Quality Assurance Of Labour Room and Maternity OT at District Hospital Gandhi Nagar, Jammu, J&K

Presented By

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Introduction

March 2018, GOI launched LaQshya – *Labor Room Quality Improvement Initiative*

Objective

To reduce maternal and newborn **mortality**, **morbidity**, **stillbirths** and **enhancing** the **satisfaction** of women availing healthcare.

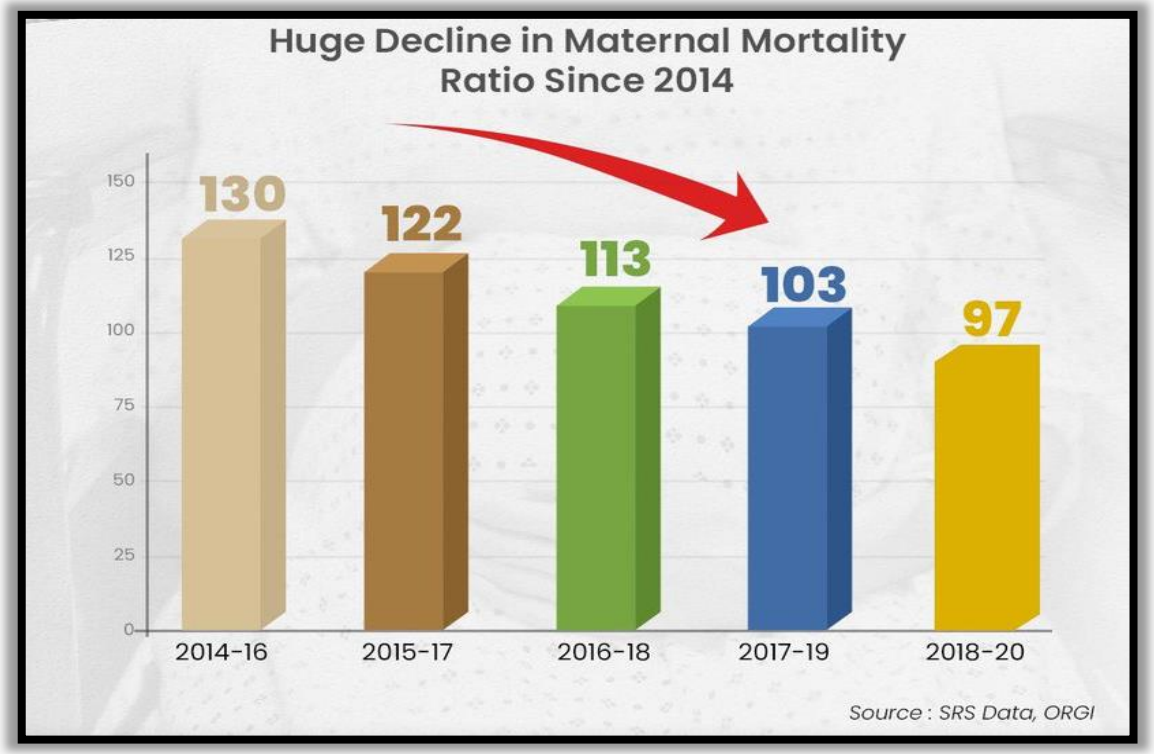
Goal

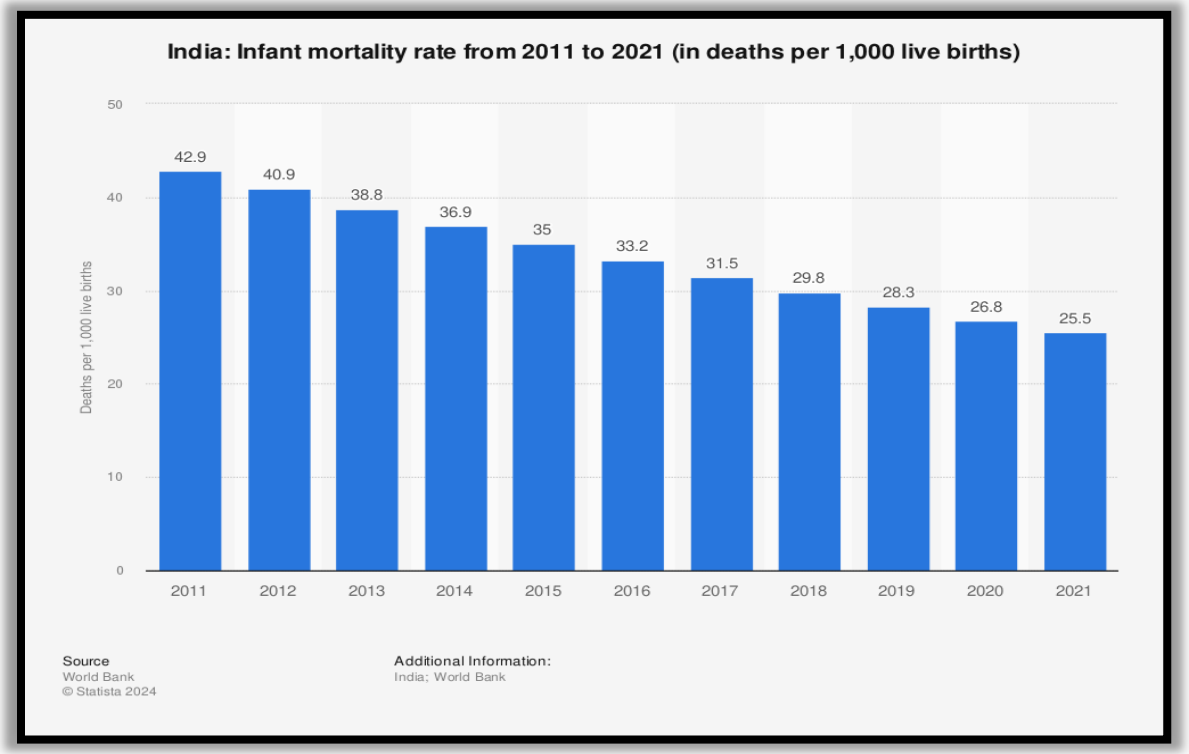
To **improve quality** of care provided to pregnant Mother in Labor room and maternity operation theatres

Target Areas

- Government Medical College and hospitals
- District Hospitals
- First Referral Units
- CHCs with high case loads

Scenario – India





Achievements

- MMR reduced to less than **100 per lakh live births** (achievement of NHP)
- On track to achieve MMR of less than **70 per lakh live births** by 2030

Future Focus

Continued efforts required to **sustain the positive trends** and **enhance progress** with significant improvements in maternal and newborn health

Review of Literature

S. No.	Title of the study	Objective	Key Findings
1	**LaQshya- an uphill climb: a review of implementation of LaQshya programme at a tertiary centre in Chennai**.(Mahalakshmi, N. M., Kanmani, N. K., Kirubanidhi, N. V. U., & Swetha, N. S.,2023)	To have retrospective review of the LaQshya program at the Institute of Social Obstetrics, Govt. Kasturba Gandhi Hospital for Women & Children in Chennai.	Significant improvements in quality of care from 40% to 93%, earning a platinum badge. Improved intrapartum care, timely interventions, infection control, and reduced neonatal asphyxia and sepsis. Decreased maternal deaths due to pregnancy-induced hypertension and eclampsia.
2.	**A study of maternal and newborn healthcare services at district hospital Sitamarhi, Bihar.** (Sagar, N., Mankar, D. D., & Kumar, A. , 2020)	To assess maternal &newborn healthcare services at a 100-bed district hospital in Sitamarhi, Bihar, LaQshya guidelines.	Hospital did not meet minimum standards, scoring 42% in the labor room and 54% in the maternity OT. Challenges included lack of human resources, inadequate SOPs, and insufficient organizational framework. Needed 28 percentage points improvement in labor room and 16 in OT.
3.	**Improving quality of care for perinatal and newborn care at district and subdistrict hospitals in Haryana, India: Implementation research protocol**. (Das, M. K., Arora, N. K., Dalpath, S., Kumar, S., Qazi, S. A., & Bahl, R. ,2018)	To improve quality of perinatal & newborn care at district & subdistrict hospitals in Haryana, India.	Documented changes in 16 indicators across delivery, antenatal, and sick newborn care. Quality improvement interventions led to significant improvements in pregnancy outcomes, reduced stillbirths, and lower maternal and newborn mortality. Better outcomes for sick newborns.
4.	**Readiness of public health facilities to provide quality maternal and newborn care across the state of Bihar, India: a cross-sectional study of district hospitals and primary health centres.** (Kaur, J., Franzen, S. R. P., Newton-Lewis, T., & Murphy, G. , 2019)	To assess readiness of public health facilities to provide quality maternal & newborn care across Bihar, India.	Highlighted deficiencies in capacity to deliver quality services. PHCs fared worse than DHs. DHs inadequately prepared for neonatal care due to lack of essential equipment and supplies. Poor hygiene practices and insufficient availability of essential drugs. Positive association between adequate staffing and better quality of care in DHs.

S. No.	Title of the study (Author/s, year)	Objectives	Key Findings
5.	A study on evaluation of laqshay in Andaman.(Saha, M. ,2019)	To evaluate implementation of respectful maternity and newborn care guidelines under the LaQshya program in Andaman.	Identified inadequacies in respectful maternity care. 95% of mothers not allowed to walk or change position during labor, 56.7% subjected to direct pushing, and only 22% allowed to choose comfort positions. Suggested repeated counseling, staff reinforcement, and surprise visits to improve care.
6.	Rollout of quality assurance interventions in labor room in two districts of Bihar, India. (Sharma, J., Neogi, S. B., Negandhi, P., Chauhan, M., Reddy, S., & Sethy, G. , 2016)	To implement quality assurance measures in labor rooms in two districts of Bihar.	Significant improvements in infection control and quality management scores. Targeted facilities with over 200 deliveries per month, identified gaps using Ministry of Health checklist, and developed priority actions. Ensured scalability and sustainability of interventions.
7.	An Action Plan to Assess the Current Situation of Maternal & Newborn Care at Government Health Facilities in Jharkhand, India. (Singh, Janet and Kumar, Sudesh, , 2007)	To assess current situation of maternal and newborn care at government health facilities in Ranchi, Jharkhand.	Identified gaps in the health system contributing to maternal and newborn mortality and morbidity. Proposed action plan to address deficiencies and improve quality of care.
8.	Assessment of labour rooms in public health facilities of Bihar, India. ,(Ray, A. 2013)	To assess labor rooms in public health facilities of Bihar.	More than half lacked adequate infrastructure for safe delivery, sanitation, and hygiene. 77% of labor rooms lacked inverters, and 72% of deliveries conducted without partograph. Significant gaps in infection control measures, availability of essential drugs, consumables, equipment, and instruments.

Research Question

1. To what extent do public health facilities in Jammu Division comply with LaQshya guidelines regarding infrastructure and equipment for maternal and neonatal health services?
2. How adequate are the human resources, including skilled personnel and their training, in delivering maternal and neonatal health services as per LaQshya guidelines in Jammu Division's public health facilities?
3. What are the gaps and challenges faced by healthcare facilities in Jammu Division in implementing LaQshya guidelines, and what recommendations can be proposed for improvement?

Objectives

i. To assess the compliance of District Hospital Gandhi Nagar, Jammu with LaQshya guidelines regarding infrastructure, equipment, and human resources for maternal and neonatal health services.

ii. To identify gaps and challenges in implementing LaQshya guidelines in Jammu Division's public health facilities and propose recommendations for improvement.

Methodology

Study Design

Descriptive cross-sectional study

Sampling technique:

Purposive Sampling – while selecting the hospital as study unit
Convenient Sampling – while selecting respondents (key informants)

Study Population:

Government Hospital Gandhi-Nagar, Jammu

Study Tool

LaQshya Checklist – LR* & Mot**

Data Collection

SI - Staff Interview

OB - Observation

RR - Record Review

PI - Patient Interview

Sampling Frame:

1. Patients,
2. Their care takers
3. Staff Nurses
4. Department in charge
5. Hospital Managers,
6. Administrative staff.

Dimensions considered for studying quality assurance categorized into AOC

1. Service Provision
2. Patient Rights
3. Inputs
4. Support Services
5. Clinical Services
6. Infection Control
7. Quality Management
8. Outcome

***NHSRC_LR_Tool** ****NHSRC_MOT_Tool**

Area of Concern- A:	**Service Provision**
Standard A1	The facility provides curative services
Standard A2	The facility provides RMNCHA services
Standard A3	Standard A3: The facility provides diagnostic services
Area of Concern- B:	**Patient Rights**
Standard B1	The facility provides information to care seekers, attendants & community about the available services and their modalities.
Standard B2	Services are delivered in a manner that is sensitive to gender, religious and cultural needs, and there are no barriers on account of physical economic, cultural or social reasons
Standard B3	The facility maintains privacy, confidentiality & dignity of patient, and has a system for guarding patient related information
Standard B4	The facility has defined and established procedures for informing patients about the medical condition, and involving them in treatment planning, and facilitates informed decision making
Standard B5	The facility ensures that there are no financial barriers to access, and that there is financial protection given from the cost of hospital services
Area of Concern- C:	**Inputs**
Standard C1	The facility has infrastructure for delivery of assured services, and available infrastructure meets the prevalent norms.
Standard C2	The facility ensures the physical safety of the infrastructure.
Standard C3	The facility has established Programme for fire safety and other disaster.
Standard C4	The facility has adequate qualified and trained staff, required for providing the assured services to the current case load.
Standard C5	The facility provides drugs and consumables required for assured list of services
Standard C6	The facility has equipment & instruments required for assured list of services.
Standard C7	The facility hs a defined and established procedure for effective utilization, evaluation and augmentation of competence and performance of staff

Area of Concern- D:	**Support Services**
Standard D1	The facility has established Programme for inspection, testing and maintenance and calibration of Equipment.
Standard D2	The facility has defined procedures for storage, inventory management and dispensing of medicines and consumables in pharmacy and patient care areas
Standard D3	The facility provides safe, secure and comfortable environment to staff, patients and visitors
Standard D4	The facility has established Programme for maintenance and upkeep of the facility.
Standard D5	The facility ensures 24 X 7 water and power backup as per requirement of service delivery, and support services norms
Standard D7	The facility ensures clean linen to the patients
Standard D11	Roles & Responsibilities of administrative and clinical staff are determined as per govt. regulations and standards operating procedures
Area of Concern - E:	**Clinical Services**
Standard E1	The facility has defined procedures for registration, consultation and admission of patients.
Standard E2	The facility has defined and established procedure for clinical assessment, reassessment and preparation of the treatment plan
Standard E3	The facility has defined and established procedures for continuity of care of patient and referral
Standard E4	The facility has defined and established procedures for nursing care
Standard E5	The facility has a procedure to identify high risk and vulnerable patients
Standard E6	Facility ensures rationale prescribing and use of medicines
Standard E7	The facility has defined procedures for safe drug administration
Standard E8	The facility has defined and established procedures for maintaining, updating of patients' clinical records and their storage
Standard E11	The facility has defined and established procedures for Emergency Services and Disaster Management
Standard E12	The facility has defined and established procedures of diagnostic services.
Standard E13	The facility has defined and established procedures for Blood Bank/Storage Management and Transfusion
Standard E14	The facility has established procedures for Anaesthetic Services
Standard E15	The facility has defined and established procedures of Operation theatre service
Standard E16	The facility has defined and established procedures for the management of death & bodies of deceased patients
Standard E18	The facility has established procedures for Intranatal care as per guidelines.
Standard E19	The facility has established procedures for postnatal care as per guidelines.

Area of Concern - F:	Infection Control
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 standard practices and materials for Personal protection.
Standard F4	The facility has standard procedures for processing of equipment and instruments.
Standard F5	Physical layout and environmental control of the patient care areas ensures infection prevention.
Standard F6	The facility has defined and established procedures for segregation, collection, treatment and disposal of Bio Medical and hazardous Waste
Area of Concern- G:	**Quality Management**
Standard G1	The facility has established organizational framework for quality improvement
Standard G2	The facility has established system for patient and employee satisfaction
Standard G3	The facility have established internal and external quality assurance programs whenever it is critical to quality
Standard G4	The facility has established, documented implemented and maintained Standard Operating Procedures or all key processes and support services
Standard G5	The facility maps its key processes and seeks to make them more efficient by reducing nonvalue adding activities and wastages.
Standard G6	The facility has established system of periodic review as internal assessment, medical, death audits and prescription audits.
Standard G7	The facility has defined mission, values, Quality policy & objectives & prepares a strategic plan to achieve them
Standard G8	The facility seeks continually improvement by practicing Quality method and tools
Standard G10	The facility has established procedures for assessing, reporting, evaluating and managing risk as per Risk Management Plan
Area of Concern- H:	**Outcome Indicator**
Standard H1	The facility measures Productivity Indicators and ensures compliance with State/National benchmarks
Standard H2	The facility measures Efficiency Indicators and ensure to reach State/National Benchmark
Standard H3	The facility measures Clinical Care & Safety Indicators and tries to reach State/National benchmark
Standard H4	The facility measures Service Quality Indicators and endeavours to reach State/National benchmark

Results and Findings

Rules for Scoring

2	Full Compliance
1	Partial Compliance
0	Non-Compliance

The Scoring System

Data obtained for measurable elements

Checkpoint compliance determined & compiled

Department total* obtained

Result expressed in %
(to enable interdepartmental comparison)

$$\frac{\text{Score Obtained} * 100}{\text{No. of checkpoint in checklist} * 2}$$

***Departmental scorecard** represents the Quality scores of the respective department. The total along with AOC wise score can also be obtained

Calculations can be done manually or using the NHSRC excel sheet

Finding 1

LABOUR ROOM

Area of Concern wise Score			Percentage
A	Service Provision	20/22	91%
B	Patient Rights	37/40	93%
C	Inputs	98/108	91%
D	Support Services	58/62	94%
E	Clinical Services	182/184	99%
F	Infection Control	67/74	91%
G	**Quality Management**	70/70	**100%**
H	**Outcome**	40/40	**100%**

MATERNITY OT

Area of Concern wise Score			Percentage
A	Service Provision	17/18	94%
B	**Patient Rights**	22/22	**100%**
C	Inputs	101/116	87%
D	Support Services	68/70	97%
E	Clinical Services	166/168	99%
F	Infection Control	119/126	94%
G	**Quality Management**	56/56	**100%**
H	**Outcome**	24/24	**100%**

Finding 2

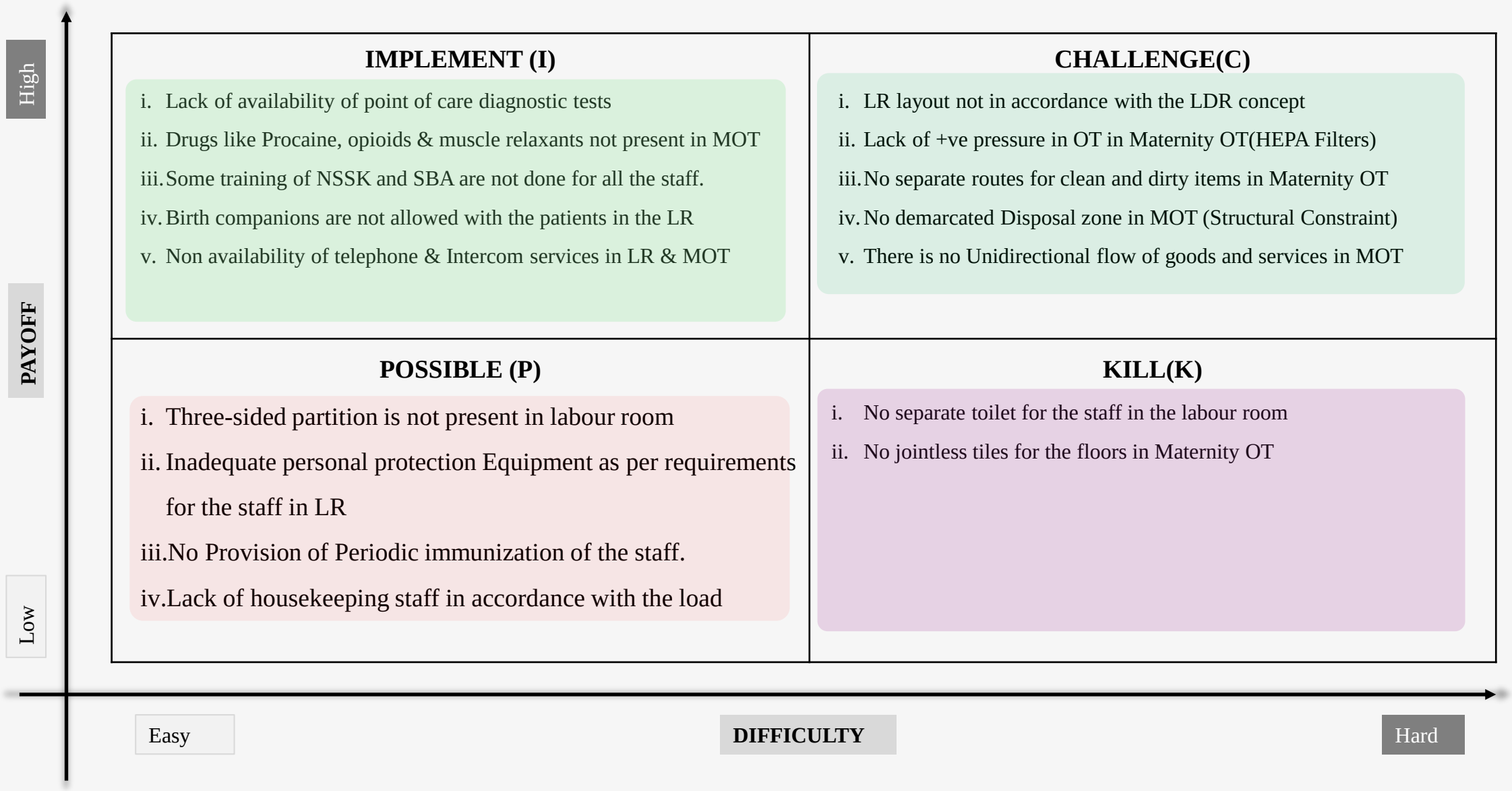
Compliance levels indicate a strong adherence to LaQshya guidelines in several areas, such as quality management and clinical services, but also highlight deficiencies, particularly in inputs and infrastructure.

Finding 3 Significant gaps were identified in both the Labour Room and Maternity OT

- Lack of availability of point of care diagnostic tests.
- Lack of adequate space as per delivery & LR layout is not in accordance with the LDR Concept
- 3-sided screen /partition is not present in LR for visual privacy
- No separate toilet for the staff in the labour room
- Non availability of telephone and Intercom services in both LR and MOT for the purpose of Intramural and Extramural communication
- There is no Unidirectional flow of goods and services in MOT.
- Lack of housekeeping staff in accordance with the load
- Non - availability of some of the equipment & instruments for diagnostic procedures
- No demarcated Disposal zone in Maternity OT

- No separate changing rooms for male and females in MOT
- No jointless tiles for the floors in Maternity OT
- Some of the drugs like Procaine, opioids and muscle relaxants not present in MOT
- The department is unable to ensure the adequate personal protection Equipment as per requirements for the staff in LR .
- Lack of positive pressure in OT, or adequate air exchange due to lack of HEPA Filters in Maternity OT
- No separate routes for clean and dirty items in Maternity OT
- Some trainings of NSSK and SBA are not done for all the staff.
- There is no Provision of Periodic immunization of the staff. (Immunization of only sanitary staff is done.)

Pick Chart


High
PAYOFF
Low
IMPLEMENT (I)
i. Lack of availability of point of care diagnostic tests
ii. Drugs like Procaine, opioids & muscle relaxants not present in MOT
iii. Some training of NSSK and SBA are not done for all the staff.
iv. Birth companions are not allowed with the patients in the LR
v. Non availability of telephone & Intercom services in LR & MOT
CHALLENGE(C)
i. LR layout not in accordance with the LDR concept
ii. Lack of +ve pressure in OT in Maternity OT(HEPA Filters)
iii. No separate routes for clean and dirty items in Maternity OT
iv. No demarcated Disposal zone in MOT (Structural Constraint)
v. There is no Unidirectional flow of goods and services in MOT
POSSIBLE (P)
i. Three-sided partition is not present in labour room
ii. Inadequate personal protection Equipment as per requirements for the staff in LR
iii. No Provision of Periodic immunization of the staff.
iv. Lack of housekeeping staff in accordance with the load
KILL(K)
i. No separate toilet for the staff in the labour room
ii. No jointless tiles for the floors in Maternity OT
Easy
DIFFICULTY
Hard

100% → **Maximum Compliance**

- Clinical Services
- Quality Management
- Outcome

50%-99% → **Partial Compliance**

- Service Provision
- Infection Control
- Patient Rights
- Support Services
- Inputs

0% → **Non-Compliance**

Conclusion

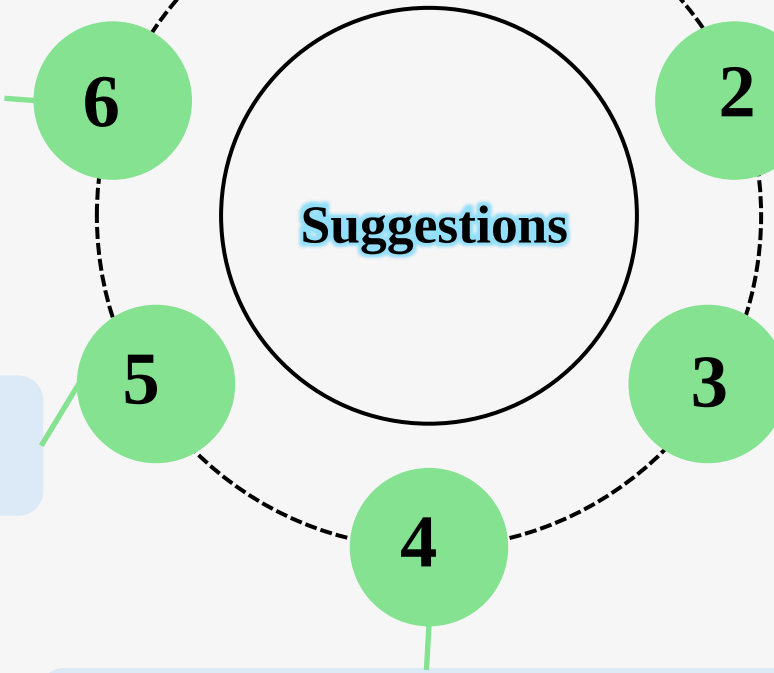
LR scores shows consistently high performance with **above 90%** in most areas

Perfect scores achieved in quality management and outcomes

LaQshya recommendations have been effectively implemented

Notable enhancements in patient rights, clinical care, and service delivery

Overall high degree of compliance observed with LaQshya standards



Install Telephones and Intercoms

Equip labor rooms and maternity OTs with telephones and intercoms to improve real-time communication among staff

Establish Clean and Dirty Routes

Designate separate routes for clean and dirty items within the maternity OT to minimize the risk of cross-contamination.

Provide Staff Training

Ensuring all staff receive NSSK and SBA training would enhance their skills and competencies

Expand Immunization Program

Extending immunization to all staff members would ensure comprehensive protection against diseases

Strengthening Human Resources

Provide comprehensive training for all staff in NSSK and SBA

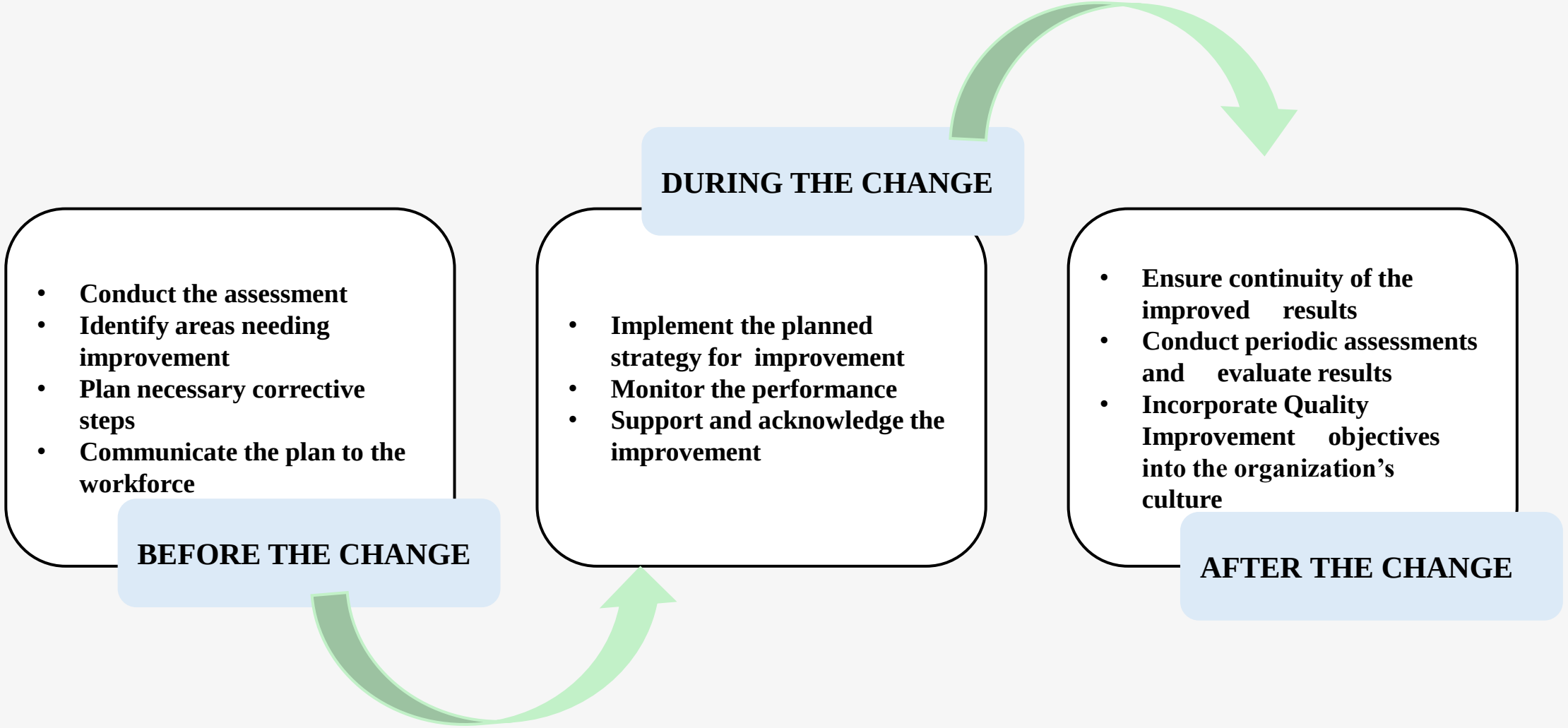
Conduct Regular Inventory Checks

Establish a schedule for routine inventory assessments to ensure essential drugs are consistently stocked

Improving Facility Layout and Services

structural changes could be made to include a disposal zone and ensure a unidirectional flow of goods

Proposed Framework for - Ensuring Quality in the Labour Room and Maternity OT Department



Department of Gynae. And Obst.

A well maintained SNCU

Proper maintenance of record registers

Fire extinguisher with standard precautions

Bio Medical Waste segregated as per guidelines.

Labor room

IEC material

Cylinder Tagging Index

Available handwash area

Properly labelled autoclaved Instruments

NBCC of Maternity O.T.

Thank you !!


MISSION DIRECTOR NHM J&K
DIRECTOR FAMILY WELFARE, MCH AND IMMUNIZATION, J&K
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