputation and credibility of public hospitals. However, sustaining the attained quality standards post-certification presents a challenge that necessitates ongoing efforts, dedication, monitoring, and evaluation of various predetermined standards. The sustenance of certification status refers to a health facility's ability to maintain the necessary standards and requirements to retain its certification.

This study aims to assess the sustenance of quality standards for public health facilities in India for NQAS certification, with three specific objectives, first, to determine which type of public health facilities, were not able to sustain NQAS-certified status. Second, to evaluate the gaps in the sustenance of attained NQAS-certified status between the initial external assessment and the Surprise Assessment under NQAS for selected PHFs and third, to recommend the action plan to the public health facilities which were not able to attain the full certification under the Surprise Assessment. The study follows a descriptive exploratory research design and was carried out over the duration of April and May 2023 at the National Health Systems Resource Centre in Delhi. The study includes secondary data which was collected from the NHSRC data pool. The study population consists of 71 public health facilities from 22 states/UTs in India, selected through systematic random sampling for the Surprise Assessment in 2022. From this sample, a subset of 43 facilities that were unable to sustain their full certification status was selected to identify the gaps in maintaining NQAS standards through non-probability purposive sampling.

The key findings of the study indicate that all selected facilities successfully maintained quality standards in the area of concern "Patient rights". However, significant challenges were identified in the areas of concern "Quality Management System" and "Outcome". The overall scores of the 43 public health facilities exhibited an average decline of 16%, indicating the necessity for enhancing the quality and formulating an action plan to enhance their performance. In conclusion, this study underscores the importance of

maintaining quality in Indian public health facilities following certification. The study's recommendations center around fostering a culture of internal quality assessment and improvement within public health facilities to ensure sustained certification status and continuous enhancement of healthcare services. By addressing the identified gaps and implementing the recommended measures, public health facilities can uphold the highest standards of quality, obtain and retain their certification status and provide excellent healthcare services to the communities they serve. The vision is to enable all public health facilities in India to gradually achieve and sustain certified NQAS status.

Keywords: NQAS, Surprise Assessment, Sustenance, Certification, Conditionality, Deferred, Public health facilities, Quality standards.

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Abbreviations

AoC	Area of Concern
CHC	Community Health Centre
DH	District Hospitals
DQAU	District Quality Assurance Unit
HWC	Health and Wellness Centre
IPHS	Indian Public Health Standards
ISQua	International Society for Quality in Health Care
MoHFW	Ministry of Health & Family Welfare
NHM	National Health Mission
NHSRC	National Health Systems Resource Centre
NQAS	National Quality Assurance Standards
PHC	Primary Health Centre
PHFs	Public Health Facilities PHFs
QA	Quality Assurance
QPS	Quality and Patient Safety
SDG 3	Sustainable Development Goals
SDH	Sub-district Hospital
SQAU	State Quality Assurance Unit
UPHC	Urban Primary Health Centre
UT	Union territory

Chapter 1: Introduction

The implementation of healthcare accreditation and certification systems is a global trend observed in both industrialized and developing countries. These systems involve a comprehensive evaluation of health facilities against predetermined standards to ensure quality in healthcare delivery. Maintaining quality is crucial to reduce waste, improve productivity, enhance patient safety, and achieve efficiency improvements in healthcare services. Access to quality healthcare for all is essential for India to achieve its Sustainable Development Goal 3. India's healthcare achievements vary across states, with some states such as Gujarat, Kerala, Maharashtra, Tamil Nadu, Himachal Pradesh, Andhra Pradesh, Karnataka, Sikkim, and Goa classified as "Front runners" due to their progress towards SDG 3 targets on health and well-being. However, states like Assam, Arunachal Pradesh, Madhya Pradesh, Chhattisgarh, Uttar Pradesh, Bihar and Nagaland are categorized as "Performer States" and lag in terms of health indicators, as per the SDG India Index released by NITI Aayog in 2022 (1).

To address such diverse issues related to poor coverage, infrastructure, facilities, and standards in the healthcare system, The Ministry of Health & Family Welfare (MoHFW), Government of India, has launched the National Quality Assurance Standards (NQAS) program for public health facilities. The primary objective of this program is to enhance the quality of public healthcare services provided by these facilities. By implementing NQAS, the government strives to improve the quality of public healthcare delivery and ensures that they meet the predefined standards. "Currently, the NQAS standards are available for District Hospitals, Community Health Centres, Primary Health Centres, Urban Primary Health Centres, and Health and Wellness Centres" (2). The availability of NQAS across all levels of PHFs ensures that quality standards are maintained across the healthcare system. It also enhances the credibility of public hospitals in the community through a comprehensive accreditation process.

The sustenance of certification status refers to a health facility's ability to maintain the necessary standards and requirements to retain its certification. Sustaining quality requires ongoing efforts, commitment, adherence to compliance with standards, training and education, documentation, record-keeping, and rigorous monitoring and evaluation of predetermined parameters. This study emphasizes the importance of the sustenance of quality in healthcare facilities, especially after obtaining accreditation or certification. In

India, where the quality of care and patient safety measures in public health facilities have faced criticism, having the National Quality Assurance Standards (NQAS) is seen as a valuable asset.

This study aims to assess the sustenance of quality standards for public health facilities in India for NQAS certification, with the three specific objectives, first, to determine which type of public health facilities, were not able to sustain NQAS-certified status. Second, to evaluate the gaps in the sustenance of attained NQAS-certified status between the initial external assessment and the Surprise Assessment under NQAS for selected PHFs and third, to recommend the action plan to the public health facilities which were not able to attain the full certification under the Surprise Assessment. The study identifies several areas that require attention, including the establishment of defined procedures and frameworks for staff competence evaluation, equipment maintenance, patient and employee satisfaction, dietary services, and monitoring of outsourced services. Strengthening the quality management system, improving nursing care, and implementing quality improvement measures are also highlighted as essential steps toward sustaining certification status. The study provides recommendations on how to sustain the gains of NQAS implementation. This study can serve as a catalyst to initiate and sustain improvements in quality health care.

1.1. Overview of NQAS

The NQAS standards have been developed based on global best practices, focusing on evidence-based, user-friendly, and measurable systems. This program aims to emphasize the importance of maintaining high standards in public health facilities (PHFs) across India. NQAS has Quality Standards as its main pillars. These standards are designed to cater to different levels of facilities and are categorized into eight Areas of Concern. Each standard consists of specific Measurable Elements. To ensure compliance with these standards, department-specific Checkpoints are implemented and assessed in each department of a health facility. The Checkpoints for a department are aggregated to form a comprehensive assessment tool called a "Checklist." The Checklist, when filled in or scored, generates scorecards that provide an overview of the facility's performance in meeting the defined quality standards. The relationship between different elements of NQAS has been displayed in **Figure 1.1**. The number of components are different for different healthcare facilities based on their scope of services as represented in **Table 1.1**.

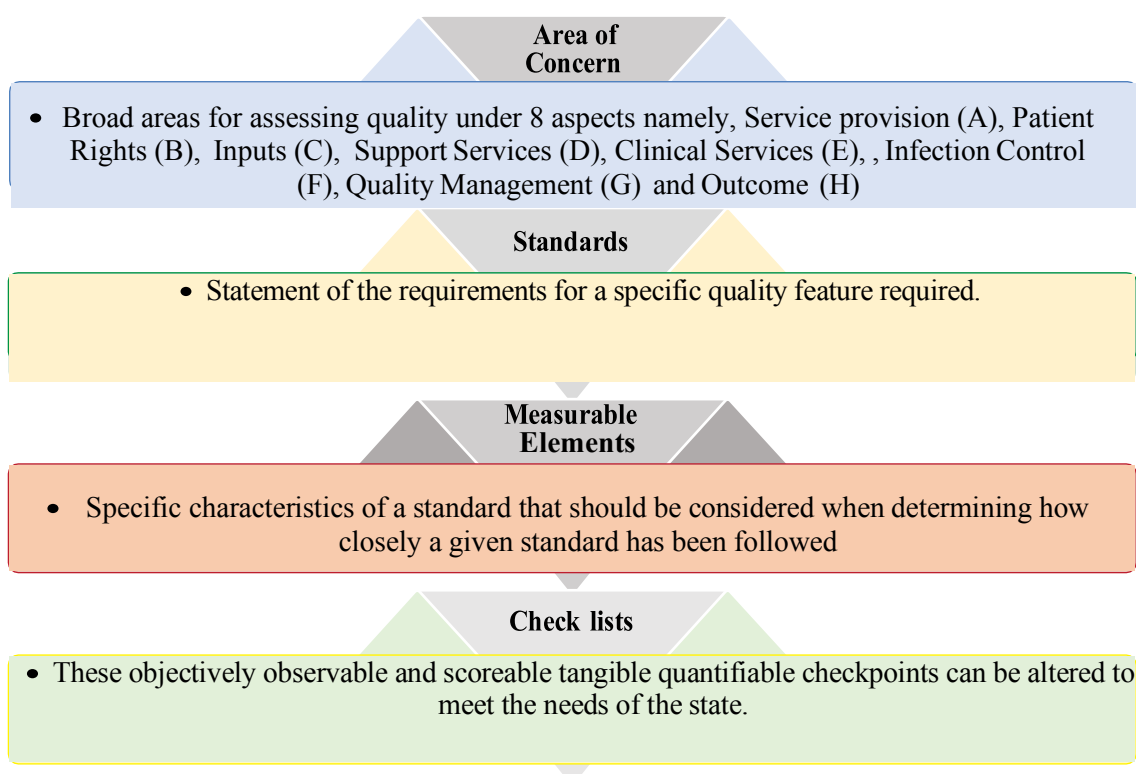


Figure 1.1: Relationship of different components of NQAS.

Table 1.1: Components of NQAS for various levels for health facilities.

Component	DH	CHC	PHC	UPHC
Area of Concern	8	8	8	8
Standards	74	65	50	35
Measurable Elements	362	297	250	200
Checklists	19	12	6	12

Source: Operational Guidelines for Improving Quality in Public Healthcare Facilities, NHSRC (5)

1.2. Role of NHSRC in NQAS

The National Health Systems Resource Centre (NHSRC), established in 2007, plays a vital role in the NQAS program. It assists in policy and strategy development, provides technical assistance to states, and supports capacity building for the Ministry of Health. The MoHFW, in collaboration with the NHSRC, is responsible for assessing and issuing certificates to health facilities based on their compliance with NQAS standards.

1.3. Process of NQAS certification

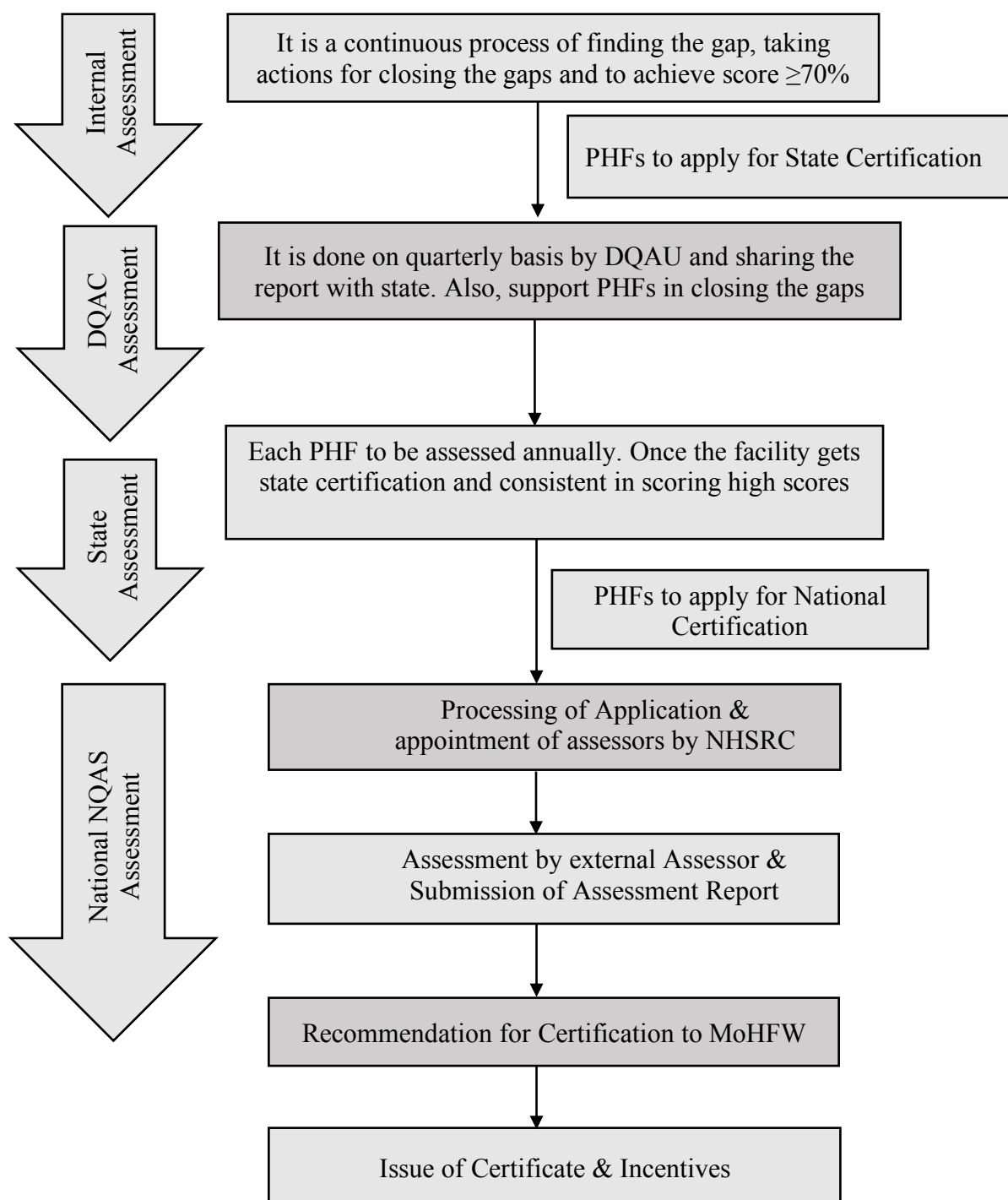


Figure 1.2: Process of NQAS certification.

- Certification/recertification is valid for three years, subject to the SQAC team validating compliance with the QA Standards every year for the following two years.
- Following the successful completion of two surveillance audits by the SQAC, the facility is subject to re-certification assessment by the national assessors in the third year (4).

Table 1.2: Criteria for national certification.

S. No.	Criteria	Aggregate Score (%)		
		DH/ SDH	CHC	PHC/ UPHC
1.	Aggregate score of the health facility	≥ 70%	≥70%	≥70%
2.	Score of each department	≥ 70%	≥70%	NA
3.	Segregated score in each Area of Concern	≥ 70%	≥70%	≥ 60%
4.	Score of Standard	Standard A2, B5 and D10 is ≥ 70%	Standard A2, B5 and D8 is ≥ 60%	Standard A2, B4 and F6 (PHC)/ F4 (U-PHC) is ≥ 60%
5.	Individual Standard wise score	≥ 50%	≥ 50%	≥ 50%
6.	Patient Satisfaction Score	70% or Score of 3.5 on Likert Scale	65% or Score of 3.2 on Likert Scale	60% or Score of 3.0 on Likert Scale

Source: NHSRC (5)

Based on the criteria of certification mentioned in **Table 1.2** The PHFs can receive any of the following status after an NQAS assessment.

NQAS Certified

When a facility meets the required criteria, the facility receives the status of certified. The certification or recertification of a health facility remains valid for three years. However, during the subsequent two years following the initial certification, the facility's compliance with the Quality Assurance (QA) Standards will be assessed annually by the SQAC (State Quality Assurance Committee) team for validation. In the third year, after successfully completing two surveillance audits conducted by the SQAC, the facility will undergo a re-certification assessment conducted by National Assessors to maintain its certification status.

NQAS Certification with Conditionality

The conditionality certification remains valid for one year. The criteria vary depending on the type of health facility. The following are the requirements.

For DHs & CHCs

To be certified, a health facility must achieve an aggregate score of 70% or higher in Criterion I. Additionally, the facility must meet a minimum of three out of the remaining five criteria.

For UPHCs & PHCs

To be certified, a health facility must attain an aggregate score of 70% or higher in Criterion I. Moreover, the facility must fulfil a minimum of three out of the remaining four criteria.

Deferred Certification: If the hospital receives an overall external evaluation score of 70% but does not meet the prerequisites for conditional certification as described above, the certification may be deferred until a subsequent assessment.

Source: Operational Guideline, NHSRC (5)

Following is the summary of Standards, Measurable Elements, Check Points & Departmental Checklists for various levels of Facilities.

1.4. The Surprise Assessment

It has been learned that some states/UT do not give proper attention to those facilities which get certified. Thus it was decided in the 4th CQSC meeting dated 30th December 2019 that the Surprise Assessment of NQAS-certified public health facilities will be conducted to monitor the performance of quality-certified public health facilities. The matter was considered and it was decided by the MoHFW that a 10% random sample of such facilities would be physically visited by the NQAS assessors/ NHSRC team to monitor the real performance of quality-certified facilities to get the correct picture and to evaluate the sustenance of the gains made during the NQAS implementation (3). The first Surprise Assessment was conducted in 2019 for 21 facilities. However, the results of the 2019 assessment are challenging to evaluate due to the small sample size. This study is based on Surprise Assessment 2022, that was conducted for 71 public health facilities in India.

1.5. The rationale of the study

To raise the quality standards of public health facilities in India, the national government and state governments have taken a number of initiatives and actions. Even then, public health facilities struggle to uphold quality standards. There are only a few researches that highlight why public health facilities find it challenging to sustain the quality post-certification. This study evaluates the gaps in the quality standards for public health facilities which are not able to achieve a certified status under the Surprise NQAS Assessment 2022 and provides recommendations on how to sustain the gains of NQAS implementation. The study's outcomes will offer valuable insights to policymakers, program implementers, and health officials, specifically in identifying the obstacles that have impeded public health facilities from sustaining their certification status during the Surprise NQAS Assessments. This information will be crucial in devising strategies to enhance the situation in public health facilities by improving their NQAS scores. Such assessments can serve as a catalyst to initiate and sustain improvements in quality health care.

Chapter 2: Review of literature

The following literature review aims to provide a comprehensive analysis of the current state of knowledge on gains, impact, and sustenance of certification/ accreditation of health facilities at hand by critically examining and synthesizing findings from a selection of nine relevant research papers. These papers were carefully chosen based on their significance, rigor, and relevance to the study objectives. The table below provides an overview of the papers included in this review, highlighting their titles, authors, publication years, and salient features.

Table 2.1: Overview of reviewed papers.

S. No	Author and year	Study location	Sample size	Methodology and Sampling Techniques	Salient features
1	Hussein M, Pavlova M, Ghalwash M, Groot W. (2021) (6)	Netherlands	Seventy-six empirical studies which were conducted in 22 countries	Meta-Analyses guidelines (PRISMA) The study analysed how hospital certification programmes overall affected the standard of health care during the last two decades. (i.e. from January 2000 – February 2020)	The study highlights that hospital accreditation has a positive impact on safety culture, performance measures, efficiency, and patient length of stay. It stimulates performance improvement and patient safety. The study recommends that accreditation should be seen as one element that complements other improvement strategies, and efforts to incentivise and modernize accreditation.

“Table 2.1 continued”

2	Sajini B. Nair (2020) (7)	Kerala, India	43 health facilities Divided into three groups: 1) Hospitals with NQAS certification, for identify enabling factors n=25 2) Hospitals Failed to achieve NQAS certification but are Kayakalp winners. For assessing both barriers and enablers. n=5 3)Hospitals have not applied for NQAS for assessing the barriers. n=13	Purposive sampling The districts selected are those selected for NHM PIP Monitoring in Kerala	The study identified intrinsic and extrinsic factors that influenced NQAS accreditation. The intrinsic factors included services, teamwork and leadership, staff attitude and satisfaction, staff competency and training, functional coordination, documentation, and resource availability. These factors were found to be modifiable, and facilities that successfully modified them achieved certification. The extrinsic factors were the participation of local self-government departments (LSGD), involvement of NGOs, community support, and the geographical location of the facility. The absence of any of these factors in the three domains was identified as potential barriers to accreditation.
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“Table 2.1 continued”

3	Javeed A. Golandaj, and K. G. Kallihal (2020) (8)	India	Eight health facilities across Karnataka, Maharashtra, and Chhattisgarh.	Cross-sectional survey design Purposive sampling, Eight health facilities across Karnataka, Maharashtra, and Chhattisgarh, which have successfully passed the accreditation under NQAS	The study finds that NQAS accreditation provides advantages, such as levelling the playing field between public and private hospitals, fostering staff pride and satisfaction, and being perceived as a valuable tool for enhancing healthcare quality. To maximize its regulatory impact, it is essential to assess quality based on patient outcomes. Strengthening the current accreditation program to prioritize outcomes would facilitate this goal
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“Table 2.1 continued”

4	Brubakk K, Vist GE, Bukholm G, Barach P, Tjomsland O. (2015) (9)	Norway	Four articles	Systematic Reviews, 20 articles retrieved for full-text review. Three systematic reviews and one randomized controlled trial study review. The comparison was made between hospitals that were accredited and those that were not.	The study findings indicate no evidence supporting significant improvements in treatment quality based on quality metrics and standards. Many studies lacked information on the context, method, and cost of interventions. Accreditation and certification are proposed interventions for patient safety and high-quality healthcare. It was found that accreditation programs require substantial investments and may distract healthcare teams from clinical goals. Further research is needed to assess the clinical impact and weigh the costs against other quality improvement interventions.
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“Table 2.1 continued”

5	Devkaran S, O’Farrell PN. (2014) (10)	Abu Dhabi, UAE	A 150-bed multi-specialty hospital	Interrupted time series analysis. A simple random sample of 24% of patient records was audited, per month. 2,76,000 observations were collected from 12,000 patient records. between January 2009 and December 2012 The Life Cycle Model was used to evaluate data on 23 quality measures. The model consists of four phases: initiation, presurvey, post-accreditation slump, and stagnation.	It was observed that evaluating the sustainability of quality and patient safety quality standards over the accreditation cycle, the results indicate that accreditation has the ability to sustain improvements throughout the cycle, despite a temporary decline in performance after the accreditation survey. The Life Cycle Model provides a valuable framework for avoiding stagnation and declining outcomes by monitoring the different phases and implementing proactive initiatives at appropriate times to maintain performance. It emphasizes the importance of continuous survey readiness programs throughout the organization.
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“Table 2.1 continued”

6	Abedi G, Abedini E, Malakza deh R, Araghian Mojarad F. (2014) (11)	Mazandara, Iran	38 health facilities including 8 private, 25 Public, and 5 social security hospitals.	Descriptive study, Purposive sampling. Data was collected through documents reviewed relating to 2013 and 2014	The study revealed no significant difference in the rate of reported errors before and after implementing the accreditation of healthcare facilities. This indicates that management's efforts to control medical errors have not been successful. It is recommended to scrutinize and strengthen the report, control, and manage medical errors in hospitals. Accreditation programs are to be approached with greater seriousness and stronger management, involving collaboration among doctors, nurses, and hospital officials to improve healthcare services
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“Table 2.1 continued”

7	Flodgren G, Eccles MP, Shepperd S, Scott A, Parmelli E, Beyer FR. (2011) (12)	UK	Four Studies	Cochrane Database of Systematic Reviews The authors identified four reviews out of 32 studies. Based on the AMSTAR criteria	The study highlights that financial incentives are external motivators used to increase productivity in healthcare and other public service settings. However, in healthcare, quality of care is a crucial consideration. The effects of financial incentives on patient outcomes remain largely unexamined.
8	Alkhenizan A, Shaw C. (2011) (13)	Not mentioned	Twenty-six studies	systematic reviews	The study results consistently demonstrate that accreditation programs have a positive outcome on the process of care in healthcare services. Furthermore, there is substantial evidence indicating that accreditation programs also improve clinical outcomes across various clinical conditions. Therefore, it is recommended to support and utilize accreditation programs as an effective tool for enhancing the overall quality of healthcare services.

“Table 2.1 continued”

9	Awa BA, Wever AD, Almazrooa A, Habib H, Al-Noury K, Deek BE, et al. (2011) (14)	Saudi Arabia	One University hospital A total of 119 performance indicators were collected and were later transformed into 81 patient safety and quality indicators.	Purposive sampling A 4 year retrospective and prospective study design was used.	With the active endorsement of hospital management, the implementation of the Canadian accreditation process at King Abdulaziz University Hospital has proven to have a favourable influence on the QoC and patient safety indicators examined in this study. These indicators encompass mortality rates, hospital-acquired infections, blood transfusion reactions, outcomes of surgery, CPR codes, invasive procedures, and adverse incidences. The accreditation process has effectively contributed to enhancing the Quality of care and ensuring patient safety within the hospital, as evidenced by the positive outcomes observed in this study.
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Chapter 3: Methodology

3.1. Research aim

Assessing the sustenance of quality standards for public health facilities in India for NQAS certification.

3.2. Research questions

- 1 Which types of public health facilities were not able to sustain the certified NQAS status between 2019-2021?
- 2 Which quality standards, did public health facilities find challenging to sustain during the Surprise Assessment 2022?
- 3 How can the NQAS-certified status be sustained at NQAS-certified Public health facilities?

3.3. Objectives

3.3.1. Broad objective

- To evaluate the sustenance of the NQAS-certified status of public health facilities in India through scores of the Surprise Assessment 2022.

3.3.2. Specific objectives

1. To determine which level of public health facilities, were not able to sustain NQAS-certified status in India.
2. To evaluate the gaps in the sustenance of attained NQAS-certified status between the initial external assessment and the Surprise Assessment under NQAS for selected public health facilities.
3. To recommend the action plan to the public health facilities which were not able to attain the full certification under the Surprise NQAS Assessment.

Table 3.1: Objectives and methods.

Objective	Research Question	Method	Sources of Data
To determine which level of Public health facilities, were not able to sustain NQAS-certified status in India.	Which types of public health facilities were not able to sustain the certified NQAS status between 2019-2021?	Compare the initial external and the Surprise Assessment scores of selected public health facilities.	Secondary data from the NHSRC data pool.
To evaluate the gaps in the sustenance of attained NQAS-certified status between the initial external assessment and the Surprise Assessment under NQAS for selected public health facilities.	Which quality standards, did public health facilities find challenging to sustain during the Surprise Assessment 2022?	Quantitative analysis by building a matrix based on NQAS quality standards.	Secondary data from the NHSRC data pool and NQAS guidelines for Quality Assurance for PHFs.
To recommend the action plan to the public health facilities which were not able to attain the full certification under the Surprise NQAS Assessment.	How can NQAS-certified status be sustained at NQAS-certified Public health facilities?	Based on the gaps observed and Literature review.	Relevant articles from websites and notes taken during discussions.

3.4. Material and methods

Study design: Descriptive exploratory research design

Setting: National Health Systems Resource Centre (NHSRC) Delhi.

Study population: The study covers 71 public health facilities from 22 states/UTs of India. Which were selected through Systematic random sampling for the NQAS Surprise Assessment in the year 2022.

Duration of study: April and May 2023

Sampling technique: Non-probability purposive sampling

Data collection procedure: The initial external NQAS assessment (FY 2019-20 to 2021-22) and Surprise External Assessment (FY 2022) scores of selected public health facilities were collected.

Data Source: This study includes secondary data which was collected from the NHSRC data pool.

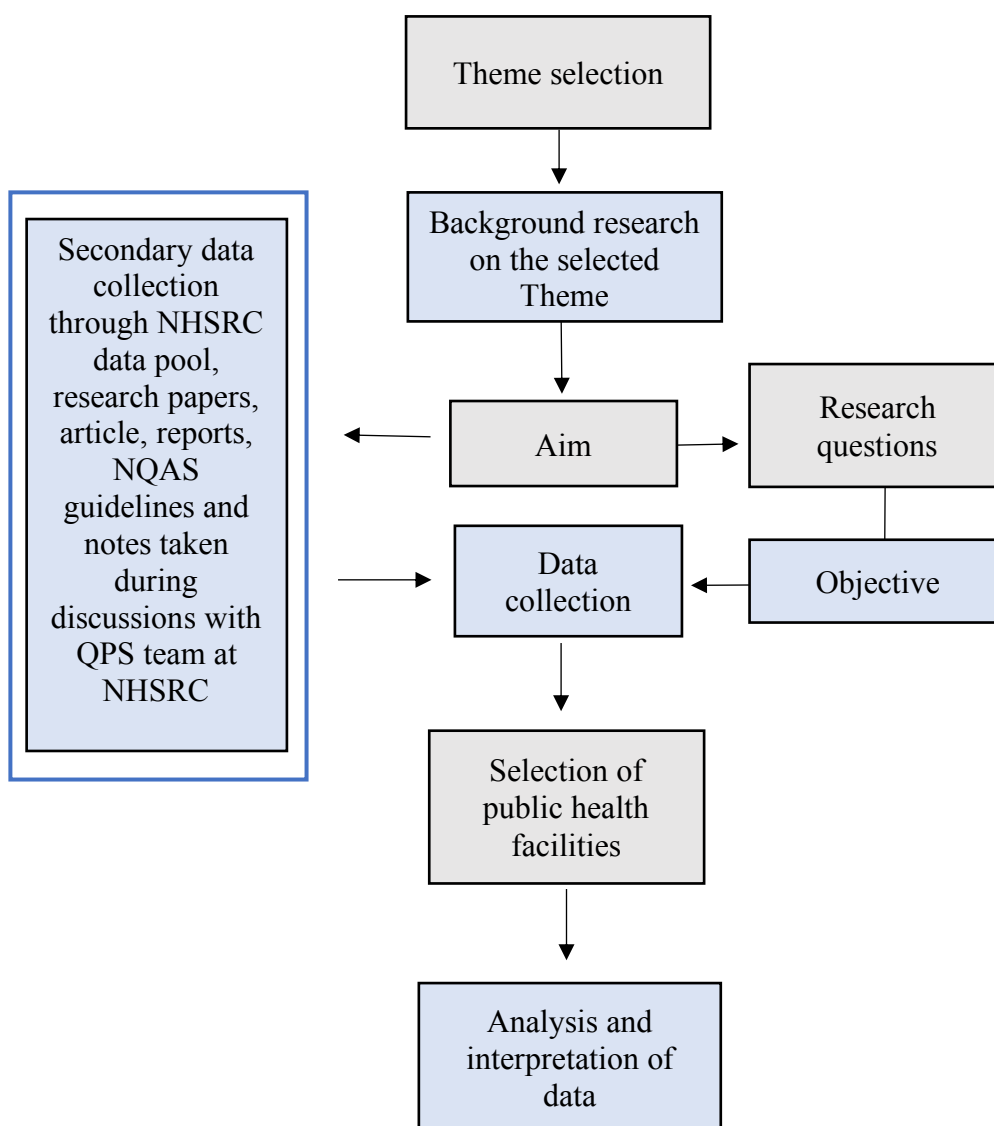


Figure 3.1: Research Process flow.

3.5. Process of the Surprise Assessment

Facility selection criteria for the Surprise Assessment 2022

It was decided in the 4th CQSC meeting dated 30th December 2019 that the Surprise Assessment of NQAS-certified public health facilities will be conducted to monitor the performance of Quality certified health facilities. The notification was shared with all states/ UTs for the same. A total of 1,288 facilities were NQAS certified during FY 2019-20 to 2021-22 all over India till June 2022 (source: NHSRC).

Table 3.2: Sample section exclusion criteria for the Surprise Assessment.

Exclusion criteria
Facilities that have certification status till August 2022
Virtually assessed facilities (421 facilities)
Facilities got certification in the last 6 months
Facilities got certified with conditionality

Out of 807 physically assessed facilities 609 facilities were selected from 23 states/UTs after sampling. For facility selection, previous external assessment scores of a state were collated, and a specific number of facilities were selected based on scores centered around the median. One facility was chosen from states/UTs with fewer than 10 certified facilities, while 10% of the facilities were selected when there were more than 10 nationally certified facilities. This number was calculated individually for each state as mentioned in **Table 3.3**.

During the assessment, it was found that the health facility in Nagaland had already applied for recertification. To maintain a consistent sample size, this facility was excluded, and another facility was randomly chosen from the pool of 609 facilities. The selected facility happened to be a district hospital located in Bihar. Thus a total of 71 facilities were selected as mentioned in **Table 3.3.** & **Table 3.4.**

Table 3.3: NQAS Certified facilities till 31st march 2021.

States	DH	SDH	CHC	PHC	UPHC	Grand Total	Selected 10% facility for the Surprise Assessment
Andhra Pradesh	1	3	10	162		176	18
Assam	1			2	1	4	1
Bihar	1			1		2	2
Chhattisgarh	2		4	4	7	17	2
Delhi	3					3	1
Gujarat			1	66	14	81	8
Haryana	3		3	25	7	38	4
J&K	2		1	1		4	1
Karnataka	3				2	5	1
Kerala	2	3	1	35	7	48	5
MP	2			3		5	1
Maharashtra				9		9	1
Manipur	2			1		3	1
Odisha	1				4	5	1
Punjab	5			1	2	8	1
Rajasthan	2	2	2	8	2	16	2
Tamil Nadu	8	22	21	34	2	87	9
Telangana	2	1		55	2	60	6
Tripura				2	1	3	1
Uttar Pradesh	11		4	10	1	26	3
Uttarakhand	1			1		2	1
West Bengal	2	1	3			6	1
Grand Total	56	32	50	420	53	609	71

Source: NHSRC

Table 3.4: Selected 10% facilities for the Surprise Assessment PHFs type & state wise.

States	DH	SDH	CHC	PHC	UPHC	Grand Total
Andhra Pradesh		1		17		18
Assam					1	1
Bihar	2					2
Chhattisgarh			2			2
Delhi	1					1
Gujarat				8		8
Haryana				3	1	4
Jammu & Kashmir			1			1
Karnataka					1	1
Kerala				5		5
Madhya Pradesh				1		1
Maharashtra				1		1
Manipur	1					1
Odisha					1	1
Punjab				1		1
Rajasthan				1	1	2
Tamil Nadu		3	1	5		9
Telangana				5	1	6
Tripura				1		1
Uttar Pradesh	2			1		3
Uttarakhand				1		1
West Bengal		1				1
Grand Total	6	5	4	50	6	71

Source: NHSRC

Table 3.5: Result summary of the Surprise NQAS Assessment 2022.

S. No.	States	Certified	Conditionality	Deferred	Total
1	Andhra Pradesh	8	2	8	18
2	Assam			1	1
3	Bihar			2	2
4	Chhattisgarh			2	2
5	Delhi	1			1
6	Gujarat	1		7	8
7	Haryana	1	2	1	4
8	Jammu & Kashmir			1	1
9	Karnataka	1			1
10	Kerala	3	2		5
11	Madhya Pradesh		1		1

“Table 3.5: continued”

12	Maharashtra		1		
13	Manipur			1	1
14	Odisha	1			1
15	Punjab		1		1
16	Rajasthan	2			2
17	Tamil Nadu	6	1	2	9
18	Telangana	3	1	2	6
19	Tripura		1		1
20	Uttar Pradesh	1		2	3
21	Uttarakhand		1		1
22	West Bengal			1	1
	Grand Total	28	13	30	71

Source: NHSRC

As per **Table 3.5** the result of the Surprise Assessment 2022 revealed that In FY 2022-23, a total of 71 Public Health Facilities (6 DHs, 5 SDHs, 4 CHCs, 50 PHCs, and 6 UPHCs) in 22 States/UTs underwent the Surprise Assessment under NQAS programs to check the compliance about the sustenance of their previous NQAS certification status. Out of the assessed 71 facilities, 28 facilities retained their certification status, 13 were partially compliant and 30 of them were not found compliant to their previous certification status.

Inclusion criteria for this study: All 71 public health facilities for which the Surprise Assessment was conducted in FY 2022 were included. That includes six DHs, five SDHs, four CHCs, six UPHCs, and 50 PHCs from 22 states/UTs of India.

Exclusion criteria for this study: 28 public health facilities, which were successful in sustaining the certified NQAS status under the Surprise Assessment 2022.

Final sample size: 43 Public health facilities in India including five District Hospitals (DH), two Sub-district Hospitals (SDH), four community health centres (CHC), two Urban Primary Health Centres (UPHC), 30 Primary Health Centres (PHC) from 18 states of India were selected to evaluate the gaps which PHFs were not able to maintain.

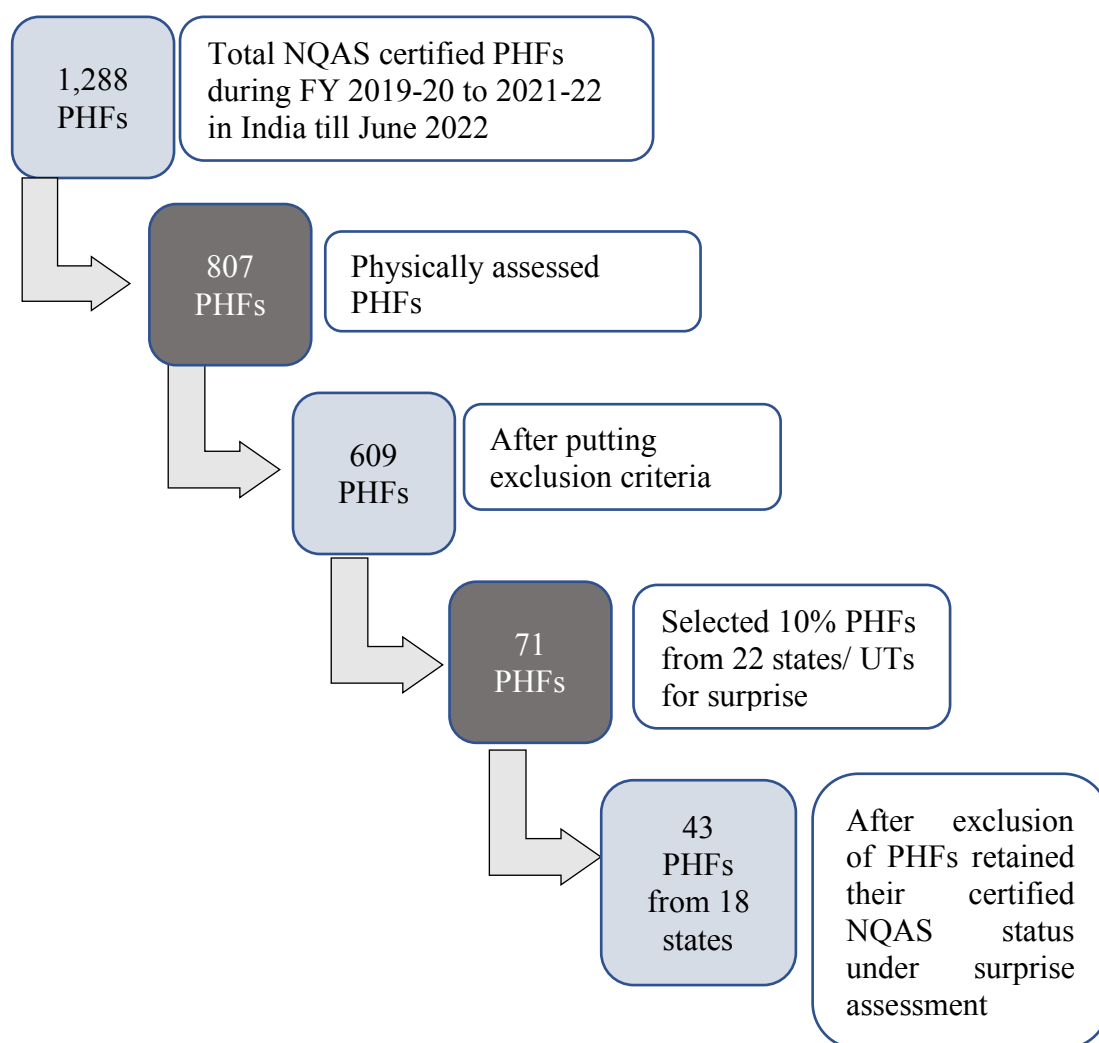


Figure 3.2: Flow of sample selection for the study.

3.6. Operational definitions

Public health facilities: A public health facility refers to a healthcare institution that is owned, operated, or funded by the government or public authorities. According to Rural Health Statistics 2021-22. There are a total of functional 1,61,829 Sub centres, 31,053 PHCs, 6,064 CHCs, 1,275 SDHs, and 767 DHs in India till March 2022 (15).

Certification: When a facility meets the required criteria, the facility receives the status as certified. The certification or recertification of a health facility remains valid for three years. However, during the subsequent two years following the initial certification, the facility's compliance with the Quality Assurance (QA) Standards will be assessed annually by the SQAC (State Quality Assurance Committee) team for validation. In the

third year, after successfully completing two surveillance audits conducted by the SQAC, the facility will undergo a re-certification assessment conducted by National Assessors to maintain its certification status.

Certification with Conditionality

The conditionality certification remains valid for one year. The criteria vary depending on the type of health facility. The following are the requirements.

For DHs & CHCs:

To be certified, a health facility must achieve an aggregate score of 70% or higher in Criterion I. Additionally, the facility must meet a minimum of three out of the remaining five criteria.

For UPHCs & PHCs:

To be certified, a health facility must attain an aggregate score of 70% or higher in Criterion I. Moreover, the facility must fulfil a minimum of three out of the remaining four criteria.

Deferred Certification: If the hospital receives an overall external evaluation score of 70% but does not meet the prerequisites for conditional certification as described above, the certification may be deferred until a subsequent assessment.

Source: NHSRC (5)

3.7. Data analysis plan

The specially designed format of scorecards of the initial external NQAS assessment and the Surprise Assessment were used for data collection. Microsoft Excel (version 16.16.27) was used for the compilation, comparative analysis, and interpretation of the data.

3.8. Ethical considerations

Required approvals and permission have been taken from the NHSRC team for the study of the data.

Chapter 4: Research findings and analysis

In FY 2022-23, a total of 71 Public Health Facilities (6 DHs, 5 SDHs, 4 CHCs, 50 PHCs, and 6 UPHCs) in 22 States/UTs underwent the Surprise Assessment under NQAS programs to check the compliance about the sustenance of their previous NQAS certification status. **Figure 4.1** shows the percentage of the type of PHFs that were chosen, with Primary Health Centres (PHCs) accounting for up to 70% of the health facilities.

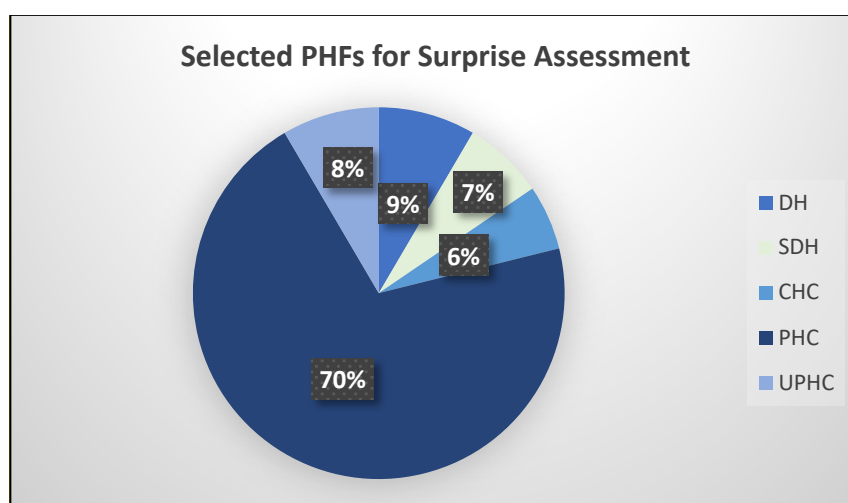


Figure 4.1: Selected PHFs for the Surprise Assessment.

Table 4.1: Result summary of the Surprise Assessment based on type of PHF.

PHFs	DH	SDH	CHC	PHC	UPHC	Grand Total
No of the PHFs selected	6	5	4	50	6	71
No of the PHFs retained the certification status	1	3	0	20	4	28
% of the PHFs retained the certification status	16.67	60.00	0.00	40.00	66.67	39.44

Table 4.1 demonstrates how different types of PHFs performed under the Surprise Assessment. It reveals that 40% PHCs and only 17% of DHs were able to retain their certification status. In contrast around 67% UPHCs were able to retain the certification status. However, none of the CHCs were able to sustain the certification status.

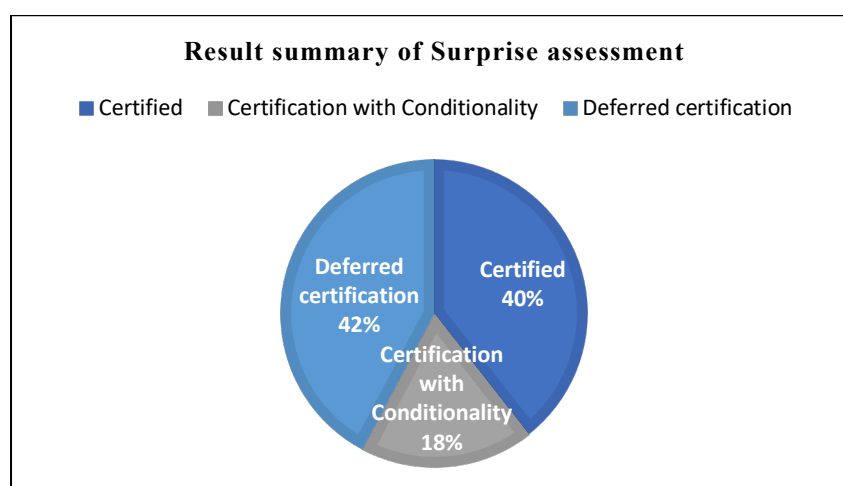


Figure 4.2: Result summary of the Surprise Assessment.

As per **Figure 4.2**, out of the assessed 71 facilities, 40% retained their certification status, 18% were partially compliant and 42% of them were not found compliant to their previous certification status.

Based on the scores of the Surprise Assessment of 43 PHFs and comparing them with the initial external NQAS scores, the following findings were observed:

- Overall score decline: The overall scores of 43 facilities showed a decline, ranging from 2% to 41%. This indicates a decrease in the quality performance of the PHFs compared to the initial assessment.
- Average decline score: The average decline score across all 43 PHFs was 16%. This suggests a significant drop in the overall quality performance of the facilities.

4.1. Sub-group analysis

This subgroup analysis is based on the four categories of Indian states which were categorised by the National Health Mission (NHM) in India as demonstrated in **Figure 4.3** to prioritize and allocate resources based on the healthcare needs and development indicators of each state (16). This categorization helps in identifying the degree of assistance and support needed by various states to enhance their healthcare services, infrastructure, and outcomes. This analysis would make it possible to pinpoint areas of improvement, monitor development over time, and ultimately raise the overall standard

of healthcare services provided to patients in states that lag in terms of the quality standards of healthcare institutions.

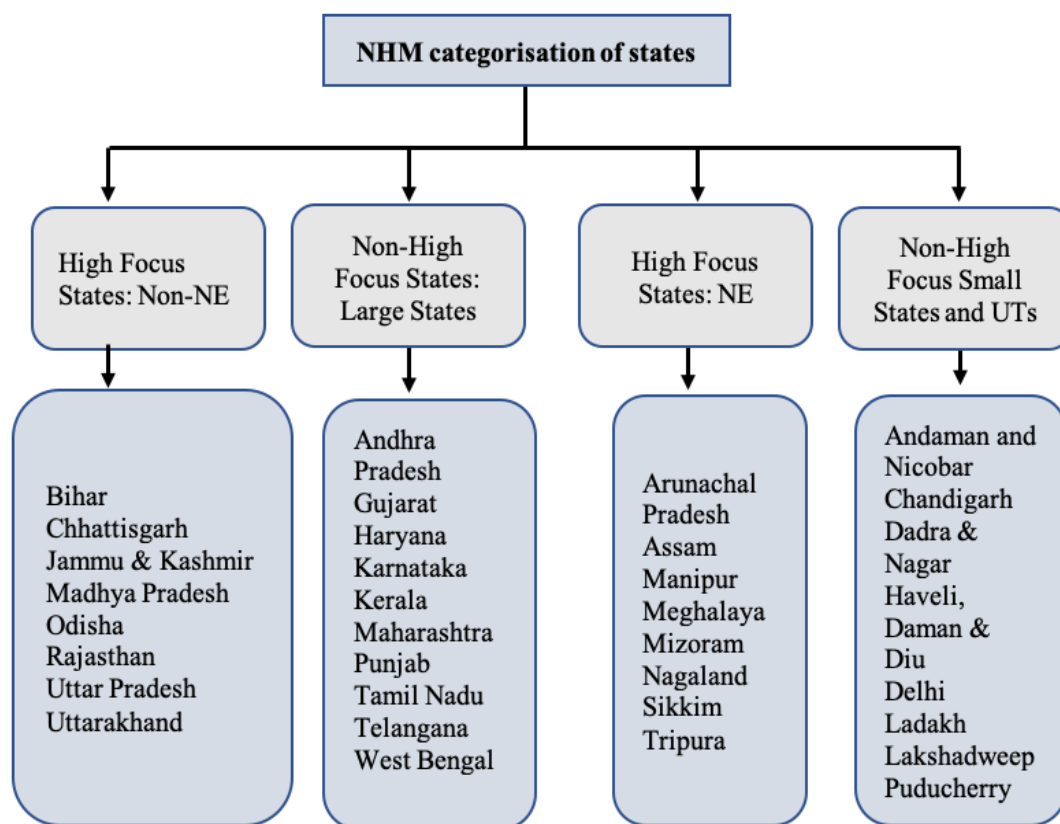


Figure 4.3: NHM categorisation of states.

- As per **Table 3.5** (Result summary of the Surprise NQAS Assessment 2022) listed in Chapter 3, a total of 13 PHFs were selected from High Focus Non-NE States for the Surprise Assessment 2022 from eight states mentioned in **Figure 4.3** except Uttarakhand.
- From Non-High Focus Large States, a total of 54 PHFs were selected from all the 10 states of this category mentioned above.
- From the High Focus NE States, only three facilities were selected from Assam, Manipur, and Tripura.
- For Non-High Focus Small States and UTs, only one PHF from Delhi was selected.
- The number of PHFs, which retained the certification status is shown in **Table 4.2**.

Table 4.2: Percentage of health facilities that retained their NQAS certification status.

NHM categorisation of states	Number of facilities selected for the Surprise Assessment	The number of facilities that retained their certification status	% of PHFs retained their certification status	% of PHFs retained their certification status out of total certified PHFs (N=28)
High Focus States: Non-NE (n=8)	13	4	30.77	14.29
Non-High Focus States: Large States (n=10)	54	23	42.59	82.14
High Focus States: NE (n=3)	3	0	0.00	0
Non-High Focus Small States and UTs (n=1)	1	1	100.00	3.57
Total	71	28	39.44	100%

Reference: Table 3.5: Result summary of the Surprise NQAS Assessment 2022.

Key findings: As per *Table 4.2* the majority of PHFs that kept their accreditation status (82%) came from the Non-High Focus Large States group, accounting for 76% of the facilities that were chosen. Because there were fewer certified facilities in the initial NQAS assessment in the Non-High Focus minor states and UTs and High Focus NE states categories, the number of PHFs chosen is one and three respectively among these groups of states. Also, none of the PHFs were able to maintain their certification status among the High Focus NE States. That suggests that raising the bar and ensuring patient safety in PHFs in India should be an urgent focus and action plan in these states.

Objective 1 is achieved by determining which public health facilities in India, were not able to sustain their attained NQAS-certified status under the Surprise Assessment.

For further analysis, scores for each facility's specific areas of concern and relevant standards were recorded from the scorecards from the Surprise Assessment 2022 based on the certification criteria listed in **Table 1.2**. Subsequently, gaps were identified. The sample analysis done for district hospitals for finding the gaps has been attached as **Annexure 3**.

Table 4.3: Summary of PHFs did not meet the criteria: Area of Concern wise.

Area of Concern	DH/ SDH	CHC	UPHC	PHC	Total	% of non-compliant PHFs (N=43)
Service Provision (A)	0	0	0	1	1	2.33
Patient Rights (B)	0	0	0	0	0	0.00
Inputs (C)	4	1	0	1	6	13.95
Support Services (D)	4	1	1	3	9	20.93
Clinical Services (E)	1	2	0	2	5	11.63
Infection Control (F)	2	1	0	2	5	11.63
Quality Management Systems (G)	6	3	2	12	23	53.49
Outcome (H)	4	1	2	7	14	32.56

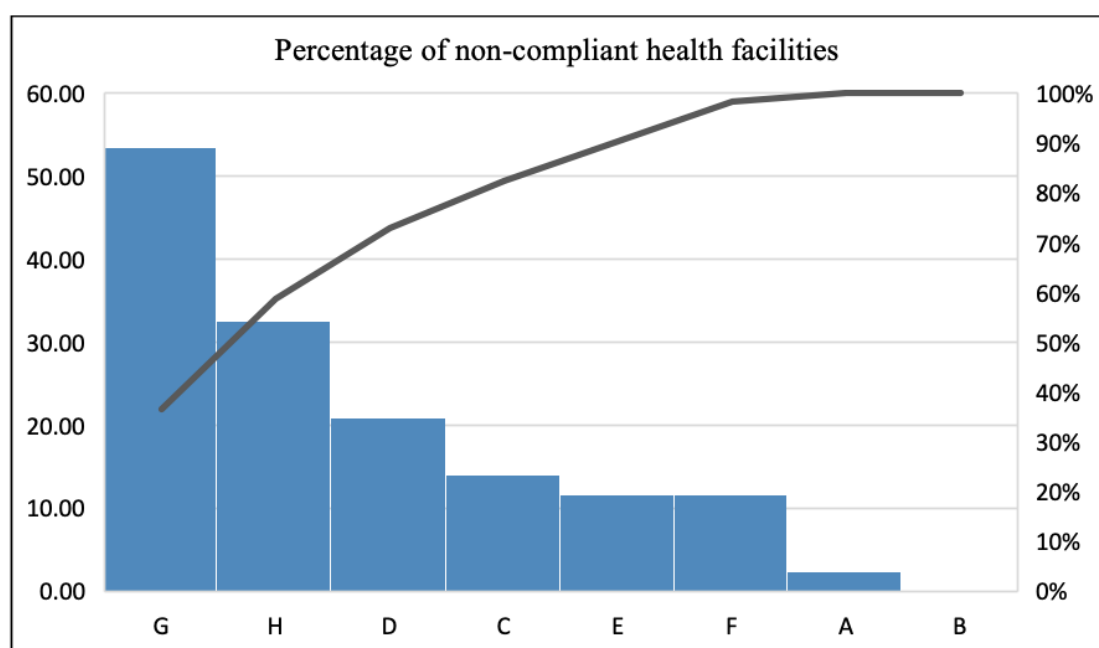


Figure 4.4: Percentage of non-compliant public health facilities - Area of Concerns wise.

Key findings: As presented in **Table 4.3** all facilities achieved and maintained the quality standards for the Area of Concern “B” i.e. "Patient rights", demonstrating their commitment to upholding patient rights and ensuring ethical healthcare practices. While 53% of facilities found the "Quality Management System” i.e. “G” as the most challenging AoC to be implemented followed by the "Outcome" i.e. “H” Area of Concern. These findings present an opportunity for quality improvement. The focus can now be directed toward strengthening the quality management system and enhancing the outcomes of care. By identifying these challenges in the Quality management system and Outcome, and implementing necessary improvements, facilities can strive to achieve and surpass the quality standards in these areas.

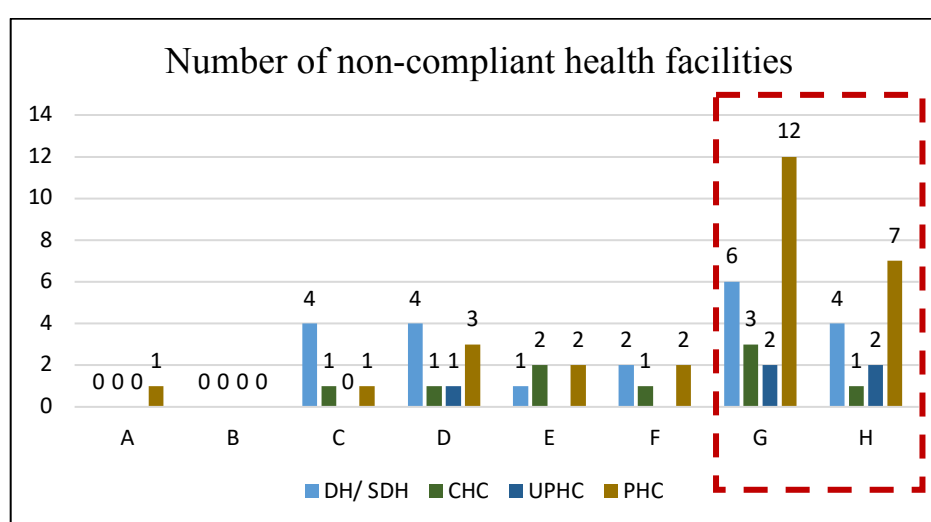


Figure 4.5: Number of non-compliant health facilities - Area of Concerns wise.

It can be observed in **Figure 4.5** that the majority of health facilities across all PHF types were not able to maintain quality standards for the AoC “G” i.e. "Quality Management Systems", followed by AoC “H” i.e. "Outcome".

Table 4.4: Number of PHFs which were unable to meet the quality standards.

Level of Public Health facility	Number of facilities
District Hospitals (DH) & Sub-district Hospitals (SDHs)	7
Community Health Centres (CHCs)	4
Urban Primary Health Centres (UPHCs)	2
Primary Health Centres (PHCs)	30
Total	43

It is worth noting that the standards mentioned in operational guidelines vary for different types of healthcare facilities based on their scope of services. Therefore, the denominator and percentage have been calculated accordingly for each standard as mentioned in **Table 4.5**. Additionally, for this analysis, the standards have been numbered sequentially (e.g. A-1, A-2....), rather than following the numbering specified in the NQAS guidelines, to align with the analysis and methodology. The corresponding standards mentioned in the guidelines for Quality Assurance for DHs, CHCs, UPHCs, and PHCs are attached as **Annexure 1**. The standards applicable for District hospitals and sub-district hospitals are grouped for the purpose of this study, as both types of health facilities were assessed based on criteria applies for DH.

Table 4.5: Denominator for specific standards.

Standards available for facility	Standards	Denominator
All facilities	A-1, A-2, A-3, D-2, D-3, E-2, E-5, F-1, F-2, F4, G-3, G-5, H-2, H-3, H-4	43
DHs, CHCs, PHCs	C-1, D-4, D-5, D-8, E-3, E-7, E-9, E-10, F-3, G-4, H-1	41
DH, PHC	C-3, D-6, D-9	37
CHC, UPHC, PHC	C-2, E-4	36
UPHC, PHC	E-17, G-2	32
PHC	E-11, E-12, E-14, E-18	30
DH, CHC	D-1, D-10, E-1, E-6, E-8, E-16, E-19, G-1, G-7, G-9	11
DH	B-1, C-4, D-7, E-13, E-15, G-6, G-8, G-10, G-11	7
CHC	D-12, G-12	4
UPHC	A-4, D-11	2

*Standards that are available for less than 7 facilities have been excluded from the analysis as it is difficult to interpret any standard based on less than 7 facilities.

Excluded standards are A-4 & D-11 as they are available for 2 facilities and D-12 & G-12 as they are available for 4 facilities.

Following tables display the findings of PHFs' non-compliance with the relevant standard.

Table 4.6: NQAS standards that PHFs did not meet for AoC, Service Provision (A).

S. No	DH	SDH	CHC	UPHC	PHC	Total	Standard applies for	% of non-compliant PHFs
A-1					1	1	All Facilities	2.33
A-2					1	1	All Facilities	2.33
A-3					1	1	All Facilities	2.33
A-4				1		1	UPHC	50.00

Table 4.7: NQAS standards that PHFs did not meet for AoC, Patient Rights (B).

S. No	DH	SDH	CHC	UPHC	PHC	Total	Standard applies for	% of non-compliant PHFs
B-1	1					1	DH	14.29

Table 4.8: NQAS standards that PHFs did not meet for AoC, Input (C).

S. No	DH	SDH	CHC	UPHC	PHC	Total	Standard applies for	% of non-compliant PHFs
C-1	1				1	2	DH, CHC, PHC	4.88
C-2				1	5	6	CHC, PHC, UPHC,	16.67
C-3		1			1	2	DH, PHC	5.41
C-4	1	1				2	DH	28.57

Table 4.9: NQAS standards that PHFs did not meet for AoC, Support Services (D).

S. No	DH	SDH	CHC	UPHC	PHC	Total	Standard applies for:	% of non-compliant PHFs
D-1	2		2			4	DH, CHC	36.36

“Table 4.9 continued”

D-2	1	1			1	3	all	6.98
D-3	1	1	1		2	5	All	11.63
D-4	1				2	3	DH,CHC, PHC	7.32
D-5		1	1		3	5	DH, CHC, PHC	12.20
D-6	1				2	3	DH, PHC	8.11
D-7	2	1				3	DH	42.86
D-8	1		1		5	7	DH, CHC, PHC	17.07
D-9	1				5	6	DH, PHC	16.22
D-10	1	1	2			4	DH, CHC	36.36
D-11				1		1	UPHC	50.00
D-12				1		1	CHC	25.00

Table 4.10: NQAS standards that PHFs did not meet for AoC, Clinical Services (E).

S. No	DH	SDH	CHC	UPHC	PHC	Total	Standard applies for:	% of non-compliant PHFs
E-1	1					1	DH, CHC	9.09
E-2					2	2	all	4.65
E-3	1		1		13	15	DH, CHC, PHC	36.59
E-4				1	2	3	CHC,PHC UPHC	8.33
E-5	1		1		1	3	All	6.98
E-6	1		1			2	DH, CHC	18.18
E-7					2	2	DH, CHC, PHC	4.88

“Table 4.10 continued”

E-8	3					3	DH, CHC	27.27
E-9			1		3	4	DH, CHC, PHC	9.76
E-10	2	1	2		4	9	DH, CHC, PHC	21.95
E-11					1	1	PHC	3.33
E-12					2	2	PHC	6.67
E-13	1					1	DH	14.29
E-14					5	5	PHC	16.67
E-15	1					1	DH	14.29
E-16			1			1	DH, CHC	9.09
E-17					4	4	UPHC, PHC	12.50
E-18					1	1	PHC	3.33
E-19	1					1	DH, CHC	9.09

Table 4.11: NQAS standards that PHFs did not meet for AoC, Infection Control (F).

S. No	DH	SDH	CHC	UPHC	PHC	Total	Standards available for:	% of non-compliant PHFs
F-1	2	1	1		5	9	All	20.93
F-2	1		1		4	6	All	13.95
F-3	1				1	2	DH, CHC, PHC	4.88
F-4			1			1	All	2.33

Table 4.12: NQAS standards that PHFs did not meet for AoC, Quality Management Systems (G).

S. No	D H	SDH	CHC	UPHC	PHC	Total	Standards available for:	%of non-compliant PHFs
G-1	1		2			3	DH, CHC	27.27
G-2				2	10	12	UPHC, PHC	37.50
G-3	2	1	2	2	13	20	All	46.51
G-4	2	2	2		13	19	DH, CHC, PHC	46.34

“Table 4.12 continued”

G-5		1		1	3	5	All	11.63
G-6	3	2				5	DH	71.43
G-7	3	2	2			7	DH, CHC	63.64
G-8	2	2				4	DH	57.14
G-9	1	2	4			7	DH, CHC	63.64
G-10		1				1	DH	14.29
G-11	3	2				5	DH	71.43
G-12			3			3	CHC	75.00

Table 4.13: NQAS standards that PHFs did not meet for AoC, Outcome (H).

S. No	DH	SDH	CHC	UPHC	PHC	Total	Standards available for:	% of non-compliant PHFs
H-1	2	1		2	5	10	DH, CHC, PHC	23.26
H-2	2	1	1	2	6	12	All	27.91
H-3	2	1	1		5	9	All	20.93
H-4	1	1	1		13	16	All	37.21

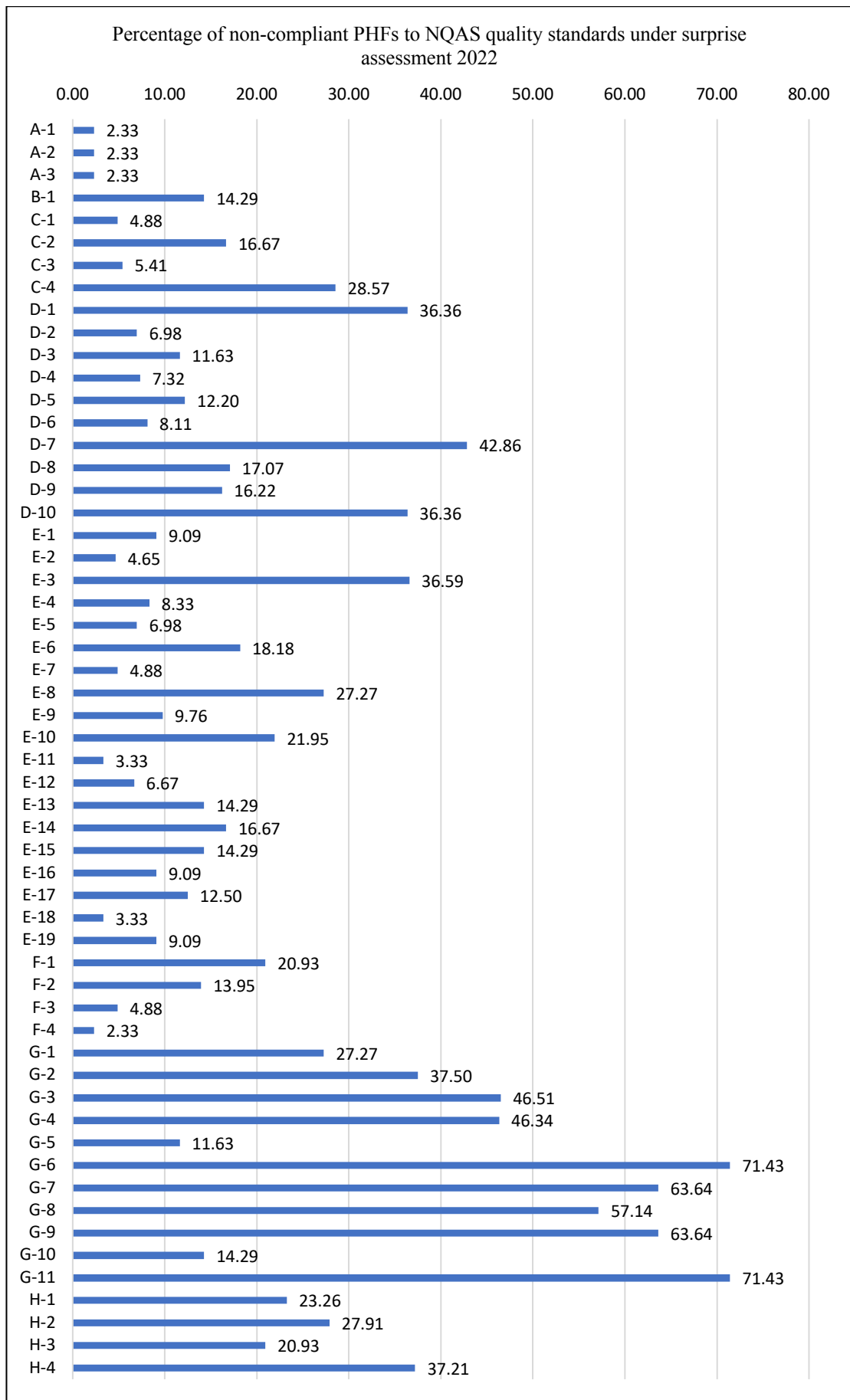


Figure 4.6: Matrix of percentage of non-compliant PHFs to NQAS quality standards.

The matrix of **Figure 4.6** Provides a comprehensive picture of all the standards PHFs could not achieve and the respective percentage of non-compliance by PHFs. The percentage of non-compliant facilities ranges from 2.33% – 71.43%. Further, the standards were enlisted in ascending order based on the percentage of non-compliant facilities for each standard. They were then divided into four categories based on the 25th, 50th, 75th, and 100th percentiles. As shown in **Table 4.14**.

Table 4.14: Categories of standards based on percentile of non-compliant PHFs.

Category	Percentile of non- compliant PHFs	Scores range
I	Up to 25	0 – 7
II	26- 50	7.01- 14
III	51-75	14.01- 28
IV	76-100	28.01 and above

Table 4.15: Category wise standards based on percentile criteria.

Standard	Percentage of non-compliant PHFs	Category
A-2	2.33	Category I
A-3	2.33	
F-4	2.33	
A-1	2.33	
E-11	3.33	
E-18	3.33	
E-2	4.65	
C-1	4.88	
E-7	4.88	
F-3	4.88	
C-3	5.41	
E-12	6.67	
D-2	6.98	
E-5	6.98	
D-4	7.32	Category II
D-6	8.11	
E-4	8.33	
E-1	9.09	
E-16	9.09	
E-19	9.09	
E-9	9.76	
D-3	11.63	

“Table 4.15 continued”

G-5	11.63	
D-5	12.20	
E-17	12.50	
F-2	13.95	
B-1	14.29	Category III
E-13	14.29	
E-15	14.29	
G-10	14.29	
D-9	16.22	
C-2	16.67	
E-14	16.67	
D-8	17.07	
E-6	18.18	
F-1	20.93	
H-3	20.93	
E-10	21.95	
H-1	23.26	
E-8	27.27	
G-1	27.27	
H-2	27.91	
C-4	28.57	Category IV
D-1	36.36	
D-10	36.36	
E-3	36.59	
H-4	37.21	
G-2	37.50	
D-7	42.86	
G-4	46.34	
G-3	46.51	
G-8	57.14	
G-7	63.64	
G-9	63.64	
G-6	71.43	
G-11	71.43	

As per **Table 4.14**, the standards are categorised based on the percentile of non-compliant PHFs. Category IV comprises the standards in which at least 28% of the PHFs could not uphold the necessary quality standards. These standards necessitate immediate attention

and the implementation of an action plan for quality improvement to obtain NQAS certification status.

4.2. The standards falling under Category IV

As categorized in *Table 4.15*, the category IV standards are discussed below as per the Area of Concern (AoC). This discussion also includes recommendations on how to improvise that specific quality standard by a health facility.

*The corresponding standards mentioned under the NQAS guidelines (17) (18) (19) (20) for Quality Assurance for DHs, CHCs, UPHCs, and PHCs are attached in *Annexure 1*.

Input “C”

The area of concern Input in the NQAS standards focuses on the structural aspects of the facility, aligning with the IPHS guidelines. The standards emphasize compliance with minimum requirements for human resources, infrastructure, equipment, drugs, and other supplies to ensure the delivery of committed services.

C-4: “The facility has a defined and established procedure for effective utilization, evaluation, and augmentation of competence and performance of staff”

This NQAS standard is applicable for DHs. The analysis revealed that 29% of these facilities found it challenging to achieve. It is mentioned as standard C7 under NQAS guidelines.

This specific standard, emphasizes, public health facilities to have a defined and established system to assess the performance and competency of their staff members periodically at pre-defined intervals and take appropriate actions to maintain it. That would in turn help in the efficient utilization, performance, and competence of staff.

Support services “D”

Support services are essential for the effective functioning of healthcare facilities. They serve as the backbone of the facility, enabling the achievement of expected clinical outcomes.

D-1: “The facility has established programme for inspection, testing and maintenance and calibration of equipment”

This NQAS standard applies to CHCs and DHs and is mentioned as D1 under NQAS guidelines. The analysis revealed that one-third of these facilities (36%) failed to sustain this standard.

This standard addresses processes regarding equipment maintenance by having the defined processes such as establishing SOPs and maintaining instructions, keeping the record of valid AMCs for important and lifesaving equipment, calibration records, updated labels on measuring instruments, and taking preventive and corrective maintenance activities promptly.

D- 7: “Dietary services are available as per service provision and nutritional requirement of the patients”

This standard is referred to as D6 for DHs under the NQAS guidelines. As per the analysis, more than two-fifths (43%) of DHs were not able to sustain this standard.

This standard emphasizes the need to conduct nutritional assessments for patients periodically, standardizing the food preparation and distribution methods and strict adherence to hygiene and sanitation practices.

D-10: “The facility has established a procedure for monitoring the quality of outsourced services and adheres to contractual obligations”

This standard applies to DH and CHCs which are referred to as D12 and D10 respectively for DH and CHCs. As per the analysis, 36% of these facilities found it challenging to sustain.

Having establishes and defined processes related to outsourced services through proper documentation, following efficient tendering ways, timely payments, finding the gaps, and applying improvement measures would help the facilities to score better in this specific standard.

Clinical care “E”

The primary purpose of healthcare facilities is to provide clinical care. These services have a direct impact on the outcome of services, and the overall level of care given to the patients.

E-3: “The facility has defined and established procedures for nursing care”

This specific NQAS standard applies to DHs, CHCs, and PHCs. The study revealed that more than one-third of these facilities (37%) found it challenging to sustain this standard.

It is designated as standard E3 for PHCs and E4 for DHs and CHCs under the NQAS guidelines.

This standard is concerned with assessing the quality of nursing care given to patients adequately and promptly. It includes processes such as patient identification, efficient nurse handover, prompt implementation of treatment plans, proper maintenance of nursing records, compliance with treatment procedures, medical administration, and patient monitoring to enhance nursing care and patient safety to improve overall healthcare services in a comprehensive and timely manner.

Quality management “G”

This AoC encompasses a comprehensive set of interrelated and interconnected activities aimed at ensuring that services meet predefined standards and continually strive for improvement. It includes systematic planning, implementation, monitoring, finding the gaps, and taking appropriate action for improvement to ensure compliance with quality standards.

G-2: “The facility has defined and established an organizational framework and quality policy for quality assurance”

This specific NQAS standard applies to UPHCs and PHCs. The analysis revealed that more than one-third of these facilities (38%) could not meet this standard. It is mentioned as standard G1 for UPHCs and PHCs under guidelines.

This standard focuses on the formation of Quality teams within the health facility and assigning responsibilities to them. This standard emphasizes on development and dissemination of quality policy and objectives at the health facility. It is important to conduct periodic meetings, document them, and periodically review them to assure quality improvement.

G-3: “The facility has established system for patient and employee satisfaction”

This specific NQAS standard applies to all types of PHFs. As per the analysis, more than two-fifths of these facilities (47%) did not meet this standard. It is designated as standard G2 for all facilities under the NQAS guidelines.

This standard focuses on establishing a systematic process to conduct regular surveys to evaluate patient and employee satisfaction, analysing them, and developing action plans as per the findings. This would ensure continuous quality improvement, patients’ and employees’ satisfaction, and engagement with the health facility.

G-4: “The facility has established system for assuring and improving the quality of clinical and support services by an internal and external program (EQAS)”

This specific NQAS standard applies to DHs, CHCs, and PHCs. The assessment revealed that more than two-fifths of these facilities (46%) found challenging to sustain this standard. It is referred to as standard G3 for DHs, CHCs, and PHCs under the NQAS guidelines.

This standard emphasizes the implementation of internal quality assessment programs such as clinical audits, medical audits, death audits, etc., and EQAS for laboratory, diagnostic services, etc. to ensure continuous improvement of healthcare services and patient safety.

G-6: “The facility maps its key processes and seeks to make them more efficient by reducing non-value-adding activities and wastages”

This NQAS standard applies to DHs. The analysis findings indicate that approximately three-fourths of these facilities (71%) were not able to maintain this standard. It is defined as standard G5 under the NQAS guidelines for DHs. This standard strongly emphasizes mapping the important processes, finding out the areas of improvement, and eliminating non-value-added operations. Streamlining the processes improves the overall quality of care and patient safety in healthcare services.

G-7: “The facility has established system of periodic review as internal assessment, medical and death audit, and prescription audit”

This standard applies to both DHs and CHCs. The analysis suggests that approximately 64% of these facilities failed to sustain this standard. As per the NQAS guidelines, it is designated as G5 for CHCs, and for DHs, it has combined elements from standards G9 and G10.

This standard emphasizes conducting periodic assessments and audits at predetermined intervals to identify the area of improvement, evaluate the quality, efficiency, and effectiveness and enhance the overall quality of healthcare delivery.

G-8: “The facility has defined mission, values, quality policy and objectives, and prepares a strategic plan to achieve them”

This NQAS standard applies to DHs. The study revealed that more than half of these facilities (57%) did not achieve the minimum scores for this standard. It is designated as standard G6 for DHs under the NQAS guidelines.

This standard requires facilities to have a clear mission statement. It indicates the purpose of its existence, its users, and the overall goal of a facility. The mission must be aligned with the State’s Health Department. Quality policy defines the overall intention and direction of the facility, it should align with the mission statement. The facility should define its core values to guide the hospital services and Objectives should be “SMART”. The facility to develop time-bound plans to achieve these objectives. It develops a unified approach for achieving the overall goal and quality of healthcare delivery.

G-9: “The facility seeks continual improvement by practicing quality methods and tools”

This standard applies to both DHs and CHCs. The assessment revealed that approximately 64% of these facilities did not meet the minimum criteria for this standard. It is designated as G7 for DHs and CHCs under the guidelines.

The standard focuses on utilizing quality tools and methods to enhance processes, optimize resources, reduce errors, create productive and efficient work environments, and ensure quality and patient safety in healthcare delivery.

G-11: “The facility has established procedures for assessing, reporting, evaluating, and managing risk as per the risk management plan”

This standard applies to DHs. It was observed that a significant percentage of these facilities (71%) found it challenging to meet this standard. It is designated as standard G9 for DHs under the NQAS guidelines

This standard focuses on the implementation of a risk management framework that outlines the responsibilities of staff, SOPs, identification of the severity of various risks, maintenance, and documentation of the risk register, and timelines for risk management. By complying with this standard the facility can mitigate and manage the potential risks on time in an organized manner. This will help in reducing errors and enhancing patient safety.

The outcome “H”

This AoC focuses on four measures of standards related to providing clinical care, service quality, efficiency, and productivity. Each standard has two goals: implementation of a measurement system for monitoring the indicators within the facility and meeting the benchmark standards. Initially, it may be challenging to set the benchmark practices and standards but eventually, it can be established by the states to evaluate the performances against the benchmark.

H-4: “The facility measures service quality indicators and endeavours to reach state/national benchmark”

This standard applies to all types of facilities. For DHs, CHCs, and PHCs it is designated as H4, while for UPHCs it has the combined elements of H1 and H2 as per the NQAS guidelines. The assessment revealed that approximately one-third of these facilities were not able to sustain this standard.

This standard focuses on key performing indicators of service quality, waiting time, LAMA rate, patient satisfaction scores (PSS), etc. The goal is to improve the quality indicators and performance of the facility compared to their current levels and meet the benchmark standards set by the states.

Objective 2 is achieved by assessing the standards that PHFs found difficult to meet the requirements for sustenance of attained NQAS certified status.

Chapter 5: Discussion

This study emphasizes the importance of maintaining quality in public health facilities in India, particularly after obtaining accreditation or certification. It highlights that states often neglect the facilities that have achieved certification. Hussein et al. (6) support the positive impact of hospital accreditation on patient length of stay, performance metrics, and safety culture, suggesting it to be seen as a supplementary tool for process improvement. Furthermore, certification programmes are encouraged as they have been found to improve the overall standard of care and patient safety in healthcare. To sustain quality standards and reduce medical errors, tighter management and ongoing survey readiness programmes are recommended by Devkaran et al. (10). Government of India has started many initiatives and programmes for improving the quality standards of PHFs. However, public health facilities in India still struggle to maintain quality standards. There is limited research dedicated to understanding the underlying factors contributing to the difficulties public health facilities encounter in maintaining quality standards specially after certification.

The strength of this study lies in its focus on identifying and addressing the specific quality standards that public health facilities find most challenging to sustain under the National Quality Assurance Standards (2). This approach sets it apart from previous studies that have not specifically addressed these gaps in quality standards. It contributes to the existing body of knowledge by addressing a previously unexplored aspect of quality standards in PHFs under the NQAS.

However, this study has the following limitations:

1. One of the primary limitations of this study is that it focuses on NQAS-certified facilities that were specifically chosen for the Surprise Assessment. As a result, the findings cannot be generalized to PHFs that have not pursued or obtained NQAS certification.
2. The uneven selection of PHF types, with a majority being Primary Health Centres (70%), may lead to a biased or incomplete representation of different facility types. Consequently, the comparative analysis may not provide a comprehensive picture of the challenges faced by various types of PHFs.
3. The study's duration was limited to a three-month internship, which restricted the scope for primary data collection and in-depth qualitative analysis. This limitation

hinders a thorough exploration of the underlying reasons for the gaps in sustaining quality standards.

4. Moreover, due to privacy concerns, the specific names, codes, documents, or findings related to individual PHFs cannot be disclosed. Consequently, a detailed discussion of the performance of specific health facilities at a micro-level could not be discussed in this study.

Future research endeavours should aim to address these limitations in order to foster a more comprehensive understanding of quality standards and their sustainability in public health facilities. By encompassing a broader range of public health facilities, including those that have not pursued or received NQAS certification status, future studies can provide a more nuanced perspective on the challenges and factors influencing the maintenance of quality post-certification. This would enable researchers to explore the efficacy of alternative quality assurance mechanisms and identify potential strategies for improving the long-term sustainability of quality standards in public health facilities. By addressing these limitations, future research endeavours can contribute to the development of more robust and applicable recommendations for enhancing quality in public health facilities.

Chapter 6: Conclusion and recommendations

Globally the trend is increasing toward getting the health facility accredited or certified due to the many benefits it offers to the patients, staff as well as the health facility. The challenge is to sustain the quality after getting the certification and this is something that requires continuous efforts, commitment, monitoring, and evaluations of various pre-decided parameters. This study focuses on evaluating the sustenance of certification status in NQAS-certified public health facilities in India and highlights the need to focus on enhancing performance and addressing the challenges faced in specific NQAS standards. A total of 43 Public health facilities were selected, including five DHs, two SDHs, CHCs, two UPHCs, and 30 PHCs from 18 states/UTs of India to evaluate the gaps in the sustenance of NQAS status. The analysis revealed that all facilities successfully maintained quality standards in Area of Concern “B” i.e. "Patient rights", indicating a strong commitment to upholding patient rights and ensuring ethical healthcare practices. However, major challenges were identified in AoC “G” i.e. "Quality Management System" and AoC “H” i.e. "Outcome", highlighting the need for improvement and an immediate action plan. The average decline of 16% overall score across all 43 PHFs indicates a need for improvement in the quality standards and performance of the PHFs. The decline in scores highlights the importance of continuous quality assessment and improvement efforts to ensure consistent high-quality healthcare services.

The study identified gaps, in the need for established procedures in staff competence evaluation, equipment maintenance, patient and employee satisfaction, dietary services, and monitoring of outsourced services. Strengthening the quality management system, improving nursing care, and implementing quality improvement measures were also highlighted. The recommendations provided focus on developing and enhancing a culture of internal quality assessment and quality improvement in Public Health Facilities (PHFs) by following the action plan:

Establishing a defined process: PHFs to have a structured process in place to identify gaps in quality standards. This involves forming and operationalizing a Quality Team within the facility, developing SOPs, periodic assessments at pre-defined intervals, assessing current practices, and comparing them with existing quality parameters.

Regular training and hand-holding: Continuous training programs are to be provided to PHF staff to enhance their skills and knowledge related to quality improvement. Additionally, offering support and guidance through hand-holding initiatives can help PHFs effectively implement quality improvement measures.

Continuous quality improvement methods and tools: Implementing methods like PDCA (Plan-Do-Check-Act) cycle, 5S (Sort, Set in order, Shine, Standardize, Sustain), process mapping, continuous monitoring, and tracking systems can help PHFs identify areas for improvement and implement effective solutions.

Benchmarking: PHFs should strive to reach state/national quality benchmarks. These benchmarks serve as reference points for quality standards and help PHFs gauge their performance and progress.

PHFs to obtain and sustain Full certification status: Incorporating a combination of these recommendations will help PHFs to develop a culture of continual quality improvement, enabling them to uphold and surpass established criteria for quality and improve their service delivery, patient outcomes, and overall performance. This would assist the facilities in obtaining state certification and ultimately result in obtaining national NQAS certification status.

Objective 3 is achieved by recommending the action plan to public health facilities that are not able to attain the full certification under the Surprise NQAS Assessment.

The study's outcomes will offer valuable insights to policymakers, program implementers, and health officials, specifically in identifying the obstacles that have impeded public health facilities from sustaining their certification status during the Surprise Assessments. This information will be crucial in devising strategies to enhance the situation in public health facilities by improving their NQAS scores. Such assessments can serve as a catalyst to initiate and sustain improvements in quality health care. The vision is to enable all public health facilities in India to gradually achieve and sustain certified NQAS status.

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Annexure 1

NQAS standards that PHFs could not sustain, as per guidelines for Quality Assurance for DHs, CHCs, UPHCs, and PHCs are as follows.

S. No	Standards of Area of concern, “Service Provision” (A)
A-1	The facility provides RMNCHA services
A-2	The Facility Provides Diagnostic Services, Para-clinical, and support services
A-3	The facility provides services as mandated in the National Health Programmes /State scheme(s).
A-4	The facility provides services as per local needs / State specific health Programmes as per guidelines

S. No	Standards of Area of concern, “Patient Rights” (B).
B-1	The facility has defined framework for ethical management including dilemmas confronted during the delivery of services at public health facilities

S. No	Standards of Area of concern, “Inputs” (C)
C-1	The facility ensures the physical safety of the infrastructure
C-2	The facility has adequate qualified and trained staff, required for providing assured services to the current caseload
C-3	The facility has established Programme for fire safety and other disasters
C-4	The facility has a defined and established procedure for effective utilization, evaluation, and augmentation of competence and performance of staff

S. No	Standards of Area of concern, “Support Services” (D)
D-1	The facility has established programme for inspection, testing and maintenance and calibration of equipment
D-2	The facility has an established Facility Management Programme for Maintenance and Upkeep of Equipment and Infrastructure to provide safe and Secure environment to staff and Users

D-3	The facility has defined procedures for storage, inventory management and dispensing of drugs in pharmacy and patient care areas
D-4	The facility ensures availability of diet, linen, water and power backup as per requirement of service delivery and support services norms
D-5	The facility has defined and established procedures for promoting public participation in management of hospital with transparency and accountability.
D-6	Hospital has defined and established procedures for Financial Management and monitoring of quality of outsourced services.
D-7	Dietary services are available as per service provision and nutritional requirement of the patients
D-8	The facility is compliant with all statutory and regulatory requirement imposed by local, state or central government
D-9	Roles and Responsibilities of administrative and clinical staff are determined as per govt. regulations and standards operating procedures
D-10	The facility has established procedure for monitoring the quality of outsourced services and adheres to contractual obligations
D-11	Facility has defined & established procedure for Community Participation for providing assured services
D-12	Facility has defined procedure for Governance & work Management

S. No	Standard of Area of concern, “Clinical Services” (E)
E-1	The facility has defined and established procedures for clinical assessment and reassessment of the patients
E-2	The facility has procedures for continuity of care of patient.
E-3	The facility has defined and established procedures for nursing care
E-4	Facility has defined & establish procedure for Diagnostic Services
E-5	The facility has defined and follow correct procedure for drug administration and follows standard treatment guidelines defined by state/Central government
E-6	The facility has a procedure to identify high risk and vulnerable patients
E-7	The facility has defined and established procedures for maintaining, updating of patients’ clinical records and their storage

E-8	The facility follows standard treatment guidelines defined by State/Central government for prescribing the generic drugs & their rational use
E-9	The facility has defined and established procedures for discharge of patient.
E-10	The facility has defined and established procedures for Emergency Services and Disaster Management
E-11	The facility has established procedures for Intranatal care as per guidelines
E-12	The facility has established procedures for postnatal care as per guidelines
E-13	The facility has defined and established procedures for Blood Bank/Storage Management and Transfusion
E-14	The facility has established procedures for abortion and family planning as per government guidelines and law
E-15	The facility has established procedures for Anaesthetic Services
E-16	The facility has defined and established procedures of operation theatre and surgical services.
E-17	The facility provides adolescent Reproductive and Sexual Health services as per guidelines
E-18	The facility provides National health Programme as per operational/Clinical Guidelines of the government
E-19	The facility has defined and established procedures for end of life care and death

S. No	Standard of Area of concern, “Infection Control” (F)
F-1	The facility has infection control programme and procedures in place for prevention and measurement of hospital associated infection
F-2	The facility has standard procedures for processing for Disinfection and sterilization of equipment and instruments
F-3	Physical layout and environmental control of the patient care areas ensures infection prevention
F-4	The facility has defined and established procedures for segregation, collection, treatment and disposal of bio medical and hazardous Waste

S. No	Standards of Area of concern, “Quality Management Systems” (G)
G-1	The facility has established organizational framework for quality improvement
G-2	The facility has defined and established organizational framework and Quality policy for Quality Assurance
G-3	The facility has established system for patient and employee satisfaction

G-4	The facility have established system for assuring and improving quality of Clinical and support services by internal and external program.
G-5	The facility has established, documented, implemented and maintained Standard Operating procedures for all key processes and support services
G-6	The facility maps its key processes and seeks to make them more efficient by reducing non value adding activities and wastages
G-7	The facility has established system of periodic review as internal assessment, medical and death audit and prescription audit
G-8	The facility has defined Mission, Values, Quality policy and Objectives, and prepares a strategic plan to achieve them
G-9	The facility seeks continually improvement by practicing Quality methods and tools
G-10	The facility has defined, approved and communicated Risk Management framework for existing and potential risks
G-11	The facility has established procedures for assessing, reporting, evaluating and managing risk as per Risk Management Plan
G-12	The facility has defined and established Quality Policy and Quality Objectives.

S. No	Standards of area of concern “Outcome” (H)
H-1	The facility measures Productivity Indicators and ensures compliance with State/National Benchmarks
H-2	The facility measures Efficiency Indicators and ensure to reach State/National Benchmark
H-3	The facility measures Clinical Care & Safety Indicators and tries to reach State/National Benchmark
H-4	The facility measures Service Quality Indicators and endeavours to reach State/National Benchmark

Annexure 2

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Annexure 3

Following is the sample analysis done for district hospitals for finding the gaps.

Sl.No.	Category	State	Score of Area Of Concern							
			A	B	C	D	E	F	G	H
1	DH	Bihar	85	74	80	81	86	86	64	92
2	DH	Bihar	91	90	69	56	88	65	61	85
3	DH	Manipur	73	76	75	70	81	91	55	7
4	DH	Uttar Pradesh	75	86	74	80	80	89	76	86
5	DH	Uttar Pradesh	76	78	64	67	57	68	43	33
			0	0	2	2	1	2	4	2

A						B						C						D												
A1	A2	A3	A4	A5	A6	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12
76	83	98	89	95	93	67	71	87	63	93	80	##	55	80	87	95	87	85	58	82	81	64	100	93	86	100	100	94	97	86
100	89	100	NA	NA	NA	88	100	89	75	100	NA	##	83	67	50	88	82	57	50	44	90	36	75	NA	75	NA	NA	NA	67	NA
71	78	83	77	50	50	71	74	91	78	69	75	##	78	69	86	81	83	63	48	51	74	85	87	0	83	NA	NA	100	100	100
85	70	69	78	75	90	79	91	92	91	83	91	##	81	77	59	81	81	57	93	77	75	77	97	82	94	100	25	61	82	100
79	73	75	64	96	92	81	77	87	69	76	67	##	52	50	81	90	78	17	58	66	55	70	81	47	47	85	100	76	85	40
																		1	1	1		1		2	1		1	1		1

Standard wise score																						
E																						
E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23
90	75	82	83	100	48	86	68	84	83	73	67	97	0	100	87	98	NA	NA	98	NA	100	97
50	100	90	60	75	83	64	93	NA	NA	NA	100	100	NA	NA	100	NA	99	75	NA	NA	NA	NA
87	80	69	88	63	26	73	92	94	NA	63	72	94	93	90	100	64	NA	70	75	NA	NA	50
98	67	80	86	88	64	81	84	90	NA	40	68	100	100	100	100	100	NA	NA	77	98	NA	100
82	42	65	45	22	29	40	66	64	NA	22	63	39	77	77	25	NA	NA	NA	83	NA	NA	88
	1		1	1	3	1				2		1	1		1							

F						G										H			
F1	F2	F3	F4	F5	F6	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	H1	H2	H3	H4
77	96	90	88	81	85	61	68	81	62	33	70	66	57	50	82	93	95	95	84
33	100	56	67	30	75	100	0	50	86	100	7	100	100	NA	0	100	100	83	50
60	98	100	90	92	93	0	50	11	91	27	34	31	50	NA	20	8	4	8	9
90	90	94	78	89	92	89	86	85	79	50	67	86	61	80	65	91	83	78	93
47	85	81	40	60	85	83	47	24	68	7	21	36	17	50	20	35	33	19	53
2			1	1		1	2	2		3	3	2	1		3	2	2	2	1

Remarks				
Aggregate Scores of SA %	Previous scores	Remarks	Result	% Decline in Scores
81	94	Meeting Three out of Six criteria	Deferred Certification	13.83
75	97	Meeting Three out of Six criteria	Deferred Certification	22.68
73	89	Meeting Three out of Six criteria	Deferred Certification	17.98
80	89	Meeting Three out of Six criteria	Deferred Certification	10.11
62	89	Failed to meet mandatory minimum	Deferred Certification	30.34