

Summer Internship Report

At

DISTRICT HOSPITALS & PUBLIC HEALTH CENTRE

NHM, MADHYA PRADESH

(APRIL 18 TO 17<sup>th</sup> JUNE 2022)

A Report

By

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PGDM (Hospital and Health Management)

2021 – 2023



International Institute Of Health Management Research, New Delhi

### **Certificate of Approval**

The Summer Internship Project of titled “ **Assessment of District Hospitals - National Quality Assurance Standard**” at “**NHM Madhya Pradesh**” is hereby certified study management carried out and placed presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in health and Hospital 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 report only for the purpose it is submitted.



**Dr. Preetha GS**

**Professor and Dean Research**

**IIHMR Delhi**



## FEEDBACK FORM

(IHMR MENTOR)

Name of the Student: Dr Riya Agrawal

Summer Internship Institution: NHM Madhya Pradesh

Area of Summer Internship: Quality Assurance

Attendance: Satisfactory

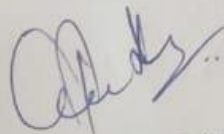
Objectives met: Yes

Deliverables: Achieved

- 1) NOAS assessment
- 2) Presentation to NHM
- 3) Internship Report

Strengths: Hardworking and Disciplined.

Suggestions for Improvement: Practice and evaluation



Signature of the Officer-in-Charge (Internship)

Date:

Place:

## **ACKNOWLEDGEMENT**

This internship work has been a very scrupulous but enriching time of our life. These two months have given us immense knowledge and an unparalleled understanding of the work, which was earlier restricted to books only. It gives us tremendous bliss to acknowledge the valuable and cooperative guidance and the assistance of various individuals without whom We would have been unable to do our work.

At this moment of accomplishment, we would like to express our deep and sincere gratitude to my mentor, Dr. Preetha G.S., Professor & Dean (Research), IIHMR DELHI, who provided constant guidance and support during the internship period.

We would like to express our sincere gratitude to Dr. Vivek Mishra and Dr. Sandeep Sharma for their continuous guidance; despite being busy with their duties, taking time to hear and guide us, and giving helpful advice, this work would not have been possible without their constant support.

We are also very thankful to Civil Surgeon, Resident Medical Officer, and all the nursing and housekeeping staff of District Hospital & PHC for their attention towards our work and helping us, which greatly added to our project.

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## ACRONYMS / ABBREVIATION

- NRHM – NATIONAL RURAL HEALTH MISSION
- NUHM – NATIONAL URBAN HEALTH MISSION
- NHM – NATIONAL HEALTH MISSION
- MOHFW – MINISTRY OF HEALTH AND FAMILY WELFARE
- HMIS – HEALTH MANAGEMENT INFORMATION SYSTEM
- NQAS – NATIONAL QUALITY ASSURANCE STANDARD
- RCH – REPRODUCTIVE AND CHILD HEALTH
- CHC – COMMUNITY HEALTH CENTRE
- PHC – PRIMARY HEALTH CENTRE
- ISQUA – INTERNATIONAL SOCIETY FOR QUALITY IN HEALTH CARE
- QOC – QUALITY OF CARE
- QA – QUALITY ASSURANCE
- ICU – INTENSIVE CARE UNIT
- SNCU – SICK NEW BORN CHILD UNIT
- NRC – NATIONAL REHABILITATION CENTRE
- PP UNIT – POST PARTUM UNIT
- USG – ULTRASONOGRAPHY
- M-OT – MATERNITY OPERATION THEATRE
- IPD – INDOOR PATIENT DEPARTMENT
- OPD – OUTDOOR PATIENT DEPARTMENT
- NHP – NATIONAL HEALTH PROGRAM
- HAI – HOSPITAL ACQUIRED INFECTION
- IEC – INFORMATION EDUCATION AND COMMUNICATION
- AYUSH - AYURVEDA, YOGA, UNANI, SIDDHA AND HOMEOPATHY
- MRD – MEDICAL RECORD DEPARTMENT
- BMW – BIOMEDICAL WASTE
- IPC – INFECTION PREVENTION CONTROL
- IMNCI – INTEGRATED MANAGEMENT OF NEONATAL AND CHILDHOOD ILLNESS
- CSSD – CENTRAL STERILE SERVICES DEPARTMENT
- TMT – TREDMILL TEST
- RBSK – RASHTRIYA BAL SWASTHYA KARYAKRAM
- STG – STANDARD TREATMENT GUIDELINES
- SOP – STANDARD OPERATING PROCEDURE

- RSO – RADIOLOGICAL SAFETY OFFICER
- PDCA – PLAN DO CHECK ACT
- 5S – SET SORT SHINE STANDARDISE SUSTAIN
- PPE – PERSONAL PROTECTIVE EQUIPMENT



## 1. OVERVIEW OF NHM

The Hon'ble Prime Minister established the National Rural Health Mission (NRHM) on April 12, 2005, intending to provide accessible, affordable, and high-quality health care to the rural population, especially vulnerable groups. The National Urban Health Mission (NUHM) was founded in May 2013 and was incorporated into the broader National Health Mission as a sub-Mission of NRHM. Many innovative approaches were urged, including innovations in healthcare delivery, flexible financing for states, and stronger monitoring and evaluation component for improved health outcomes and state health indicators. Decentralized health planning, service delivery, knowledge hubs within district hospitals, secondary level care at district hospitals, expanding outreach services, improving community processes and behaviour modification communication, human resources development, public health management, and health management information systems are all areas where NHM focuses. It is mainly concerned with equity, emphasizing the health of tribal peoples, those living in low-income areas, and the urban poor. The reduction of out-of-pocket expenses is a real result of NHM. Large-scale surveys with assessments, the usage of HMIS data, and periodic reviews are used to evaluate health outcomes, output, and process indicators. The National Health Mission seeks to provide universal access to equitable, accessible, and high-quality health care that is accountable and responsive to the needs of people, reduces child and maternal mortality, and promotes population stability, gender, and demographic balance. With all these aspects in mind, some quality programs launched by MOHFW – NQAS, Kayakalp, LaQshya, and MusQan take the quality of care to the next step. (1)

NHM Madhya Pradesh is working with the same goal to provide the best quality care to patients in every way possible; till now, in Madhya Pradesh, five District Hospitals and one PHC got NQAS certification.

After three days of orientation at NHM Bhopal, posting to the following District Hospitals and PHCs of Madhya Pradesh for two months to conduct NQAS assessment of these facilities and help them to improve the quality standards up to some extent and also analysing the analysing the previous five year kayakalp data.

S.NO.	NAMES	HEALTHCENTRES ALLOTTED
1.	Mr. Prashant Pokhriyal	District Hospital, Damoh
2.	Dr. Richa Verma and Dr. Malvika Negi	District Hospital, Agar Malwa
3.	Dr. Riya Agrawal	District Hospital, Satna
4.	Dr. Deepti Sidar	District Hospital, Shahdol
5.	Mr. Rahul Chauhan	District Hospital, Betul
6.	Ms. Vaishnavi Kadam & Ms. Diya Nayak	PHC Misrod & NHM Bhopal Quality Cell
7.	Dr. Avinash Kumar & Ms. Renu Gupta	District Hospital, Singaruli

## **2. PROJECT OUTLINE**

### **2.1 INTRODUCTION**

Quality of care is the level of attainment of health systems, intrinsic goals for health improvement and responsiveness to legitimate expectations of the population. Quality in healthcare is now more than just a famous motto. Quality of care is more important rather than the quality of care. The outcome of care has now become more important to physicians than the total number of patients treated daily.(2)

Quality of healthcare came into focus in India in 1997 with the launch of Reproductive and Child Health (RCH), to improve the quality of healthcare services provided by the public health care facilities in India. Poor service quality contributes to the load on the healthcare system by reducing interventions and increasing the cost of care. The Ministry of Health and Family Welfare (MOHFW) commissioned a study for quality accreditation in public health services through an external consultant. To deliver the best quality, certain standards must met. Healthcare for patients means giving them what they want, whenever they want. The patients want services in an affordable, safe and effective way. The increased and effective quality of service in healthcare increase the likelihood of its demanded results. Such services must be effective, timely, equitable, integrated and, above all, efficient. One of the main tasks of healthcare organizations like hospitals is to provide the finest standard services to meet up with patient expectations. This philosophy must initially be institutionalized in the hospitals to decrease the average duration of stay in the hospital with increased satisfaction. Healthcare quality is not intended for patient care only; it also serves to ensure the data quality of the patients.(3)

The government of India has launched several quality improvement initiatives like Kayakalp, NQAS, MusQan, and LaQshya to improve the situation and facilities available in the public health sector. NQAS had developed to improve the quality of District hospitals, CHCs, PHCs, and urban PHCs to improve their quality through a number of the set standard. ISQUA-accredited, these criteria fulfil global benchmarks regarding comprehensiveness, objectivity, and evidence. Similarly, Kayakalp was launched to improve cleanliness and hygiene. To ensure the quality of care during the delivery and after delivery, the purpose government initiated the LaQshya program so that neonatal and maternal death get reduced to some extent. A multi-layered plan has been established as part of the programme, including specific steps for infrastructure advancement, ensuring the availability of critical equipment, providing appropriate human resources, health care worker capacity building, and improving quality processes. So hospital in India needs to get accreditation to provide better facilities and quality of care to patients.(4)

The ISQua international principles for healthcare standards were created to help accreditation bodies make accreditation standards. These principles are divided into six categories, each having four to fourteen sub-categories. To aid in interpreting and applying the regulations, it publishes advice and an example of standards

assessment. The principles and sub-principles are graded on a three-point scale as Met, Partially Met, or Not Met.(5)

## 2.1 Quality of care (QOC)

Quality care accepted on the "Donabedian model," according to which three aspects of care:

- **Structure:** This particular quality of care include human resources, drug, equipment and infrastructure, such as availability of the number of personnel, skills and knowledge.
- **Process:** This quality can also be seen in terms of process and sub-process. It refers to how fast registration of patients is being done, how much time is being taken for consultation and how quickly patient examination is being done; apart from all this, patient confidentiality, privacy, and rights need to be maintained.
- **Outcome:** The last aspect can be evaluated in terms of outcome, which shows to what extent goals have been fulfilled.(6)

## 2.2 Quality Assurance

The American Society for Quality refers to Quality Assurance as "planned and systemic activities, which are implemented in a quality system so that the quality requirement of the product or service would be fulfilled."

It's based upon:

- The goal of quality assurance is to meet the needs and expectations of patients.
- Quality control is concerned with the system and the process.
- Quality assurance use data to analyze the service delivery process.
- Quality assurance encourages a team approach to problem-solving and quality improvement.(6)

## 2.3 NQAS (National Quality Assurance Standard)

- The Ministry of Health and Family Welfare (MoHFW), Government of India, released the National Quality Assurance Standard for Public Healthcare Facilities in 2013.
- NQAS are now accessible for District hospitals, Community Health Centers, Primary Health Centers, and Urban Primary Health Centers.
- Criteria are primarily intended to help providers analyze their quality and bring their facilities up to certification standards by using predetermined standards.
- The national quality assurance standards are broadly classified into eight "Areas of Concern" -

Service Delivery	•Curative Services, RMNCHA Services, Diagnostic Services, NHM and
Patient Rights	•Information access, Privacy, Confidentiality, Patient involvement in
Inputs	•Infrastructure, Physical safety, Qualified and trained staff, drugs and
Support Services	•Water supply, Electricity, Drug Storage facility, Dietary services,
Clinical Services	•Registration, Standard treatment protocol, Nursing care, Record
Infection Control	•Effective infection control practices, Personal hygiene, Equipment,
Quality Management	•Organization framework, Patient and employee satisfaction, Standard
Outcome Indicators	•Productivity, Efficiency, Clinical care and Service quality indicators

- These standards are ISQUA recognised and meet all applicable international criteria for thoroughness, objectivity, evidence, and development rigour.(7)

## 2.4 Quality Measurement System

The central pillar of the quality measurement system is quality standards.

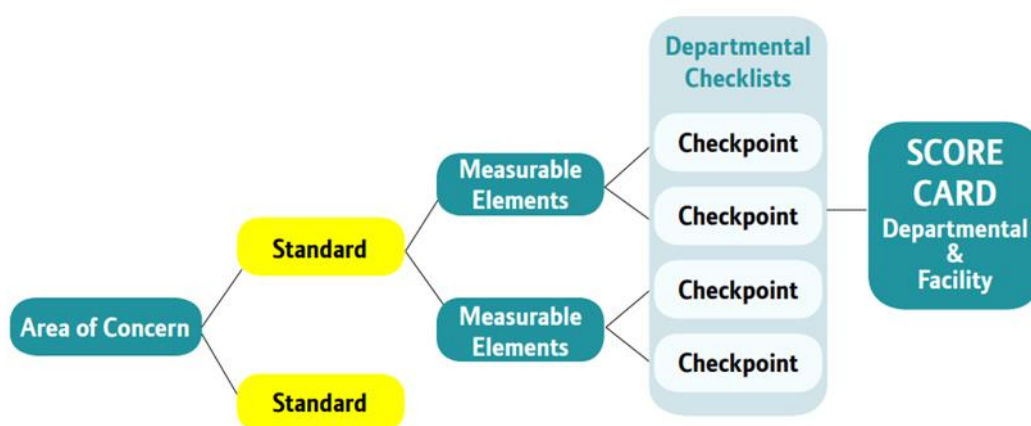


Fig1. Functional relationship between components of quality measurement system

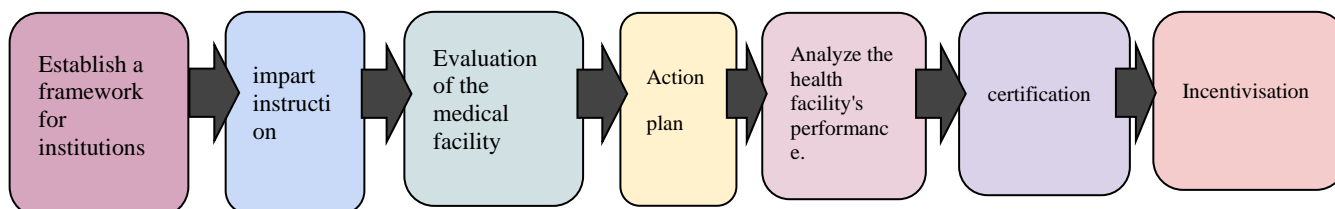
Currently, NQAS is being conducted in the following facilities:

- District Hospital
- Community Health Centre
- Primary Health Centre
- Urban Primary Health Centre

#### Measurement System for various levels of facilities:

Component	DH	CHC	PHC	UHC
<b>Area of Concern</b>	8	8	8	8
<b>Standard</b>	74	65	50	35
<b>Measurable Elements</b>	362	297	250	200
<b>Checklists</b>	19	12	6	12

#### Process of NQAS certification



There are, in total, 19 departmental checklists for the assessment of the district hospitals: (7)

Accident & Emergency department	Intensive Care Unit
Outdoor patient department	Indoor Patient Department
Labour room (LaQshya)	Blood Bank
Maternity Ward	Laboratory Services
Paediatric Ward	Radiology & USG
Sick New Born Care Unit (SNCU)	Pharmacy

Nutritional Rehabilitation Centre (NRC)	Auxiliary Services
Maternity Operation theatre	Mortuary
Post-Partum Unit	General Administration
Operation Theatre	

And there are 6 departmental checklist for PHC:

OPD	Laboratory
Labour Room	NHP
Indoor	General

### 3. OBJECTIVES

To assess the quality of healthcare in District Hospitals and Primary Health Centre in Madhya Pradesh using the NQAS assessment tool.

- To address the gaps and assess the barrier in quality care implementation.
- To assess the degree of confidentiality and dignity in patient care services.
- To implement a high standard of infection control in hospital premises.

### 4. METHODOLOGY

Study area – District Hospitals and PHC of Madhya Pradesh

Study Duration – 2 months

### 5. MODE OF DATA COLLECTION

To understand the work completed and the work still needed to be done for NQAS certification, a conversation has been held with the person in responsibility of the NQAS implementation at the healthcare facility.

For every department, the assessment was done through staff interviews, personal interviews, record reviews and observation.

#### **Tool - NQAS Checklist**

C	D	E	F	G	H	I
NQAS SCORE CARD-DISTRICT HOSPITAL						Version : DH/ 02/19-Rev -02
Hospital Score Card (Deparatment wise)						
Accident & Emergency 76%	OPD 62%	Labour Room (LaQshya) 85%	Maternity Ward 74%	Paediatric OPD (MusQan) 69%	Hospital Score (Including LaQshya & MusQan)	
Paediatric Ward (MusQan) 72%	SNCU 90%	NRC 76%	OT 71%	M- OT (LaQshya) 85%	68%	
PP Unit 72%	ICU 0%	IPD 75%	Blood Bank 84%	Lab 76%	LaQshya Score	MusQan Score
Radiology 59%	Pharmacy 75%	Auxillary 47%	Mortuary 76%	General Admin 59%	85%	78%

## 6. FINDINGS

Some Major gaps were observed during the assessment of District Hospitals and PHC:

**District Hospitals Gaps** - During the assessment, there were some major gaps across all the district hospitals that were common:

GAPS	ACTION PLAN
Overcrowding	The facility needs to ensure there is no overcrowding within hospital premises for that facility can use pass/token system and mics for calling out patients during OPD hours
No Disaster management Training/Plan	There is a need of Disaster management team in the hospital to ensure the safety of patients and staff during any disaster
Functional toilet for people with disabilities	Hospital shall ensure that there is separate toilet for the people with disabilities
MRD	MRD needs to be made so that all the medical records can be placed in a safe place and can easily accessible for the staff and doctors
Prescription Audit	Prescription audit needs to be done on timely basis to get information about prescribing habits of clinicians, appropriateness of medicine usage

Employee Feedback	Employee feedback needs to be done on monthly basis and corrective and preventive action needs to be taken accordingly
Availability of dharmshala/stay facility for attendants	Hospital shall ensure that there is staying facility for patient's attendant within the hospital premises, as it can help in reducing overcrowding up to some extent
Hospital has Special diet schedule for the critical ill patients suffering from Heart Disease, Hypertension, Diabetes, Pregnant Women, diarrhoea and renal patients	Dietary department needed in hospital for such special diet provision and for other dietary needs of the patients so that patient can get a balance diet
No stray animal/rodent/birds/pests	Pesticide control needed to be done in the entire hospital premises to avoid any kind of pest and cattle trap for stray animals
Hospital has system to manage violence/mass situation	Security guards must ensure that is no violence in hospital premises and a police post must be available
Estimation of power consumption of different department of hospitals is done	Estimation of power consumption needs to be monitored of every department so that hospital can get the estimate in which department's electricity consumption is most and make a corrective and preventive plan accordingly
Training	Training of the staff needs to be done at regular intervals on BMW, IPC, Quality indicators, outcome
Hospital has a visitor policy in place	Setting a fixed time for visitors as it helps to control the visitors in a better way
Committee against sexual harassment is constituted at the facility	A committee against sexual harassment needs to be formed to handle any case related to it
Samples are taken for culture to detect HAI in suspected cases	Selecting patients who are admitted to the hospital for more than six days tests must be done by nurses to see if the patient anyhow got some other infection after the date of admission



## Primary Health Centre Gaps

GAPS	ACTION PLAN
Mobile medical unit is not obtainable	The facility needs to make a separate team for a mobile medical unit and needs to appoint a supervisor to carry out the process smoothly.
Disable friendly toilet was not available in the hospital	Disable-friendly toilet needs to be made separately so that people with disabilities can easily use the restroom.
Drugs were not categorized as vital, essential, and desirable	Drugs need to be categorized according to their usage as vital, essential, and desirable
No quality team has been made in the PHC	A quality team needs to be formed to maintain the quality process and supervision of quality assurance.
The current version of SOPs is not available at the facility	SOPs shall be made available so that the department can function according to guidelines provided by the state government.

Some major gaps that required State Support for better functioning:

- Hospital requires a in house linen department for washing and cleaning of linen.
- Provision of rain water harvesting.
- Availability of licence for operating lift.
- Availability of human resources, in terms of dietician, radiologist, nurses, AYUSH doctor, physiotherapist.
- Training on Measuring Hospital Performance Indicators
- Training on facility level Quality Assurance.
- Nursing staff training on IMNCI.
- Availability of Equipment for maintenance of Cold chain
- X ray department has Radiological safety officer (RSO) approved by competent authority
- CSSD Unit
- Lack of human resources
- Treadmill for TMT service Assurance

## 7. RESULTS

Three assessments were conducted over the period of two months

### District hospital, Damoh

AREA OF CONCERN	FIRST ASSESSMENT SCORING	FINAL ASSESSMENT SCORING
Service Provision	79%	81%
Patient Rights	74%	80%
Inputs	74%	77%
Support Services	79%	83%
Clinical Services	91%	93%
Infection control	88%	91%
Quality management	77%	83%
Outcome	65%	86%

### District Hospital, Agar Malwa

AREA OF CONCERN	FIRST ASSESSMENT SCORING	FINAL ASSESSMENT SCORING
Service Provision	76%	76%
Patient Rights	73%	75%
Inputs	68%	69%
Support Services	72%	73%
Clinical Services	79%	80%
Infection control	80%	82%
Quality management	31%	32%
Outcome	21%	30%

### District Hospital, Satna

AREA OF CONCERN	FIRST ASSESSMENT SCORING	FINAL ASSESSMENT SCORING
Service Provision	83%	85%
Patient Rights	85%	86%
Inputs	80%	80%

Support Services	84%	87%
Clinical Services	87%	89%
Infection control	85%	87%
Quality management	82%	86%
Outcome	84%	90%

### **District Hospital, Shahdol**

AREA OF CONCERN	FIRST ASSESSMENT SCORING	FINAL ASSESSMENT SCORING
Service Provision	89%	90%
Patient Rights	80%	82%
Inputs	80%	82%
Support Services	90%	92%
Clinical Services	95%	96%
Infection control	92%	81%
Quality management	85%	87%
Outcome	87%	91%

### **District Hospital, Betul**

AREA OF CONCERN	FIRST ASSESSMENT SCORING	FINAL ASSESSMENT SCORING
Service Provision	83%	85%
Patient Rights	85%	86%
Inputs	80%	80%
Support Services	84%	87%
Clinical Services	87%	89%
Infection control	85%	87%
Quality management	82%	86%
Outcome	84%	90%

### **PHC, Misrod**

AREA OF CONCERN	ASSESSMENT SCORING
Service Provision	84%

Patient Rights	71%
Inputs	77%
Support Services	77%
Clinical Services	79%
Infection control	91%
Quality management	42%
Outcome	22%

### **NHM BHOPAL, Quality Cell**

Analysis of district hospital's data of five previous years was done from the kayakalp score sheets of each district hospitals provided from the NHM office from year 2017 to 2022. The documentations of hospitals were provided division wise from those documentation total number of kayakalp participants from the DH CHC PHC & CH has been documented into excel file .Along with participants the facilities who won the awards from last 5 years were analyzed and the graphs were plotted from year 2017 to 22 to observe the growth and the facilities regarding participation and Award-winning

### **District Hospital, Singrauli**

AREA OF CONCERN	FIRST ASSESSMENT SCORING	FINAL ASSESSMENT SCORING
Service Provision	69%	71%
Patient Rights	65%	67%
Inputs	68%	70%
Support Services	67%	67%
Clinical Services	72%	72%
Infection control	62%	66%
Quality management	32%	34%
Outcome	34%	52%

Quality is a continuous process of refinement which means it shall be maintained even when no one is watching and when these facilities exceed the expectation of customers. During the first assessment, the following district hospitals were lacking in the areas of infection control, quality management and outcome indicators, but with proper monitoring and training, improvements were made in these areas as well as other areas of concern

After the final assessment, there were significant changes in scoring from the first assessment that shows improvement, these facilities have the potential for NQAS certification, but they constantly require someone to monitor and guidance for the quality assurance

## 7.1 GAPS FULLFILLED

- IEC materials were being displayed in hospital for patient knowledge and education purposes.
- Implementation of 3 bucket mopping system of cleaning purposes for housekeeping staff.
- Trolley system in place for carrying biomedical waste.
- Visiting hour policy was being implemented in paediatric department.
- Training of nursing staff, infection prevention control, spill management, biomedical waste segregation.
- SOPs and STGs were made available to every department for better functioning of department in a systematic manner.
- Housekeeping staff were being trained in using 3 bucket mopping system, importance of using gloves and mask while cleaning and carrying waste.
- Mission statement, core values and quality statement displayed.
- Outcome indicators for various departments were being made to evaluate the performance of the hospital.

## 7.2 TRAINING SESSION

Two training sessions were being conducted over a period of two months on various topics like BMW, IPC, PDCA, 5S, Quality tools, Outcome indicators, Disaster management.

### a) BMW

**Bio-Medical Waste Management** - There are four categories of biomedical waste.

Category	Type Of Waste
Yellow	Organs, human tissue, body parts, fetus, soiled waste, expired or discarded medicines, chemical waste, microbiology, biotechnology and other clinical laboratory waste.
Red	Contaminated Waste(recyclable)

White	Waste sharps include metals: Needles, Syringes, and fixed needles.
Blue	Glassware: Broken or discarded and contaminated glass, including vials, and ampoules, except those contaminated with cytotoxic waste.

Segregation of these bio-medical wastes needs to be done as per protocol so that they can be disposed of and recyclable accordingly.

- b) **Infection Prevention Control** is concerned with the practical approach of preventing healthcare infections and helping patients and healthcare workers from being harmed by disease. It consists of hand hygiene, five hand movements, PPE (Personal Protective Equipment), Safe handling and disposal of chemical waste laundry, and Water safety hygiene.
- c) **5S** - 5S helps achieve more consistent operational results, maintain order at the workplace and use visual signals to reduce waste while optimizing efficiency.
  - SET
  - SORT
  - SHINE
  - STANDARDIZE
  - SUSTAIN
- d) **Quality Tools** – The seven essential quality tools have been designated that help to improve the quality process of any organization.
  - Flow chart
  - Histogram
  - Check sheet
  - Fishbone diagram
  - Pareto chart
  - Scatter diagram
  - Control chart

Fishbone analysis:

It helps the members of the team to visually diagram problems, and it helps to allow them to diagnose that particular situation in much more efficient ways.

Histogram:

It graphically depicts the data and helps the team members to analyze the situation easily; it is a type of bar chart with the frequency of continuous data in it.

e) **PDCA** – It is considered a planning tool. It helps to improve new Processes or any aging process.

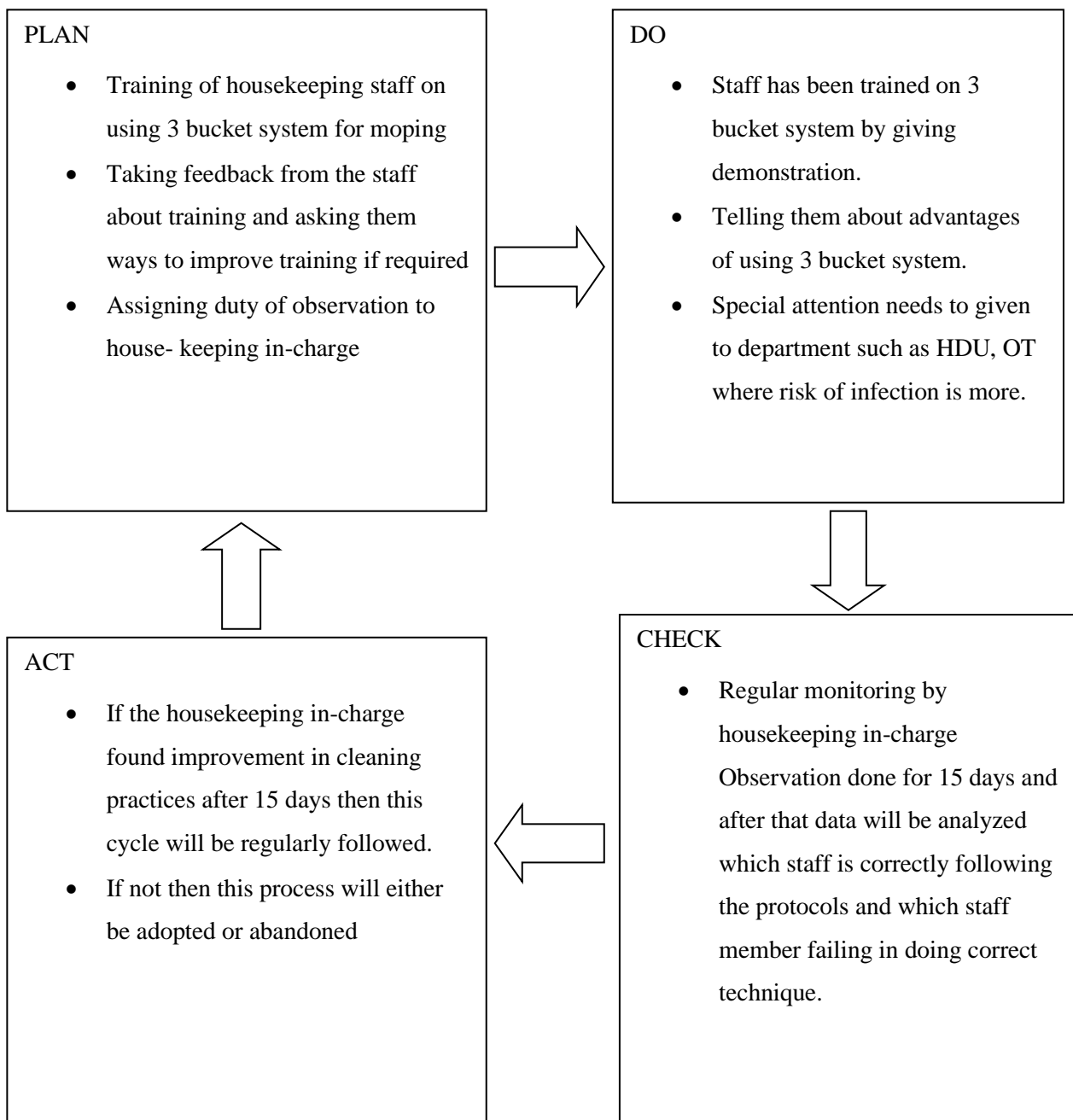
**P (PLAN)** – Recognizing opportunity and plan a change accordingly.

**D (DO)** – Now testing the changes on a small scale.

**C (CHECK)** – Now it's time to review and analyze the changes made.

**A (ACT)** – Taking action from the analyzed results, if the changes are working, then continue the cycle; if not, review the cycle and make changes accordingly

### **PDCA FOR USAGE OF 3 BUCKET MOPPING SYSTEM**



#### f) **Outcome Indicators**

The objectives of an intervention, or its results, or outcome, are referred to as outcome indicators. These indicators allude to the reasons why particular interventions were chosen in the first place. They are the outcome of the "quantity" ("how many") as well as the "quality" ("how well") of the actions carried out.

For a facility to get NQAS certification, maintaining an outcome indicator is a must.

### **6. Discussion**

Globally, a growing percentage of industrialized and developing countries are adopting a system of healthcare accreditation. An approved authority, either government or nongovernment, conducts a thorough assessment of healthcare facilities against recognized, predetermined standards as the base for accreditation. Though certification primarily deals with quality checks, its effect on functionality and durability is in question. It is stated that certification requirements strengthen patient safety and improve the quality of healthcare, and they are created to promote on-going quality improvement initiatives inside accredited institutions. Although the certification process is thought to be advantageous and many developing nations are exploring accrediting programmes, there are not many research studies to determine its effects. In addition to other developing nations, India created and implemented a national accrediting programme (MoHFW, 2013). However, since the program's introduction in 2013, nothing is known about its effects on the standard of care provided by Indian hospitals. Therefore, the current study's objective is to evaluate its effects on quality services from the perspective of health care professionals as well as performance results.

Currently in Madhya Pradesh, 5 District Hospital along with 1 PHC are NQAS certified. Taking the reference of data analysis done, top 5 and least 5 are calculated for the last 5 years-

[A] According to the analysis- Top 5 Highest scoring District Hospital in year 2017-2018 were-

1. BHIND-87.4%
2. SHIVPURI-78
3. UJJAIN-73.4
4. MANDSAUR-72.2
5. ALIRAJPUR-71.2

[B]According to the analysis- Least 5 scoring District Hospital in year 2017-2018 were-

1. SHEOPUR-41.2
2. DEWAS-43.8
3. CHINDWARA-48.6
4. AGAR MALWA-50
5. SHAHDOL—53.4



[A] According to the analysis- top 5 highest scoring District Hospital in year 2018-2019 were-

1. SATNA-95
2. BHIND-92.3
3. HOSHANGABAD-85
4. MANDSAUR-79
5. SHEOPUR-77

[B] According to the analysis- least 5 scoring District hospital in year 2018-2019 were-

1. NARSINGPUR-22.8
2. ASHOKNAGAR-35.8
3. JHABUA-42.8
4. AGAR MALWA-47.2
5. DATIA-50.5

[A] According to the analysis-top 5 highest scoring District Hospital in year 2019-2020 were-

1. SEONI-97
2. SATNA-95
3. JABALPUR-93
4. ANUPUR-86.2
5. SAGAR-82

[B] According to the analysis- least 5 scoring District hospital in year 2019-2020 were

1. BURHANPUR-30
2. JHABUA-42.8
3. DATIA-45.7
4. BHALGHAT-55.3
5. NARSINGPUR-57.7

[A] According to the analysis-top 5 highest scoring District Hospital in year 2020-2021 were-

1. SEONI-97
2. VIDISHA-91
3. BHIND-87
4. BETUL-86.3
5. KHANDWA-83.3

[B] According to the analysis- least 5 scoring District hospital in year 2020-2021 were

1. AGAR MALWA-27.3

2. JHABUA-45.5
3. DATIA-54.1
4. RAJGARH-55
5. HOSHANGABAD-65.3

[A] According to the analysis-top 5 highest scoring District Hospital in year 2021-2022 were

1. VIDISHA-91.29
2. DEWAS-90.29
3. BHOPAL -88
4. NARSINGPUR-86.14
5. SEONI-84.29

[B] According to the analysis- least 5 scoring District hospital in year 2021-2022 were

1. DATIA-43.71
2. RAJGARH-51.86
3. GUNNA-60.95
4. BURHANPUR-64.76
5. HOSHANGABAD-65.43

With this analysis, we found BHIND to be the most scoring district in maximum years, whereas AGAR MALWA, RAJGARH, and BURHANPUR were observed to be the least scoring DHs in full years in Madhya Pradesh.

In the assessment, we found major drawbacks to be training on quality, Overcrowding, Disaster Management Training/plan, Medical Record Department, Prescription Audit, Employee Feedback, Disable friendly toilets, Sample culture for HAI, Availability of Dharmshala/stay facility for Attendants, Stray Animals/rodent/pest, System to Manage Violence against Staff, Special/modified diet for critically ill patient etc.

Few of the limitations of our assessments were the unavailability of a quality nodal person to present document when needed, Inadequate support from the staff in discussion/implementation of the action plan.

## **7.Recommendation**

- The advantage of NQAS accreditation for improving the quality of care in the public sector needs to conveyed to all staff.
- To reduce crowding within the hospital premises, Rainbasera must establish so that patient attendants can take shelter.
- There shall be the provision of a patient calling system like the use of a display with patient registered number or use mic system for calling patient it can help reduce overcrowding to some extent.

- Patient attendant visits need to be followed strictly, for that token system can be used along with a security guard to monitor the situation.
- Currently, there is no medical record department in some of the facilities and finding any old record can get tricky at times; there is a need for a separate department with a computer-based system so that record finding can become easy and more accessible.
- Similarly, there is a need for an in-house linen cleaning system as the current laundry services are not up to the mark.
- Strict action with the support of all the staff is required in violence against the staff.
- The lack of adequate human resources was a significant problem across all district hospitals and PHC. The state government needs to assign more human resources to these districts so that workload on the current staff can be managed.
- Timely payment of outsourced services must be made for the continuation of services.
- Regular meetings (with the record of meeting minutes) must be held at least once a month for a discussion on day-to-day topics of the facility.
- Roles and responsibilities must be made very clear to every staff.
- Reverting from higher authorities on-demand/problems need to be addressed on time for the proper functioning of the facility.
- Implementing any plan of action was challenging as the head officials were not actively participating in improving the quality. For this purpose, the hospital manager needs to be appointed, so the implementation process goes as planned.

## **8. CONCLUSION**

The result of the assessment shows an increase in overall scoring that means with proper monitoring of services, changes can be made. The implementation of an action plan or quality services must be done in a systemic manner, and it needs to be regularly monitored can help in improving the overall quality of services of the hospital. Hospitals can adopt computer-based patient records as a standard for medical records and improve the quality of patient care. Timely training of nursing staff and doctors regarding quality management should be done in order create to improve the overall quality of care of the hospital.

The leadership and the management at the district hospital need to understand their roles and responsibilities towards the use of continuous quality improvement needs to monitor results, implementation and access to resources, hence promoting quality. Appreciation needs to be given to nursing staff and housekeeping staff where it is due.

Finally, the hospital has the potential to get NQAS accreditation if it designs its activities strategically to improve the quality of care.

## 9. References

1. National Health Mission.pdf [Internet]. [cited 2022 Jun 20]. Available from: <https://darpg.gov.in/sites/default/files/National%20Health%20Mission.pdf>
2. Training Manual for implementation of NQAS 4.pdf [Internet]. [cited 2022 Jun 12]. Available from: <http://qi.nhsrindia.org/sites/default/files/Training%20Manual%20for%20implementation%20of%20NQAS%204.pdf>
3. 1596 NQAS for PHF 2020\_16 Dec 2021.pdf [Internet]. [cited 2022 Jun 12]. Available from: [http://qi.nhsrindia.org/sites/default/files/1596%20NQAS%20for%20PHF%202020\\_16%20Dec%202021.pdf](http://qi.nhsrindia.org/sites/default/files/1596%20NQAS%20for%20PHF%202020_16%20Dec%202021.pdf)
4. Quality Assurance Framework | National Health Systems Resource Centre | Technical Support Institute with National Health Mission [Internet]. [cited 2022 Jun 12]. Available from: <http://qi.nhsrindia.org/quality-assurance-framework>
5. AlKhenizan A, Shaw C. Assessment of the accreditation standards of the Central Board for Accreditation of Healthcare Institutions in Saudi Arabia against the principles of the International Society for Quality in Health Care (ISQua). Ann Saudi Med. 2010;30(5):386–9.
6. Operational Guidelines on Quality Assurance.pdf [Internet]. [cited 2022 Jun 12]. Available from: <http://qi.nhsrindia.org/sites/default/files/Operational%20Guidelines%20on%20Quality%20Assurance.pdf>
7. India, Ministry of Health and Family Welfare, Maternal Health Division, National Rural Health Mission (India). Assessor's guidebook for quality assurance in district hospitals 2013. 2013.

## 10. ANNEXURE

### (1) Major gaps with action plan.

MAJOR GAPS	ACTION PLAN

### (2) NQAS Checklist

#### (a) 8 Areas of concern

	Area of Concern A- Service Provision			
Standard A1.	Facility Provides Curative Services	71%	75%	77%
Standard A2	Facility provides RMNCHA Services	89%	96%	100%
Standard A3.	Facility Provides diagnostic Services	70%	100%	67%
Standard A4	Facility provides services as mandated in national Health Programs/ state scheme	67%	NA	50%
Standard A5.	Facility provides support services	86%	NA	79%
Standard A6.	Health services provided at the facility are appropriate to community needs.	77%	NA	100%
	Area of Concern B- Patient Rights			
Standard B1.	Facility provides the information to care seekers, attendants & community about the available services and their modalities	65%	58%	76%
Standard B2.	Services are delivered in a manner that is sensitive to gender, religious, and cultural needs, and there are no barrier on account of physical economic, cultural or social reasons.	74%	90%	62%
Standard B3.	Facility maintains the privacy, confidentiality & Dignity of patient and related information.	83%	100%	87%
Standard B4.	Facility has defined and established procedures for informing and involving patient and their families about treatment and obtaining informed consent wherever it is required.	71%	75%	87%
Standard B5.	Facility ensures that there are no financial barrier to access and that there is financial protection given from cost of care.	91%	100%	100%
Standard B6	Facility has defined framework for ethical management including dilemmas confronted during delivery of services at public health facilities	78%	NA	100%

	Area of Concern C - Inputs			
Standard C1.	The facility has infrastructure for delivery of assured services, and available infrastructure meets the prevalent norms	67%	78%	63%
Standard C2.	The facility ensures the physical safety of the infrastructure.	78%	88%	90%
Standard C3.	The facility has established Programme for fire safety and other disaster	51%	58%	42%
Standard C4.	The facility has adequate qualified and trained staff, required for providing the assured services to the current case load	55%	65%	56%
Standard C5.	Facility provides drugs and consumables required for assured list of services.	89%	97%	95%
Standard C6.	The facility has equipment & instruments required for assured list of services.	76%	100%	74%
Standard C7	Facility has a defined and established procedure for effective utilization, evaluation and augmentation of competence and performance of staff	61%	62%	52%

	Area of Concern D- Support Services			
Standard D1.	The facility has established Programme for inspection, testing and maintenance and calibration of Equipment.	68%	83%	75%
Standard D2.	The facility has defined procedures for storage, inventory management and dispensing of drugs in pharmacy and patient care areas	84%	97%	96%
Standard D3.	The facility provides safe, secure and comfortable environment to staff, patients and visitors.	61%	67%	74%
Standard D4.	The facility has established Programme for maintenance and upkeep of the facility	83%	93%	99%
Standard D5.	The facility ensures 24X7 water and power backup as per requirement of service delivery, and support services norms	83%	100%	100%
Standard D6	Dietary services are available as per service provision and nutritional requirement of the patients.	78%	NA	91%
Standard D7.	The facility ensures clean linen to the patients	38%	67%	46%
Standard D8	The facility has defined and established procedures for promoting public participation in management of hospital transparency and accountability.	10%	NA	NA
Standard D9	Hospital has defined and established procedures for Financial Management	44%	NA	NA
Standard D10.	Facility is compliant with all statutory and regulatory requirement imposed by local, state or central government	65%	NA	71%
Standard D11.	Roles & Responsibilities of administrative and clinical staff are determined as per govt. regulations and standards operating procedures.	86%	100%	91%
Standard D12	Facility has established procedure for monitoring the quality of outsourced services and adheres to contractual obligations	54%	NA	75%

	Area of Concern E- Clinical Services			
Standard E1.	The facility has defined procedures for registration, consultation and admission of patients.	77%	75%	72%
Standard E2.	of the patients.	76%	100%	71%
Standard E3.	Facility has defined and established procedures for continuity of care of patient and referral	79%	91%	91%
Standard E4.	The facility has defined and established procedures for nursing care	78%	100%	95%
Standard E5.	Facility has a procedure to identify high risk and vulnerable patients.	84%	100%	100%
Standard E6.	Facility follows standard treatment guidelines defined by state/Central government for prescribing the generic drugs & their rational use.	75%	75%	94%
Standard E7.	Facility has defined procedures for safe drug administration	79%	89%	88%
Standard E8.	Facility has defined and established procedures for maintaining, updating of patients' clinical records and their storage	81%	100%	94%
Standard E9.	The facility has defined and established procedures for discharge of patient.	82%	N/A	92%
Standard E10.	The facility has defined and established procedures for intensive care.	20%	N/A	100%
Standard E11.	Management	47%	0%	76%
Standard E12.	The facility has defined and established procedures of diagnostic services	61%	67%	63%
Standard E13.	Transfusion.	83%	50%	88%
Standard E14.	Facility has established procedures for Anaesthetic Services	91%	100%	N/A
Standard E15.	Facility has defined and established procedures of Surgical Services	88%	88%	100%
Standard E16.	The facility has defined and established procedures for end of life care and death	86%	83%	100%
Standard E17.	Facility has established procedures for Antenatal care as per guidelines	95%	N/A	N/A
Standard E18.	Facility has established procedures for Intranatal care as per guidelines	99%	99%	N/A
Standard E19.	Facility has established procedures for postnatal care as per guidelines	93%	91%	N/A
Standard E20.	The facility has established procedures for care of new born, infant and child as per guidelines	96%	N/A	97%
Standard E21.	guidelines and law	100%	N/A	N/A
Standard E22.	Facility provides Adolescent Reproductive and Sexual Health services as per guidelines	80%	N/A	N/A
Standard E23.	Facility provides National health program as per operational/Clinical Guidelines	52%	N/A	100%

	Area of Concern F- Infection Control			
Standard F1.	Facility has infection control program and procedures in place for prevention and measurement of hospital associated	72%	94%	89%
Standard F2.	Facility has defined and Implemented procedures for ensuring hand hygiene practices and antiseptics	89%	100%	97%
Standard F3.	Facility ensures standard practices and materials for Personal protection	89%	94%	100%
Standard F4.	Facility has standard Procedures for processing of equipments and instruments	81%	95%	79%
Standard F5.	Physical layout and environmental control of the patient care areas ensures infection prevention	73%	74%	87%
Standard F6.	Facility has defined and established procedures for segregation, collection, treatment and disposal of Bio Medical and hazardous Waste.	84%	97%	94%
	Area of Concern G- Quality Control			
Standard G1.	The facility has established organizational framework for quality improvement	58%	50%	50%
Standard G2.	Facility has established system for patient and employee satisfaction	21%	33%	17%
Standard G3.	Facility have established internal and external quality assurance programs wherever it is critical to quality.	54%	63%	75%
Standard G4.	Facility has established, documented implemented and maintained Standard Operating Procedures for all key processes and support services.	43%	38%	46%
Standard G5.	Facility maps its key processes and seeks to make them more efficient by reducing non value adding activities and wastages	21%	50%	25%
Standard G6.	The facility has established system of periodic review as internal assessment , medical & death audit and prescription audit	12%	63%	8%
Standard G7.	The facility has defined Mission, values, Quality policy and objectives, and prepares a strategic plan to achieve them	4%	20%	0%
Standard G8.	Facility seeks continually improvement by practicing Quality method and tools.	23%	83%	14%
Standard G9.	Facility has de defined, approved and communicated Risk Management framework for existing and potential risks.	0%	NA	NA
Standard G10.	Facility has established procedures for assessing, reporting, evaluating and managing risk as per Risk Management Plan	6%	25%	25%

	Area of Concern H- Outcome			
Standard H1 .	The facility measures Productivity Indicators and ensures compliance with State/National benchmarks	36%	100%	42%
Standard H2 .	The facility measures Efficiency Indicators and ensure to reach State/National Benchmark	27%	100%	43%
Standard H3.	The facility measures Clinical Care & Safety Indicators and tries to reach State/National benchmark	31%	91%	32%
Standard H4.	The facility measures Clinical Care & Safety Indicators and tries to reach State/National benchmark	21%	50%	25%

### (3) Gunak App