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Dr. Palak Badhwar

PG/17/039

IIHMR

Delhi

SECTION 1: OVERVIEW

INTERNSHIP REPORT

SECTION 1: OVERVIEW

INTERNSHIP REPORT

(01 Feb - 30 Apr 2019)

Organization Profile

National Health Systems Resource Centre (NHSRC) has been set up under the National Rural Health Mission (NRHM) of Government of India to serve as an apex body for technical assistance.

Established in 2006, the National Health Systems Resource Centre'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 Centre and in the states. The goal of this institution is to improve health outcomes by facilitating governance reform, health systems innovations and improved information sharing among all stake holders at the national, state, district and sub-district levels through specific capacity development and convergence models.

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

The NHSRC currently consists of seven divisions – Community Processes, Public Health Planning, Human Resources for Health, Quality Improvement in Healthcare, Healthcare Financing, Healthcare Technology and Public Health Administration.

The NHSRC has a regional office in the north-east region of India. The North East Regional Resource Centre (NE RRC) has functional autonomy and implements a similar range of activities.

Vision

They are committed to facilitate the attainment of universal access to equitable, affordable and quality healthcare, which is accountable and responsive to the needs of the people of India.

Mission

To provide Technical support and capacity building for strengthening public health systems in India.

Policy Statement

NHSRC is committed to lead as professionally managed technical support organization to strengthen public health system and facilitate creative and innovative solutions to address the challenges that this task faces.

In the above process, they intend to build extensive partnerships and network with all those organizations and individuals who share the common values of health equity, decentralization and quality of care to achieve its goals.

1. NHSRC is set to provide the knowledge-centre technical support by continually improving its processes, people and management practices.

Governing Board

Chairperson- Ms Preeti Sudan, Secretary, Department of Health & Family Welfare.

Vice Chairperson - Shri Manoj Jhalani, Additional Secretary & Mission Director (NHM), D/H & FW, Ministry of Health & Family Welfare.

Members

- Dr. S Venkatesh, DGHS, Ministry of Health and Family Welfare.
- Dr. R K Vats, Additional Secretary & Financial Advisor, D/H&FW.
- Prof. Balram Bhargava, Secretary, Department of Health Research.
- Dr. Manohar Agnani, Joint Secretary (Policy), MoHFW.
- Ms. Preeti Pant, Joint Secretary, Urban Health, MoH&FW.
- Ms. Vandana Gurnani, Joint Secretary (RCH), D/H & FW.
- Prof. J.K. Das, Designation: Director, NIHFW.
- Mrs. Gauri Singh, Principal Secretary (Health), Govt. of Madhya Pradesh.
- Shri Samir Kumar Sinha, Principal Secretary (Health), Govt. of Assam.
- Shri Prabodh Saxena, Principal Secretary (Health), Govt. of Himachal Pradesh.
- Smt. Poonam Malakondaiah, Principal Secretary (H& FW), Govt. of AP.
- Dr. Devadasan N, Director, Institute of Public health Bangalore.

- T. Sundararajan, Dean, School of Health Systems Studies.
- Professor Gautam Sen, Chairman and Founder Healthspring, Mumbai.
- Indrani Gupta, Professor, Institute of Economic Growth, University Enclave, University of Delhi (North Campus).
- Prof. Sunil Maheshwari, Chairperson (AHRD), IIM Ahmedabad
- Dr. Sundar Ravindran, Professor, Achutha Menon Center for HS Studies,
- Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum.
- Prof. Lipika Nanda, Director, Indian Institute of Public Health Bhubaneswar.
- Member Secretary - Dr Rajani R. Ved, Executive Director, National Health Systems Resource Centre.

Divisions

- Community Processes.
- Public Health Planning.
- Human Resources for Health.
- Quality Improvement in Healthcare.
- Healthcare Financing.
- Healthcare Technology.
- Health Informatics.
- Public Health Administration.

Quality Improvement

Universal access to care under NRHM, implies universal access to quality care. The Quality Improvement at the Public Health facilities looks into organisation of the work processes critical to health care delivery, which helps in ensuring that investments made in term of money, material and human resources are optimally used to realise expected outcomes. It helps in delivering quality services those are safe and satisfying to users leading better utilization of facilities.

NHSRC's mandate is to make quality improvement an inherent part of service delivery at public health facilities. The NHSRC has implemented pilot programmes that build an approach for ensuring that every public health facility would have a quality assurance program in place. In such an approach every facility is assessed and scored against explicit quality standards and after achieving a certain benchmark gets certified by an external agency. Given the nation's diversity in both health systems development and subjective readiness for assuring quality of care, , the quality approach needs to ensure essential norms

for facility management, regulatory compliances, clinical protocols & guidelines but at the same time be flexible enough to accommodate variable (essential & desirable) standards of quality certification objectively.

Recommendations

The recommendations will go a long way in improving the “LaQshya” implementation in the states. At Organisational level- NHSRC, there is a requirement of Training of assessor regarding facility assessment, Regular workshop with assessors and Regular monitoring of assessed facilities. At National Level requirement of Periodic visit to the states and to a sample of the health facilities, Orientation and training, Development of IEC & resource material and Monitoring & evaluation. At State Level there is need for Visit to the facilities and ‘on site’ support for under performing facilities, Training and mentoring of the coaching teams and Tracking and reporting of indicators. At the Facility level there is a requirement of Monitoring Adherence to protocol & Clinical guidelines and Prioritisation and action planning for closure of gaps as per ‘Maternal and Newborn Health Toolkit’ and ‘Guidelines for standardisation of Labour Rooms at Delivery Points.

SECTION 2: DISSERTATION

**“Sustainability of Quality Standards of Kayakalp Awardee
Public Health Facilities of the year 2016-2017”**

CHAPTER 1: INTRODUCTION

Background

- Sustainability is a broad term to understand. But basically, it is about holding the gains of any improvement project. “Unfortunately, up to 70% of organizational change is not sustained” (Harvard Business Review, 2000). There is a great increase in the implementation of the health programs every year but with no real time check on the sustenance of the improvement results. We provide health care professionals with strategies to sustain and support quality improvement. Threats to sustainability shall be identified both at the beginning of a project and when it is ready for implementation. Sustainability here also extends to the responsibility of health services to patients not just of today but of the future. There is an incessant need to ensure that changes that have improved patient care are consistently and reliably applied to every patient encounter. There also is a need for evidence generation which is valuable about the costs and benefits of any programme to the government, communities and its providers. Public health stakeholders are concerned about program sustainability. Such data is highly crucial to government and funding agencies when making policy and investment decisions.
- The interest in quality and safety in the health care sector has rapidly risen over the past decade. Sustainability complements and supports both quality and value within the health care facility setting. Achievement of sustainable change requires quality improvement initiatives to guide the new way of working rather than something added on to routine clinical care. There is an undeniable need for a way to be able to sustain the improvements rather than devolve towards the past performance. However, there is the uncertainty regarding the application of sustainability tools to the quality improvement as well as recognition of factors from the local environment and setting of what promotes a supportive context for future quality improvement initiatives. The success in identifying factors that directly affect the quality management process and accreditation is seen as crucial for sustainable performance, given that “most health care managers” are seeking to adopt new strategies and management tools that enable the healthcare facilities to be more competitive, meeting community expectations, and avoid costs by reducing errors and waste and enabling improved performance of the system.
- “Kayakalp” as an initiative endeavours to rejuvenate public health facilities, to promote cleanliness, hygiene and infection control practices. All the exemplary performing facilities are recognized and incentivized. Apart from hygiene promotion and incentivization, the program has been able to inculcate a culture of ongoing assessment and peer review

performance. Within the short span of three years of its implementation, it has escalated the journey of public health care towards attainment of “Quality”. With Kayakalp as a stepping stone, many public health institutions have been able to acquire Quality Certification against NQAS (National Quality Assurance Standards). Conventionally, measurement of “Cleanliness, Hygiene & Sanitation” of any health facility is quite subjective and depends on individual’s perception and hence to reduce the bias, an explicit checklist is used in Kayakalp for all level of health care facilities. The checklist stratified into thematic area, criteria and checkpoints is used to measure “Swachhta” objectively and uniformly. Post assessment, thematic and overall score of the facility is generated.

- After the launch of ‘Swachh Bharat Abhiyan (SBA)’ on 2nd October 2014, ‘Kayakalp’ initiative was launched by the Ministry of Health & Family Welfare on 15th May 2015 to complement these efforts. The objectives of the ‘Kayakalp’ Scheme are -
 - ❖ To promote cleanliness, hygiene and infection control practices in public healthcare facilities, through incentivising and recognising such public healthcare facilities that show exemplary performance in adhering to standard protocols of cleanliness and infection control;
 - ❖ To inculcate a culture of ongoing assessment and peer review of performance related to hygiene, cleanliness and sanitation;
 - ❖ To create and share sustainable practices related to improved cleanliness in public health facilities linked to positive health outcomes.
- All the states have been enthusiastically participating in this scheme since its launch. As evident, the scheme promoted cleanliness and hygiene in public health facilities. However, it was observed, through peer review and external assessment process, that awareness levels with regard to the closure of gaps as per the thematic area of the Kayakalp Scheme have been found to be inadequate at the facility level.
- “Guidelines for Implementing Kayakalp” have been developed as an implementation tool and enabler document to find solutions to the identified problems. These guidelines are meant for secondary care public hospitals meeting the Indian Public Health Standards (IPHS) guidelines, though with some discretion they may be used for primary healthcare facilities and as well tertiary care hospitals. These guidelines have been developed after a detailed literature review of the existing best practices in the field of hospital sanitation, housekeeping, infection control, general maintenance, waste management, and support services etc.; and relevant extracts from the same were adapted with suitable changes as per the needs of public health systems. These guidelines are generic in nature and can be adopted by the healthcare facilities judiciously as per their scope of services. While framing

these guidelines actual logistics, staff and other constraints in the public healthcare facilities have also been kept under consideration.

- These guidelines are divided into six thematic areas as per the “Kayakalp” Scheme (Figure-1):
 - Hospital Upkeep
 - Sanitation and Hygiene
 - Waste Management
 - Infection Control
 - Hospital Support Services
 - Hygiene Promotion



Figure 1

Scope of Kayakalp Programme

Based on scoring, using a specific standard protocol administered by an external Assessor Team, the awards are distributed in the following ways:

- Best District Hospital for Category A State, Best two District Hospitals for Category B states and Best three District Hospital for Category C States in the eligible State (States with more than 10 Districts), as per details given in the Award Criteria.
- Best two Community Health Centres/Sub District Hospitals (limited to one in small states). Small States are those states & UTs, which have less than 10 Districts.
- One Primary Health Centre in every district.

Each facility receives a cash award with a citation.



CHAPTER 3: AIM AND OBJECTIVES

Aim

To examine the sustainability of quality standards among Kayakalp Awardee public health facilities.

Objectives of Study

- [2.1](#) To examine whether the facilities awarded under the Kayakalp are sustaining quality standards or not
- [3.2](#) To identify the reasons behind non-maintenance of quality standards Kayakalp Awardee District Hospitals

Expected Outcome of the Study

1. Percentage of “Kayakalp Awardee” public health facilities those are able to sustain the quality standards.
2. Identification of gaps/weak thematic areas and standards that directly affect the quality management process at the non-sustaining facilities.

CHAPTER 4: METHODOLOGY

Study type: Descriptive, Cross-sectional study

Study population: All Kayakalp awarded public health facilities

Sample size: 874 public health facilities spread across ten states of India

Zone-wise distribution of these public health facilities are presented below:

ZONES	States	Total number of Awardee facilities (2016-17)
North & Central	Haryana, Uttarakhand, Madhya Pradesh	148
East	Jharkhand, Odisha	25
West	Rajasthan, Gujarat	547
South	Telangana	54
North-East	Assam, Mizoram	83
TOTAL	10 states	857

Data collected: Secondary data on scores achieved by each facility during the review process was collected from National Health Resource Centre

Data Analysis: Microsoft Excel was used for the analysis of the data

Inclusion criteria: All those public health facilities which have been awarded under Kayakalp scheme in year 2016-2017

Exclusion criteria: Public health facilities which were not awarded in 2016-2017

CHAPTER 5: OBSERVATIONS AND ANALYSIS

Results and Discussion: Objective 1

The data of the Awardee facilities under Kayakalp Programme for the year 2018-19 of ten states across five zones in India was analyzed. It was matched with the data of Awardee facilities of same states for the year 2018-19 in order to identify the following number of facilities sustaining the quality standards even after a gap of two years thereby determining the consistency in the processes and management of quality standards. The analysis showed following results:

States	Total Awardee Facilities (2016-17)	Number of facilities sustaining in 2018-19	Sustained Facilities (%)
Assam	29	23	79%
Gujarat	512	343	67%
Haryana	105	15	14%
Jharkhand	5	3	60%
Madhya Pradesh	32	16	50%
Mizoram	54	47	87%
Odisha	20	11	55%
Rajasthan	35	11	31%
Telangana	54	3	6%
Uttarakhand	11	7	64%
TOTAL	857	479	56%

Table 1

Table 1 shows state-wise distribution of facilities sustaining their quality standards. An overall percentage of 56% facilities have sustained their practices under quality standards. The good performing states were identified as Mizoram and Assam at 87% and 79% respectively. While, Telangana was found to be least performing at 6% only.

ZONES	Total number of Awardee facilities (2016-17)	Number of Facilities sustaining in 2018-19	Sustained Facilities (%)
North & Central	148	38	26%
East	25	14	56%
West	547	354	65%
South	54	3	6%
North-East	83	70	84%
TOTAL	857	479	56%

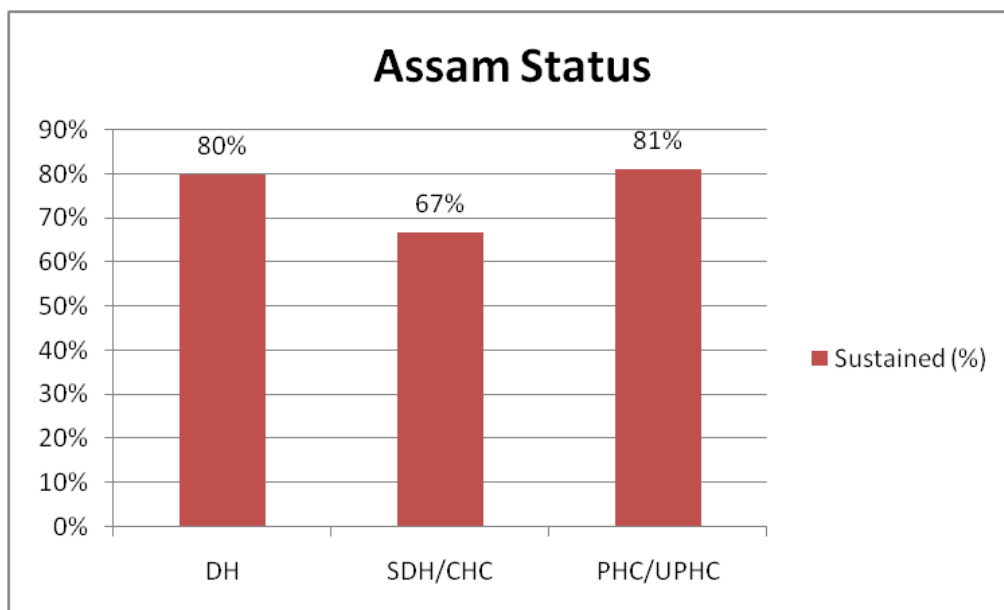
Table 2

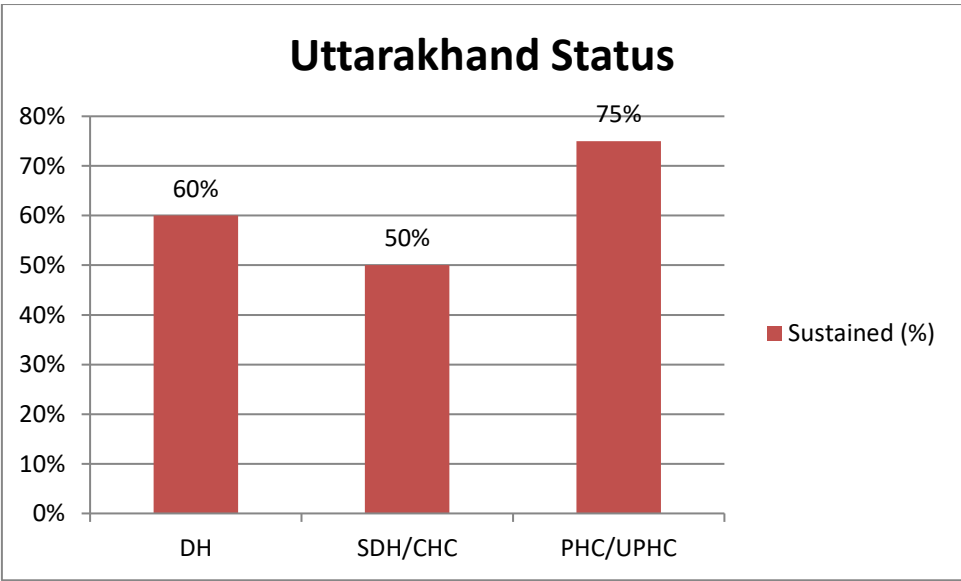
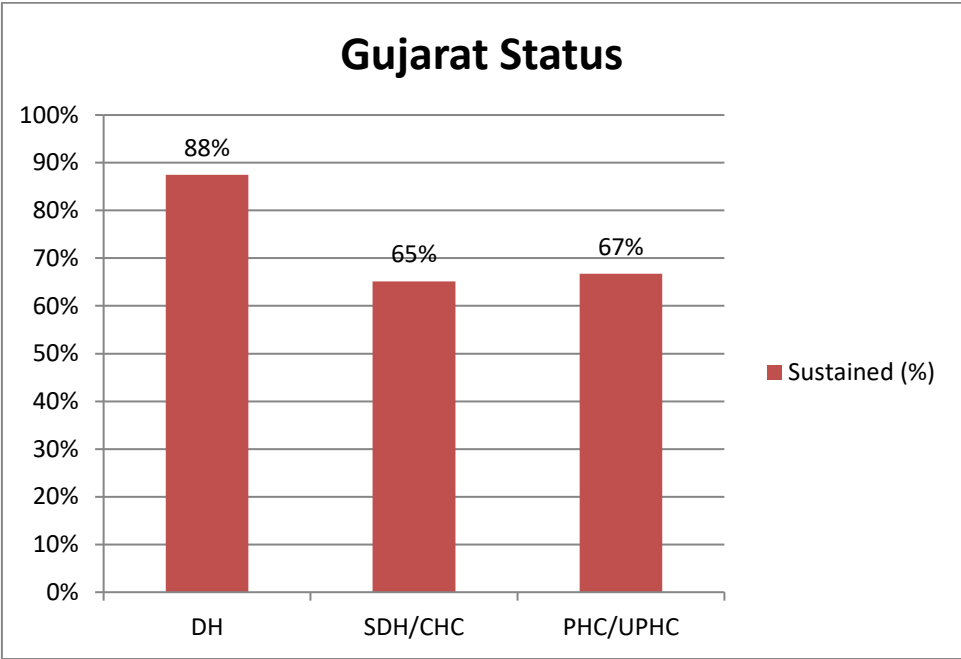
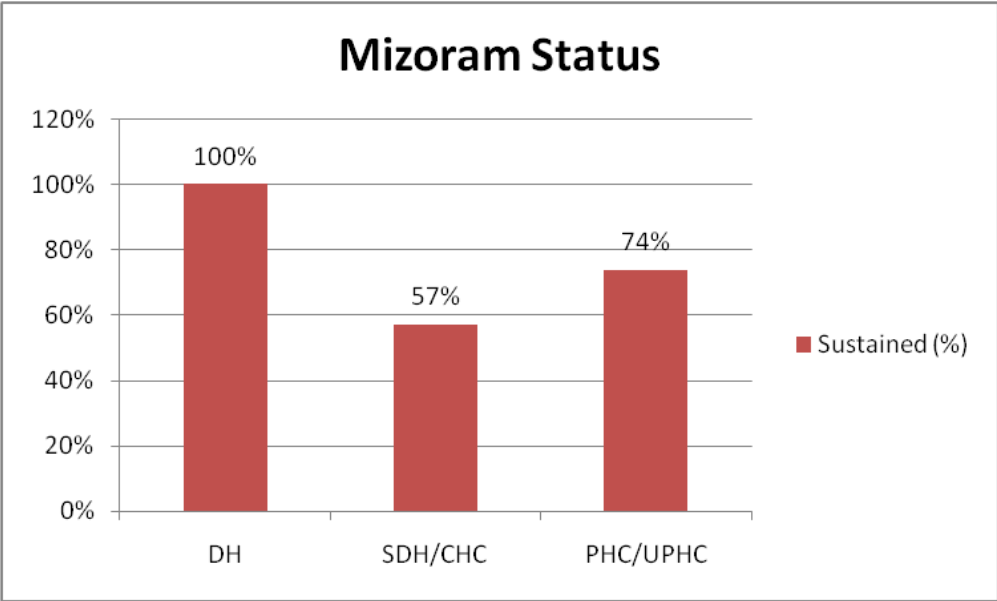
Zone-wise distribution of compared facilities shows that north-east zone scored highest 84%. The states in these zones may be assessed to examine the good practices followed by them that is helping them to maintain their organizational changes. While the South zone, which scored very less, requires an in-depth analysis to identify the weak areas and root causes for the non-sustenance of quality standards (table 2).

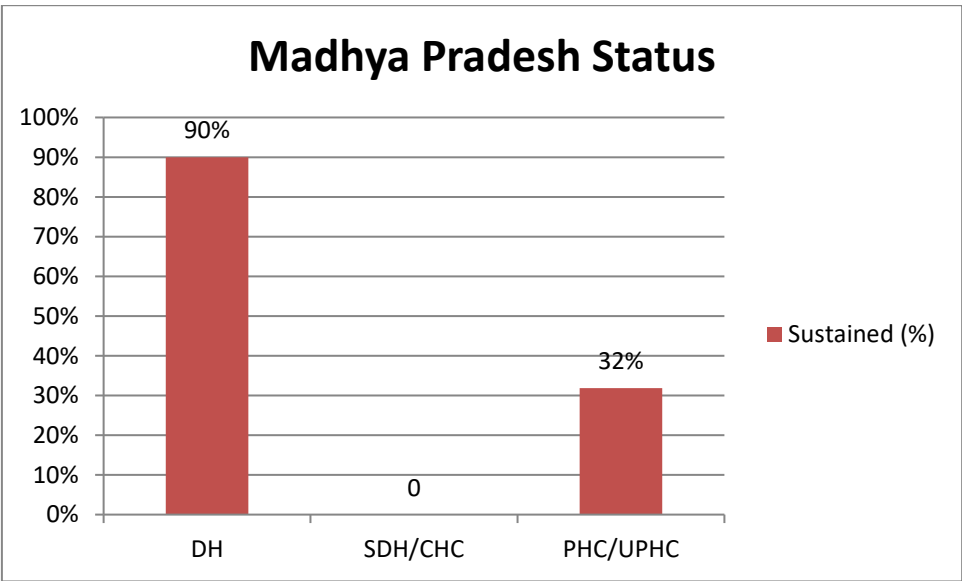
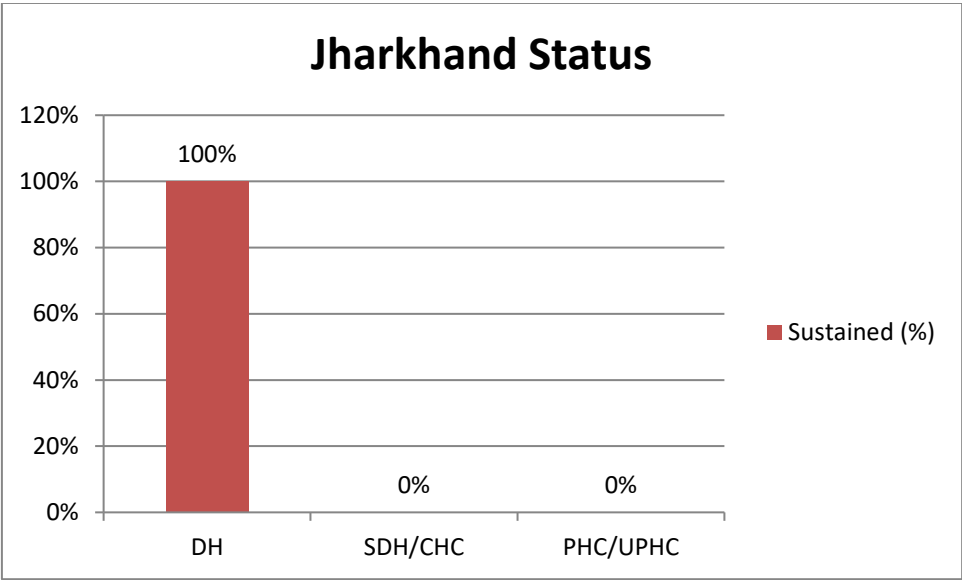
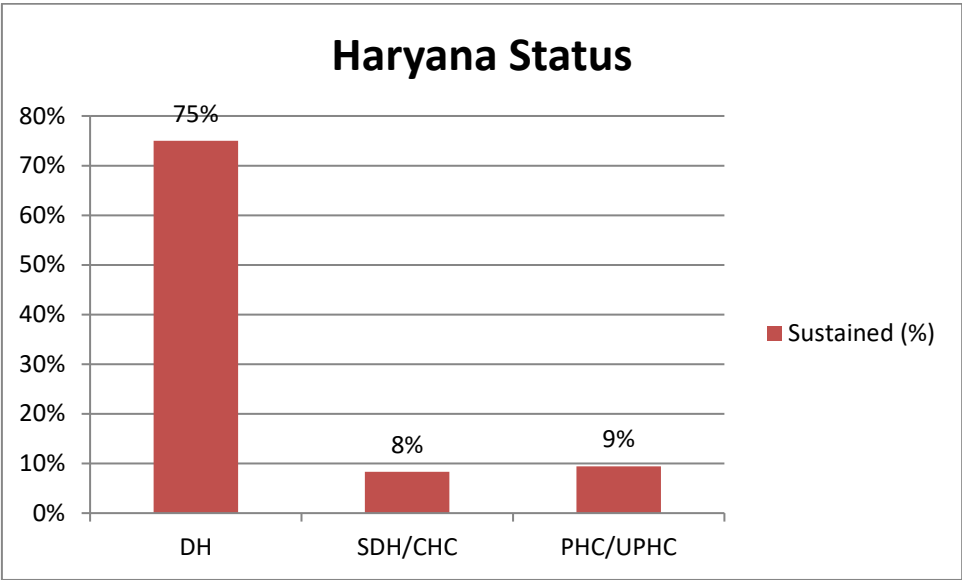
Facility Type (Sustainability)			
Year	DH	SDH/CHC	PHC/UPHC
Count of Awardee Facilities in 2016-17	97	205	572
Count of sustained facilities in 2018-19	52	113	314
Sustained Facilities(%)	54%	55%	55%

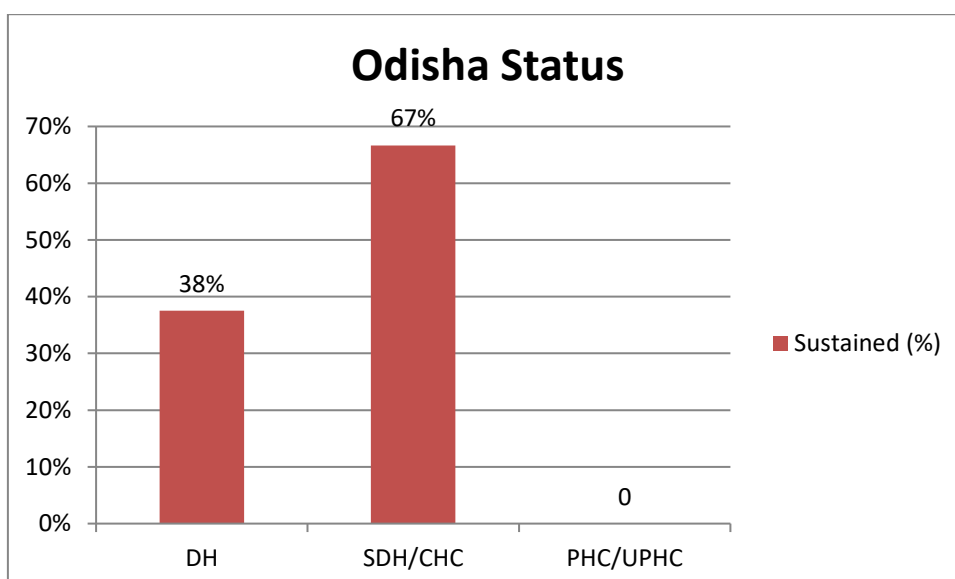
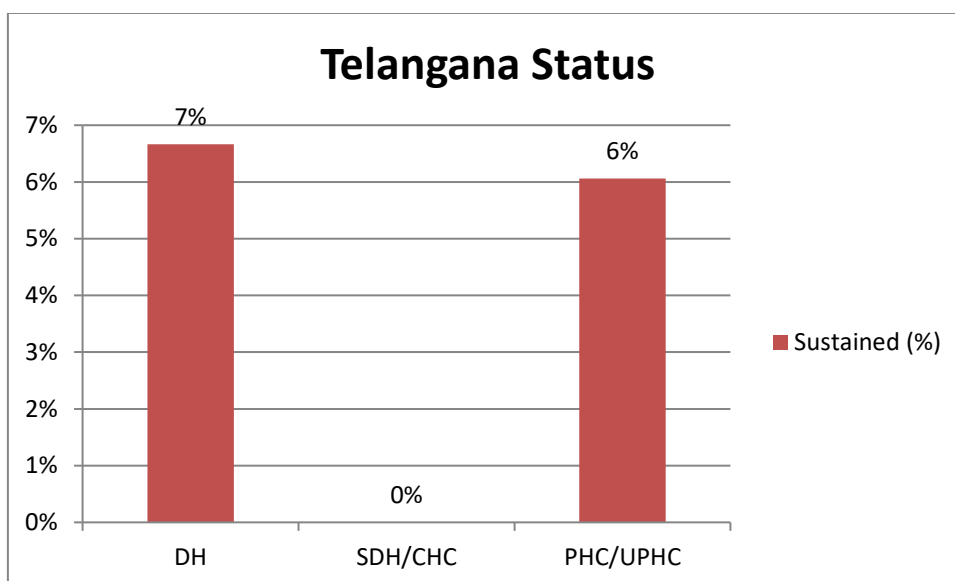
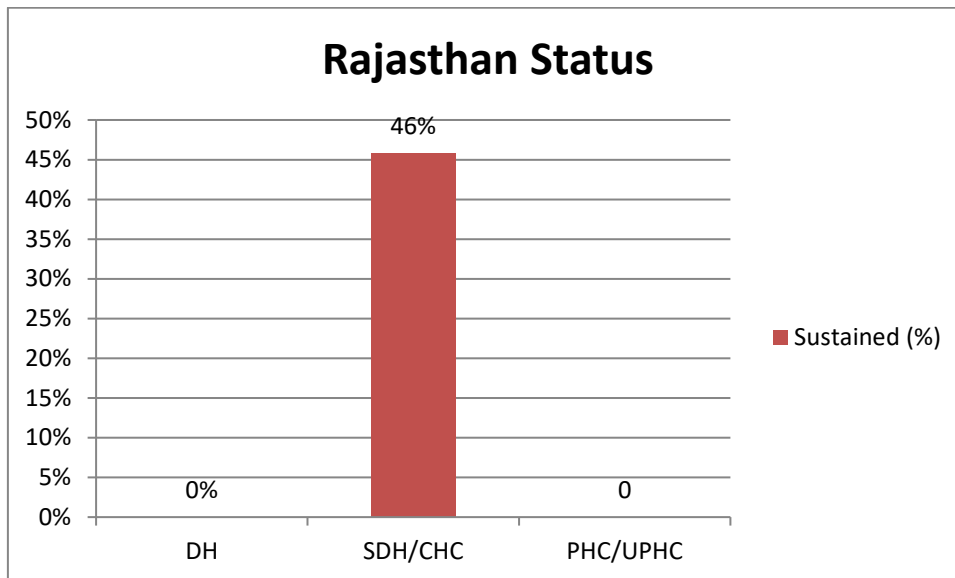
Table 3

Table 3 shows the percentage of facilities sustaining their quality standards after two years and depicts uniform sustenance of approximately 55% overall in all types of facilities i.e District Hospitals, Sub-district hospitals/Community health centres and (Urban)/Primary health centre's. Though state wise variations are seen of the same which are as follows:



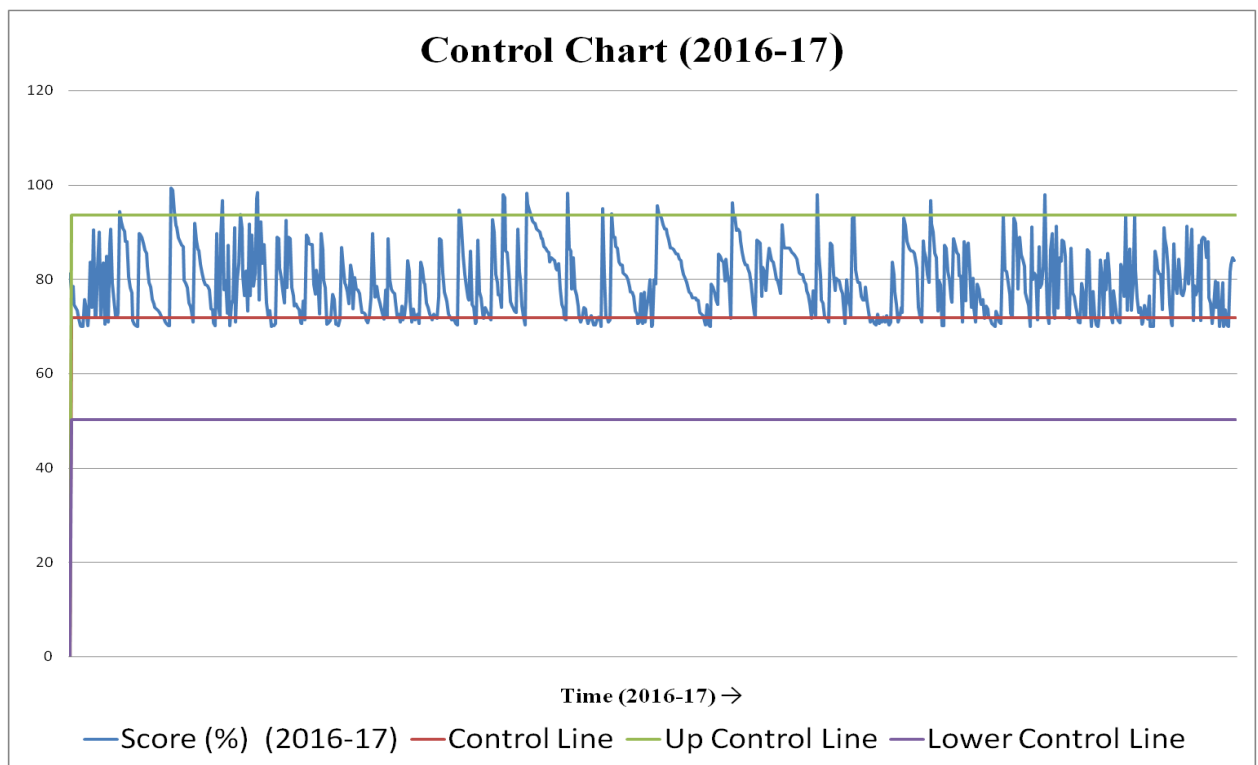




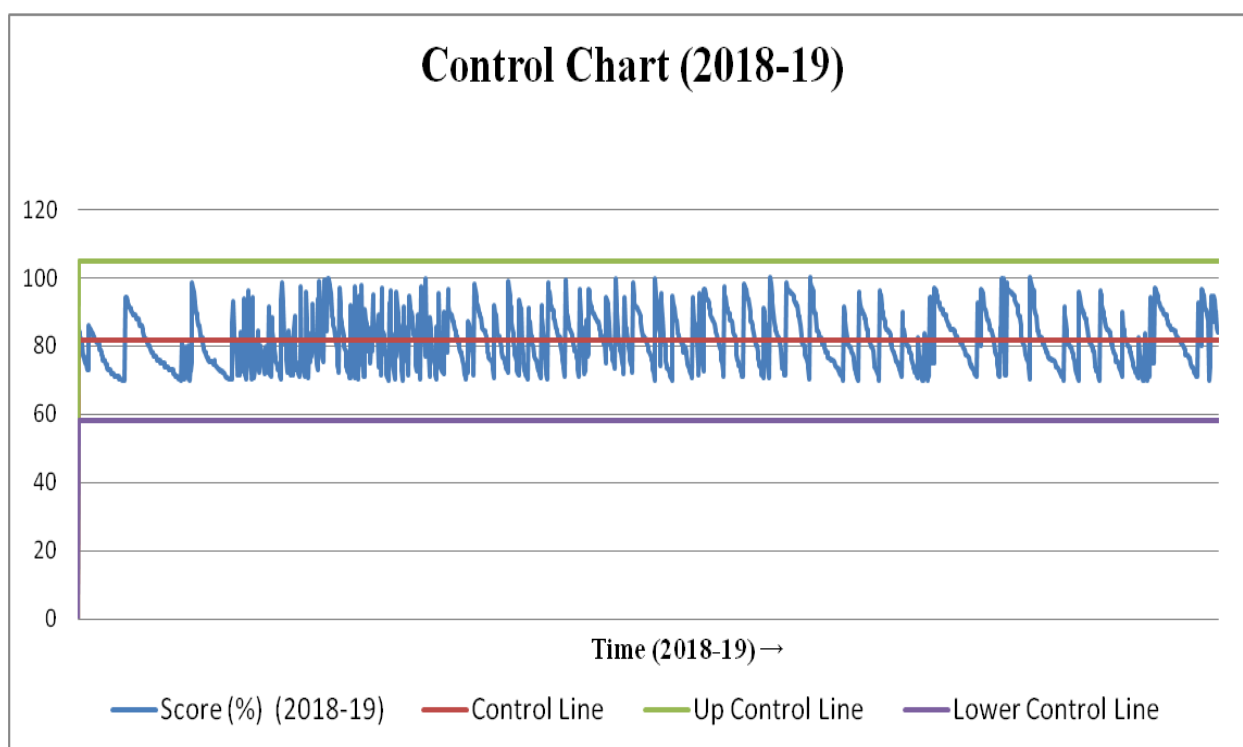


- The following two control charts were made to analyze the process variation in the Awardee facilities of the year 2016-17 and 2018-19 respectively.

- Control Chart 1: The mean of the overall score of the year 2016-17 was 71.9 as shown in the control chart by the control line. It also shows that majority of the facilities were scoring at the baseline of 70% only, and getting the awards at the borderline cut off score while the 14 points that are seen crossing the upper control limit of 93.5 are the exceptionally well performing facilities.
- Control Chart 2: The mean of the year 2018-19 was 81.6 as shown in the chart by the control line. It also shows that now, most of the facilities are scoring much better and above the minimum cut off score of 70% as set as the criteria for awards by the Kayakalp Programme. Also, the increase in upper and lower control limits and a much more stable pattern of the variations being within the upper and lower control lines as compared from from the year 2016-17 (UCL=3.5, LCL=50.2 in 2016-17 to UCL=105.1, LCL=58.1 in 2018-19) which suggests evident process improvement.



Control Chart 1

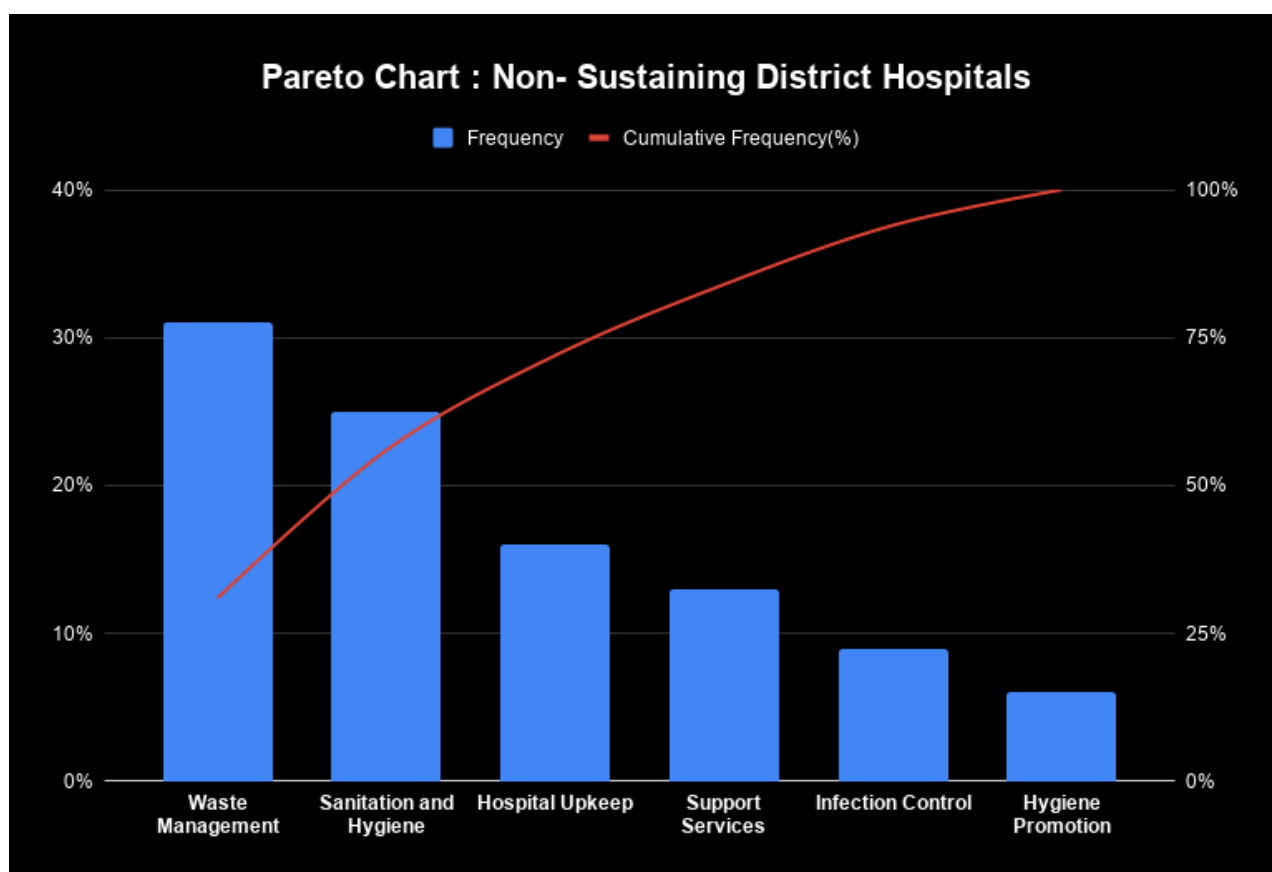


Control chart

Results and Discussion: Objective 2

A detailed analysis was done for the non-sustaining District Hospitals of all ten states to identify the weak thematic areas. After analysis of the scores of all such facilities, a Pareto analysis was performed and the results were obtained as follow:

Parameters	Frequency (%)	Cumulative Frequency(%)
Waste Management	31%	31%
Sanitation and Hygiene	25%	56%
Hospital Upkeep	16%	72%
Support Services	13%	84%
Infection Control	9%	94%
Hygiene Promotion	6%	100%



According to the above table, 80% of the issues in the non sustaining district hospitals are due to the following four thematic areas:

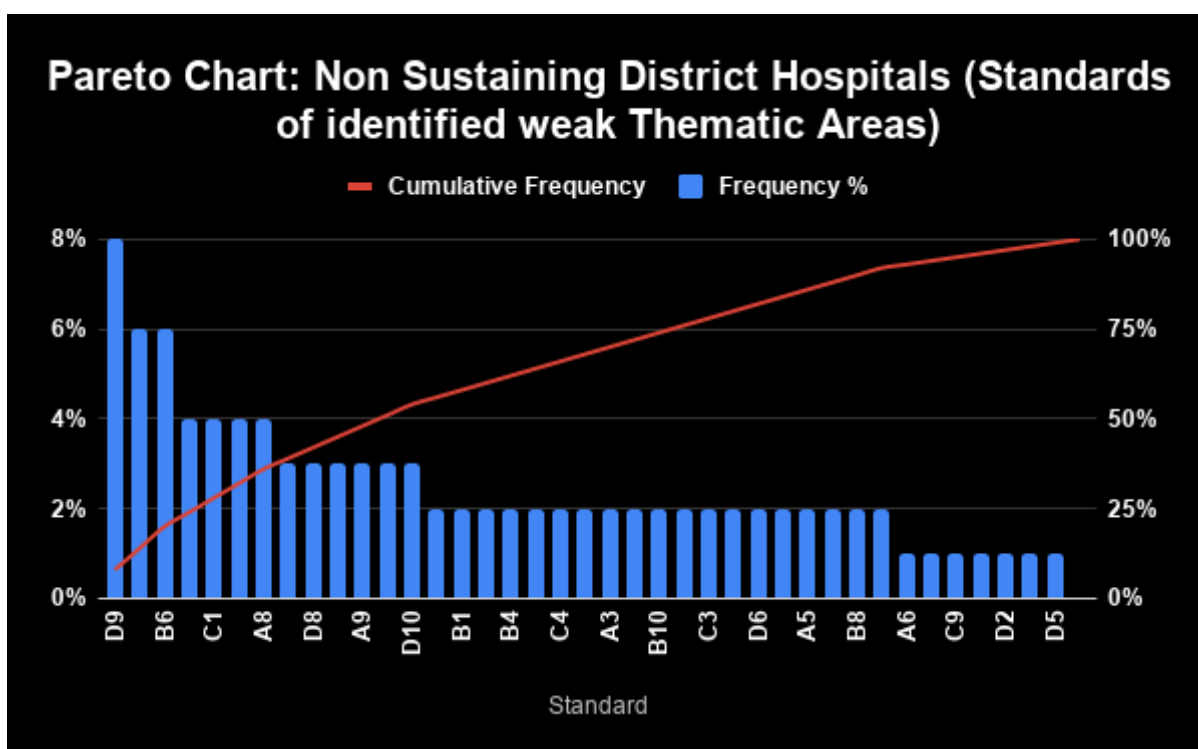
1. Waste Management
2. Sanitation and Hygiene
3. Hospital/Facility Upkeep
4. Support Services

Addressal of the issues would result in 80% of the issues occurring in the facilities leading to lower scores and thus decrease in their performance.

Furthermore, a Pareto analysis of the standards under these four identified thematic areas to pin point the specific standards for swift quality improvement. The following standards were identified as major causes for decline in quality performance of these facilities:

Standards	Frequency %	Cumulative Frequency
D9	8%	8%
C7	6%	14%
B6	6%	20%
A1	4%	24%
C1	4%	28%
C10	4%	32%
A8	4%	36%
B9	3%	39%
D8	3%	42%
A7	3%	45%
A9	3%	48%

C5	3%	51%
D10	3%	54%
A4	2%	56%
B1	2%	58%
B2	2%	60%
B4	2%	62%
B5	2%	64%
C4	2%	66%
C6	2%	68%
A3	2%	70%
B7	2%	72%
B10	2%	74%
C2	2%	76%
C3	2%	78%
C8	2%	80%
D6	2%	82%
A2	2%	84%
A5	2%	86%
A10	2%	88%
B8	2%	90%
D7	2%	92%
A6	1%	93%
B3	1%	94%
C9	1%	95%
D1	1%	96%
D2	1%	97%
D3	1%	98%
D5	1%	99%
D4	0%	100%



The Standards causing 80% of the issues and require rectification are as follows:

Reference Number	Standard
D9	Hospital/Facility acquired infection surveillance
C7	Solid general waste management
B6	Cleanliness of toilets
A1	Pest and animal control
C1	Implementation of biomedical waste rules 2016
C10	Statuary compliances
A8	Removal of junk material
B9	Monitoring of cleanliness activities
D8	Infection control program
A7	Maintenance of furniture and fixtures
A9	Water conservation
C5	Disposal of biomedical waste
D10	Environment control
A4	Facility appearance
B1	Cleanliness of circulation area
B2	Cleanliness of wards
B4	Cleanliness of ambulatory area
B5	Cleanliness of auxiliary areas
C4	Storage of biomedical waste
C6	Management of hazardous waste
A3	Maintenance of open areas
B7	Use of standard materials and equipments for cleaning
B10	Drainage and sewage system
C2	Segregation, Collection and Transportation of biomedical waste
C3	Sharp management
C8	Liquid waste management

CHAPTER 5: CONCLUSION

Within a short span of implementation Kayakalp Programme has definitely escalated the journey of public health facilities towards attainment of “Quality”. It proves to be a stepping stone towards quality certification (National Quality Assurance Standards) of these facilities as well.

But along with focus on implementation of the programme and its scaling, there shall also be focus on the sustenance of the changes and success achieved by the public health facilities. This is so because successful quality programmes depend more on behavioural science than on technical solutions. So, to achieve sustainable change, quality improvement initiatives must become the new way of working rather than something added on to routine clinical care to make those organizational changes as permanent. Incentivization may not play a huge role and be enough to keep the facilities and their staff to be motivated on an everyday basis. Also, a separate tool for measuring the sustainability of changes may be developed for easy and periodic monitoring. This will also serve for early and easy identification of facility-specific gaps. Based on the analysis of the available data, certain recommendations are suggested in the next chapter.

CHAPTER 6: RECOMMENDATIONS

Based on the analysis done and gaps identified, the following recommendations pertaining to the organization as well as the facilities are suggested:

<u>Organization (NHSRC)</u>	<u>Facilities</u>
Development of a sustainability tool to have periodic monitoring of sustenance of the changes achieved by every facility under quality improvement.	Address the identified gaps under the following thematic areas: <ul style="list-style-type: none">. Sanitation and Hygiene. Waste Management. Support Services. Hospital/Facility Upkeep
Focus need to be re-oriented from just increasing coverage to sustaining of the achieved improvements	Improvement of these thematic areas may begin with rectification of the identified weak standards
North Zone: Motivation needs to be developed regarding quality standards (Hand-holding/On-the-job training)	It was observed that facilities are performing well under Hygiene Promotion but are weak in performing under Sanitation and Hygiene. Implementation of the Promotional aspects needs to be strengthened. Training of the staff maybe required.
Review Workshops to address the state/facility level issues	Dedicated engagement of health care providers to pursue “Ownership”