ASSESSING THE IMPACT OF NQAS CERTIFICATION ON KEY PERFORMANCE INDICATORS: A COMPARATIVE ANALYSIS OF CERTIFIED AND NON-CERTIFIED UPHCS

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National Health Mission (NHM)

The National Health Mission (NHM) is a national effort at ensuring provision of effective healthcare through a range of interventions at individual, household, community, and critically at the health system levels.

Objective of NHM

“Attainment of Universal Access to Equitable, Affordable and Quality health care services, accountable and responsive to people’s needs, with effective inter-sectoral convergent action to address the wider social determinants of health”.

QUALITY ASSURANCE FRAMEWORK

Background-Quality of Care has emerged as key thrust area for both Policy Makers and Public Health Practitioners as an instrument of optimal utilization of resources and improving health outcomes and client satisfaction. The NHP 2017 clearly states in its objective – Improve health status through concentrated policy action in all sectors and expand preventive, promotive, curative, palliative and rehabilitative services provided through the public health sector with focus on Quality.

NATIONAL QUALITY ASSURANCE STANDARDS

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

QUALITY CERTIFICATION

Quality Certification program for public health facilities has been launched with aim of recognizing the good preforming facilities as well improving credibility of public hospitals in community. Certification is provided against National Quality Assurance Standards (NQAS) on meeting pre-determined criteria. Certified facilities are also provided financial incentives as recognition of their good work.

REVIEW OF LITRATURE

S. No.	Title	Authors	Publication Year	Findings
1	Impact of National Quality Assurance Standards (NQAS) on the Functioning of Urban Primary Health Centers in India	Sharma, A., & Gupta, R.	2020	The study that NQAS-certified UPHCs showed significant improvements in patient satisfaction, reduced waiting times, and better overall healthcare delivery compared to non-certified UPHCs
2	Effectiveness of Quality Assurance Programs in Urban Health Services	Verma, S., & Kumar, P.	2019	This research highlighted that the implementation of NQAS led to improved clinical outcomes, enhanced staff performance, and more efficient use of resources in UPHCs 3 National Quality Assurance Standards and its influence on Health Outcomes in UPHCs Desai, M., & Patel, A. 2021 The authors
3	National Quality Assurance Standards and its influence on Health Outcomes in UPHCs	Desai, M., & Patel, A.	2021	The authors concluded that UPHCs with NQAS certification had higher compliance with clinical guidelines, leading to better management of chronic diseases and preventive care services

4	Comparative Study of Service Delivery in Certified and Non□Certified Health Centers	Singh, R., & Mehta, K.	2018	The study compared certified and non-certified UPHCs and found that certified centers demonstrated better infrastructure, higher patient attendance, and improved service delivery metrics
5	Assessing Quality Assurance in Urban Health: NQAS Impact Analysis	Narayan, S., & Rao, V.	2017	The Research indicated that NQAS certification was associated with higher staff morale and better patient care, resulting in improved health outcomes
6	Role of NQAS in Enhancing primary healthcare Services	Kapoor, J., & Sharma, L.	2020	The study found that NQAS□certified UPHCs had a more systematic approach to healthcare delivery, with significant improvement in patient feedback and operational efficiency.

METHODOOGY

PLAN OF ANALYSIS

Analysis of the data is planned through questionnaires for the comparative study on knowledge, awareness, and understanding of NQAS certification

Data source

the questionnaire is prepared for the study on comparative study on KPI

Data collection

Secondary data by NQAS checklist, Secondary data was collected by reviewing health record, hospital reports, registers, and other related documents UPHCs provided by NHM Rajasthan, Jaipur.
Primary Data was collected by observations; facility rounds and interviews of the key personnel involved Using Checklist Which Was Based KPI Namely

Rationale of the study

The purpose of the study is to identify factors affecting quality assurance practices and the process to achieve NQAS certification.

Study population

The study sample is taken from UPHCs over a 3-month period.

Ethical consideration

The study takes ethical considerations into account. During my dissertation period, I visited 1 certified UPHC and 1 non-certified UPHC after obtaining permission for data collection.

National Quality Assurance Standards

National quality assurance standards have been crafted to meet the unique needs of public health facilities while adhering to global best practices. Presently, NQAS applies to District Hospitals, CHCs, PHCs, and Urban PHCs. These standards are intended to assist providers in evaluating and enhancing their quality through predefined benchmarks, ultimately preparing them for certification. Covering eight essential areas—service provision, patient rights, inputs, support services, clinical care, infection control, quality management, and outcomes—these standards are accredited by ISQUA, ensuring they are comprehensive, objective, evidence-based, and rigorously developed in line with global standards.

KPI INDICATORS

- OPD Indicators Percentage of delivery conduct out of expected Percentage of delivery conducted in Night.
- . Percentage of High-Risk pregnancy cases referred to FR
- . Percentage of clint accepting limitation of long-term contraception Method of Contraception.
- . Drop Out rate of Penta Vaccination
- Percentage of Women Stayed For 48 HRS After Normal Delivery
- . IUCD Rejection Ratex. Percentage of Anemia cases treated Successfully.
- Percentage of Deliveries having Partograph Recorded
- . Percentage of DOT cases completed successfully
- . Patient Satisfaction (IPD)
- Patient satisfaction score (OPD)

SCORES FOR QUALITY ASSURANCE & INDICATORS FOR KEY PERFORMANCE

NQAS Scoring System

Scores for the department and/or facility can be calculated as follows.

Check all checkpoints

Assess all measurable elements

Do grading of compliance

Compliance & Scoring Rules

Non Compliances: Marks awarded 0
Criteria for evaluation

Fails to meet most of the requirements
- **Verification of tracers provided is less than 50%**
- **Objective of Measurable Element are not met**

Full Compliance: Marks awarded 2
Criteria for evaluation

Requirements mentioned in checkpoint are met 100%
- **Verification of tracers provided is 100%**
- **Objective of Measurable Element's is 100% met.**

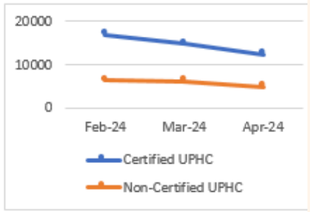
Partial Compliance: Marks awarded 1
Criteria for evaluation

Though not 100% but most of the requirements mentioned in checkpoint are met
- **Verification of tracers provided is more than 50%**
- **Objective of Measurable Element is net in most of the cases.**

COMPARISION OF KEY PERFORMANCE INDICATORS

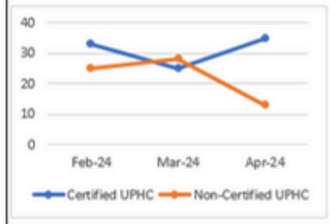
CerƟfied UPHC v/s Non-CerƟfied UPHC

1	OPD per Month		16962	15052	12371	6456	6102	4858



The graph depicts a decline in OPD patient visits from February to April 2024 for both Certified and Non-Certified UPHCs, with Certified UPHCs showing a steeper decrease from around 17,500 to 11,000 visits. Non-Certified UPHCs experienced a more gradual decline, starting at 6,000 visits and reducing to 5,000 over the same period.

2	No. of ANC Conducted per month		33	25	35	25	28	13



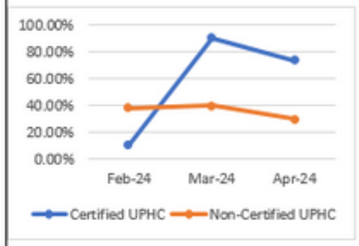
The graph illustrates the monthly number of Antenatal Care (ANC) sessions conducted at Certified and Non-Certified UPHCs. Certified UPHCs started with higher ANC numbers in February, saw a decrease in March, and an increase in April, while Non-Certified UPHCs began lower, peaked in March, and then declined in April.

S. No.	KPI Indicator	Benchmark	Feb-24	Mar-24	Apr-24	Feb-24	Mar-24	Apr-24	Linear Graph Differentiation
3	Number of NCD Cases registered		877	720	647	727	685	643	

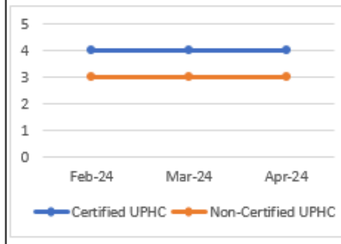
The graph illustrates the monthly number of Non-Communicable Disease (NCD) cases registered at Certified and Non-Certified UPHCs. While the number of cases remained constant for Certified UPHCs over the period, Non-Certified UPHCs saw a peak in March followed by a decline.

4	No. of Outreach session conducted for vulnerable population	4	4	4	4	3	3	3	

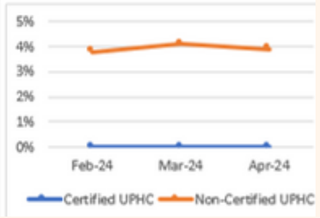
The graph illustrates the monthly number of outreach sessions conducted for a vulnerable population at Certified and Non-Certified UPHCs. Both types of centers maintained consistent session numbers across Feb, March, and April, with Certified UPHCs conducting slightly more sessions than Non-Certified UPHCs

5	Follow up rate of OPD cases		50.17%	52.25%	54.1%	38%	40%	30%	

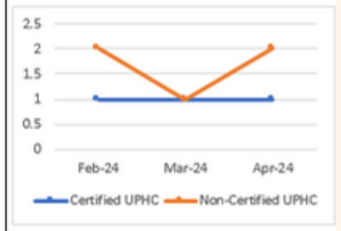
The graph illustrates the percentage of follow-ups for OPD cases at Certified and Non-Certified UPHCs over a three-month period. While Certified UPHCs had a higher percentage of follow-ups in Feb and April, with a dip in March, Non-Certified UPHCs maintained a relatively steady rate with a slight increase in April

6	No. of Outreach session conducted per ANM	4	4	4	4	3	3	3	

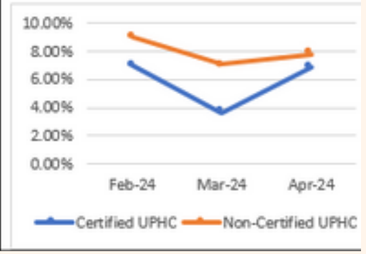
The graph illustrates the percentage of follow-ups for OPD cases at Certified and Non-Certified UPHCs over a three-month period. While Certified UPHCs had a higher percentage of follow-ups in February and April, with a dip in March, Non-Certified UPHCs maintained a relatively steady rate with a slight increase in April.

7	Dropout rate for pentavalent	3.5% - 4%	0%	0%	0%	4%	4.1%	3.9%	

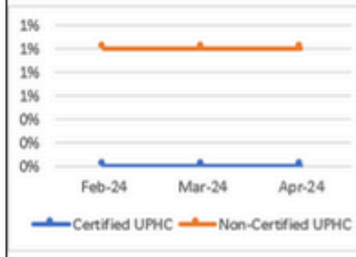
The graph illustrates dropout rate for pentavalent at Certified and Non-Certified UPHCs over a three-month period. While Certified UPHCs had no caes of dropping out of vaccination, Non-Certified UPHC show consistent rate of about 4% throughot the period.

8	No. Of Stock out days for EML	0	1	1	1	2	1	2	

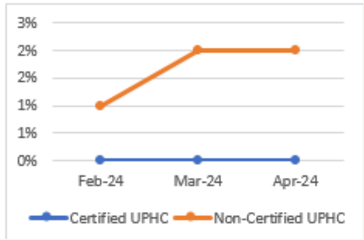
The graph displays the number of days drugs were out of stock at Certified and Non-Certified UPHCs over a three-month period. While Certified UPHC had drugs out-of-stock 1 day per month, Non-Certified UPHC were out-of-stock for 2 days in Feb and April with dip in March.

9	Percentage of High Risk Pregnancy detected during ANC	6-8%	7%	4%	6.9%	9%	7%	8%	

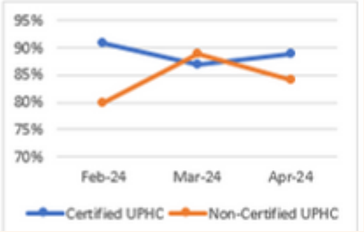
The graph illustrates the percentage of high-risk pregnancies detected during antenatal care (ANC) at certified and non-certified UPHC over a three-month period. Notably, certified UPHCs consistently identified a higher percentage of HRP compared to non-certified UPHCs, with both types of centers dipping in March.

10	Percentage of AEFI cases reported	0	0%	0%	0%	1%	1%	1%	

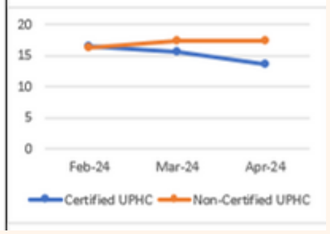
The graph displays the percentage of AEFI cases reported over a three-month period. It compares the percentages between Certified UPHC and Non-Certified UPHC, showing that Certified UPHC reported no AEFI cases, however Non-Certified UPHC consistently reported 1% AEFI cases across the period.

11	IUCD Complication rate	0.20%	0%	0%	0%	1%	2%	2%	

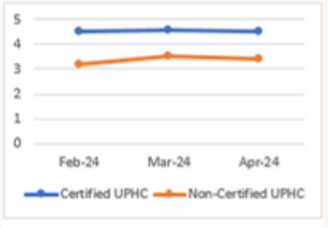
The graph presents a comparison of IUCD complication rates between Certified and Non-Certified UPHC over three month period. The rates for Certified UPHC is consistently ideal(0%), whereas Non-Certified UPHC is 1% in Feb and doubled to 2% in March and April.

12	Percentage of TB patient on DOTS completed treatment successfully	86-90%	91%	87%	89%	80%	89%	84%	

The graph illustrates the percentage TB patients on DOTS who successfully completed treatment at certified and non-certified UPHC over a three-month period. While success rates for certified UPHC remained above 85%, the rates for non-certified UPHC declined, suggesting a potential impact of certification on treatment outcomes.

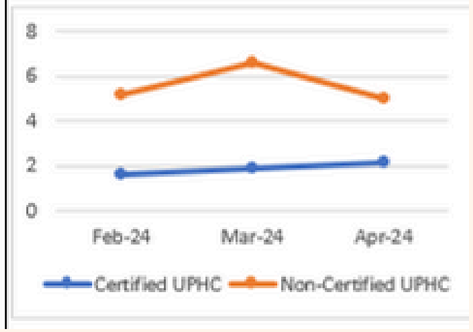
14	Registration to Drug time (Average)	20 Min	16.51	15.64	13.57	16.2	17.37	17.46	

The graph compares the average time from registration to drug delivery at Certified and Non-Certified UPHC over three months. While the average time for Certified UPHCs remains relatively stable, Non-Certified UPHCs show an increasing trend from February to April.

13	Patient Satisfaction Score For OPD	70%(3.5)	4.5	4.6	4.5	3.2	3.5	3.4	

graph presents a comparison of Patient Satisfaction Scores for OPD between Certified and Non-Certified UPHC over three months period. The Certified UPHC consistently maintains a higher satisfaction The score around 5, while the Non-Certified UPHC scores are lower, around 3.

15	Consultation Time In OPD (Average)	5 Min	1.634	1.841	2.153	5.2	6.62	5



The graph compares the average consultation time in an OPD between Certified and Non-Certified UPHC over three months. The average consultation time remains relatively stable for Certified UPHCs, while Non-Certified UPHCs consistently have a longer consultation time, peaking in March.

Results

The findings indicate that NQAS certification significantly improves key performance indicators (KPIs). These indicators are crucial for enhancing performance by identifying and implementing corrective and preventive actions, thereby contributing to sustainable improvements in healthcare standards.

Conclusion

This study highlights the transformative impact of NQAS certification on healthcare through enhanced KPIs. These KPIs not only streamline record-keeping and documentation but also serve as the foundation for achieving NQAS certification. For non-certified centers, adopting KPIs is the pathway to certification, heralding a new era of elevated healthcare standards and superior quality of care.

Thank You.