## **ORIGINAL ARTICLE**

# A DESCRIPTIVE ANALYSIS OF NATIONAL QUALITY ASSESSMENT STANDARDS CERTIFICATION STATUS OF PRIMARY HEALTH CARE CENTRES IN TAMIL NADU, MAY 2024.

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#### **ABSTRACT**

**INTRODUCTION:** Ensuring high-quality healthcare delivery is a fundamental goal of health systems worldwide. In India, the National Quality Assurance Standards (NQAS) were introduced to evaluate and enhance healthcare services, including those provided at Primary Health Centers (PHCs). This study examines the NQAS certification status of PHCs, Urban PHCs (UPHCs), and Community Health Centres (CHCs) in Tamil Nadu to identify factors affecting compliance and propose improvement strategies.

METHODS: A cross-sectional study was conducted from April to June 2024, encompassing all PHCs, UPHCs, and CHCs in Tamil Nadu. Secondary data on certification status from May 2023 to May 2024 were collected from state-level quality officers, while district-level officers provided insights into reasons for non-certification. Data were analyzed using descriptive statistics to identify trends and common deficiencies in achieving NQAS certification.

**RESULTS:** Among 2,127 Primary Health Centers (PHC) facilities, 469 received full certification, 83 were certified with conditions, and 17 were deferred. Key deficiencies were identified in quality management, patient rights, and service outcomes. Deferred CHCs often failed to meet criteria related to blood storage management and outsourced service monitoring, while PHCs and UPHCs struggled with inpatient care, national health programs, and infection control measures.

**DISCUSSION**:The study highlights gaps in infrastructure, workforce capacity, and adherence to standardized protocols. Addressing these deficiencies requires regular internal assessments, targeted training, and policy reforms. Digital tools like GUNAK and patient feedback applications can support quality monitoring and engagement.

**CONCLUSION**: Strengthening PHC services in Tamil Nadu necessitates an integrated approach involving capacity building, infrastructure development, and evidence-based quality improvement models. The study's findings provide insights for program implementers to enhance primary healthcare delivery and achieve sustained NQAS compliance.

KEYWORDS: Quality care, NQAS, PHC, Kayakalp, Accreditation

### INTRODUCTION

Providing the finest available care at the appropriate time for the appropriate person while achieving the best outcomes is the cornerstone of high-quality healthcare. Quality improvement methods in healthcare have their roots in the 19th century. Two notable examples are the handwashing advocacy of obstetrician Ignaz Semmelweis and nurse Florence Nightingale's efforts to improve living conditions and reduce soldier mortality in army hospitals.¹ Quality health services according to WHO, should be: effective; safe; people-centered; timely; equitable; integrated; and efficient also to attain Universal Health Coverage, and attention to quality of care in all settings including those experiencing fragility, conflict, and vulnerability is mandatory.²

Primary Health Centers (PHCs) are the cornerstone of India's healthcare system, especially in rural regions,

providing essential medical services to a vast population. To ensure the delivery of high-quality care, the Ministry of Health and Family Welfare (MoHFW) introduced the National Quality Assurance Standards (NQAS), in 2013 a comprehensive framework designed to assess and enhance the quality of services in public health facilities at Subdistricts, District-level hospitals, including PHCs.

NQAS aims to assess and certify healthcare facilities on eight quality parameters, including service provision, patient rights, inputs, support services, clinical care, infection control, quality management, and outcome. These standards



Please Scan this QR Code to View this Article Online Article ID: 2025:05:01:01 Corresponding Author: Vaishnavi N e-mail: dr.vaishu98@gmail.com are ISQua (International Society for Quality in Health Care) accredited and meet global benchmarks in terms of comprehensiveness, objectivity, evidence, and firmness of development. Once a health facility gets certified for NQAS, it is felicitated and recognized for its achievement with financial incentives. Further surveillance will be done every year and recertification will take place after three years.

PHC/ Upgraded PHC with beds that receive full Certification and Certification with conditionality will get an incentive of Rs.3.0 Lakh and Rs.2.0 Lakh respectively (Table 1). U-PHC/ PHC without beds will receive an incentive of Rs.2.0 Lakh for Full Certification and Rs.1.5 lakh for certification with conditionality.

CHCs with full certification will receive an incentive of Rs.  $10,000 \times No$ . of functional bed x No. of applicable checklist/ total number of checklists in the standards. CHCs with certification with conditionality will receive an incentive of Rs.  $7,000 \times No$ . of functional bed x No. of applicable checklist/ total number of checklists in the standards.

Certification with conditionality (Table 1) is given only when the facility meets the first criteria of aggregate score  $\geq$  70% including four out of five remaining criteria for the Community Health Centre (CHC) and three out of four remaining criteria for the Primary Health Centre and U-PHC.<sup>3</sup> Certification will be deferred if the facility does not meet four out of five remaining criteria for the Community Health Centre (CHC) and three out of four remaining criteria for the Primary Health Centre and U-PHC.<sup>3</sup>

[\*Standard A2 - The facility provides RMNCHA services; Standard B4 - The facility has defined and established procedures for informing patients about the medical condition, and involving them in treatment planning, and facilitates informed decision making; Standard B5 - 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 D8 - The facility has defined and established procedures for promoting public participation in management of hospital transparency and accountability; Standard F6 - The facility has defined and established procedures for segregation, collection, treatment and disposal of Bio Medical and hazardous Waste. Abbreviations - SDH -Sub-district hospital; CHC - Community health centre; PHC - Primary health centre; U-PHC - Upgraded primary health centre]

Despite the implementation of NQAS, achieving certification remains a significant challenge for many PHCs. As of October 31, 2024, a total of 16,586 health facilities across India have received NQAS certification.<sup>4</sup> However,

numerous PHCs still struggle to meet the required standards. Identifying and understanding the barriers to certification are crucial steps toward improving healthcare quality.

Several studies have highlighted common obstacles faced by PHCs in attaining NQAS certification. A report on the enablers and barriers of NQAS accreditation in Kerala identified factors such as inadequate infrastructure, insufficient staffing, and limited training opportunities as significant hurdles.<sup>5</sup>

Table 1: NQAS assessment criteria for SDH/CHC and PHC/U-PHC facilities

	Aggregate Score (%)		Quality Certified		Quality Certified with Conditionality		Deferred		
S.	Criteri	SDH/	PHC/U-	SDH/	PHC/U-	SDH/	PHC/U-	SDH/	PHC/U-
no	a	СНС	PHC	СНС	PHC	СНС	PHC	СНС	PHC
1	Aggreg ate score of the health facility Score	≥ 70%	≥ 70%	V	<b>V</b>	V	<b>V</b>	V	V
2	of each depart ment of the health facility Segreg	≥ 70%	NA	<b>V</b>	NA	At least three criteria out of	NA	Does not meet at least three	NA Does
3	ated score in each Area of Concer	≥ 70%	≥ 60%	<b>V</b>	√	remain ing five (√)	At least three criteria out of remaini ng four ()	criteria out of remain ing five	not meet at least three criteria out of remaini ng four
4	Score of Standa rd	Standa rd A2, Standa rd B5 and Standa rd D8 is >60%	Standar d A2, Standar d B4 and Standar d F6 (PHC)/F 4 (U- PHC) is ≥ 60%	√	√				
5	Individ ual Standa rd wise score	≥ 50%	≥ 50%	√	√				
6	Patient Satisfa ction Score	65% or Score of 3.2 on Likert Scale	60% or Score of 3.0 on Likert Scale	<b>V</b>	<b>V</b>				

Understanding these centres' current NQAS certification status and exploring the reasons behind their success or failure in obtaining certification can provide valuable insights. Such an analysis can inform targeted interventions to bridge existing gaps, thereby enhancing the quality of primary healthcare services in the state.

This study aims to conduct a descriptive analysis of the NQAS certification status of CHCs, U-PHCs, and PHCs in Tamil Nadu. By examining the certification status of 2,127 healthcare facilities and exploring the reasons for noncertification, this study seeks to identify prevalent challenges

and propose actionable solutions. The findings are expected to contribute to policy formulation and the implementation of strategies aimed at strengthening primary healthcare services, ultimately leading to improved health outcomes for the population.

#### **METHODS**

A cross-sectional study conducted over a period of three months, from April 2024 to June 2024. All Primary Health Centers (PHCs), Urban Primary Health Centers (UPHCs), and Community Health Centers (CHCs) in Tamil Nadu are included to assess their National Quality Assurance Standards (NQAS) certification status. Facilities deferred or received conditional certification are further examined to identify the reasons for non-certification.

Secondary data on the certification status of health facilities from May 2023 to May 2024 were obtained from state-level quality officers.

Additionally, data on the reasons for noncertification were collected from district-level quality officers. The collected data were entered into Microsoft Excel. Descriptive statistical analysis was performed to identify trends and factors associated with certification outcomes.

#### **RESULTS**

Totally 2127 primary healthcare facilities are actively operating in Tamil Nadu, out of these 2127 facilities, 570 (26.7%) appeared for NQAS assessment for the year 2023-2024. At the end of the assessment, 469 (82%) centres got full certification, 83 (14.5%) got conditionality and 17 (3.6%) got deferred. District wise list is represented in Figures 1,2 and 3.

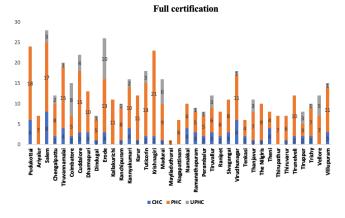


Figure 1: Distribution of facilities received full certification in NQAS assessment by District, Tamil Nadu, May 2023 – May 2024

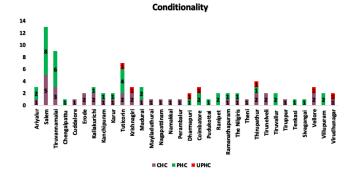


Figure 2: Distribution of facilities received certification based on conditionality in NQAS assessment by District, Tamil Nadu, May 2023 – May 2024

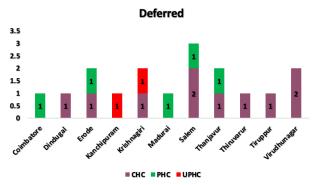


Figure 3: Distribution of facilities deferred for certification in NQAS assessment by District, Tamil Nadu, May 2023 – May 2024

 $\,$  17 deferred facilities include 10 CHCs, 5 PHCs, and 2 UPHCs. A detailed analysis of the deferred facilities is given below.

Table 2: Criteria met and not met at CHC level (n=10), Deferred facilities for NQAS assessment, Tamil Nadu, May 2023 – May 2024

CHCs Criteria	Met	Not met
criteria 1	10	0
criteria 2	2	8
criteria 3	1	9
criteria 4	4	6
criteria 5	0	10
criteria 6	10	0

Table 2 shows that at the CHC level, criteria 5, 3, and 2 are not met in most of the CHCs that got deferred. The auxiliary department, operation theatre, and general/administration department are the departments that are commonly not met (Table 3). Quality management is the area of concern not met by 8 of the 10 CHCs that got deferred (Table 4). The most common standards that are not met include Standard E12 (6 CHCs) and Standards G6 and D10 (4 CHCs).

Table 3: Departmental criteria met and not met at CHC level (n=10), Deferred facilities for NQAS assessment, Tamil Nadu, May 2023 – May 2024

Department	Met	Not met	
Emergency	8	2	
NBSU	10	0	
Operation theatre	7	3	
Laboratory	8	2	
OPD	10	0	
Labor room	10	0	
IPD	8	2	
Auxiliary	5	5	
General/admin	7	3	
Radiology	9	1	
Pharmacy and store	9	1	
Blood storage unit	9	1	

Table 4: Area of concern met and not met at CHC level (n=10), Deferred facilities for NQAS assessment, Tamil Nadu, May 2023 - May 2024

Area of concern	Met	Not met
Service provision	8	2
Patient rights	10	0
Inputs	9	1
Support services	9	1
Clinical services	9	1
Infection control	10	0
Quality management	2	8
Outcome	10	0

At the PHC level, criteria 5 and 3 are not met by the deferred PHCs (Table 5). In-patient department was not met by 3 out of 5 PHCs, followed by NHP and OPD which are not met by 2 PHCs respectively (Table 6). Quality management and outcome are the areas of concern not met by 4 and 3 of the deferred PHCs respectively (Table 7).

Table 5: Criteria met and not met at PHC level (n=5), Deferred facilities for NQAS assessment, Tamil Nadu, May 2023 – May 2024

PHCs Criteria	Met	No	ot met
criteria 1		4	1
criteria 2 (NA)		-	-
criteria 3		1	4
criteria 4		4	1
criteria 5		0	5
criteria 6		5	0

Table 6: Departmental criteria met and not met at PHC level (n=5), Deferred facilities for NQAS assessment,

Tamil Nadu, May 2023 – May 2024

PHCs Department	Met	Not met
OPD	3	2
Labor room	5	0
IPD	2	3
National Health program	3	2
General	5	0
Laboratory	4	1

Table 7: Area of concern met and not met at PHC level (n=5), Deferred facilities for NQAS assessment, Tamil Nadu, May 2023 – May 2024

PHCs Area of concern	Met	Not met
Service provision	5	0
Patient rights	5	0
Inputs	5	0
Support services	5	0
Clinical services	5	0
Infection control	5	0
Quality management	1	4
Outcome	2	3

#### **DISCUSSION**

The analysis of National Quality Assurance Standards (NQAS) certification status among 2,127 health facilities in Tamil Nadu reveals critical gaps in achieving quality standards. While 469 facilities obtained certification, 83 were certified with conditions, and 17 were deferred. Among the eight key quality areas (Service Provision, Patient Rights, Inputs, Support Services, Clinical Services, Infection Control, Quality Management, and Outcome), Quality Management was the most commonly unmet criterion, followed by Outcome-based assessments across the majority of the deferred centers (CHCs/PHCs/UPHCs). A thorough assessment of the unmet standards among the failed centers is essential to drive future improvements.

Non-Compliance with Certification Criteria: The primary reason for deferment was the failure to meet Criteria 3 and 5, which require a minimum score of  $\geq$ 60% (PHC/UPHC) or  $\geq$ 70% (CHC) in each area of concern and an individual standard score of  $\geq$ 50% across all facility types. Additional gaps were noted in Criteria 1, 2, and 4, which emphasize overall scores ( $\geq$ 70%), service package scores ( $\geq$ 7), and standard scores ( $\geq$ 60%).

Departmental Deficiencies: CHCs: Key challenges were observed in the Auxiliary and General Administration departments. Six CHCs lacked defined procedures for blood storage and transfusion management (Standard E12). Four CHCs failed to establish protocols for monitoring outsourced services, adherence to contractual obligations, and defining quality objectives (Standards D10 and G6). PHCs: Major gaps were in the Inpatient Department (IPD), National Health Program (NHP), and Outpatient Department (OPD). The deficiencies were observed in the public participation mechanisms in the management of hospitals, a structured quality assurance system for clinical and support services, and defined service quality benchmarks were major barriers (Standards D4, G3, and H4) for the deferred PHCs. UPHCs:

Non-compliance was noted in Newborn and Child Health, Communicable Diseases, Family Planning, and Non-Communicable Diseases (NCDs).

Across India, NQAS assessment has shown a positive impact on improving the quality of healthcare facilities. An assessment by Javeed et al., showed that staffs in NQAS-certified facilities are more satisfied, work efficiently, and feel a sense of pride compared to the non-certified centres.<sup>6</sup>

A study by Sujata Gupta et al has shown that the involvement of medical college faculties in managing the PHCs has improved the overall Kayakalp scores from 56% to 84% in 2 years of undertaking by the community medicine department.7 Under the direction of public health experts, resource management and capacity building can lead to a notable improvement in cleanliness, hygiene, and infection control. This study concluded that an integrated approach involving public health specialists and other medical professionals such as medical officers, field workers, and sanitary inspectors was useful in improving the primary care services.7 In George et al study, a stronger evidence base linking improved quality of care with health financing, private sector partnerships, and community participation and engagement strategies. The evidence related to leadership, system design, information and monitoring, and accountability and transparency is limited.8

Many quality improvement methods can be applied to healthcare, 3 of which include Plan-Do-Study-Act (PDSA), Lean, and Six Sigma. Each method has a unique goal-oriented outcome that has been applied to healthcare to streamline and optimize processes. PDSA is a cyclical quality improvement method often compared to the application of the scientific method, differing from Lean philosophy due to its iterative format. PDSA was adapted to healthcare in 1996 by statistician Gerald J. Langley and built upon its manufacturing origin in 1986 by statistician Edwards Deming. PDSA focuses on 4 stages: plan, do, study, and act. 10

"GUNAK" is an application that abbreviates Guidelines for NQAS and Kayakalp. The app displays the availability of state-specific customized checklists. Real-time reporting of scores to respective State/ district Quality Assurance units.<sup>3</sup> Mera Asptaal or My Hospital is a simple, and multi lingual application launched in 2016, that captures patient feedback in a very short time on the services received from public hospitals. The goals of Mera Asptaal or My Hospital application are to improve quality of care at healthcare facilities, to establish a patient-driven, responsive and accountable healthcare system, to establish an environment of healthy competition among providers

to provide better quality services, and to recognize topperforming facilities, which will boost the morale of staff.<sup>3</sup>

To enhance the quality of Primary Health Centers (PHCs) in Tamil Nadu, a multifaceted approach is essential. Implementing regular self-assessments and internal audits can help identify gaps in service delivery, enabling targeted improvements. The Tamil Nadu Health System Reform Program (TNHSRP) emphasizes a multipronged approach to quality improvement, recognizing that there is no single solution to achieving high-quality care. Community engagement is another critical factor in improving PHC quality. Strengthening community linkages and promoting multisectoral collaboration can lead to more responsive and accountable healthcare services.

The Tamil Nadu Health Policy - Vision 2030 underscores the importance of community participation and intersectoral coordination in achieving health objectives. Furthermore, adopting advanced technologies for screening, diagnostics, and treatment can enhance service delivery. By implementing evidence-based strategies, Tamil Nadu can strengthen its primary healthcare system and ensure high-quality, patient-centered care.

#### **CONCLUSION**

Ensuring the quality of primary healthcare services requires a comprehensive approach that integrates structured quality assessments, workforce capacity building, process optimization, and community engagement. While achieving NQAS certification is a milestone, the ultimate goal should be to provide high-quality, patient-centred care rather than merely fulfilling certification requirements.

#### **CONFLICT OF INTEREST**

None

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