Improving Newborn Safety

Through SaQushal Implementation in Karnataka - Leading the Way in Quality Healthcare by Karnataka Health Department

Quality Assurance & Patient Safety Initiative

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Session Agenda

1. **Introduction: Safe care for every newborn and every child**

2. **Karnataka's Leadership**
Overview of Karnataka's pioneering role in MusQan and SaQushal implementation

3. SaQushal and MusQan Framework
Understanding the safety and quality assessment tool for newborn care

4. Implementation Impact
Measurable improvements in newborn safety outcomes across Karnataka

Overview of Patient Safety

Patient safety is a fundamental element of health care

Freedom for a patient from unnecessary harm or potential harm associated with provision of health care.

Unsafe hospital care ranks third among the causes of death globally after heart disease and cancer.

Safe care for every newborn and every child

High vulnerability of this age group to harm,

Unsafe care in intrapartum and postnatal care can lead to lifelong consequences

A single unsafety incident in childhood can have permanent, negative consequences on a child's health and overall development, making early interventions crucial.

New Born Health Indicators

Infant Mortality Rate Trends: Infant Mortality Rate in Karnataka shows a gradual decline over recent years, reflecting improved healthcare access; however, disparities persist in rural areas, indicating the need for targeted newborn safety interventions like SaQushal and MusQan.

Common New Born Health Challenges

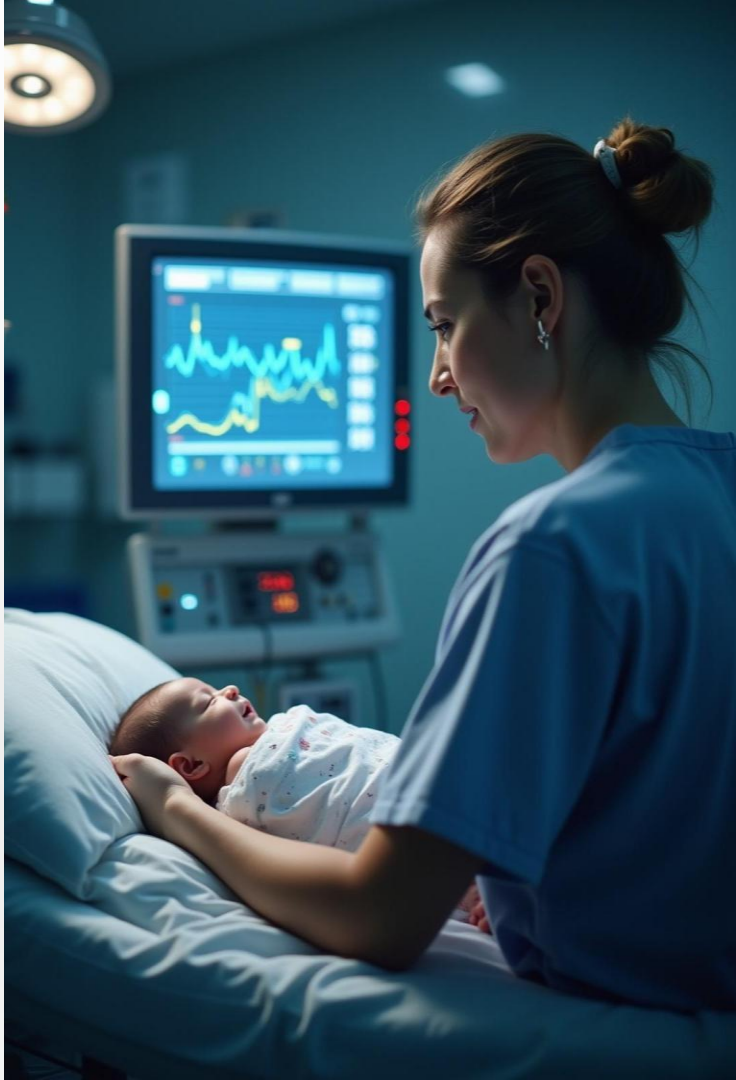
High rates of neonatal infections, low birth weight, and inadequate postnatal care remain critical challenges affecting newborn safety, highlighting need for improved healthcare interventions.

New Born Health Indicators

Gaps in New Born Care Services
Limited access to skilled birth attendants, inconsistent essential newborn care practices, inadequate postnatal monitoring, and poor health infrastructure contribute to significant gaps in newborn care services.

Importance of newborn safety in healthcare

Ensuring **newborn safety** is critical for reducing infant mortality and morbidity. Early identifying and timely interventions improve health outcomes and support sustainable development goals related to child health.



Implementation of SaQushal and MusQan in Karnataka

Karnataka has emerged as a leading state in implementing both MusQan and SaQushal initiatives

Implemented SaQushal assessment and MusQan Certification across all district hospitals

Statewide Coverage

100% implementation in Medical Colleges, District Hospitals and all Taluk Hospital across all districts covering 170+ healthcare facilities

Overview of SaQushal

SaQushal is an self-assessment tool for health facilities to evaluate and improve patient safety and healthcare quality.

SaQushal assesses four key areas—

A. Safe Patient Care Processes
B. Clinical Risk Management
C. Safe Care Environment,
D. Patient Safety System

Overview of MusQan

MusQan Certification is a quality certification awarded to public health facilities in India that meet National Quality Assurance Standards (NQAS) for providing child-friendly services to newborns and children up to 12 years of age.

The Departments involves:

1. Paediatrict OPD
2. Paediatrict IPD
3. NRC
4. NSCU / NBSU

Implementation Journey: Key Milestones

Phase 1: Foundation
Launch of SaQushal assessment tool across District Hospitals in Karnataka

Phase 2: Scale-up
Expansion to all Taluk hospitals

Quality Improvement Strategies in Karnataka

Surprise virtual review of certified PHFs

Subject those state certified PHFs for National Assessment

Mentoring by State and National Assessors to close the identified gaps

Re-State Level Assessment of those failed all PHFs in state assessment

Policy Changes for quality certification of all PHFs

Self-Assessment by Facility Staff

Assessment by District Quality Team

State Level Assessment of all PHFs irrespective of their score

Improving Quality of Intrapartum Care

LaQshya certification of **130** targeted L2 and L3 delivery facilities

Roll out of **K-ARC partography** a digital solution to monitor intrapartum care

Dakshata training for staff nurses, medical officers and OBGYNs to ensure intrapartum care

Enhancing the intrapartum skills of providers through OSCE

Physical mentorship visits by pool of master trainers

Policy decision at cabinet level to achieve quality certification for all public institutions and sustainability of quality of care

Virtual review of LaQshya certified facilities by state MH cell

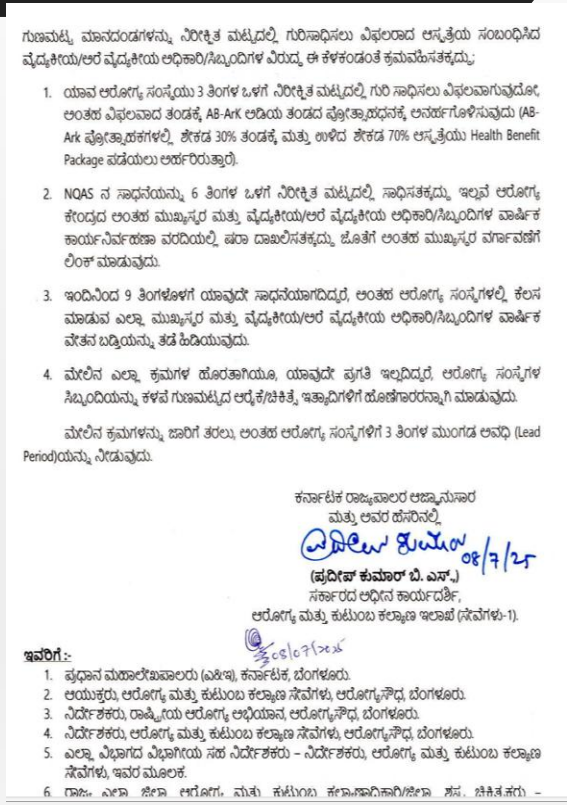
Implementation of **Antenatal corticosteroid guidelines** for pre term deliveries.

Reduced still births in the state to 3.41

(Source CRS 2024)

Quality Improvement Strategies in Karnataka

1. Proactive action by High Level Government Officials such as Issued Government Order to certify the all Public Health Facilities in the state.
2. Consequences for Non-Achievement of NQAS Certification:
    1. Ineligibility for Team Incentives under AB-ArK if not certified within 3 months from the date of GO,
    2. Record on Annual Performance Report and Transfer of hospital staff If not certified within 6 months from the date of GO,
    3. Withholding of Annual Increment all HR personnel working in such facilities If not certified within 9 months from the date of GO,
    4. Facility staff may be held accountable for Substandard Care If not certified within 12 months from the date of GO



ಗುಣಮಟ್ಟ ಮಾನದಂಡಗಳನ್ನು ನಿರೀಕ್ಷಿತ ಮಟ್ಟದಲ್ಲಿ ಗುರಿಸಾಧಿಸಲು ವಿಫಲರಾದ ಆಸ್ಪತ್ರೆಯ ಸಂಬಂಧಿಸಿದ ವೈದ್ಯಕೀಯ/ಆರೆ ವೈದ್ಯಕೀಯ ಅಧಿಕಾರಿ/ಸಿಬ್ಬಂದಿಗಳ ವಿರುದ್ಧ ಈ ಕೆಳಕಂಡಂತೆ ಕ್ರಮವಹಿಸತಕ್ಕದ್ದು;

1. ಯಾವ ಆರೋಗ್ಯ ಸಂಸ್ಥೆಯು 3 ತಿಂಗಳ ಒಳಗೆ ನಿರೀಕ್ಷಿತ ಮಟ್ಟದಲ್ಲಿ ಗುರಿ ಸಾಧಿಸಲು ವಿಫಲವಾಗುವುದೋ, ಅಂತಹ ವಿಫಲವಾದ ತಂಡಕ್ಕೆ AB-ArK ಅಡಿಯ ತಂಡದ ಪ್ರೋತ್ಸಾಹಧನಕ್ಕೆ ಅನರ್ಹಗೊಳಿಸುವುದು (AB-Ark ಪ್ರೋತ್ಸಾಹಕಗಳಲ್ಲಿ, ಶೇಕಡ 30% ತಂಡಕ್ಕೆ ಮತ್ತು ಉಳಿದ ಶೇಕಡ 70% ಆಸ್ಪತ್ರೆಯು Health Benefit Package ಪಡೆಯಲು ಅರ್ಹರಿರುತ್ತಾರೆ).
2. NQAS ನ ಸಾಧನೆಯನ್ನು 6 ತಿಂಗಳ ಒಳಗೆ ನಿರೀಕ್ಷಿತ ಮಟ್ಟದಲ್ಲಿ ಸಾಧಿಸತಕ್ಕದ್ದು, ಇಲ್ಲವೆ ಆರೋಗ್ಯ ಕೇಂದ್ರದ ಅಂತಹ ಮುಖ್ಯಸ್ಥರ ಮತ್ತು ವೈದ್ಯಕೀಯ/ಆರೆ ವೈದ್ಯಕೀಯ ಅಧಿಕಾರಿ/ಸಿಬ್ಬಂದಿಗಳ ವಾರ್ಷಿಕ ಕಾರ್ಯನಿರ್ವಹಣಾ ವರದಿಯಲ್ಲಿ ಪೂರಾ ದಾಖಲಿಸತಕ್ಕದ್ದು, ಜೊತೆಗೆ ಅಂತಹ ಮುಖ್ಯಸ್ಥರ ವರ್ಗಾವಣೆಗೆ ಲಿಂಕ್ ಮಾಡುವುದು.
3. ಇಂದಿನಿಂದ 9 ತಿಂಗಳೊಳಗೆ ಯಾವುದೇ ಸಾಧನೆಯಾಗದಿದ್ದರೆ, ಅಂತಹ ಆರೋಗ್ಯ ಸಂಸ್ಥೆಗಳಲ್ಲಿ ಕೆಲಸ ಮಾಡುವ ಎಲ್ಲಾ ಮುಖ್ಯಸ್ಥರ ಮತ್ತು ವೈದ್ಯಕೀಯ/ಆರೆ ವೈದ್ಯಕೀಯ ಅಧಿಕಾರಿ/ಸಿಬ್ಬಂದಿಗಳ ವಾರ್ಷಿಕ ವೇತನ ಬಡ್ತಿಯನ್ನು ತಡೆ ಹಿಡಿಯುವುದು.
4. ಮೇಲಿನ ಎಲ್ಲಾ ಕ್ರಮಗಳ ಹೊರತಾಗಿಯೂ, ಯಾವುದೇ ಪ್ರಗತಿ ಇಲ್ಲದಿದ್ದರೆ, ಆರೋಗ್ಯ ಸಂಸ್ಥೆಗಳ ಸಿಬ್ಬಂದಿಯನ್ನು ಕಳಪೆ ಗುಣಮಟ್ಟದ ಆರೈಕೆ/ಚಿಕಿತ್ಸೆ ಇತ್ಯಾದಿಗಳಿಗೆ ಹೊಣೆಗಾರರನ್ನಾಗಿ ಮಾಡುವುದು.

ಮೇಲಿನ ಕ್ರಮಗಳನ್ನು ಜಾರಿಗೆ ತರಲು, ಅಂತಹ ಆರೋಗ್ಯ ಸಂಸ್ಥೆಗಳಿಗೆ 3 ತಿಂಗಳ ಮುಂಗಡ ಅವಧಿ (Lead Period)ಯನ್ನು ನೀಡುವುದು.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆಜ್ಞಾನುಸಾರ
ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ
ಪ್ರದೀಪ್ ಕುಮಾರ್ 08/7/25
(ಪ್ರದೀಪ್ ಕುಮಾರ್ ಬಿ. ಎಸ್.)
ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ,
ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆ (ಸೇವೆಗಳು-1).

ಇವರಿಗೆ:-

1. ಪ್ರಧಾನ ಮಹಾಲೇಖಪಾಲರು (ಎಚ್ಇ), ಕರ್ನಾಟಕ, ಬೆಂಗಳೂರು.
2. ಆಯುಕ್ತರು, ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಸೇವೆಗಳು, ಆರೋಗ್ಯಸೌಧ, ಬೆಂಗಳೂರು.
3. ನಿರ್ದೇಶಕರು, ರಾಷ್ಟ್ರೀಯ ಆರೋಗ್ಯ ಅಭಿಯಾನ, ಆರೋಗ್ಯಸೌಧ, ಬೆಂಗಳೂರು.
4. ನಿರ್ದೇಶಕರು, ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಸೇವೆಗಳು, ಆರೋಗ್ಯಸೌಧ, ಬೆಂಗಳೂರು.
5. ಎಲ್ಲಾ ವಿಭಾಗದ ವಿಭಾಗೀಯ ಸಹ ನಿರ್ದೇಶಕರು – ನಿರ್ದೇಶಕರು, ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಸೇವೆಗಳು, ಇವರ ಮೂಲಕ.
6. ರಾಜ್ಯ ಎಲ್ಲಾ ಜಿಲ್ಲಾ ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣಾಧಿಕಾರಿ/ಜಿಲ್ಲಾ ಶಸ್ತ್ರ ಚಿಕಿತ್ಸಕರು –

Stakeholder Involvement

1. Guidance by Quality State and District Quality Unit
2. Coordination by Facility Quality Coordinator
3. Involvement designated Nodal Officers in each department
4. Mentoring of Staff by NQAS State and National Assessors

Karnataka Summary of SaQushal Score in FY 2025-26

S.N	Type of PHFs	Number of PHF	Average SaQushal Score
1	Medical College	17	63%
2	District Hospital	14	75%
3	Taluk Hospital	147	72%
State Average		**178**	**70%**

Karnataka Status of MusQan Certification FY 2025-26

S.no	Type of PHFs	Total PHFs	State Certified	National Certified	Total Certified	% if Certified PHFs
1	Medical College	17	2	12	14	82.35%
2	District Hospital	14	4	8	12	85.71%
3	Single Speciality Hospital	2	0	1	1	50.00%
4	MCH	89	10	0	10	11.24%
5	Taluk Hospital	147	12	0	12	8.16%
TOTAL		269	28	21	49	18.22%

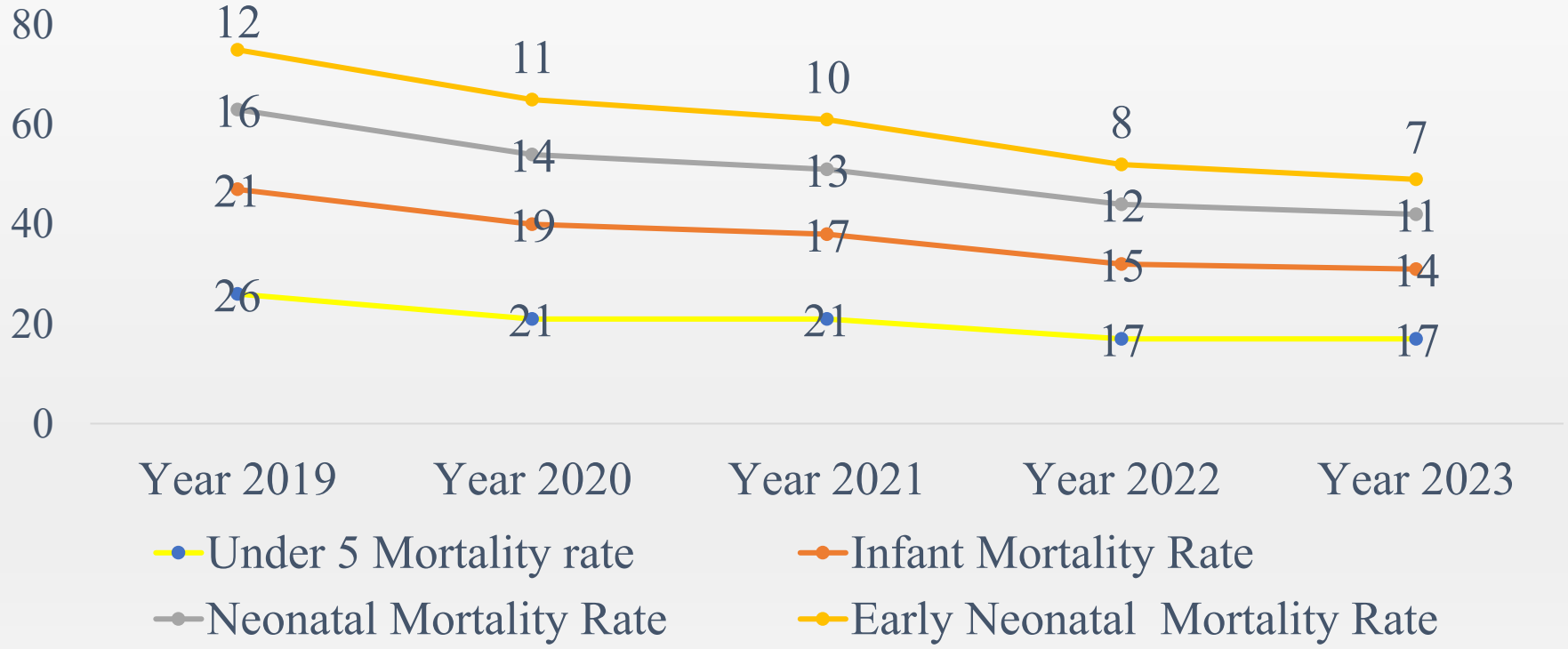
LaQshya Certification in Karnataka

Sl No	Year	State Certifications	National Certifications
1	2019-2020	23	10
2	2020-2021	12	3
3	2021-2022	25	22
4	2022-2023	46	32
5	2023-2024	22	51
6	2024-2025	20	7
7	2025-2026	8	8
Total		**156**	**133**

Status of Karnataka NQAS Certification

Level of Health Facilities	Total No. of facilities as per HDI 2022-23	National Certification	State Certification	Total Certification	% of Certified PHFs
DH	14	9	4	13	85.7%
TH	147	24	55	79	53.7%
CHC	212	31	35	66	31.1%
PHC	2132	169	557	726	34.1%
UPHC	365	62	131	193	52.9%
AAK-SCs	6315-1625 4690	206	1719	1925	30.5%
Total	9371	506	2503	3001	32.58

Trend of Newborn and child death in Karnataka



Improving Newborn Safety through SaQushal and MusQan Implementation in Karnataka

Clinical Improvements

- Significant reduction in neonatal infections and birth asphyxia cases
- Standardized resuscitation protocols
- Improved infection control measures
- Enhanced Gap Identification and closing those gaps systems

Capacity Building

- Comprehensive training programs for healthcare workers
- Hands-on training sessions
- Continuous medical education
- Quality improvement workshops

Infrastructure Upgrade

- Modernization of newborn care units across all districts
- Equipment standardization
- Facility renovation for safety propose
- Technology integration like, CC TV, Biometric etc.

Conclusions

Implementing **SaQushal** and MusQan significantly improves newborn safety by streamlining care processes.

Average MusQan Score as per SLA

S.N	Reference No	Area of Concern & Standards	Average MusQan Score
1	Standard G5	The facility maps its key processes and seeks to make them more efficient by reducing non value adding activities and wastages	58%
2	Standard G8	Facility seeks continually improvement by practicing Quality method and tools.	59%
3	Standard G7	The facility has defined mission, values, Quality policy & objectives & prepared a strategic plan to achieve them	68%
4	Standard G6	The facility has established system of periodic review as internal assessment , medical & death audit and prescription audit	68%
5	Standard G10	Facility has established procedures for assessing, reporting, evaluating and managing risk as per Risk Management Plan	68%
6	Standard C7	Facility has a defined and established procedure for effective utilization, evaluation and augmentation of competence and performance of staff	69%

Average MusQan Score as per SLA

S.N	Reference No	Area of Concern & Standards	Average MusQan Score
7	Standard D12	Facility has established procedure for monitoring the quality of outsourced services and adheres to contractual obligations	70%
8	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 access, social, economic, cultural or social status.	71%
9	Standard E6	Facility follows standard treatment guidelines defined by state/Central government for prescribing the generic drugs & their rational use.	71%
10	Standard D1	The facility has established Programme for inspection, testing and maintenance and calibration of Equipment.	72%
11	Standard G2	Facility has established system for patient and employee satisfaction	72%
12	Standard E23	The facility provides National health Programme as per operational/Clinical Guidelines	73%

Average MusQan Score as per SLA

S.N	Reference No	Area of Concern & Standards	Average MusQan Score
13	Standard F1	Facility has infection control program and procedures in place for prevention and measurement of hospital associated infection	75%
14	Standard H4	The facility measures Service Quality Indicators and endeavours to reach State/National benchmark	77%
15	Standard E11	The facility has defined and established procedures for Emergency Services and Disaster Management	78%
16	Standard G1	The facility has established organizational framework for quality improvement	78%
17	Standard D2	The facility has defined procedures for storage, inventory management and dispensing of drugs in pharmacy and patient care areas	79%
18	Standard B6	Facility has defined framework for ethical management including dilemmas confronted during delivery of services at public health facilities	80%

Average MusQan Score as per SLA

S.N	Reference No	Area of Concern & Standards	Average MusQan Score
19	Standard G3	Facility have established internal and external quality assurance programs wherever it is critical to quality.	80%
20	Standard E3	Facility has defined and established procedures for continuity of care of patient and referral	80%
21	Standard G4	Facility has established, documented implemented and maintained Standard Operating Procedures for all key processes.	80%
22	Standard C1	The facility has infrastructure for delivery of assured services, and available infrastructure meets the prevalent norms	80%
23	Standard F4	Facility has standard Procedures for processing of equipment and instruments	82%
24	Standard H3	The facility measures Clinical Care & Safety Indicators and tries to reach State/National benchmark	83%

Average MusQan Score as per SLA

S.N	Reference No	Area of Concern & Standards	Average MusQan Score
25	Standard C4	The facility has adequate qualified and trained staff, required for providing the assured services to the current case load	83%
26	Standard E4	The facility has defined and established procedures for nursing care	83%
27	Standard H2	The facility measures Efficiency Indicators and ensure to reach State/National Benchmark	84%
28	Standard D10	Facility is compliant with all statutory and regulatory requirement imposed by local, state or central government	84%
29	Standard D7	The facility ensures clean linen to the patients	85%
30	Standard D4	The facility has established Programme for maintenance and upkeep of the facility	85%

Average MusQan Score as per SLA

S.N	Reference No	Area of Concern & Standards	Average MusQan Score
31	Standard E7	Facility has defined procedures for safe drug administration	85%
32	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.	85%
33	Standard C2	The facility ensures the physical safety of the infrastructure.	85%
34	Standard B1	Facility provides the information to care seekers, attendants & community about the available services and their modalities	85%
35	Standard F5	Physical layout and environmental control of the patient care areas ensures infection prevention	85%
36	Standard H1	The facility measures Productivity Indicators and ensures compliance with State/National benchmarks	85%

Average MusQan Score as per SLA

S.N	Reference No	Area of Concern & Standards	Average MusQan Score
37	Standard D6	Dietary services are available as per service provision and nutritional requirement of the patients.	86%
38	Standard E5	Facility has a procedure to identify high risk and vulnerable patients.	87%
39	Standard F2	Facility has defined and Implemented procedures for ensuring hand hygiene practices and antisepsis	87%
40	Standard C6	The facility has equipment & instruments required for assured list of services.	88%
41	Standard E16	The facility has defined and established procedures for end of life care and death	88%
42	Standard A1	Facility Provides Curative Services	88%

Average MusQan Score as per SLA

S.N	Reference No	Area of Concern & Standards	Average MusQan Score
43	Standard E20	The facility has established procedures for care of new born, infant and child as per guidelines	88%
44	Standard C3	The facility has established Programme for fire safety and other disaster	88%
45	Standard A5	Facility provides support services services	89%
46	Standard E13	The facility has defined and established procedures for Blood Bank/Storage Management and Transfusion.	89%
47	Standard E15	The facility has defined and established procedures of Operation theatre services	89%
48	Standard E10	The facility has defined and established procedures for intensive care.	89%

Average MusQan Score as per SLA

S.N	Reference No	Area of Concern & Standards	Average MusQan Score
49	Standard A6	Health services provided at the facility are appropriate to community needs.	89%
50	Standard A3	Facility Provides diagnostic Services	90%
51	Standard E2	The facility has defined and established procedures for clinical assessment and reassessment of the patients.	90%
52	Standard D3	The facility provides safe, secure and comfortable environment to staff, patients and visitors.	90%
53	Standard B5	Facility ensures that there are no financial barrier to access and that there is financial protection given from cost of hospital services.	90%
54	Standard E8	Facility has defined and established procedures for maintaining, updating of patients' clinical records and their storage	91%

Average MusQan Score as per SLA

S.N	Reference No	Area of Concern & Standards	Average MusQan Score
55	Standard C5	Facility provides drugs and consumables required for assured list of services.	92%
56	Standard E9	The facility has defined and established procedures for discharge of patient.	92%
57	Standard E12	The facility has defined and established procedures of diagnostic services	93%
58	Standard B3	The facility maintains privacy, confidentiality & dignity of patient, and has a system for guarding patient related information.	93%
59	Standard F6	Facility has defined and established procedures for segregation, collection, treatment and disposal of Bio Medical and hazardous Waste.	93%
60	Standard A2	Facility provides RMNCHA Services	93%

Average MusQan Score as per SLA

S.N	Reference No	Area of Concern & Standards	Average MusQan Score
61	Standard D11	Roles & Responsibilities of administrative and clinical staff are determined as per govt. regulations and standards operating procedures.	93%
62	Standard E1	The facility has defined procedures for registration, consultation and admission of patients.	93%
63	Standard A4	Facility provides services as mandated in national Health Programs/ state scheme	94%
64	Standard F3	Facility ensures standard practices and materials for Personal protection	95%
65	Standard D5	The facility ensures 24X7 water and power backup as per requirement of service delivery, and support services norms	96%
61	Standard D11	Roles & Responsibilities of administrative and clinical staff are determined as per govt. regulations and standards operating procedures.	93%

Average SaQushal Score in District Hospital and Medical College

S.N	SaQushal Standard	SaQushal Average Score in DH
1	Standard (D2): Reporting and Learning System	69.1%
2	Standard (D1): Leadership and Governance	72.6%
3	Standard (A3): Safe patient handling and Harm prevention	73.3%
4	Standard (D4): Ability at point of care	76.5%
5	Standard (C1): Physical safety	77.1%
6	Standard (D3): Patient Engagement	77.9%
7	Standard (A4): Communication at transition of care	79.7%
8	Standard (C3): Human Factors and Ergonomics	79.9%

Average SaQushal Score in District Hospital and Medical College

S.N	SaQushal Standard	SaQushal Average Score in DH
9	Standard (B1): Safety in General Clinical Care	80.1%
10	Standard (C4): Support and maintenance services	81.1%
11	Standard (B3): Speciality clinical services	81.4%
12	Standard (C2): Hygiene and environment control	83.6%
13	Standard (B4): High-risk clinical processes	84.7%
14	Standard (A1): Medication Safety	85.4%
15	Standard (A2): Infection prevention and Control	85.8%
16	Standard (B2): Safety in Reproductive, Maternal, Newborn, Child and Adolescent Health	87.4%

Average SaQushal Score in Taluk Hospital

S.N	SaQushal Standard	SaQushal Average Score in TH
1	Standard (D2): Reporting and Learning System	62.3%
2	Standard (D1): Leadership and Governance	67.4%
3	Standard (D3): Patient Engagement	69.1%
4	Standard (B3): Speciality clinical services	70.8%
5	Standard (C1): Physical safety	71.0%
6	Standard (D4): Ability at point of care	71.1%
7	Standard (A3): Safe patient handling and Harm prevention	71.5%
8	Standard (B1): Safety in General Clinical Care	74.1%

Average SaQushal Score in Taluk Hospital

S.N	SaQushal Standard	SaQushal Average Score in TH
9	Standard (A4): Communication at transition of care	74.2%
10	Standard (C3): Human Factors and Ergonomics	74.2%
11	Standard (C4): Support and maintenance services	74.5%
12	Standard (A1): Medication Safety	74.6%
13	Standard (C2): Hygiene and environment control	77.0%
14	Standard (B4): High-risk clinical processes	78.3%
15	Standard (B2): Safety in Reproductive, Maternal, Newborn, Child and Adolescent Health	78.6%
16	Standard (A2): Infection prevention and Control	79.7%

THANK YOU