



Quality Compliance in a Remotely Located PHC in India

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

Background: As the rural Indian health care sector is providing patient care to the community at large, evaluating the quality of services gives an insight into the level of care provided. The primary health care chose the audit evaluation voluntarily.

Objectives: The aim of the study was to assess the service quality provided in the primary health care Centre. The study was to help understand the skill set requirements in improving the quality of care and to identify the service quality gaps and to provide the best possible solutions for the gap closures by nominating the responsible personnel.

Methods: The quality of care was evaluated in three ways: staff interview, record review, and observations conducted. Six departments were chosen for evaluation: the out-patient department, in-patient department, labor room, laboratory, National health programs, and general administration. By a prepared specific checklist comprised of standards and measurable elements, an evaluation was performed. The scoring was provided as 0, 1 and 2, which implied noncompliance, partial compliance, and full compliance.

Results: As per evaluation, national health program areas scored the least, whereas the inpatient departments scored the highest. There were multiple gaps in the service provision areas and manpower allocation. The average mean score was 77.48.

Conclusion: Keeping the national standards and guidelines, an audit evaluation was performed. Quality has to be imbued with the optimization of resource allocation and with the mindset to provide the best possible care in the interest of the individual's wellbeing.

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1. INTRODUCTION

Primary health care (PHC) was the basic foundation of health care delivery that functions effectively and efficiently with a patient-centered approach [1]. At the primary health care level, the availability of resources such as infrastructure and the physical facility is the need of the hour. Prioritization of funds for managing needs and wants is to be balanced. Evaluating the quality of service was performed under the six departments by taking standards and measuring elements. By scoring the departments with set standards and measuring details will provide us with an insight into the quality improvement areas which can be performed for betterment. The entire process of the audit was informative and challenging.

In Tamil Nadu state, health care was provided with the main objectives of delivering maternal and child health care to the Rural and Urban people. The Primary health care center was involved in preventing and controlling Communicable and non-Communicable Diseases [2]. Service improvement includes attention in all aspects of primary health care, including rational evidence-based but sustainable health care. By providing priorities to simple preventive health care measures, health education is given to empower and motivate people. This initiative takes to a high level of participation by the poorest members of the community. Subsequently, the health care services must be achieved at a fraction of the cost of care in most healthcare centers. In this PHC, audit evaluation was chosen voluntarily.

The specific areas were defined and on predetermined dates. Guidelines and a particular checklist for Primary health centers were used for functional six departments. Each department was evaluated extensively. As the PHC was situated in the vicinity, which was Malaria endemic in nature, National health programs initiatives were considered in-depth [3]. A planned Field visit was conducted at the entire surroundings. The essential requirement of the service area focuses explicitly on the workforce-funding, number, and mix of staff. The evaluation was done regarding hospital management and team leadership. Specific input was obtained about the governance of the health center. A variety of questions and information was

gathered regarding the proper coordination and linkages. Integration of services internally, as well as an external link, was enquired. To ensure appropriate support and continuity of care, adequate process flow was laid down. These requirements are essential and are interrelated. The National Rural Health Mission (NRHM) launched by the Government of India and national health program guidelines helps to leap forward in establishing effective integration.

The convergence of health services affects architectural correction in India's health care delivery system [4]. Despite progress in improving health care quality, there are inequalities in socioeconomic status, geography, and gender. This disparity can be minimized by improving the quality of care in a systematic approach. At the same time, compared with the United States, which has highly a flawed system of funding health care and a flawed system of allocation of resources [5]. In India, for primary health care, quality needs to be strategically scaled up for betterment.

2. METHODS

It was a planned, structured audit with dates that were mentioned one month prior through notice. Keeping the national standards and guidelines, the scoring pattern was predetermined. 2 auditors who were certified and trained as per federal guidelines were designated [6]. With the 0,1, 2 as the scoring design for nil compliance, partial compliance, and full compliance, the rating was done in each department with a specific checklist. As it was a remote rural area, the preplanned structure of the audit pattern was mentioned as record review, staff interview, and observation.

The audit was conducted by providing a self-introduction of the evaluators. The attendance of the personnel was taken with their signatures incorporated [7]. Areas of the evaluation was categorized for all of the audits. The method and methodology of audit evaluation was well explained to staff. All the documents were scrutinized and verified. The duration of the records that were maintained was confirmed and validated. The audit was planned and performed for whole two days, which was as per the schedule. They evaluated six departments were general administration, outpatient services, in-

patient services, labor room, laboratory, and national health programs undertaken at the PHC [8]. Keeping in view the patient-centric initiatives and the total workload for efficiency and effectiveness, the evaluation was unbiased.

Under each checklist, eight subsections were considered. The subsections were service provision, patient rights, inputs, support services, clinical services, infection control, quality, and outcomes [9]. The standards were defined along with measurable elements. The measurable characteristics were assessed with three methods, such as record review- RR, staff interview-SI, and observation methods-OB.

3. RESULTS

As it was a qualitative assessment and evaluation of the departments in remote rural areas, which were catering to the rural population with the Outpatient department, Inpatient department, laboratory service, and labor room facilities. The assessment of general administration was also opted by PHC. The vicinity of the PHC was considered Malaria endemic for many years. The national health programs have been initiated. The field officers were involved in the process of implementation. In the letter of application, The evaluation of the National health programs was proposed [10]. Evaluation of National health programs from a quality perspective gave a better insight into the processes and how it was improvised to that particular setup.

In the ODP department, the quality subsection was least in performance with a score of 64.29, and in the outcome, the subsection was highest with a score of 96.39. There were minor and major gaps identified and listed, and mentioned in the consolidated report.

In the Labor room as a department, the service provided was considered least performed with 50.0 scorings, followed by clinical services scored the highest with 88.68. Even though all the physical facilities, infrastructure, and Manpower were present, the services rendered were inadequate as far as department functioning was considered [11]. Despite clinical services being rendered, adequate counseling on the diet's nutritional content is to be provided to pregnant women and during the lactation stage. The importance of nutritious food and diet supplementation has to be emphasized. A well-

educated, professional nutritional teacher was a cavity in the rural health sector [12].

In the IP department, supportive services performed the least, with scoring of 50.00, and the outcome area performed the highest of 100.00 [13]. By evaluating the documents, staff interviews, and observations, the IP outcome area performance was high. Noncompliance was not identified in any of the measuring elements in outcome areas which were scrutinized in depth. In the laboratory, the supportive services performed the least, with a score of 64.29, and the outcome area achieved the highest at 100.00. In the absence of Manpower, intersectoral coordination plays a vital role in supportive service areas.

In National Health Programs (NHP) [14], the supportive services performed the least with a score of 61.98, and the outcome area was 100.00. Despite developing health care and social care, health care delivery programs for the elderly are still in the conceptual phase. Implementation of the exact needs to be initiated.

In general administration, the service provision score was least at 50.00, and the outcome was highest at 100.00 [15]. By consolidating the average score in all the six areas, we were able to understand that the average score of OPD was 80.89, the average score of labor room was 77.05, the average score of IP area was 80.90, the average score of the laboratory was 76.88, the average score of National health programs was 70.72, and an average score of the General administration was 78.74. By consolidating the data, we could understand the most minor performing area was the national health programs, and the highest performing area was the IP department [16]. Fig. 1 shows OPD Scorecard.

The overall mean score of the PHC was 77.48. There are multiple areas where gaps were identified and needed improvement. Fig. 2 displays the Labour room Scorecard. Suggestions were provided regarding the same. The PHC personnel who took the recommendations were taken positively. Across India, as life expectancy is increasing, the issues of access and affordability of health care for the senior age group and vulnerable people have become more important. These services to the old and vulnerable group were emphasized as a priority and discussed in the PHC. Table 1 shows

the PHC scorecard then, Fig. 3 and Fig. 4 shows the IPD Scorecard and Laboratory Scorecard.

the tasks concerning funds availability and allocate the budget accordingly Fig. 5 shows the National Health programs Scorecard and Fig. 6 displays the General administration Scorecard. In each department's gaps were noted.

We suggested solutions and provided responsibility authority as one point of contact for task completion. We also proposed to prioritize

Table 1. PHC scorecard

PHC Score Card		
OPD	PHC Score	Laboratory
80.89	77.48	76.88
LABOUR ROOM		national health program
77.05		70.72
IPD		general administration
80.90		78.74

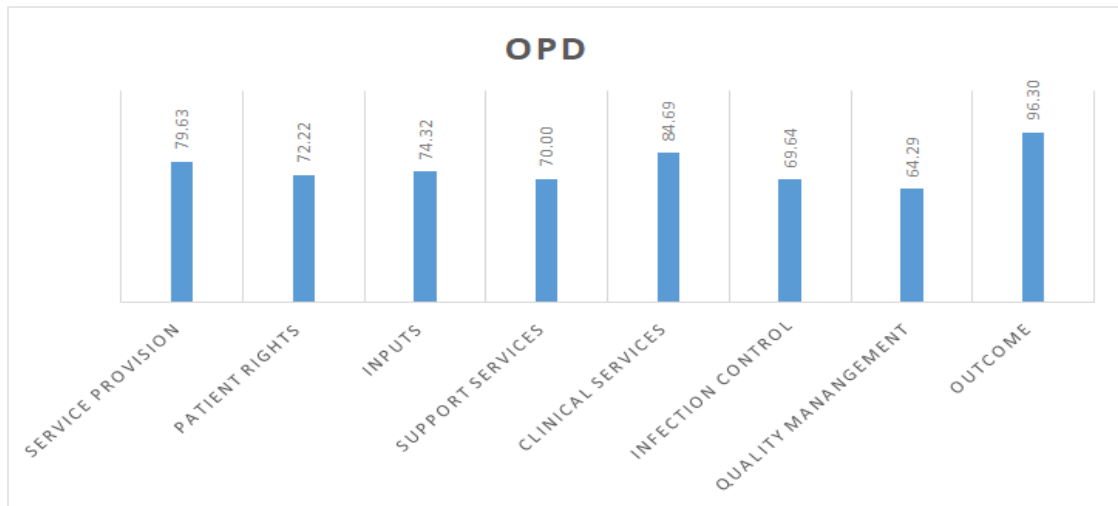


Fig. 1. OPD scorecard

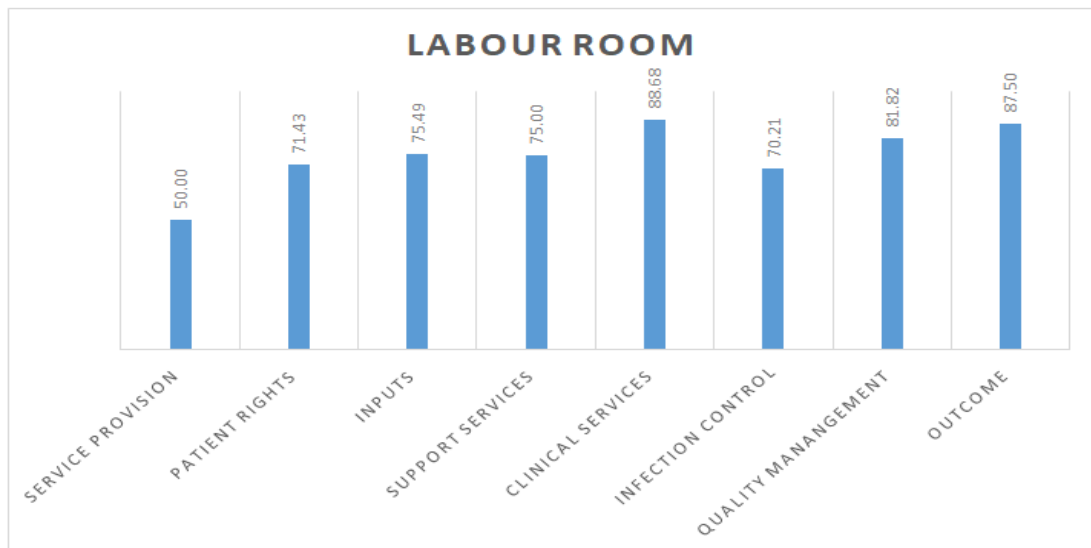


Fig. 2. Labor room scorecard

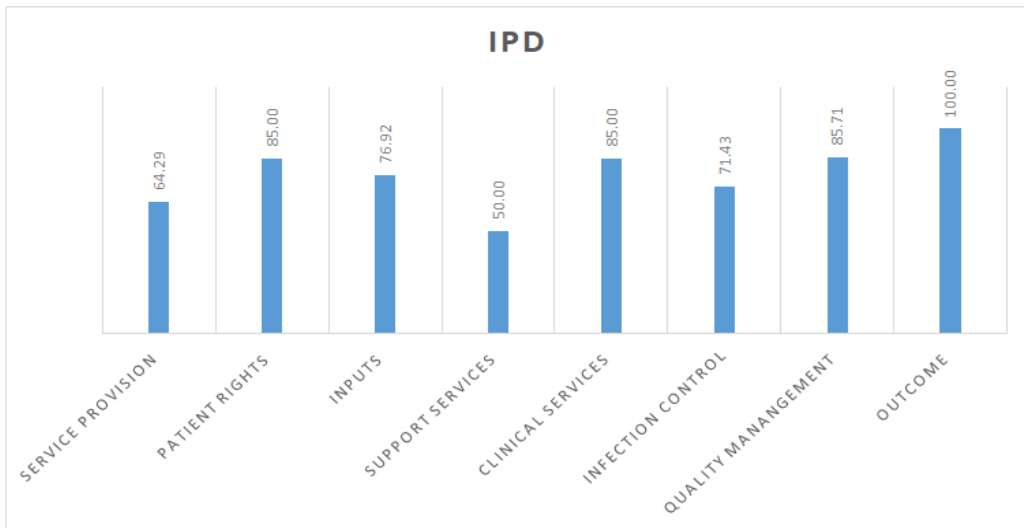


Fig. 3. IPD scorecard

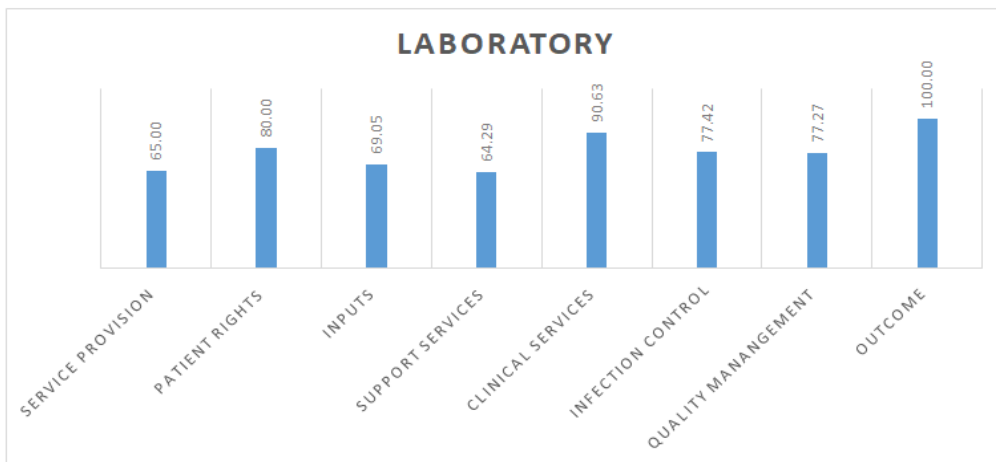


Fig. 4. Laboratory scorecard

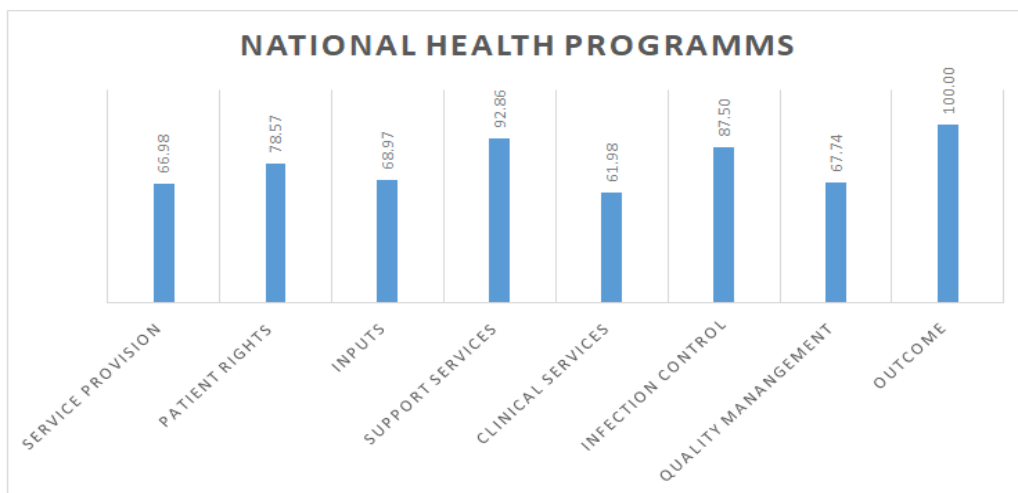


Fig. 5. National health programs scorecard

Table 2. PHC major gaps with suggested solutions

SL. No	MAJOR GAPS	Suggested solutions	Responsible authority
1.	Main Gaps: No proper space for activity. No proper emergency services for snakebite cases and poisoning cases were done before referral.	Earmark the area for emergency services and set up the casualty services.	In charge admin
2.	There is no proper implementation of national health programs. Fever cases are not followed up properly as per guidelines/monthly report, PUO cases 5 to 10 without proper diagnosis and treatment for one year.	Follow up the case by proper clinical guidelines and monthly follow-up of each case with laboratory investigations supporting it.	RMO
3.	No larval surveillance and prevention program followed as per national guidelines.	Retraining the field officer And motivating the team for larval surveillance and prevention program.	Field officer and training team
4.	The hospital vicinity shows a lot of larval growth and water clogging. For many months action was not taken.	Set cleaning protocols and remedial action for water clogging.	General admin to take weekly rounds of the vicinity of the hospital and act accordingly
5.	Registration was done on the outside of the hospital on the open ground. Patient rights and dignity is not maintained.	Earmark and Set-up a proper hospital registration counter for male and female patients separately and an exclusive queuing for vulnerable patients. Citizen charter board to be put up bilingually. Training of staff regarding patient rights and responsibility. A responsible trainer with proper pretest, training, posttest and feedback needs to be implemented.	General Administration to initiate the registration process. General administration to initiate citizen charter boards and training.
6.	Stray animals were seen in the hospital vicinity. Goats and dogs.	Deploying Security personnel needs to be deputed 24/7.	General administration needs to be proactive, and facility rounds need to be initiated.
7.	Water surveillance not done effectively	The lab in charge has to take water samples at regular intervals for testing and follow up regularly.	Supervision needs to be done by general administration along with follow-up.
8.	Emergency ambulance service is not immediately available. (10 km) delayed by 30 minutes to 45 minutes for a referral.	Prioritization of budget for emergency services and fund allocation for an ambulance is required.	General administration
9.	No national blindness control program. The outcome is poor due to poor screening frequency.	Initiation of the national blindness control program.	Supervision needs to be done by general administration along with follow-up.
10.	Leprosy (NLEP) is to be implemented with better screening and preparedness for treating by making the availability of drugs in the pharmacy.	Initiate Proper training and formulate strategies for the blindness control program. Initiate Proper training and formulate strategies. Indenting of drugs and monitor Supply chain management.	Supervision needs to be done by general administration along with follow-up.

SL. No	MAJOR GAPS	Suggested solutions	Responsible authority
11.	Water clogging is seen around the hospital with larva growth.	Field visit of the vicinity at regular intervals.	General administration needs to be proactive, and facility rounds need to be initiated with set targets.
12.	Patient rights to be improved by improving their registration area and proper directional signage.	Earmark and set up proper hospital signages for unidirectional flow of patients.	General administration
13.	Infection control practices to be strengthened by providing proper PPE supply.	Supply chain management and SOP for inventory and logistics need to be laid down.	Infection control nurse
14.	Staff not fully aware of SOP	Proper training on SOP and Later continuous improvement.	The training and development team needs to be structured.
15.	Clean drinking water to be made available to the patients.	The planning of resources has to be need-based.	General administration
16.	The quality implementation and improvement audits are not in coordination.	The quality team needs to behave timelines and set targets for proper coordination.	Quality consultant
17.	Shortage of staff nurse and field male worker	Reworking on the structure and manpower allocation depending on the need base.	General administration
18.	BMW segregation Not Proper	Proper training on SOP and Later continuous improvement	Training and development team
19.	Mental health program Not Implemented.	National health program functioning needs proper allocation of tasks.	General administration
20.	No training on a mental health program to MO	Proper training on SOP and clinical protocols. Later continuous improvement program	Training and development team
21.	Three Bucket system not used as per guidelines squeeze the mop by hand manually.	Logistics needs to be allocated	HK team and general administration.
22.	Most of the displays are stuck to the walls are temporarily printed	Proper hospital signage's to be implemented.	General administration

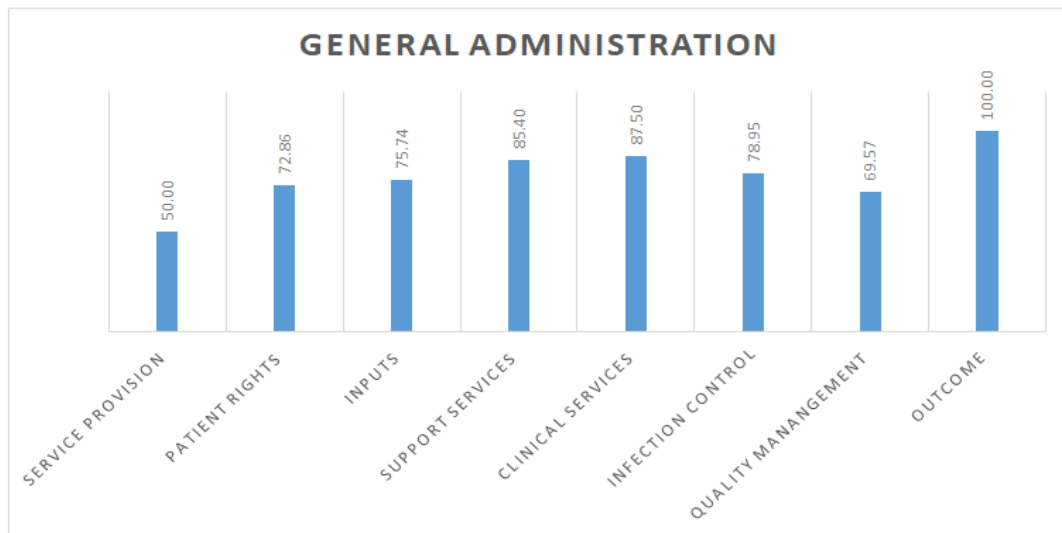


Fig. 6. General administration scorecard

4. DISCUSSION

An executive summary was also prepared with mention of central holes, and also recommendations were discussed with the PHC personnel for betterment. Twenty-two significant gaps were identified. Among them were major ones are related to structure and processes, which were marked noncompliance. Table 2 shows PHC's significant gaps with suggested solutions.

5. CONCLUSIONS

While assessing the service quality at a primary health Centre, the physical facility and infrastructure play a pivotal role. Emphasis was laid on prioritization and budget allocation as far as service delivery is considered. Maternal and child healthcare is to be given prime importance. In terms of clinical care, process flow was suggested for diagnosis, counseling, post-delivery follow-up care. The essential component of quality in health care is the implementation of national health programs. Multiple gaps were present in the service provision and manpower allocation, which needs to be closed. Audit evaluation helps to understand where we need to improve the services and how better we can perform keeping in the background of standard guidelines. The essential requirement of the service area focuses on workforce funding, number, and mix of staff. Multidimensional inputs were suggested regarding hospital management and team leadership. Emphasis was provided regarding the governance of health care

services. Insight was given on proper coordination and linkages. Adequacy of infrastructure and communication issues was discussed. Integration of the services internally and externally tie-up was the key issue that required clarity in implementation. Sustainability in care aspects can be obtained by training programs and retraining planned strategically. Quality has to be imbibed with the optimization of resource allocation and with the mindset to provide the best possible care in the interest of the individual's wellbeing.

CONSENT AND ETHICAL APPROVAL

As per international standard or university standard guideline participant consent and ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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