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To Evaluate the Role of Kayakalp in NQAS Implementation

by

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Enroll No. PG/20/018

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June, 2022 Dr. Gaurav Pandey

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

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

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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.

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He/She comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning.

We wish him/her all the best for future endeavours.

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LIST OF ABBREVIATIONS

S. No	Symbol	Abbreviations
1.	NQAP	National Quality Assurance Program
2.	NQAS	National Quality Assurance Standards
3.	NIHFW	National Institute of Health and Family Welfare
4.	DH	District Hospital
5.	SDH	Sub-District Hospital
6.	CHC	Community Health Centre
7.	PHC	Primary Health Centre
8.	KPI	Key Performing Indicators
9.	GoI	Government of India
10.	UN	United Nations
11.	MoHFW	Ministry of Health and Family Welfare
12.	ISO	International Organization for Standardization
13.	OPD	Out-Patient Department
14.	IPD	In-Patient Department
15.	NRC	Nutrition Rehabilitation Centre
16.	ICU	Intensive Care Unit
17.	CQAC	Central Quality Assurance Committee
18.	IT	Information Technology
19.	RKS	Rogi Kalyan Samiti
20.	MAS	Mahila Aarogya Samiti
21.	UPHC	Urban Primary Health Centre
22.	NRHM	National Rural Health Mission
23.	NUHM	National Urban Health Mission
24.	NFHS	National Family Health Survey
25.	RCH	Reproductive and Child Health
26.	SDG	Sustainable Development Goals
27.	NHM	National Health Mission

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National Health Systems Resource Centre (NHSRC)

National Health Systems Resource Centre (NHSRC) was set up in 2006 under the National Rural Health Mission (NRHM), now under National Health Mission (NHM), of Government of India, to serve as an apex body for technical assistance. NHSRC's mandate is to assist in policy and strategy development in the provision and mobilization of technical assistance to the states and in capacity building for the Ministry of Health and Family Welfare (MoHFW) at the center and in the states. The goal of this institution is to improve health outcomes by facilitating governancereform, health systems innovations and improved information sharing among allstakeholders at the national, state, district and sub-district levels through specific capacity development and convergence models.

It has a 23-member Governing Body, chaired by the Secretary, MoHFW, with the Mission Director, NRHM as the Vice Chairperson of the GB and the Chairperson of its Executive Committee. Of the 23 members, 14 are ex-officio senior health administrators, including four from the states and nine are public health experts from academics and civil society. The Executive Director, NHSRC, is the Member Secretary of both the Governing Body and the Executive Committee. NHSRC's annual governing board meet sanctions its work agenda and its budget.

NHSRC, Delhi, is manned by eight technical divisions namely Community Processes-Comprehensive Primary Health Care, Public Health Administration, Quality Improvement, Human Resources for Health, Health Care Financing, Health Care Technology, Knowledge Management Division, and the eighth division is the Administration which is supported by four subsections such as General Administration, Human Resources, Accounts, and Information Technology.

The NHSRC has a regional office in Guwahati, Assam, for the northeast region of India, known as Regional Resource Centre for North Eastern States (RRC-NE). RRC-NE was established in 2005 to augment the technical and managerial capacities of the eight northeastern states, including Sikkim, at all levels as a technical support unit. Subsequently, it was subsumed under NHSRC in 2007. RRC-NE has functional autonomy and implements a similar range of activities in the NE region.

NHSRC actively seeks collaboration with organizations and individuals with a mandate to provide technical leadership for universal access to health care.

Vision - Universal access to equitable, affordable, acceptable and quality health care that is accountable and responsive to the needs of people of India.

Mission - Enable technical support and capacity building to strengthen public health systems, generate evidence from field to formulate and evaluate policies and strategies; with a focus on decentralization, equity and quality to meet the goals of the National Health Policy 2017.

Statement - The National Health Systems Resource Centre works closely with policy makers, practitioners and researchers to provide technical and implementation support based on experiential learning, build sustainable partnerships to develop knowledge networks; strengthen technical strategies and management approaches to enable people centered, strengthened health systems.

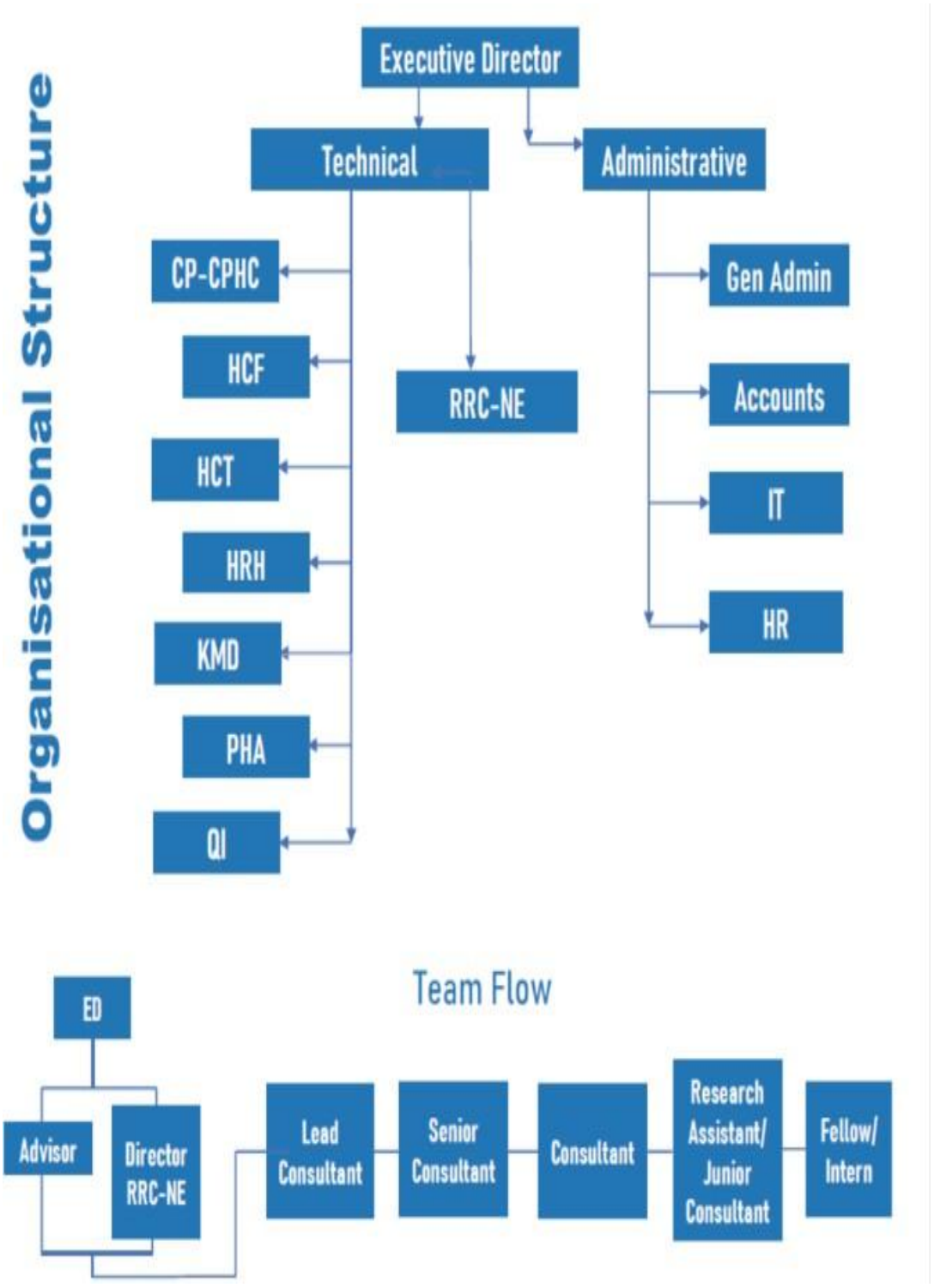

Organisational Structure
Executive Director
Technical
Administrative
CP-CPHC
HCF
HCT
HRH
KMD
PHA
QI
RRC-NE
Gen Admin
Accounts
IT
HR
Team Flow
ED
Advisor
Director RRC-NE
Lead Consultant
Senior Consultant
Consultant
Research Assistant/ Junior Consultant
Fellow/ Intern

Figure 1

Community Processes – Comprehensive Primary Health Care (CP-CHC)

The CP-CPHC division supports the realization of – one of the core values of the NHM is to 'build an environment of trust between people and providers of health services and empower the community to become active participants in the process of attainment of highest possible level of health.' It also works towards achieving Universal Health Coverage as envisaged in the National Health Policy (NHP) 2017.

Broad areas of work-

Supporting ASHA programme by building skills, incentives, career opportunities, grievance redressal, and support structures.

Rolling out of Comprehensive Primary Health Care through Ayushman Bharat - Health and Wellness Centers (AB-HWC).

Public participation in District Health Societies & District Health Action Plan

ASHA Facilitators in 5.54 Lakh Village Health 38,481.

Community-based platforms like Village Health Sanitation and Nutrition Committees (VHSNC), Mahila Arogya Samitis (MAS), Jan Arogya Samitis (JAS) and Rogi Kalyan Samitis (RKS)

Community Monitoring of Health Programme.

Programmes for involving NGOs in NHM.

Key Actions –

•Policy support & guidelines development

•Technical assistance to states and UTs

•Developing training modules/handbooks

•Capacity building of AB-HWC team & community platforms

Research/studies/evaluation/programmatic Assessments

Organising workshops, consultations & writing reports

•Documentation of Good and Replicable Best Practices

Network & Partnerships – Civil Society, Innovation, Learning Centre

•IT support – Design of Portals/Mobile applications

•ASHA Certification

Health Care Financing (HCF)

Globally, health care financing has become increasingly acknowledged as an area of major policy relevance to achieve Universal Health Coverage. Understanding a country's health care financing system allows to recognise current situation, raise more funds, allocate funds to ensure equity and quality health care for everyone, and reduce out-of-pocket expenditures. NHSRC's HCF division supports evidence-based policymaking and implementation of support to the union and state governments in these areas. The National Health Policy 2017 also gives impetus to increasing funds for health care, better utilisation of existing resources, improving financial protection, and establishment of a robust Health Accounts system to guide the policymakers in the allocation of funds.

Focus Areas -

Health Accounts: Annual production of National Health Accounts for India.

Health Financing indicators: Analysis and presentation of health financing indicators using budget data, National Sample Survey (NSS), National Family Health Survey (NFHS) data and more.

Policy Engagement: Provide input in different issues related to health financing.

Achievements –

•It is the National Health Account Technical Secretariat for National Health Accounts(NHA) Production in the country.

•Published the National Health Accounts Guidelines for India.

•Produced NHA estimates on an annual basis since 2013-14.

•The NHA estimates feed into the WHO-Global Health Expenditure Database.

•The State level indicator based on NHA estimates is used by NITI Aayog for State Health Index.

•Results from NHA estimates are reported every year in Economic Survey of India and it is used for SDG monitoring.

Health Care Technology (HCT) -

HCT helps the MoHFW on policies, strategies, and action plans for health technologies, specifically for medical devices under the NHM. The division also provides technical expertise for multiple vertical health programmes at the national level, like Pradhan Mantri National Dialysis Program (PMNDP), Biomedical Equipment Management and Maintenance Program (BMMP), Free Diagnostics Service Initiative (FDI).

Work Area –

•Recognised as WHO's Collaborating Centre for Priority Medical Devices and Health Technology Policy.

•Provides consultation to Department of Pharmaceutical, Indian Pharmacopeia Commission, Central Drugs Standard Control Organization, and Bureau of Indian

Standards on medical devices.

•Ensuring Atomic Energy Regulatory Board Compliance for Public Health Facilities

•Regular technical support to states and union territories for implementing the NHM programmes.

•Establishing health department specific Technical Specifications for medical devices

•Health Technology Assessments

Key achievements –

•Developed Technical Specifications for 331 medical devices as per Indian Public Health Standards

•Assessment of product innovations at National Health Innovation Portal

•PMNDP implemented in 35 states & union territories and BMMP in 31 states & UTs

•FDI-Pathological services have been put into effect in 33 states

•FDI-CT Scan services in 23 States

•FDI-Teleradiology service in 12 states

Human Resource for Health (HRH)

Over the years, a lot of effort has been made towards ensuring the availability of skilled human resource in the country in a bid to achieve Sustainable Development Goals. The NHM, with focus on strengthening health systems and providing quality services, has added around 4.5 lakh personnel in the public health facilities across the country. The HRH division supports the MoHFW, the states and UTs in strengthening human resource practices and implementation of the Health Systems Approach. The team also works on the framework for staffing decisions based on the NHM goals and objectives. It suggests evidence-based interventions for the current workforce,

identifies future needs, possible gaps and surpluses, works towards capacity building of the workforce, and attraction and retention of health workers in rural and underserved areas. The team also looks after the guidelines for the annual Program Implementation Plans of NHM, leads the processing of Emergency COVID response package, and result-based financing, conditionalities under the NHM.

Areas of Work –

•Improving HRH planning and availability

•Strengthening HRH Management

•Generate evidence and building repository related to HRH

•Capacity Building on planning and HRH management

•Program Implementation Plans

•Conditionalities

Knowledge Management Division (KMD)

Knowledge management may be defined as a process of capturing, developing, sharing and effectively using knowledge. The division facilitates health systems and policy research, nurtures collaboration between decision-makers and programme managers in the health sector as well as the health policy, health systems, and public health research community. In action, KMD envisions the co-production of knowledge for action in health systems for stronger, more evidence-informed health systems, and a more engaged and supported research community, including building skills for research among practitioners.

Work Areas-

•Research and partnerships

•Supporting SHSRC

•Supporting Tribal Health and working in Collaboration with the Ministry of Tribal Affairs for Tribal Health Cell.

•NHM Implementation Support

•Information management

•Reflections & evidence from field

•Inter departmental coordination

Objectives of the Department –

•Integration

•Improved performance

•Competitive Advantage

•Innovation

•Sharing of good practices & lessons learnt

•Continuous improvement

Public Health Administration (PHA) –

Strengthening systems to support health programme initiatives is one of the core mandates of NHSRC under NHM. PHA division works towards that by supporting the MoHFW in framing national public health policies and programmes, assisting states in implementation of the same by engaging with stakeholders through advocacy and capacity development. It also brings in accountability through a robust mechanism of governance with a continuum and prospective thinking in approach.

Work Areas –

•Indian Public Health Standards (IPHS)

•Public Health Management Cadre (PHMC)

•Secondary Care

•Governance

•Urban Health

•Prime Minister Atmanirbhar Swasth Bharat Yojana and XV Finance Commission

Quality & Patient Safety (QPS) –

In alignment with NHM and NHP, the division is committed for building quality health systems by developing policies and strategies, cost-effective standards, designing a framework for their implementation, and providing certification and incentives. QPS also acts as a liaison between various stakeholders, provides support in training and capacity building, and in creating a pool of highly-skilled professionals and assessors. QPS also collaborates with academic institutions for TISS-PG Diploma

in Health Quality Management, and PHFI Certificate Course in Health Care Quality Management, aids Immunization Division in implementation of AEFI (adverse effects following immunization) surveillance certification and supports the MoHFW in development of Standard Treatment Guidelines.

Achievements –

•ISQua and IRDA Accredited Standards of Care

•912 health facilities nationally and 2,734 are state NQAS certified

•391 labour rooms & 321 maternity operation theatres LaQshya certified

•Kayakalp facilities: 101 in 2015-16 to 7,189 in 2019-20

•Development of a pool of Health Quality professionals in the country – 4,569 state level assessors and 511 National assessors (ISQua accredited program)

•Gunak - A quality assessment app for Apple and Android users to assess public

Key Initiatives –

•National Quality Assurance Standards (NQAS): Developed keeping in mind the requirements for public health facilities and global best practices. Available for district hospitals, community health centres (CHCs), primary health centres (PHCs), urban PHCs, HWC and AEFI surveillance.

•Kayakalp: In alignment with Swachh Bharat Abhiyan, Kayakalp Award Scheme promotes swachchata in public health facilities. The winners are given cash awards and felicitated at the state and national level.

•Swachh Swasth Sarvatra: The integrated scheme by the MoHFW and the Ministry of Jal Shakti/MoHUA works for supporting CHCs in attaining Kayakalp status and

improvement of swachchata in rural and urban communities.

•LaQshya: This initiative focuses on improving quality of care during the delivery and immediate post-partum.

•Mera Aspataal: The GoI initiative is an IT platform to capture 'Voice of Patient' by a simple multilingual app which works through SMS, outbound dialling, mobile application, and web portal.

•National Patient Safety Implementation Framework 2018-25: An initiative to reduce unnecessary harm associated with health care to an acceptable minimum.

•MusQan: Soon-to-be-launched initiative will ensure delivery of quality child care services.

Regional Resource Centre – North East (RRC-NE) –

RRC-NE was created as a technical support unit in October 2005 under Sector Investment Program (SIP) supported by European Commission (EC) to provide the technical and managerial capacities to the eight northeastern states of the country. In 2007, RRC-NE was subsumed under NHSRC. For meeting the specific needs of the eight northeastern states, RRC-NE at Guwahati functions as branch office of NHSRC. It has functional autonomy and implements a similar range of activities in the NE region. The team at RRC-NE is headed by the Director with technical teams for each area.

Key Areas of Work –

Work at RRC-NE is organized around six divisions – Community Processes, Health Care Technology, Health Care Financing, Public Health Planning & Evidence

including Human Resource for Health, Quality Improvement, all duly supported by an administrative division.

Public Health Planning & Evidence

•Supporting the states in preparing State and District Program Implementation Plans, appraisals of the plans and follow up of the agreed activities

•Mentoring the aspirational districts in planning and strengthening of the service delivery

•Undertaking any assessment/evaluation of health-related projects as required by the MoHFW/NE States/NEC/MoDoNER/MHA, etc.

Quality Improvement

Facilitating NQAS and LaQshya Certification of Hospitals

Capacity building of State/District Program Officers and Facility In-charges

Promotion & Support in implementation of Kayakalp, SSS and Mera Aspataal initiative in NE States

Community Processes & Comprehensive Primary Health Care

Strengthening the ASHA Support System

Facilitating Setting up of Health & Wellness Centres with provision of all 12 packages of services and rolling out of Comprehensive Primary Health Care services in the northeastern states vis-à-vis continuum of care in true sense.

Health Care Technology-

Supporting the states in implementation of the new programmes and further expansion of Free Diagnostic Services, Pradhan Mantri National Dialysis Program, Bio-Medical Equipment Maintenance Program, Oxygen Support System.

Regular updating and analysing the information from the different dash boards and

feedback to the states.

General Administration –

The General Administration section supports NHSRC, RRC-NE and the MoHFW in terms of facility management, procurement of goods and services, asset management, tender and contract management. It is also responsible for liaising with the ministry and other government organisations as per need – organising online and offline meetings, events, and ensuring smooth functioning on a day-to-day basis.

The primary mandate of the HR section is to recruit technical and administrative manpower for NHSRC, RRC-NE and the MoHFW. HR is also responsible for contract management, pay-rolling, leave management, and annual performance appraisals. In addition to that, HR activities include inputs for RTIs/appeals/legal queries/parliamentary questions, facilitating accidental insurance, personnel file management, campus recruitment of fellows, induction, training, capacity building, consultants' satisfaction survey, and welfare activities.

The Accounts team takes care of the budgeting and expenditure of NHSRC, RRC-NE and the MoHFW (of consultants working with the ministry on the NHSRC contract). A typical day in the section involves vetting of various MoUs and contracts, audit management, payments, budgeting and costing, controlling wasteful expenditure, ensuring the expenditure is incurred as per General Financial Rules, preparing annual budgets, monthly-quarterly financial statements, drafting audit replies, and supporting admin in empanelment of CA firms.

Our IT section has been instrumental in adapting to the online mode of working by ensuring swift and smooth transition. The section is responsible for procurement of IT infrastructure (goods and services) for all divisions, troubleshooting and resolving IT

issues, installing various software, coordinating with external agencies and vendors, and providing support for online events, meetings, and interviews, along with managing office infrastructure.

General learning

The authorization letters should be in updated format especially with regard to time period.

The FI should be well groomed and confident while approaching a HE.

Interpersonal skills like soft skills, persuasion skills, communication skills, social intelligence, and emotional intelligence should be applied wisely and in a case by case manner.

Once data is collected, The FI should thank and appreciate the time given by respondent from his busy schedule.

The first thing which I learnt in the organization is definitely teamwork.

Development of patience in situations like when I was disagreed with another members of the team.

Development of problem-solving skills and how to dodge the deadlines of the next assignment.

Communicating well with the authorities holding in the organization and collaborating well with them to plan the task for the next day.

One of the most valuable skills which i learnt was how to navigate and speak well with the people in the professional setting.

The internship experience made me more responsible and accountable for what decisions to make and how to execute what was been allocated to us.

Conclusive Learning

It helps one to hone their interpersonal skills while at the same time exposure to ground reality of the situation. Working as FI, allows a person to have face to face interaction with people leading to first hand exposure of hurdles in data collection, management activities and rejection handling in a constructive manner. we understood and saw the grass root problem faced by the people at the ground level , faced the hurdles of rejection in data collection, learned management activities and handling rejection in a constructive manner, monitoring and evaluation and capacity building.

Limitations

Due to the time constraint responsibility are not defined.

Limited field visits experiences to learn ground reality.

Suggestions

All the employees must be technically advanced those have lagging in technical aspect must need training.

CHAPTER 1: INTRODUCTION

The quality of any health care service, has become a critical factor. By improving the quality of structures and processes, waste of various resources is reduced [1]. As a result, productivity and efficiency improve. Therefore, defining metrics and improving the health-care services related to the quality is critical.

The quality of service emphasizes the importance of patients which are in individual and preferences and values of the society , implying that they have been taken in count and taken into account when formulating the new health-care decision-making and policymaking (desired health outcomes); and emphasizes on professional performance by the state of technical, medical, and scientific knowledge, implying that the state is dynamic nature , and further implying that the health-care provider has taken into account those preferences and values in health-care decision-making (consistent with current professional knowledge).

The Ministry of Health and Family Welfare (MoHFW) developed the "National Quality Framework" in 2013 for public health facilities and standards for District Hospitals. Subsequently, quality standards were launched for community health centers (CHCs), primary health centers (PHCs), Urban Primary health Centers & health & wellness centers (HWCs) [2-4]. Under NQAS in 2015, MoHFW has launched Kayakalp. Kayakalp was launched in line with Swatch Bharat Abhiyaan focuses on promotion of various aspect of cleanliness and hygiene in public health facilities and honors those who go above and beyond [5-6].

National Quality Assurance Standard (NAQS) & Kayakalp criteria for DH, CHC and PHC have been released and are being implemented across the country. Since UPHC

are different from conventional PHC functionally, NQAS & Kayakalp standards/criteria's for PHCs & UPHCs have been developed separately to measure the quality of service & promoting cleanliness and hygiene. These standards/criteria also intend to help the states to build an in-house creditable management system related to quality in the design of PHCs & UPHCs. These standards/criteria's offer a standardized process for monitoring and evaluation of quality of services by various individuals like facility staff, health administration and certificate bodies [7].

NQAS programme was started for public health care facilities in 2013 & upto financial year 2016-2017 we had 10 public health certified facilities are NQAS certified. Kayakalp was launched for public health care facilities in 2015. From 2015 there were drastic increase in no. of certified public health care facilities. In financial year 2020-2021, we have 192 NQAS certified facilities while 12,603 facilities were awarded with Kayakalp. In this study we aim to analysis the influence of Kayakalp in achieving NQAS certification. Both the programmes i.e. Quality assurance & Kayakalp having some standards through with assessment done on public health facilities followed by awarded with certification and these criteria approved by supervisory committee of quality. It was observed that standards related to kayakalp are directly or indirectly related to the National Quality Assurance Standards (NQAS). So, it could be said that there can be some co- relation in both the programmes [8].

CHAPTER 2: REVIEW OF LITERATURE

Search Strategy:

Pub Med, Google Scholar, and Medline were used to conduct an electronic search. We looked at the websites of the WHO, MoHFW, UPHC, ICMR, NHSRC, NHM etc.

Keywords used for Literature Review:

Quality, Assessment, Assurance, Control, Management, Performance, Survey, Evaluation, Primary Health Centre, Urban Health, Urban Population, Kayakalp

1. In 2013, the Ministry of Health and Family Welfare (MoHFW) developed a "National Framework of Quality " that defined their approach to quality of care, organizational structure, It was dubbed "Operational Guidelines for Quality Assurance for Public Health Care Facilities" and was later updated for CHCs, PHCs, and Urban PHCs in 2014 and 2016[(2)(4).] The Hon. Prime Minister launched the Swatch Bharat Mission in 2015, and the MoHFW launched "Kayakalp" to complement it focusing on promotion in public health facilities regarding cleanliness & hygiene. Both the NQAS and Kayakalp programmes have certain standards that are used to assess health care facilities. Following that, certification was granted based on certain criteria approved by the Central Supervisory Committee of quality. It was observed that standards related to Kayakalp are directly or indirectly related to the National Quality Assurance Standards (NQAS). As a result, it's possible that there's a connection between the two programmes [(5)(6)].

2. Agrawal,et al conducted a retrospective study in New Delhi from May 2015 & April 2018 . They selected 32 quality certified district hospital under NQAS, it was discovered that positive correlation b/w Kayakalp & NQAS and Kayakalp implementation has less significance on the quality certification [8].
3. Rakesh Ninama et al. conducted a study which are cross sectional in nature in Rajkot district, Gujarat, from 2010 to 2011. They selected 14 Primary Health Care Centers (PHCs) at a rate of two PHCs per block from seven blocks. It was discovered that 21% of PHCs were residential facilities, that all PHCs provided RCH services, and that no PHC offered Medical Termination of Pregnancy (MTP) services. 100 percent of Lab Technicians and Pharmacists, 92 percent of doctors, and 57 percent of Nurses were posted in Human Resources [9].
4. For facility evaluation, a cross-sectional study was conducted in 586 districts. PHC's mean quality score was above 50 percent, with wide variation across states, and districts, according to the report. The majority of PHCs in India fell far short of government minimum standards; good managemental practices in a facility were highly correlated with better quality of care in low-performing states; and the majority of PHCs in India having low standards according to the government. [10].
5. In the Indian state of Karnataka, a study was conducted to shows a comparison of the quality-of-care components given by female outpatient practitioners working in both private and public facilities. For 5 days, 18 private and 25 public practitioners, as well as 451 patients, were studied. There are 650 consultants of private sector and 650 of public sector. In the public sector, the av. length of consultation was approx. 3min., while in the private sector, it was approx. 7min. Private practitioners were found to conduct physical examinations and inform patients about their diagnosis and prognosis. Further, in the private sector, diagnosis thoroughness, and quality of care

appeared to be better than public

sector [11].

6. A study was conducted to assess the availability and accessibility of facilities related to Hand washing as well as the supply of agents of hand washing in an OPD complex of a tertiary care hospital. Out of approx. 221 OPD rooms surveyed, approx.216 (98.56 percent) sinks were easily accessible and placed closer to users, according to a standard checklist with 13 variables. Hand-operated taps were found in the majority of sinks (99.5 percent). 16.75% of sinks lacked a soap dish, and 10.5 percent of soap dishes were broken. Soap bars were not available in 6.7 percent of sinks, but an antiseptic agent was available in only 2.87 percent. 1.91 percent of sinks had no towel stands, while 3.83 percent of sinks had broken towel stands. There were no towels in 20.57 percent of sinks, and soiled towels were found in 11% of sinks. All sink drains were patent. Correct hand washing techniques were not displayed [12].
7. The technical standards of the provider and the patient's expectations must be considered when defining the quality of health care. "Conformance to requirement" is how quality is defined. Quality can be defined as allowing the organization to opts actions based on concrete goals rather than hunches, or options. Preventing defects and adhering to requirements agreed upon by managers and employees are two ways to achieve quality. Conformance to specifications and meeting or exceeding customer expectations are two aspects of quality [13] [14].
8. A survey was done on the basis of primary survey of 2000 households with 10,929 people, a study was conducted in four cities: Jaipur, Ludhiana, Mathura, and Ujjain. A total of 500 households were chosen from twenty-five clusters in each of four cities (stratified random sampling). Lacking in public health facilities of government, a strong preference for private health facilities, high costs in both public and private

facilities, and the perception that the quality of services provided by private facilities is better, were all identified as major concerns. The continued vulnerability of the urban poor, combined with the lack of public health facilities in the area, indicated the need for immediate government action [15].

9. "Degree to which healthcare services provided to individuals and patient populations improve the desired health outcomes" is how quality of care is defined [16]. 'Ensure healthy lives and promote well-being for all at all ages' is the third of the 17 Sustainable Development Goals (SDG) ratified on September 25, 2015 at a United Nations summit. 'Achieve Universal Health Coverage, including financial risk protection, access to health-care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all by 2030,' according to goal [17].

10. Taking into account the facts, figures, and current situation of the country, the 'National Health Mission (NHM)' was launched with the goal of "improving the availability of and access to quality health care for people, particularly those living in rural areas, the poor, women, and children." The National Health Policy 2017 envisions as its goal "the attainment of the highest possible level of health and well-being for all at all ages, through a preventive and promotive health care system" [18].

CHAPTER 3: AIMS AND OBJECTIVES

3.1 General Objective:

1) To evaluate the role of Kayakalp in NQAS implementation in India

3.2 Specific Objectives:

- To assess the role of Kayakalp implementation of NQAS in the public health facilities.
- To assess the role of infection control practices under Kayakalp achievement in NQAS certified public health care facilities.

CHAPTER 4: METHODOLOGY

4.1 Study Area: The study covered PHCs & UPHCs of 36 states /UTs of India which were awarded under Kayakalp scheme and were further certified under the NQAS Program of Government of India during FY 2020-2021.

4.2 Study Population: There were 167 (2020-2021) PHCs & Urban PHCs in India are certified out of which 62 (NQAS Certified & Kayakalp Awardee) were selected for the study. The selection criteria were based on the data supplied by NHSRC (2020-21). The states included in the study are Gujarat, Haryana, Kerala, Rajasthan, Chhattisgarh, Tripura, Uttarakhand.

4.3 Sample Size: 62 (NQAS Certified & Kayakalp Awardee) were selected from the list of NHSRC for the period (2020-2021).

4.4 Statistical Analysis: Data entered using Microsoft Excel 2010 in a Data format provided by NHSRC. Statistical analysis done to analyze and represent data in a desired format, where Pearson correlation, Averages, T-statistics and p-value calculated by using excel 2010.

4.5 Study Subjects: From the secondary data provided by NHSRC, 62 PHCs & Urban PHCs which are (NQAS Certified & Kayakalp Awardee) located in India were selected. The secondary data reviews with the Kayakalp and NQAS tool.

4.6 Study Design: The present study design was a Descriptive study.

4.6.1 Inclusion Criteria: 62 PHCs & UPHCs were included.

- All the nationally certified PHCs & UPHCs under National Quality Standards Program & Kayakalp program.
- PHCs & UPHCs scoring more than 70 percent marks
- Data taken from NHSRC
- Facilities got Kayakalp award prior to the NQAS Certification.

4.6.2 Exclusion Criteria:

- All conditional certified PHCs & UPHCs were excluded from the study.
- PHCs & UPHCs under Cantonment Board.

4.7 Study Instruments:

- Kayakalp & NQAS Tool.

4.8 Time Period:

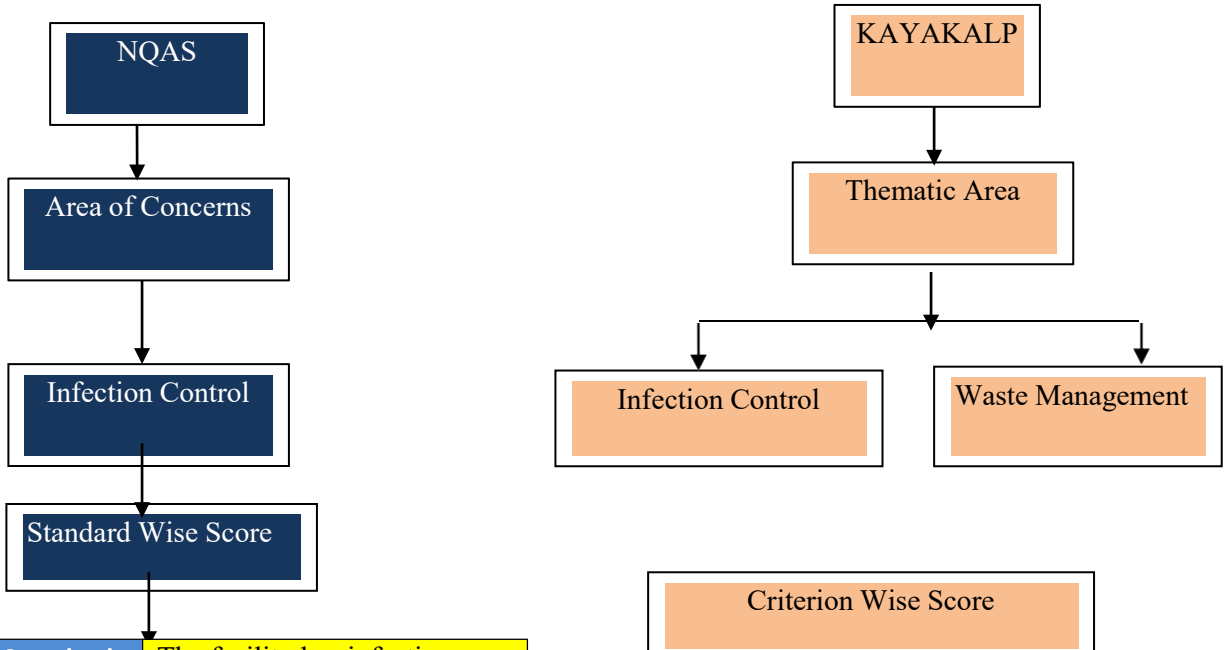
- 2020-2021(financial year)

4.9 Sampling Technique:

- Purposive Sampling technique

4.10 Ethical Issues:

- Requisite approval undertaken from NHSRC for the study from secondary data provided by them.



Standard F1	The facility has infection control Programme and procedures in place for prevention and measurement of hospital associated infection
Standard F2	The facility has defined and Implemented procedures for ensuring hand hygiene practices and antisepsis
Standard F3	The facility ensures availability of material for personal protection, and facility staff follow standard precaution for personal protection.
Standard F4	The facility has standard procedures for decontamination, disinfection & sterilization of equipment and instruments
Standard F5	Physical layout and environmental control of the patient care areas ensure infection prevention
Standard F6	The facility has defined and established procedures for segregation, collection, treatment and disposal of Bio Medical and hazardous Waste.

Infection Control	
D1	Hand Hygiene
D2	Personal Protective Equipment
D3	Personal Protective Practices
D4	Decontamination & Cleaning of Instruments
D5	Disinfection & Sterilization of Instruments
D8	Infection Control Program
D9	Hospital Acquired Infection Surveillance
D10	Environment Control

Waste Management	
C1	Segregation of Biomedical Waste
C2	Collection & Transportation of Biomedical Waste
C3	Sharp Management
C4	Storage of Biomedical Waste
C5	Disposal of Biomedical Waste
C6	Management Hazardous Waste
C8	Liquid Waste Management
C9	Equipment & Supplies for Bio Medical Waste Management

Figure 2

CHAPTER 5: RESULTS

Total no. Kayakalp awardee facilities i.e, PHCs are 6330 and UPHCs are 1303 in the FY of 2020-21 other side the NQAS certified facilities i.e, PHCs are 143 and 24 are the UPHCs in the FY 2020-21, out of all the facilities 48 PHCs and 14 UPHCs were selected, these facilities were those are Kayakalp awardee and NQAS certified in the same FY (2020-21) (graph:1,2,3,4,)

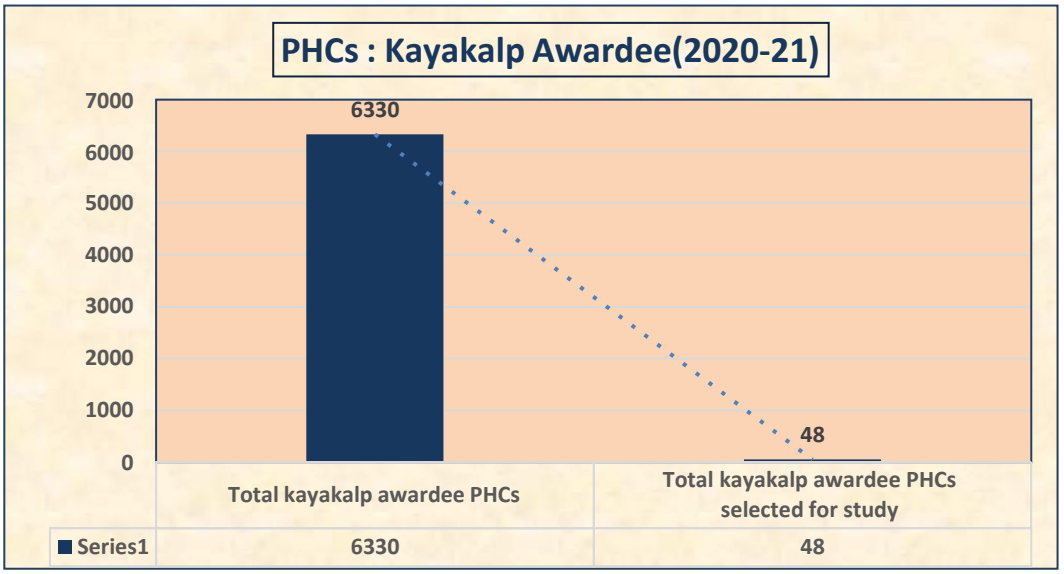


Figure 3

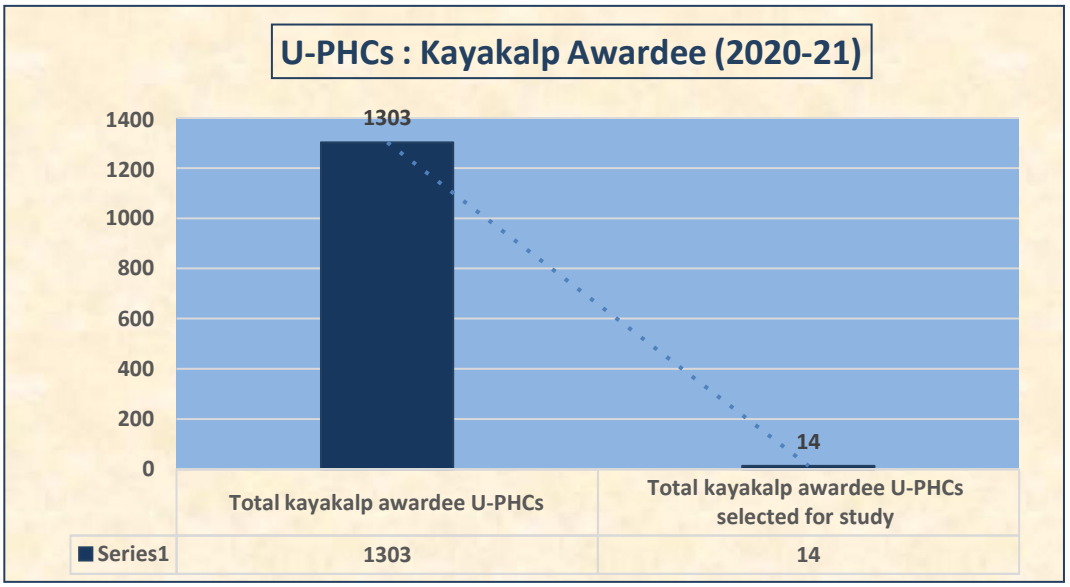


Figure 4

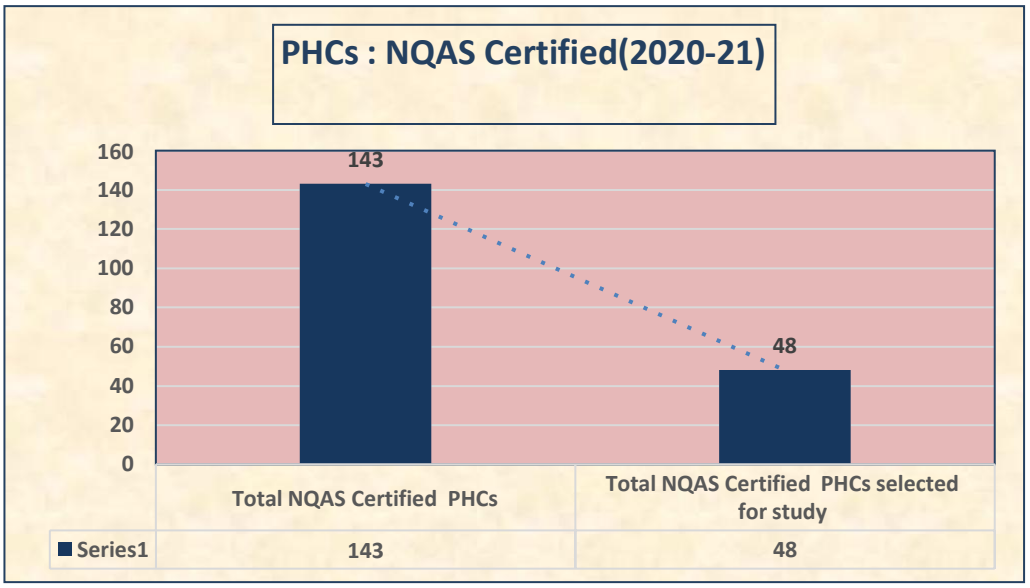


Figure 5

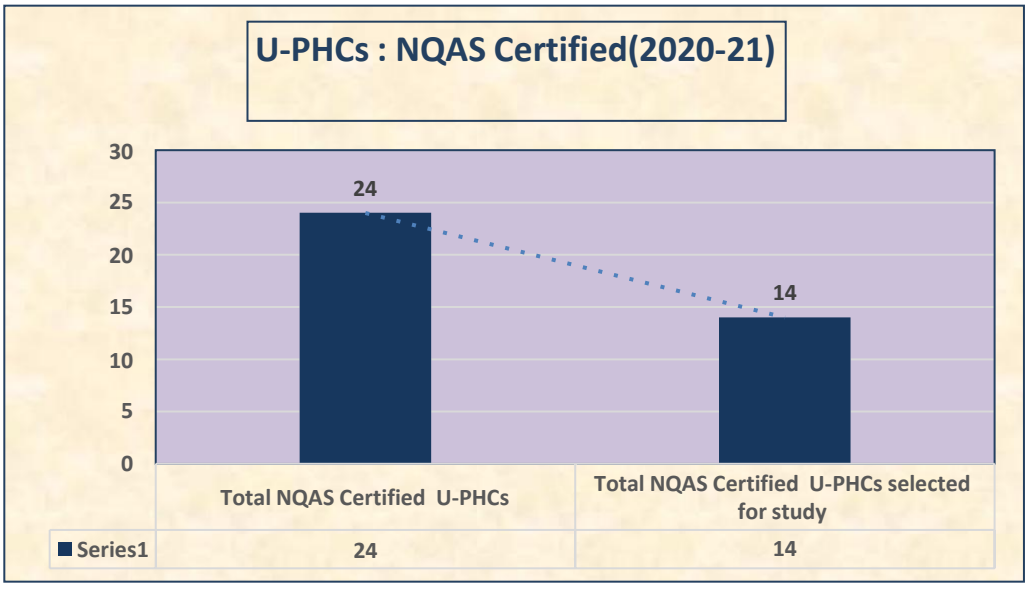


Figure 6

In this study we try to select some indicators which are common interest of NQAS and Kayakalp for PHCs & UPHCs.

5.1 Analysis for PHCs

5.1.1 Infection Control Practices (Standard/Criterion: F1 VS D8+D9)

We found a moderate correlation between the standard F1 of NQAS and D8, D9 of Kayakalp at the PHCs level, with strong significance, implying that Kayakalp criterion (D8 + D9) has a positive impact on NQAS (F1) to achieve compliance, i.e., antibiotic policy implementation at the facility, immunization and medical checkups, facility measurements etc.

Infection Control Practices	
Coefficient (r):	0.41473429
N:	48
T statistic:	3.09125533
DF:	46
p value:	0.0034

Figure 7

5.1.2 Hand Hygiene Practices (Standard/Criterion: F2 VS D1)

We found a moderate correlation between the standard F2 of NQAS and D1of Kayakalp at
the PHCs level, with strong significance, implying that Kayakalp criterion (D1) has a positive impact on NQAS (F1) to achieve compliance, i.e, staff is aware of standard hand washing protocol, display of hand washing instructions etc.

Hand Hygiene Practices	
Coefficient (r):	0.5252682
N:	48
T statistic:	4.1866128
DF:	46
p value:	0.00013

Figure 8

5.1.3 Personal Protection Practices (Standard/Criterion: F3 VS D2 +D3)

We found a weak correlation between the standard F3 of NQAS and (D2 +D3) of Kayakalp
at the PHCs level, with no significance, implying that Kayakalp criterion (D2 +D3) has a positive impact on NQAS (F3) to achieve compliance, i.e, awareness of the staff of using gloves and their types, correct method of wearing and removing PPEs & use of Masks, head cap during procedures etc.

Personal Protection	
Coefficient (r):	0.238824111
N:	48
T statistic:	1.668052629
DF:	46
p value:	0.10

Figure 9

5.1.4 Decontamination, Disinfection & Sterilization (Standard/Criterion: F4 VS D4 +D5)

We found a weak correlation between the standard F4 of NQAS and (D4 +D5) of Kayakalp
at the PHCs level, with no significance, implying that Kayakalp criterion (D4 +D5) has a positive impact on NQAS (F4) to achieve compliance, i.e, knowledge of making chlorine solution by the staff, decontamination and cleaning of instruments after use, adherence to protocol for high level disinfection and use of autoclave tape for monitoring of sterilization etc.

Figure 10

Decontamination, Disinfection & Sterilization	
Coefficient (r):	0.2014
N:	48
T statistic:	1.39
DF:	46
p value:	0.17

5.1.5 Environmental Control (Standard/Criterion: F5 VS D10)

We found a weak correlation between the standard F5 of NQAS and (D10) of Kayakalp at
the PHCs level, with no significance, implying that Kayakalp criterion (D10) has a positive impact on NQAS (F5) to achieve compliance, i.e, Preventive measures for air borne infections has been taken, adequate number of air exchange in laboratory etc.

Environmental Control	
Coefficient (r):	0.246375048
N:	48
T statistic:	1.724144376
DF:	46
p value:	0.09

Figure 11

5.1.6 Segregation, collection, treatment &disposal of biomedical & hazardous waste (Standard/Criterion: F6 VS C1-C6, C8&C9)

We found a weak correlation between the standard F6 of NQAS and (**C1-C6,C8&C9)**of Kayakalp at the PHCs level, with no significance, implying that Kayakalp criterion (**C1-C6,C8&C9)**has a positive impact on NQAS (F6) to achieve compliance, i.e, working instruction display for segmentation and handling of biomedical waste , transportation of biomedical waste, sharp waste is storage in puncture proof containers, storage of biomedical waste not more than 48 hr, PHC has adequate facility for disposal of biomedical waste ,disposal of used disinfectant solution like glutaraldehyde etc.

Segregation, collection, treatment &disposal of biomedical & hazardous waste	
Coefficient (r):	0.275851325
N:	48
T statistic:	1.946435804
DF:	46
p value:	0.06

Figure 12

5.2 Analysis for U-PHCs

5.2.1 Hand Hygiene Practices (Standard/Criterion: F1 VS D1)

We found a moderate correlation between the standard F1 of NQAS and D1of Kayakalp at
the U-PHCs level, with no significance, implying that Kayakalp criterion D1 has a positive impact on NQAS (F1) to achieve compliance, i.e, staff is aware of standard hand washing protocol, display of hand washing instructions etc.

Hand Hygiene Practices	
Coefficient (r):	0.478051035
N:	14
T statistic:	1.885411497
DF:	12
p value:	0.083811116

Figure 13

5.2.2 Personal Protection Practices (Standard/Criterion: F2 VS D2, D3)

We found a moderate correlation between the standard F2 of NQAS and (D2 +D3) of Kayakalp at the U-PHCs level, with no significance, implying that Kayakalp criterion (D1) has a positive impact on NQAS (F2) to achieve compliance, i.e , awareness of the staff of using gloves and their types, correct method of wearing and removing PPEs & use of Masks, head cap during procedures etc.

Figure 14

Personal Protection Practices	
Coefficient (r):	0.459770907
N:	14
T statistic:	1.793497491
DF:	12
p value:	0.098112688

5.2.3 Decontamination, Disinfection & Sterilization (Standard/Criterion: F3 VS D4, D5)

We found a moderate correlation between the standard F3 of NQAS and (D4 +D5) of Kayakalp at the U-PHCs level, with no significance, implying that Kayakalp criterion (D4 +D5) has a positive impact on NQAS (F3) to achieve compliance, i.e knowledge of making chlorine solution by the staff, decontamination and cleaning of instruments after use, adherence to protocol for high level disinfection and use of autoclave tape for monitoring of sterilization etc.

Decontamination, Disinfection & Sterilization	
Coefficient (r):	0.509551879
N:	14
T statistic:	2.051438357
DF:	12
p value:	0.062712251

Figure 15

5.2.4 Segregation, collection, treatment &disposal of biomedical & hazardous waste (Standard/Criterion: F6 VS C1-C6, C8&C9)

We found a Moderate correlation between the standard F6 of NQAS and (**C1-C6,C8&C9)**of Kayakalp at the PHCs level, with no significance, implying that Kayakalp criterion (**C1-C6,C8&C9)** has a positive impact on NQAS (F6) to achieve compliance, i.e, working instruction display for segmentation and handling of biomedical waste , transportation of biomedical waste, sharp waste is storage in puncture proof containers, storage of biomedical waste not more than 48 hr, PHC has adequate facility for disposal of biomedical waste ,disposal of used disinfectant solution like glutaraldehyde etc.

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Segregation, collection, treatment &disposal of biomedical & hazardous waste	
Coefficient (r):	0.484777961
N:	14
T statistic:	1.920018963
DF:	12
p value:	0.078937966

Figure 15

CHAPTER 6: DISCUSSION

The present study is a review study based on the data provided by NHSRC New Delhi. Quality framework within NQAS and Kayakalp incorporate and divides quality in 3 segments structure, process & outcome according to the well accepted Donabedian model [19]. In order to compare NQAS with Kayakalp the checkpoint is most important tool for it & it was found that all Kayakalp checkpoint are taken from the NQAS itself. When we did the comparative analysis b/w two programs on the basis of specific standards /criteria i.e, in NQAS we take standards (F1, F2, F3, F4, F5, F6) of Infection control area of concern on other hand we take standards/criteria(C1to C6, C8 and C9, D1to D5, D8,D9,D10) of 2 thematic areas (Infection Control & Waste Management) and divides these standards/criteria into some indicators i.e, Infection Control Practices (r=0.41 &p value = 0.0034), Hand Hygiene Practices (r=0.53 & p value = 0.0001) ,Personal Protection (r=0.24 &p value = 0.10) ,Decontamination , Disinfection & Sterilization(r=0.20 &p value = 0.17) ,Environmental Control(r=0.25 &p value = 0.09), Segregation, collection, treatment &disposal of biomedical & hazardous waste(r=0.28 &p value = 0.06) ,in order to drive deeper we finds that all indicators shows the positive correlation but not significant in nature except in infection control and hand hygiene practices which shows the significance in PHCs analysis , Our results suggest that Kayakalp having some component similar as NQAS .

CHAPTER 7: RECOMMENDATIONS

- More weightage may be given to the facilities those already Kayakalp awardee during the NQAS Certification.
- Facility those are wining Kayakalp awards in consecutive year must get NQAS certification within in specific period of time.

CHAPTER 8: CONCLUSION

This study was carried out to provide a perspective to the Role of Kayakalp in NQAS Implementation (NQAS), both the programs were launched by National Health Mission in order to services related to quality providing to the community. Findings having significant nature come out from the study.

- All the indicators show the positive correlation and no significance except Infection control practices, hand hygiene in PHCs (showing the significance).
- Another interesting finding is that facility national assessment is a lengthy process that necessitates a number of arrangements, including training of external assessors for facility assessments, facility doctors, and staff for this programme, awareness of programme protocols and framework among facilities, and longer run impact of programmes. All of these procedures will take time to complete. Once the facility has completed the necessary preparations for NQAS certification.

CHAPTER 9: LIMITATION

1. Sample size less due to covid less no. of facilities certified during this period.
2. Less study done on Kayakalp that's why less literature review done on Kayakalp.

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