Internship Training

at

National Health Systems Resource Centre, New Delhi

Sustenance of NQAS standards in Primary and Secondary level Health Facilities in India- A Retrospective Study

by

Mr. Anand Yadav

PG/19/012

Under the guidance of

Dr. Nishikant Belle

PGDM (Hospital & Health Management)
2019-21



International Institute of Health Management Research New Delhi

CERTIFICATE FROM EXTERNAL GUIDE

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Anand Yadav student of PGDM (Hospital & Health Management) from International Institute of Health Management Research, New Delhi has undergone internship training at Quality Improvement Division, National Health Systems Resource Center, New Delhi from 1st March 2021 to 30th May 2021.

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

The Internship is in fulfillment of the course requirements.

I wish him all success in all his/her future endeavors.

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Ms. Divya Aggarwal
Associate Dean, Academic and Student Affairs
IIHMR, New Delhi

Dr. Nishikant Belle

Mentor

IIHMR, New Delhi

DECLARATION

I hereby declare that the project work entitled "Sustenance of NQAS standards in Primary and Secondary level Health Facilities in India- A Retrospective Study" submitted for the partial fulfillment of Post Graduate Diploma in Hospital and Health Management offered by IIHMR, New Delhi during academic session 2019-2021, is a record of an original work done by me under guidance of Dr. Nishikant Belle Assistant Professor, IIHMR Delhi.

Date:

Anand Yadav

PGD (Health Management)

IIHMR, New Delhi

Certificate of Approval

The following dissertation titled Sustenance of NQAS standards in Primary and Secondary level Health Facilities in India- A Retrospective Study at National Health Systems Resource Center is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of PGDM (Hospital & Health Management) for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed, or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination	on Committee for evaluation of dissertation.	
Name		Signature

Certificate from Dissertation Advisory Committee

This is to certify that Mr. Anand Yadav a graduate student of the PGDM (Hospital & Health Management) has worked under our guidance and supervision. He/ She is submitting this dissertation titled Sustenance of NQAS standards in Primary and Secondary level Health Facilities in India- A Retrospective Study at National Health Systems Resource Center in partial fulfillment of the requirements for the award of the PGDM (Hospital & Health Management).

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report, or book.

Dr. Nishikant Belle

Assistant Professor

IIHMR DELHI

Dr. Shivali Sisodia

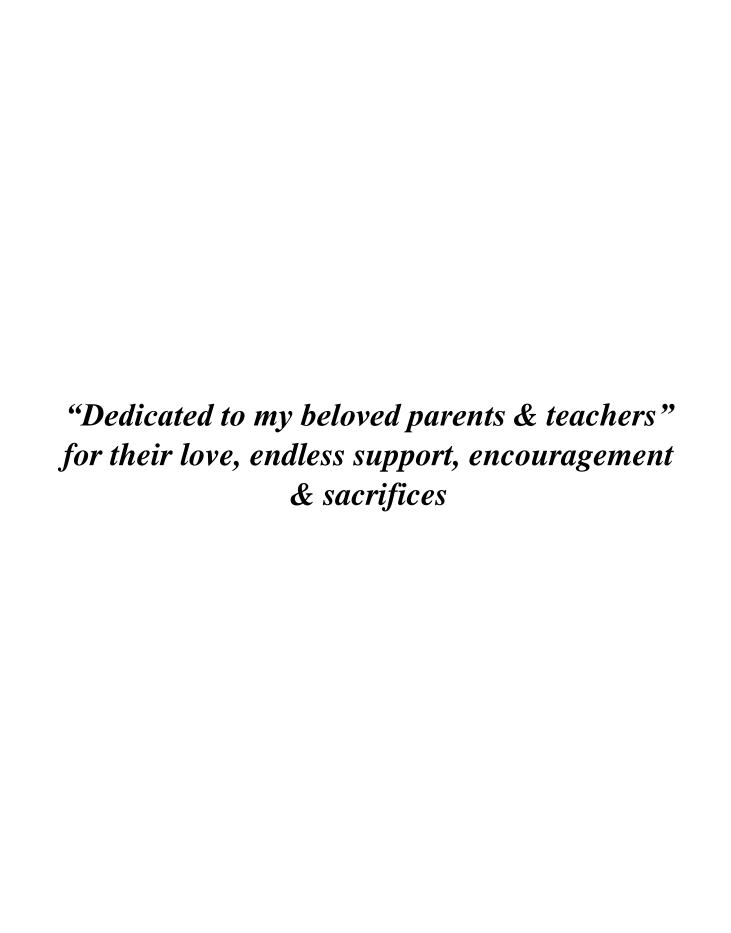
Consultant-Quality Improvement
NHSRC, New Delhi

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled *Sustenance of NQAS standards in Primary and Secondary level Health Facilities in India- A Retrospective Study* submitted by Mr. Anand Yadav Enrollment No. PG/19/012 under the supervision of Dr. Nishikant Belle for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from 1st March 2021 to 30th May 2021 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature



Acknowledgments

On this successful completion of the project, I would like to thank a few people who have helped me in effectively fulfilling this and who were my pillar of strength. I feel boundless for having been a part of a prestigious organization like National Health Systems Research Organization and for having done my project "Sustenance of NQAS standards in Primary and Secondary level Health Facilities in India – A Retrospective Study" at NHSRC.

Firstly, I would like to thank **Maj Gen (Prof) Atul Kotwal**, **Executive Director**, **NHSRC** who gave me this golden opportunity to work in the Quality Improvement Division of NHSRC for this project.

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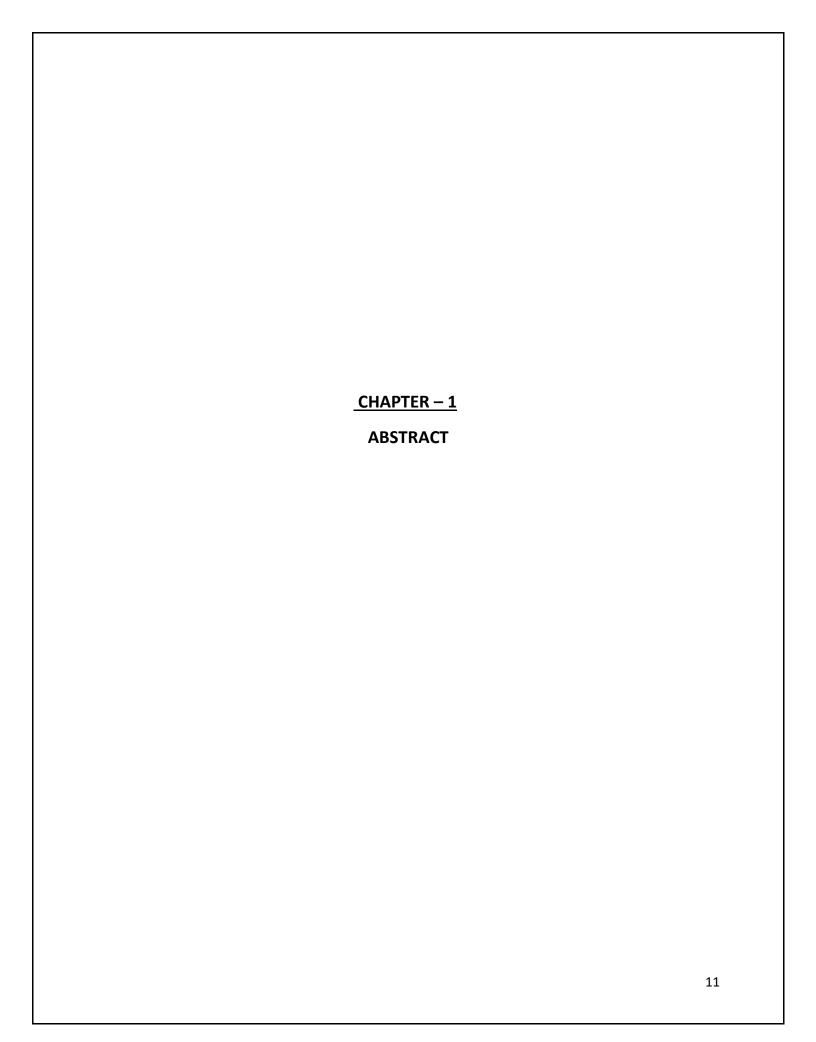
I would also like to thank **Dr. Nishikant Belle** for support, guidance and understand me every time during and after my coursework as my mentor at IIHMR DELHI.

My heartfelt gratitude to all the faculty members of the Public Health Management Department of International Institute of Health Management and Research for encouraging and supporting me throughout my dissertation project. Special thanks to **My best friend and Friends** who are the backbone of my life, who love and encourage me in every step of my life.

One million thanks to my parents, my grandparents, my siblings, and my whole family for their unconditional love and support.

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BACKGROUND:

National Quality Assurance Program has been designed keeping in mind the specific requirements of public health facilities and international standards. The program has a well-defined institutional framework CQSC (central quality supervisory committee) at the National level followed by SQAC (State Quality Assurance Committee)/DOAC (District Quality Assurance Committee) and Facility level Quality Team. National level certification is a process where empanelled assessors are trained in the field of quality to perform the assessments which involves evaluation of all NQAS standards, Area of Concern and Measurable elements, public health facilities on meeting the defined criteria of NQAS are then provided with National Quality Certification with a validity of 3 years. During the validity period States/UTs are responsible for surveillance assessments on yearly basis. Surveillance assessments aimed at examining whether the certified facility is maintaining all the requirements of the NQAS.[1] The sustenance of achieved standards of Quality are further assessed by trained assessors on yearly basis and reports are submitted to Certification cell (NHSRC). Maintaining the standards for a longer period is the key to enhance the quality of services and improvement in the desired outcomes. It has been observed that there is variation in the performance of key indicators and desired outcome in national assessment and surveillance assessment report which might have impact on service provisions of public health facilities.

Aims & Objective:

- To find the Area of Concern and Departmental wise performance of Primary and Secondary level health facilities during the validity period of national quality certification
- To identify the gap between the national and state level assessment

Methodology:

A retrospective study is designed to gather data for 50 quality certified primary and secondary health facilities under the National Quality Assurance Standards (NQAS) between August 2017 and December 2020 by reviewing external assessment reports provided by the pool of National assessors and Surveillance assessment reports by State/UTs level assessors. Certification criteria and their external assessment checklist under NQAS program for public health facilities will be collected from their respective states. External assessment score and Surveillance assessment report of all primary and secondary health facilities under study will be reviewed and analysis will be done by using Statistical Package for the Social Sciences version 22 for Pearson's correlation analysis and MS Excel 2020 for statistical analysis.

Result:

It has been observed that almost all the facilities included in the study are sustaining the quality standards during the validity period of National Quality Certification. But it is evident after analyzing the data set that there is a significant dip of 6% with a p-value (0.034) lesser than 0.05, when we compared NQAS score with Surveillance of year-2 score, and Area of Concern 'G'-Quality Management & 'D'- Support Services shows a major dip of 16% and 11% respectively.

Conclusion:

A sustainability lens may also bring immediate benefits to quality improvement, including new motivation and energy for change, highlighting wastes and opportunities otherwise overlooked,

encouraging whole systems thinking and directing projects systematically towards the highest value improvements. While external pressures and punitive measures may bring about initial improvement in the desired direction, no change can be sustained till the people responsible for making that change accept it as their own. At the facility, a motivated team, which understands the need for quality and the standards set for it. It strives to make the needed changes within its capacity, and ensures that it remains that way

Keywords: NQAS, Healthcare assessment, Surveillance, Standards, KPIs.



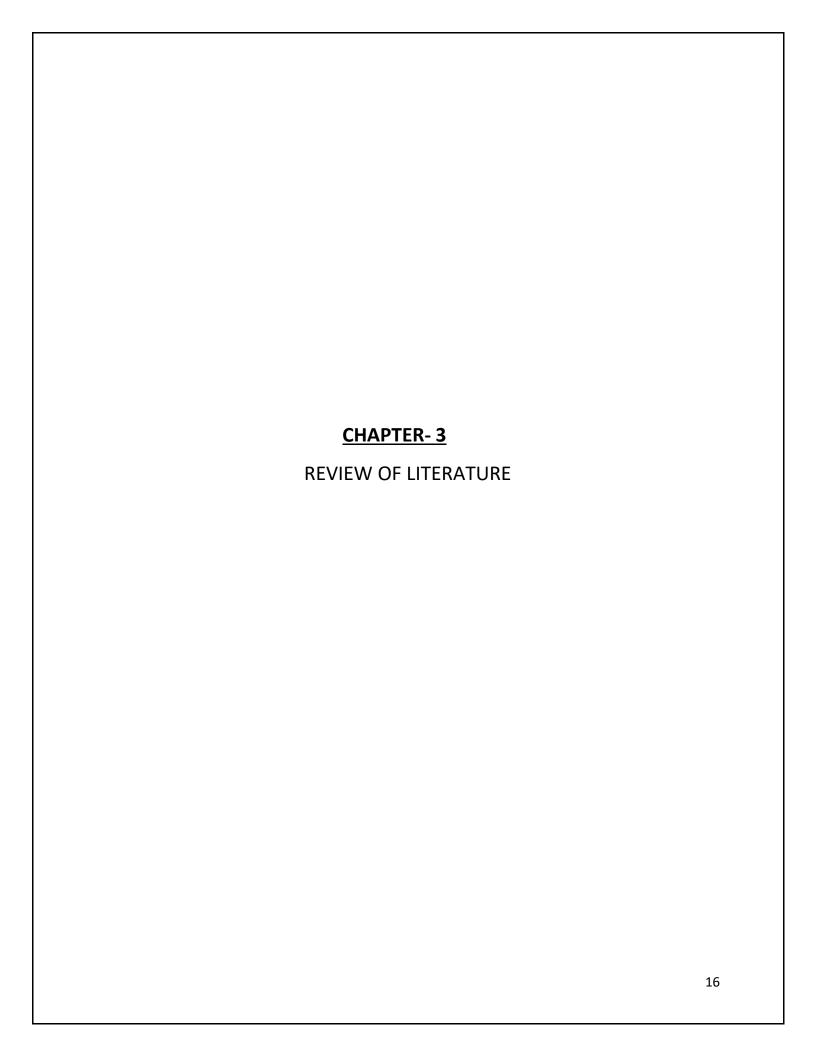
Introduction

Quality of care may be a key thrust area for both Policy Makers and Public Health Practitioners because it is an instrument of optimal utilization of resources and improving health outcomes also as client satisfaction. National Quality Assurance Standards are developed keeping in mind the precise requirements for public health facilities also global best practices. Standards are meant for providers to assess their own quality for improvement also as facilities for certification.

National Quality Assurance Standards for Public Health care facilities are intended for policy makers, program officers, service providers, assessors, and certification agencies who shall support, assess, and sustain the standard of care within the public health care system and dealing to mention their facilities for quality certification. Standards could even be used as self-improvement tools by health care facilities without linking with formal certification process [2].

This set of National Quality Assurance Standards (NQAS) is applicable altogether secondary healthcare facilities operated by the state or central health departments in India i.e., District Hospitals/District Hospitals designated as teaching institutions, Sub-divisional hospitals, Thaluk hospitals, Area hospital, or the other equivalent facilities. These standards are formulated to assess the standard of preventive, curative, and promotive services provided by a secondary public hospital. The range of services covered by these standards is Outpatient department services, Maternal, Newborn, Child, and Adolescent health services, In-patient departmental care, Emergency care services, medical care services, Laboratory and radiology diagnostic services, bank services, Surgical Services, Hospital auxiliary and support services, etc.

Quality culture might be built up with consistent efforts and investments. it's not something that's inherent and can't be changed. one among the key initiatives for building a top-quality culture is thru 'rewards and recognition' and continuing handholding support from the state & district administration. The facilities, which get National Certification for the standard and have retained such status during subsequent assessments, must be incentivized. The proposal for incentives is often re-visited at the time when large numbers of facilities are accredited, the continual scrutiny of things determines the occurrence and distribution of diseases and other conditions of unhealthiness. It implies watching over with great attention, authority, and sometimes with suspicion. It requires professional analysis and complicated interpretation of knowledge resulting in recommendations for control activities. For the standard sustenance and enhancement of public health facilities most of the important stakeholders just like the National level, State level principal, medical staff, non-medical staff, patients, supply chain system, and pool of assessor play an important role within the assessment process of the power. It has been observed within the peer team visit of varied PHFs, both at state and national levels, the contributions by all the stakeholders are reflected and thus assessment and accreditation parameters have resulted within the higher grades of the facilities, and thus help in up-gradation of quality level, however, quality sustenance has been always a challenge to the Indian healthcare system. [5]



Review of literature

Quality improvement may be a systematic and continuous exercise of identifying problems in medical aid delivery, designing activities to beat the issues, and completing follow-up steps so as to make sure that no new problems are introduced which corrective actions are effective. Achievable desired inputs, processes, and outcomes depend upon the mixture of services. It makes a difference if these services are organized by the health system during a given situation, during a country or region of a rustic, with reference to health physical structures, socioeconomic conditions of clients, skills of doctors, management and support systems, mechanisms to pay providers, etc. Quality improvement projects included reducing chart errors, improving clinic show rates, improving immunization rates, and creating staff development and health improvement plans. Agencies conducting informal quality improvement activities primarily used the Plan-Do-Study-Act process (required for the NACCHO demonstration site project) and reported being unable to finish multiple process cycles. Agencies conducting formal quality improvement and creating a top-quality improvement culture were more likely to finish Plan-Do-Study-Act cycles and to use a variety of quality improvement methods and resources. [6]

The National Rural Health Mission (NRHM) was launched within the year 2005 with the goal "to improve the supply of and access to quality health look after people, especially for those residing in rural areas, the poor, women and youngsters." The Mission has led to considerable expansion of health services through the rapid expansion of infrastructure, increased availability of skilled human resources and greater local level flexibility in operations, increased budgetary allocation, and improved financial management. However, improvement within the quality of health services at every location has not been perceived, generally. Perceptions of poor quality of health care may, in fact, dissuade patients from using the available services because health issues are among the foremost salient of human concerns [7]. Ensuring the standard of the services will end in improved patient/client level outcomes at the power level. Ministry of Health and Family Welfare, Government of India is committed to support and facilitate a top-quality Assurance Programme, which meets the requirements of the public health System within the country and is sustainable. the main target of the proposed Quality Assurance Programme would be enhancing satisfaction levels among users of the govt Health Facilities and reposing trust within the Public Health System.

The regional and national authorities have strong decision-making power on the worth constellation and determine incentives and policies aimed toward promoting the sustainability of the world. Often the most decision-maker is that the local health authority, but the complexity of healthcare requires the involvement of various authorities, especially the environmental authority within the case of sustainable healthcare. Within them, regional and national authorities include policymakers, who perform policy agendas on the world, and public decision-makers, who affect technical-administrative issues and ensure continuity of action within the sector. Especially at the national level, policy advisors are a key player within the health sector as they advise on policy programmes and initiatives, having the likelihood to influence policy decisions, especially on new topics like sustainable healthcare.^[8]

Donabedian Model

Framework for assessing the quality of care on the well accepted 'Donabedian model', which classifies QOC in terms of three aspects – structure, process, & outcome.

Structure: The structural aspect of QOC includes material resources like infrastructure, drugs, and equipment; and Human Resources like the supply of an adequate number of personnel, who have requisite knowledge and skills. Evaluation of the standard that relies on such structural elements implicitly assumes that well-qualified people with well-appointed and well-organized settings will provide high-quality care. However, it's not always the case. Also, it's acknowledged that within the Public Health System, full compliance to infrastructure and HR norms might not be possible. However, after meeting the minimum infrastructure and HR norms for a public clinic, it might be logical to expect a minimum quality within the available services at the general public hospitals. The proposed system strives to supply QOC within these constraints. [9]

Process: Care also can be evaluated in terms of processes & sub-processes, required for the delivery of the care. This refers to what takes place during its delivery – like how quickly registration of a patient is completed, and s/he is attended, courteous behavior of the service providers, especially of doctors & nurses, the conduct of examination with reference to privacy, confidentiality, and for patient's right, etc.

Outcome: The other aspect of quality of care can be assessed in terms of outcome measurements, which denote to what extent goals of the care have been achieved.

American Society for Quality refers to Quality Assurance as "planned and systematic activities, which are implemented in a quality system, so that quality requirements of a product or service would be fulfilled". It essentially entails doing a set of activities that include defining quality standards and assessing, monitoring, and improving the quality of services against those standards, so that the care provided is as efficient, effective, and safe as possible.^[10]

Four Principles of Quality Assurance:

Quality Assurance is oriented toward meeting the needs and expectations of the patients.

Quality assurance focuses on the systems and processes.

Quality assurance uses data to analyse service delivery processes.

Quality assurance encourages a team approach to problem solving and quality improvement.

Critical steps of Quality Assurance:

Following steps would be required to be taken for implementing a credible Quality System at Public Health Facilities -.

Setting up Quality Standards, Measurable Elements & Checklists: To provide consistently high-quality services, the foremost requirement is to set quality standards against which the performance can be measured. These standards must meet the specific requirements of public health system and encompassing all three aspects of Quality of care i.e., Structure, Process, and outcome. Action planning for the gap assessed against checkpoints needs to be fulfilled within a set time frame and assigned a score during the assessment process. These checkpoints would be

compiled in form of departmental check list, so the compliance to all relevant standards for a department of healthcare facility can be checked systematically, objectively and in a user-friendly way. This process should be reviewed periodically for compliance and further improvement. The checkpoints can be of two types, 'essential', one which are non-negotiable and would be required to be adhered by the facility for being quality certified and 'desirable' which are optional and should be fulfilled in due course. For example, one of the standards for RCH services would be "Facility has established procedures for Antenatal care as per guidelines". For this standard there would be a set of measurable elements and further checkpoints that would objectively assess the compliance to this standard and score antenatal care at the facility accordingly. The assessment would be done with help of assessment tools e.g., Check list for OPD, Laboratory Services, Pharmacy, etc. where all relevant checkpoints pertaining to Antenatal care would be arranged according to standards and measurable elements.^[11]

Quality Assessment: This is an activity that measures various elements of service provision against pre-determined standards of care. Such an assessment provides an understanding of the areas where the actual position falls short of the set standards. It includes both periodic reviews in terms of internal scoring of a health facility, followed by assessment by the external assessors, who themselves are not directly responsible for the implementation, so as to avoid a 'conflict of interest situation'.

Identification of gaps and areas of improvement is an important and integral part of assessment. It is also important to conduct a 'root-cause analyses of the observed gaps, so that real & sustainable solutions are found. Gaps should be categorized in term security viz: High, moderate, Low.

Action planning: The most important step following the 'assessment and gap identification' is developing time bound action plan for traversing the gaps. Action planning for critical gaps and low hanging fruits should be prioritized. It is imperative that for each gap found above, corrective measures are defined along with the person responsible to act and the time frame for the same. If the observed gaps are many, phased action plan may be developed.

Follow-up Assessment: After passage of an agreed timeframe, follow-up assessment is required to be done to ensure that the plan has been adhered and the gaps have been closed. As the elements related to quality are dynamic in nature, gaps may be found in those areas. Therefore, it is important to repeatedly assess a facility for incremental changes for the improvement.



Fig:1- Framework of Quality Assurance Program

Overview of Quality Certification Process

Empanelment of External assessors:

States are expected to select the state level assessors. Qualifications and ToRs of State assessors are given in the Annexure 'E'. Training of External Assessors may be arranged in consultation with NHSRC. Name of the participants who successfully complete the assessor training may be entered into national level of register of external assessors.

Certification Process:

Once the gaps are traversed, the DQAC may inform the SQAU for State level certification.
 ii.

- On satisfactory cross check by SQAU, the SQAC would approach Director, NHM for the Ministry of Health & Family Welfare, GOI Certification (Annexure 'I').
- NHSRC will conduct assessment through QA assessors and after examining the assessors report. Appropriate recommendation would be sent to Director, NRHM who, is proposed to be designated authority for issuing the National QA Certification, till any such body is created by the GoI.
- The State level assessors of one State will be utilized for assessment of another State by MoHFW/ NHSRC. Once a facility receives certificate its validity will be for 3 years (Annexure 'J').

After three years facility would undergo National Re-Certification audit. The process will begin 3 months before the expiry of Certification for which application will be given to SQAC for recertification. Till the SQAC organizes the re-Certification process & sends request to National level, the facility will be deemed to be accredited. Once the National assessors visit the facility, their recommendation will need to be implemented before fresh certification is issued from National level.

During COVID-19

Revised Process note on virtual Quality Certification of Public Health facilities under NQAS National Quality Assurance Standards were launched for improving the Quality of Care (QoC) in public health facilities. After launch of the standards for district hospitals in 2013, standards for CHCs (functional as FRUs) and PHCs (with beds) were rolled-out in the year 2014. Subsequently, quality standards for Urban PHCs were developed in 2016. The standards have attained international accreditation from International Society for Quality in Healthcare (ISQua). At national level, these standards have been recognized by the Insurance Development Authority (IRDA) for empanelment of hospitals. For the continual quality improvement, the health facilities undergo four level of assessment viz facility, district, state, and national level. QI division at NHSRC has been supporting the states with capacity building for undertaking the assessments, analyzing the gaps, development of action –plans for the gap closure, application of quality tools and measuring the outcomes. Quality Certification of health facilities is an inbuilt feature of the program, state, and national certification. Health facilities have been striving hard to achieve and sustain the NQAS and LaQshya certifications of the facilities. In the current situation, field visits by the External Assessors may not be possible, it is planned to undertake certification assessment of the health facilities remotely. This virtual arrangement give assurance to all stakeholders (administration, hospitals, service providers and public) that the services are bench- marked and minimum quality is being met. This note is intended to describe the virtual certification process. The States/UTs facing issues with physical external certification may follow this guidance for State virtual certification. This guidance note will be applicable for all facilities in the States. Virtual certification of the facility will have 30% weightage in the final physical assessment. The attainment of virtual certification will incentivize the facility with 30% of incentive money and remaining 70% will be disbursed after attainment of certified status on physical verification of the facility and attainment of certification.

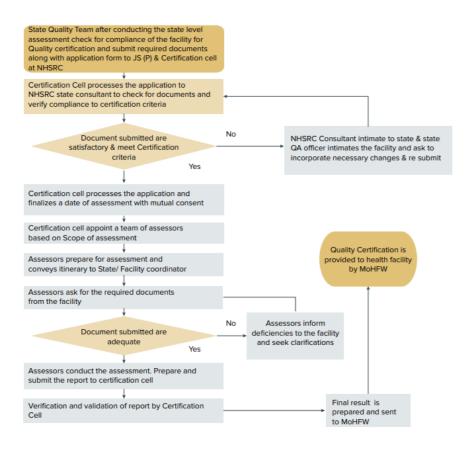


Fig:2- Overview of National Quality Certification Process

Sustenance of Quality

Quality culture could be built up with consistent efforts and investments. It is not something which is inherent and cannot be changed. One of the key initiatives for building Quality culture is through 'rewards and recognition' and continuing handholding support from the state & district administration. The facilities, which get National Certification for the quality and have retained such status during subsequent assessments, must be incentivized. The proposal for incentives can be re-visited at the time, when large numbers of facilities are accredited.^[12]

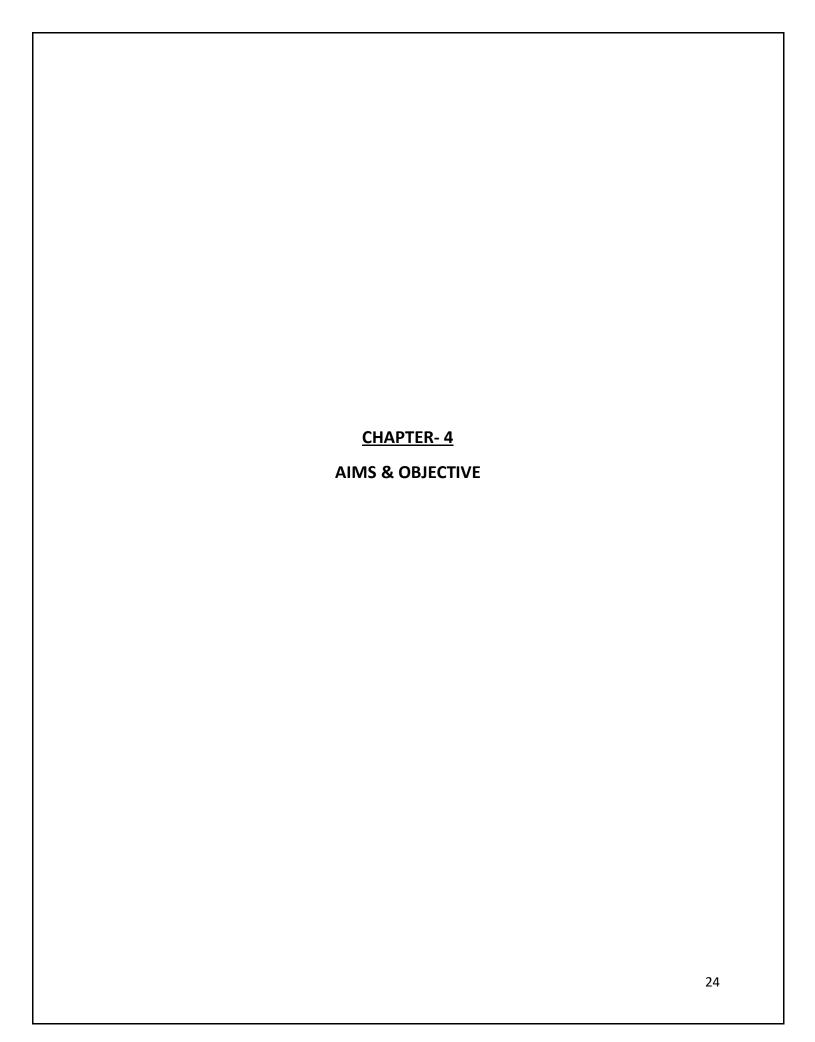
The quality of patient care is essentially determined by the quality of infrastructure, quality of training, competence of personnel and efficiency of operational systems. The fundamental requirement is the adoption of a system that is 'patient orientated'. Existing problems in health care relate to both medical and non-medical factors and a comprehensive system that improves both aspects must be implemented. Health care systems in developing countries face an even greater challenge since quality and cost recovery must be balanced with equal opportunities in patient care.^[13]

The continuous scrutiny of factors that determines the occurrence and distribution of diseases and other conditions of ill health. It implies watching over with great attention, authority and often with suspicion. It requires professional analysis and sophisticated interpretation of data leading to recommendations for control activities. For the quality sustenance and enhancement of public

health facilities most of the important stakeholders like National level, State level principal, medical staff, non-medical staff, patients, supply chain system, and pool of assessor play a vital role in the assessment process of the facility.^[14] It has been observed in the peer team visit of various PHFs, both at state and national levels, the contributions by all the stakeholders have been reflected and thus assessment and accreditation parameters has resulted in the higher grades of the facilities, and thus help in up gradation of quality level, however quality sustenance has been always a challenge to the Indian healthcare system.

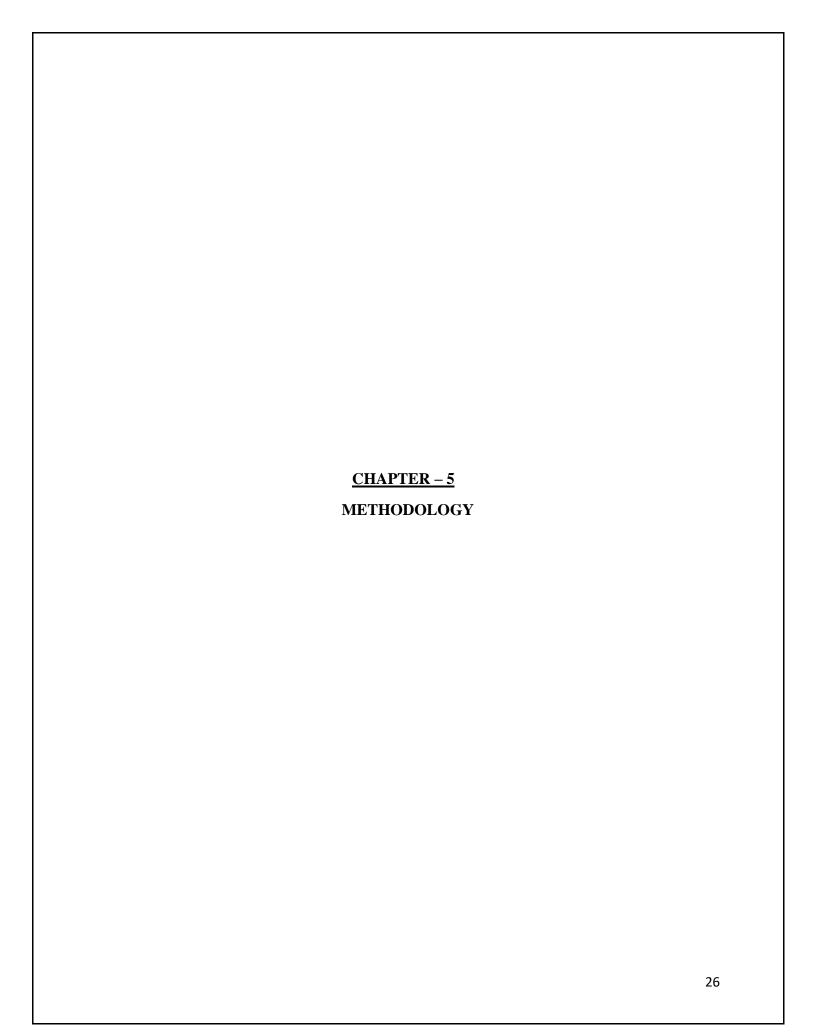
Dialogue with stakeholders varies from region to region and from country to country, but in general, the regional and national authorities directly or indirectly communicate with all actors. This allows them to pursue a vision that balances economic, social, and environmental sustainability; today, however, the economic issues are still pressing, and short-term economic concerns often constrain the choices made about healthcare services and innovations.^[15]

Overall, many critical points are emerging. First, the existing system sees a multiplicity of stakeholders dialoguing in a partially structured way and, often, communications are unidirectional: in a public system, the regional authorities relate directly with public health providers (hospitals and health organizations), and in parallel they have a dialogue with organizations acting as spokesmen for the industrial sector, primarily clusters and professional consortia. Relations with NGOs and healthcare networks, patient associations and universities are usually discontinuous. In Nordic Countries, some regional authorities have been experimenting some working groups involving representatives of the different levels of the supply chains, putting together suppliers and providers: this is certainly a good strategy, but it is necessary to develop organizational solutions able to network more stakeholders and more sectors. The supply chain approach is strongly compartmentalized, and there is a lack of a systemic vision that would align the actors downstream with those upstream. The sustainable healthcare undoubtedly increases the complexity of the system, introducing new stakeholders; therefore, a holistic approach is required to create new organizational structures to foster dialogue between different actors and balance decisions according to a long-term and shared vision. [16]



AIMS & OBJECTIVES

- To find the Area of Concern and Departmental wise performance of Primary and Secondary level health facilities during the validity period of national quality certification.
- To identify the gap between the national and state level assessment.



Methodology

A retrospective study is designed to gather data for 50 quality certified (PHC UPHC– 32) and (CHC, DH, AH-18) health facilities under the National Quality Assurance Standards (NQAS) between August 2017 and December 2020 by reviewing external assessment reports provided by the pool of National assessors and Surveillance assessment reports by State/UTs level assessors. Certification criteria and their external assessment checklist under NQAS program for Public health facilities will be collected from their respective states. External assessment score and Surveillance assessment report of all primary and secondary health facilities under study will be reviewed and analysis will be done by using Statistical Package for the Social Sciences version 22 and MS Excel 2020 for statistical analysis.

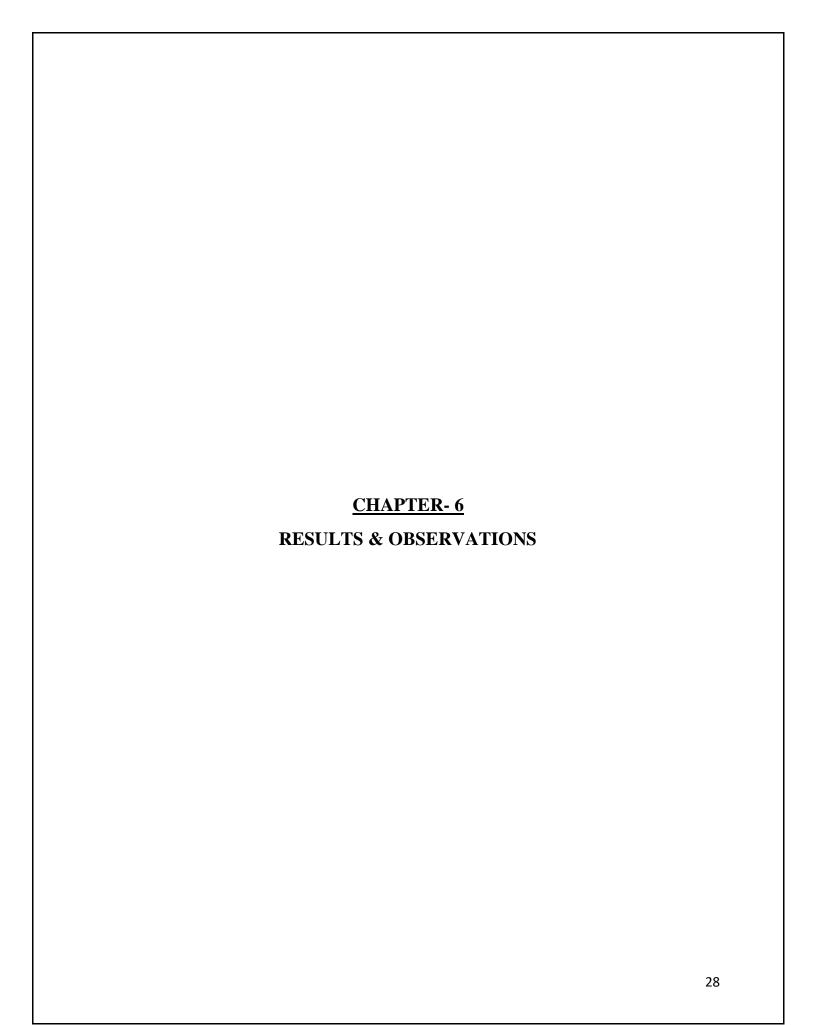
Study Design – Retrospective Study

Data Source – NQAS Certification Report, State Assessment Reports, Surveillance Reports

Duration of Study -3 Months

Parameters:

- (a) Overall NQAS Score of the Facilities
- (b) Departmental score of the Facilities
- (c) Area of Concern wise scoring of the facilities



Observation

(a). Average Overall Score of NQAS

Parameter	State Assessment	National Assessment	Surveilance-1	Surveillance-2
Average Overall Score	77.3	89	86.2	83.7

Table:1 Showing average overall score of the facility from the State of assessment till the Surveillance of year 2/end of validity of the National quality certification

(b). Departmental wise score of Primary Health Facilities

Department	State Assessment	National Assessment	Surveilance-1	Surveillance-2
OPD	76	90.4	88.4	87.5
Laboratory	74.1	88.8	82.6	80.1
Labour Room	81.8	93	89.8	88.4
NHP	67.8	88.8	84.4	82.9
IPD	76.3	89.3	84.8	83.9
Gen. Admin	75.9	90.6	83.5	84.8

Table:2 Showing average score department wise of Primary health facilities (n=32)

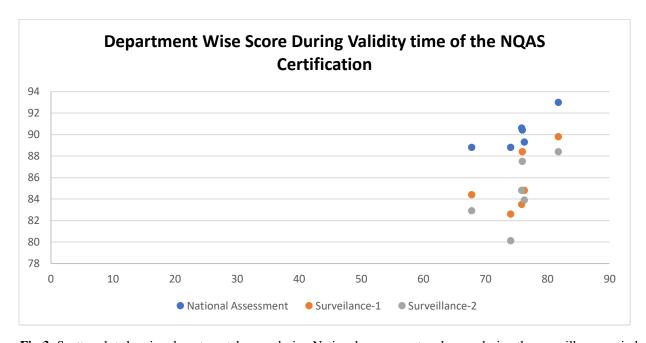


Fig:3- Scatter plot showing departmental score during National assessment and score during the surveillance period.

(c). Department wise score of Secondary Level Health Facilities

Department	National Assessment	Surveillance-2	Trend
A & E	92	87	
OPD	92	86	
Labour Room	94	97	
IPD	91	89	
OT	94	91.7	
Gen. Admin	89	76	
Auxiliary Services	85	86	
Radiology	91	87	
Laboratory	90	88	
Pharmacy & Stores	84	82	

Table:3 Showing trend and average score (department wise) of Secondary level health facilities (n=18)

(d). Area of concern

Area of Concern	National Assessment	Surveilance-1	Surveillance-2
Service Provision	88.7	87.8	96.2
Patient Rights	86.2	82.7	81.3
Inputs	97.4	93.7	89.8
Support Services	97.1	94.3	85.7
Clinical Services	95.2	91.2	87.2
Infection Control	90	86.2	83.3
Quality Management	86.4	81.1	72.5
Outcome	88.6	82.7	81.7

Table:4 Showing average scoring of 8 AoCs.

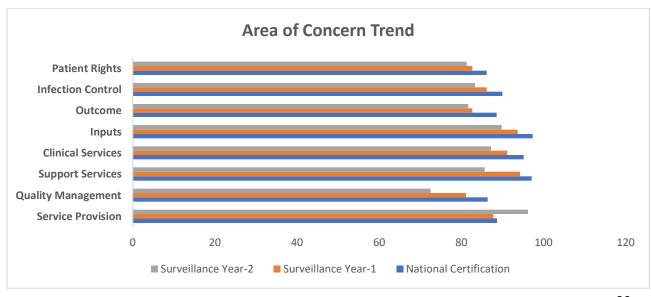


Fig:4- Chart showing the trend of Area of concern score during the validity period of National Certification

Interpretation

1. Sustenance of Quality standards by considering overall score of the facility.

After analyzing the data, we found that, there is average significant decline of approx.6%, when compared with National Quality Score. Although facility is sustaining the Quality standards above 70% as per criteria, but a significant dip of 6% is observed during the validity time-period.



Fig:5- Scatter plot diagram shows variation of overall score during National and Surveillance year 2.

2. Sustenance of Quality Standards by considering Area of Concern.

It is clear from the below diagram that except service provision none other AoCs can sustain the Quality Standards during the validity period of National Quality certification. AoCs "G"-Quality management shows a significant drop of 11% when compared with National Quality score.

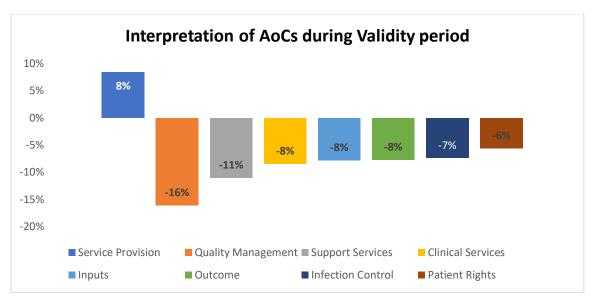


Fig:6- Chart showing average change between National Quality score and at the score at time of validity

3. Interpretation by considering Department wise score.

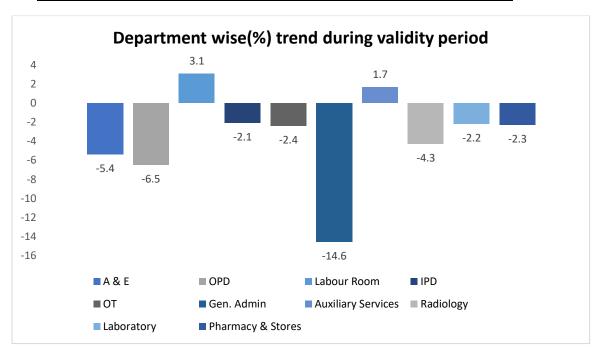
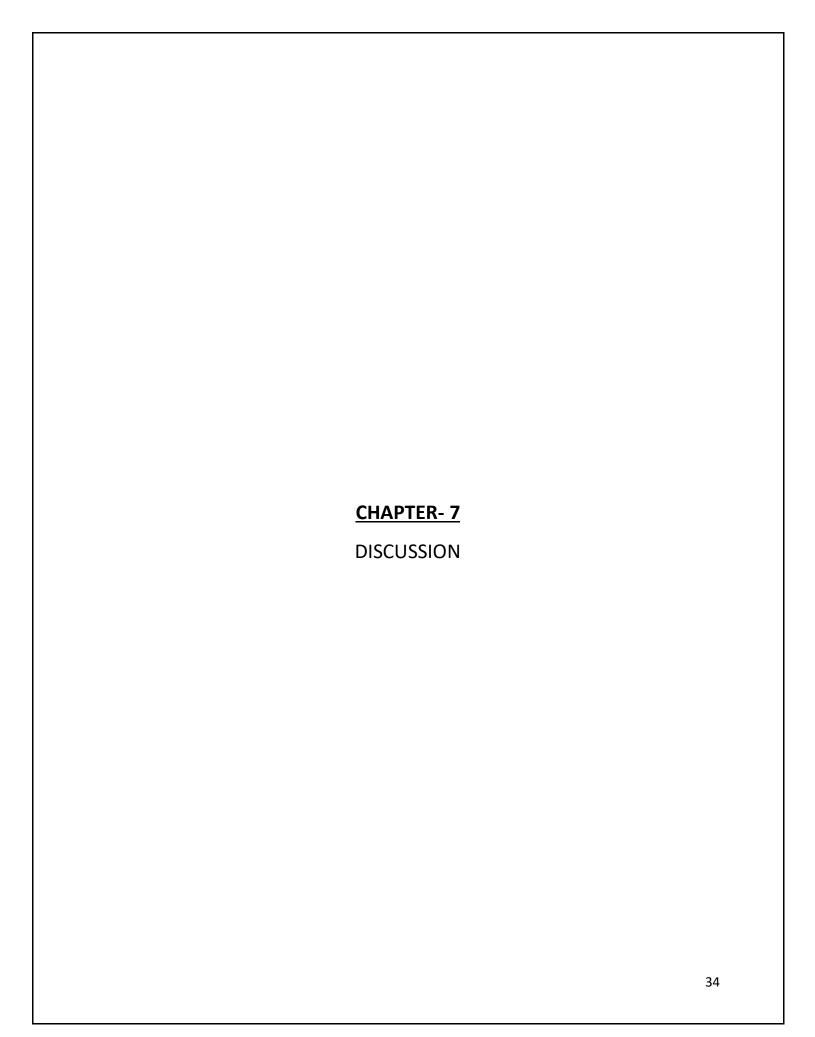


Fig:7- Chart showing average change (department wise) between National Quality score and at the score at time of validity

Gaps between National and Surveillance Assessments:

Under the National Quality Assurance Standard program, public health facilities in India are provided by the National Certification if they met all criteria for a validity of three year. Continuous assessment is a key to check the sustenance of quality standards among certified facilities, there is a provision of Surveillance Assessment during the validity time. These Surveillance are performed by pool of assessors empanelled by states government. There are various gaps that can be enlisted between National and Surveillance Assessments.

- There is some unrealistic score assigned to facilities during surveillance, which are almost impossible when compared with score during National Quality Certification assessment. This may be due to domestic pool of the assessors during surveillance assessment.
- Lack of documentation during Surveillance Assessment as compared to National Quality Certification.
- Inadequate KPIs performance report from states during the validity period of the National Quality Certification.
- Domestic pool of assessor during Surveillance assessment. Lack of diversity among assessors as compared to National Assessment.

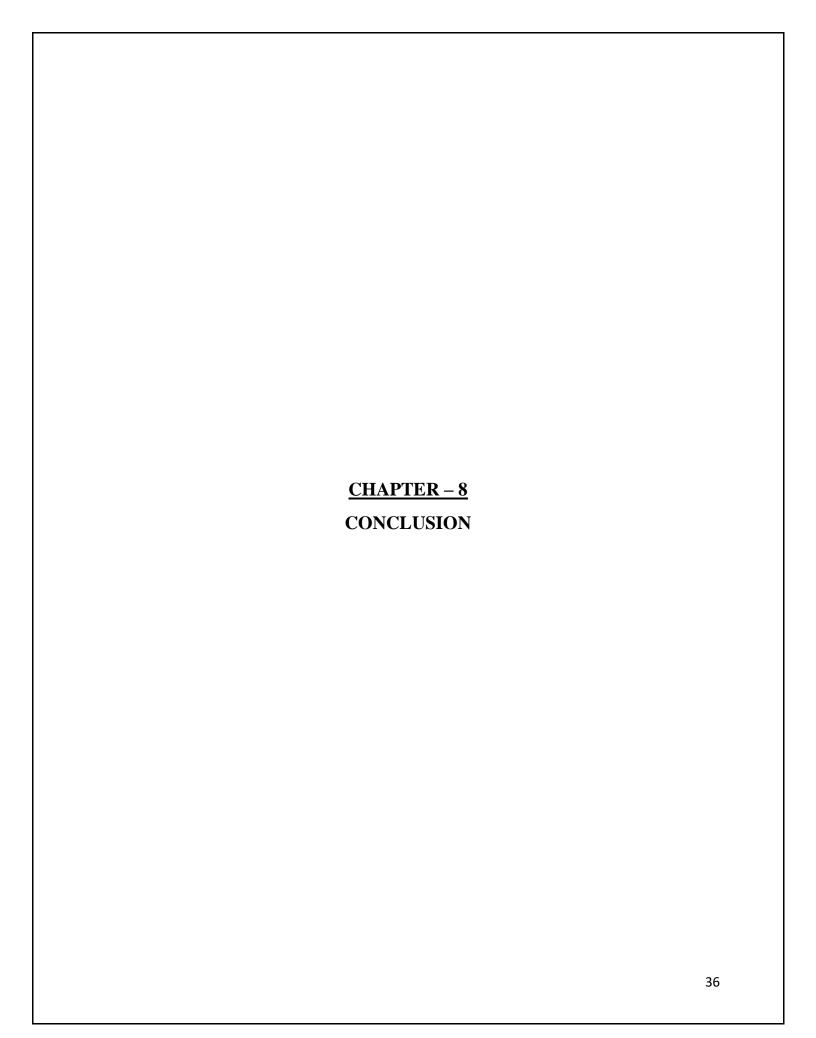


Discussion

Improvements in the public health system's capacity to fulfill essential public health services should continue. Quality assessments will result in few improvements without a strong infrastructure that can respond to and integrate the results of evaluations (Stephen et.al. 2009,) [19]. As evident from the above diagrams' (fig-5.6), there is significant decrease in the quality standards in public health facilities of India. There is a need to strengthen the overall quality improvement cycle by building a culture of excellence and full potential therefore all those agencies involved directly or indirectly in Quality Improvement of Public Healthcare in India should commit ourselves to a paradigm shift in favor of excellence through internal, self-initiated, logically planned and morally rooted committed decisions.^[20]

There are many barriers i.e., Hospital staff not having time and problems with staff prioritizing QI with other duties, lack of leadership, hospital leadership support, data utilization can compromise the sustainability of quality standards. Despite these barriers, ongoing refinements and redefinitions of public health indicators will allow for evaluation of an increasingly broad range of public health activities, particularly as standards become available for public health practices. Experience from diverse industries including personal health services validates the utility of measurement systems in improving quality. The pursuit of quality assessment within the public health system holds equal promise of improved outcomes for public health. Attempts to formulate measurement have concentrated on assessing the core functions of public health by focusing on key activities that indicate these functions have been achieved [21].

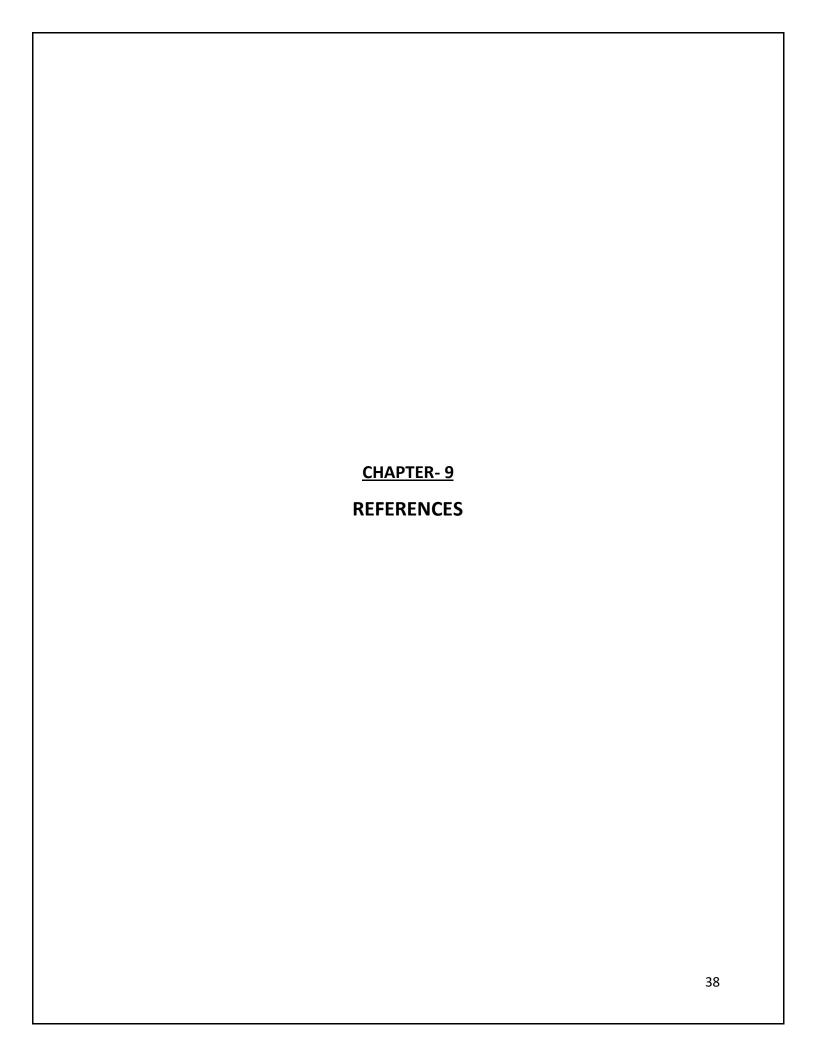
Public health quality assessment will be advanced by creating more concrete measures based on data. This will require better public health data collection systems, particularly at the local level. Primary data collection, though costly, provides invaluable information.



Conclusion

Sustainability is an important and legitimate domain of quality in healthcare, which calls for the redefinition of value to incorporate social and environmental costs. Including the concept of sustainability and resource stewardship as part of quality improvement provides a practical way for healthcare professionals to respond to ethical challenges such as climate change and social inequalities, to which we all contribute through our use of resources, and which present an urgent and unequal threat to vulnerable communities worldwide.

A sustainability lens may also bring immediate benefits to quality improvement, including new motivation and energy for change, highlighting wastes and opportunities otherwise overlooked, encouraging whole systems thinking and directing projects systematically towards the highest value improvements. [22] Self-sustaining excellence in quality processes and outcomes; analytical framework to gain timely and 'balanced picture' management information; reengineering delivery process around the patient across care continuum. While external pressures and punitive measures may bring about initial improvement in the desired direction, no change can be sustained till the people responsible for making that change accept it as their own. At the facility, a motivated team, which understands the need for quality and the standards set for it. It strives to make the needed changes within its capacity, and ensures that it remains that way



REFERENCES

- 1. Arah OA, Klazinga NS, Delnoij DMJ, Ten Ashbrook AHA, Custer's T. Conceptual frameworks for health systems performance: a quest for effectiveness, quality, and improvement. *Int J Qual Health Care* 2003; 5:377–98.10.1093/intqhc/mzg049
- 2. Raleigh VS, Foot C. *Getting the measure of quality: opportunities and challenges*. London: King's Fund, 2010.
- 3. Juran J. *Total Quality Management*. 2009. Jun 07, [Last accessed on 2018 Apr 27]. Available from: https://totalqualitymanagement.wordpress.com/2009/06/07/dr-joseph-juran/
- 4. Omasa F, Burnham G, Baingana G, Mwebesa H, Morrow R. Introducing quality management into primary health care services in Uganda. *Bull World Health Organ*. 1997; 75:155–61.
- 5. Department of Health and Family Welfare. *National Quality Assurance Standards for Public Health Facilities 2016.* India: Ministry of Health and Family Welfare; 2018.
- 6. Department of Health and Family Welfare. *Assessor's Guidebook for Quality Assurance in District Hospitals 2013*. India: Ministry of Health and Family Welfare; 2018.
- 7. Department of Health and Family Welfare. *Award to Public Health Facilities KAYAKALP* 2015. India: Ministry of Health and Family Welfare; 2018.
- 8. Quality Improvement Division, National Health System Resource Centre. New Delhi: [Last accessed on 2018 Apr 27]. Available from: http://qi.nhsrcindia.org/nationalquality-assurance-standards
- 9. Chaudhury RR, Parameswar R, Gupta U, Sharma S, Tekur U, Bapna JS, et al. Quality medicines for the poor: Experience of the Delhi programme on rational use of drugs. *Health Policy Plan.* 2005; 20:124–36.
- 10. Department of Health and Family Welfare. *National Health Policy 2017*. India: Ministry of Health and Family Welfare; 2018.
- 11. Mortimer F, Isherwood J, Kenward C, Pearce M, Vaux E. Sustainability in quality improvement: measuring impact. *Clin Med* 2018; 18:94–7.
- 12. Thompson T, Walpole S, Braithwaite I, et al. Learning objectives for sustainable health care. *Lancet* 2014; 384:1924–5.
- 13. National Quality Board Shared commitment to quality. NHS England, 2016.
- 14. General Medical Council Generic Professional Capabilities Framework. GMC, 2017.
- 15. NHS Improvement and Leadership Development Board *Developing People Improving Care. A national framework for action on improvement and leadership development in NHS-funded services*. NHS Improvement, 2016.
- 16. Brook R, Chassin M, Fink A, Solomon DH, Kosecoff J, Park RE. 1986. A method for detailed assessment of the appropriateness of medical technologies. *Int. J. Technol. Assess. Health Care* 2:53–63
- 17. Donabedian A. 1980. *Explorations in Quality Assessment and Monitoring*. Vol. 1: The Definition of Quality and Approaches to its Assessment. Ann Arbor, MI: Health Admin. Press
- 18. Green CG, Harrison M, Henderson K, Lenihan A. 1998. Total quality management in the delivery of public health services: a focus on North Carolina WIC programs. *J. Public Health Manag. Pract.* 4:72–81
- 19. Paez K, Schur C, Zhao L, Lucado J. A national study of nurse leadership and supports for quality improvement in rural hospitals. Am J Med Qual. 2013 Mar-Apr;28(2):127-34. Doi: 10.1177/1062860612451851. Epub 2012 Jul 22. PMID: 22822169.

20. O'Hanlon CE, Kranz AM, DeYoreo M, Mahmud A, Damberg CL, Timbie J. Access, Quality, And Financial Performance of Rural Hospitals Following Health System Affiliation. Health Aff (Millwood). 2019 Dec;38(12):2095-2104. Doi: 10.1377/hlthaff.2019.00918. PMID: 31794306; PMCID: PMC7004480.