HEALTH & FAMILY WELFARE DEPARTMENT
GOVERNMENT OF KERALA

KERALA QUALITY OF CARE STRATEGY

A framework for safe, effective and patient-centred care across Kerala's public health system

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1

Introduction

Background and Rationale

Quality in health services is a critical determinant of health system performance and a key factor in ensuring positive health outcomes. Poor quality of care undermines trust in the health system, contributes to avoidable morbidity and mortality, and results in inefficient use of resources. Therefore, improving the quality of care is not only essential for achieving universal health coverage (UHC) but also for promoting public trust, ensuring accountability, and enhancing health equity.

The quality of healthcare services is paramount for achieving better health outcomes. Kerala is the pioneer in the country in implementing quality assurance programs like Kerala Accreditation Standard for Hospitals (KASH), National Accreditation Board for Hospitals (NABH), Mother & Baby Friendly Hospital Initiative (MBFHI) etc. The State has also made achievements and progress in implementing national quality accreditation programs like NQAS, MUSQAN, LAQSHYA.

The National Quality Assurance Standards (NQAS) serve as a benchmark for quality care, guiding the transformation of healthcare facilities into centres of excellence. National Quality Assurance Standards have been developed keeping in mind the specific requirements for public health facilities as well global best practices. NQAS are currently available for District Hospitals, Sub District/Thaluk Hospitals, Community Health Centres, Primary and Urban Primary Health Centres and Sub-centres (AAM-SCs).

Certain checkpoints in the NQAS check list were not feasible for scoring according to health care delivery system in Kerala and the prevalent socio economic and health conditions in the state. Subsequently, the state took initiatives to customize the NQAS check list according to state specific standards as per priority with the support of in November 2017. The checklist customization was done by removing a few checkpoints irrelevant to Kerala's context and by adding the domain of Palliative care into the primary care checklist.

After customising the checklist, Kerala has made tremendous progress in NQAS accreditation. As of now, more than 400 institutions from the state have already qualified in state level assessments and have applied for national level certification.

The national level and state level accreditation programs (NQAS, LAQSHYA, MUSQAN etc.) is a starting point in the State's pursuit for quality improvement. A Quality-of-Care strategy (QoCS) is required to give more focus and momentum to this program and also to institutionalize continu-

ous quality improvement cycles in all health programs being implemented in the State.

As Kerala's health system matures, the state must now broaden its focus on quality. Building on its strong foundation, there is a valuable opportunity to deepen and evolve the approach to quality, shifting the emphasis from inputs such as infrastructure and equipment to a more nuanced focus on processes and outcomes; also moving beyond accreditation- for continuous quality improvement. This shift is particularly critical given Kerala's unique epidemiological and demographic context. To meet rising expectations, the quality of care must advance beyond traditional measures and align with what people truly value.

Kerala is also one among the seven-state selected by MoHFW under India's Enhanced Health Service Delivery Program supported by the World Bank. The key objective of the program is 'to increase utilization of comprehensive primary health care services, improve quality of care and strengthen governance of the health sector in India'. The Result Area (RA) 2 for the program is to improve quality of care for building a resilient and high-quality health system and further expanding the quality-of-care agenda to an even more holistic approach encompassing competent care processes and patient experience including development of state specific quality strategies.

The upcoming Kerala Health Systems Improvement Program (KHSIP), through World Bank assistance places quality at the core of its design. Its first Results Area (RA) aims to deliver high-quality, comprehensive health services that address the challenges posed by Kerala's rapidly evolving epidemiological and demographic transitions, with special attention to the most vulnerable populations. The second RA focuses on strengthening health system resilience in effectively responding to emerging public health and climate-related threats.

In this context, a comprehensive Quality of Care Strategy (QoCS) becomes essential. The drafting of Quality-of-Care strategy (QoCS) will not only support KHSIP activities but also ensure that quality elements are embedded across all interventions under the program. QoCS provides a structured framework to move beyond infrastructure and inputs, focusing instead on processes, outcomes, and patient experience, critical for meeting rising expectations and sustaining Kerala's leadership in health care. Their implementation through KHSIP will create alignment, coherence, and measurable improvements in care delivery.

This strategy was developed through extensive consultations with stakeholders including State Level Program Officers, State Quality Assurance & District Quality Assurance Committee members, officers from allied institutions including Directorate of Medical Education, State Health Agency etc. A participatory approach was adopted to ensure that the strategy reflects the needs and aspirations of all stakeholders involved in the healthcare system.

The strategy will serve as a roadmap to enhance the quality of services, ensuring that all citizens have access to safe and effective healthcare.

2

Vision for Healthcare Quality

2.1 Improving Health Status

Improved health status can be obtained through concentrated policy action in all sectors and expand preventive, promote, curative, rehabilitative and palliative services provided through the public health sector with focus on Quality. In the context of Kerala, quality healthcare is defined as the delivery of services that are safe, effective, patient-centred, timely, efficient, and equitable. This definition is aligned with the principles outlined in the National Health Policy and emphasizes the importance of community involvement in healthcare delivery.

2.2 Dimensions of Quality of Care

- **Safe**: Avoiding harm to patients from the care that is intended to help them.
- **Effective**: Providing services based on scientific knowledge to all who could benefit and refrain from providing services to those not likely to benefit.
- **Patient-centered**: Providing care that is respectful of and responsive to individual patient preferences, needs, and values.
- **Timely:** Minimizing waiting time and avoiding potentially harmful delays for both patients and healthcare providers.
- **Efficient**: Minimizing waste in every aspect, including equipment, supplies, ideas, and energy.
- **Equitable**: Delivering care that is consistent in quality, regardless of factors such as gender, ethnicity, geographic location, or socioeconomic status.

2.3 Conceptual Framework for Quality of Care in Kerala

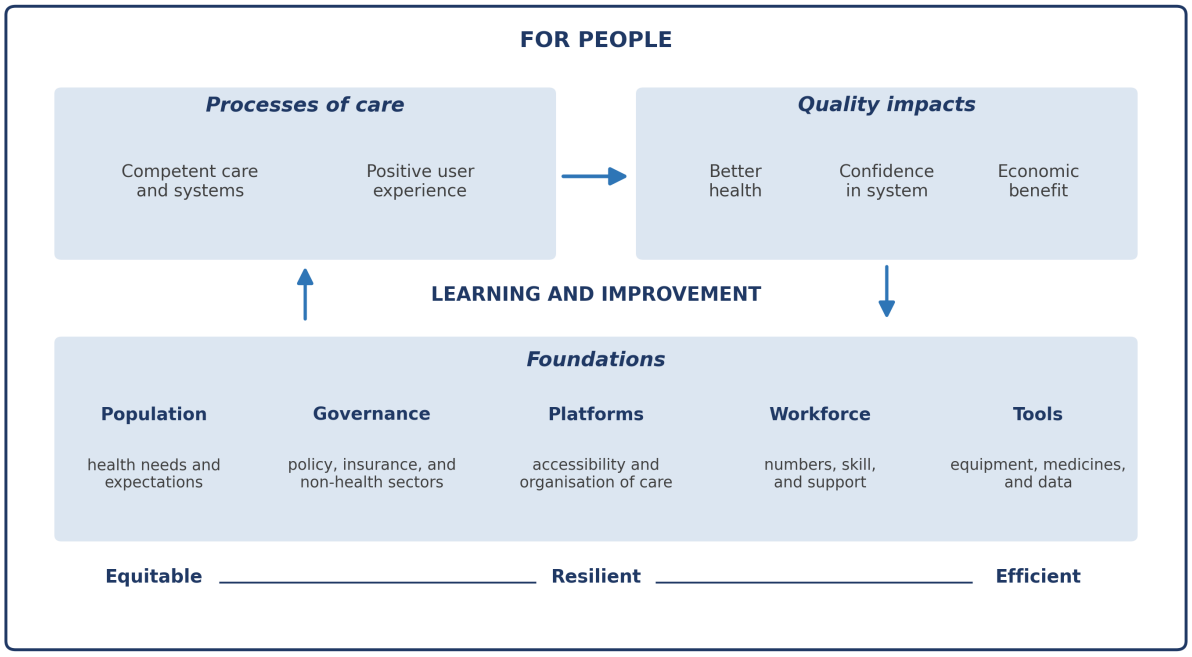
There are various existing frameworks for assessing and measuring quality of care. The Donabedian's quality triad (1966) which looks from structure, processes and outcomes (Fig 1). In addition, recently 'Lancet high commission on quality' also put forth a framework (Fig 2) which is driven by four values of putting people first, equity resilience and efficient.

Kerala's strategy will align with the Lancet Framework by recognizing its foundational principles as the lead for improving quality, while using the top two boxes (processes and quality impacts) as key guides for measurement. At the same time, the ap-

Figure 1. Donabedian Framework for Quality of care



Figure 2. Lancet Framework for High Quality Health Systems



proach will remain closely integrated with the priorities, strategies, and monitoring frameworks outlined under KHSIP, ensuring that both are complementary to each other.

2.4. Vision and Goal

With some of the best health indicators in India such as an Infant Mortality Rate of 8 per 1,000 live births (SRS Statistical Report 2024); NMR of 6 per 1000 lie births and a Maternal Mortality Ratio of 24 per 100,000 live births (SRS MMR Bulletin 2022-24), Kerala has consistently demonstrated excellence in public health outcomes. The state seeks to build on this foundation by prioritizing patient safety, strengthening universal health coverage (UHC), and enhancing financial protection for its population. The expansion of AB-

HWCs has further strengthened Kerala's primary healthcare system, enabling primary care facilities to provide a broader package of comprehensive primary healthcare services. At the same time, financial risk protection is being advanced through schemes such as the Karunya Arogya Suraksha Padhathi (KASP)—Kerala's adaptation of Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (PMJAY)—which provides cashless treatment up to ₹5 lakhs per family per year in empanelled public and private hospitals, primarily for secondary and tertiary care (SHA Kerala, 2024).

Even then, Kerala's health system is currently grappling with the challenges of an epidemiologic transition, a rapidly growing elderly population, heightened vulnerability to disease outbreaks, and the impacts of climate change. These factors place a significant portion of the population at risk. Compounding this is stagnant public health funding and the increasing dominance of private healthcare, particularly in managing complications of NCDs at hospital level, which often results in high out-of-pocket (OOP) expenses and severe financial strain on households.

The health impacts of these demographic, epidemiologic, and environmental shifts have far outpaced the progress achieved through our flagship health initiatives over the years. The overarching direction for health sector development is guided by the Kerala State Planning Board's Fourteenth Five-Year Plan for Medical and Public Health (2022–2027), which envisions Kerala moving "Towards planetary health – advancing equity, efficiency, quality, and cultural competency through partnerships and learning."

The Quality of Care (QoC) strategy seeks to align fully with this vision, emphasizing the goal of "moving towards planetary health with a strong focus on improving quality across the health system".

2.5. Guiding Principles for Quality of Care.

Patient-centered focus

The quality system should empower healthcare providers to meet the patient expectations. Patient care and quality assurance mechanisms must be designed with the end-users in mind, ensuring services are accessible, affordable, dignified, and user-friendly. Continuous and objective feedback from service users is essential and should be used proactively to enhance service delivery.

Patient care and quality assurance systems should be fundamentally shaped by the needs, expectations, and lived experiences of the people they serve. This requires a deliberate shift from a provider-centric model to one that meaningfully engages patients, families, and caregivers as active partners in care. Such an approach recognizes patients not merely as recipients of services, but as co-creators of value whose perspectives are essential in designing, delivering, and evaluating healthcare.

To achieve this, services must be designed to ensure equity, accessibility, affordability, and dignity. Accessibility extends beyond physical proximity to include availability of services across different levels of care, appropriate referral linkages, and inclusivity for vulnerable populations such as the elderly, persons with disabilities, and those in remote or underserved areas. Affordability should safeguard individuals from financial hardship, aligning with principles of financial risk protection. Care must always be delivered in a respectful, culturally sensitive, and non-discriminatory manner, ensuring that every individual feels heard, valued, and treated with dignity. Additionally, systems should be intuitive and easy to navigate, minimizing delays, fragmentation, and unnecessary complexity in accessing care.

A cornerstone of patient-centered quality systems is the establishment of robust, continuous, and objective feedback mechanisms. These may include patient satisfaction surveys, suggestion systems, grievance redressal mechanisms, community engagement forums, and increasingly, digital and real-time feedback platforms. However, the true value of feedback lies not in its collection, but in its systematic analysis and meaningful utilization. Institutions must establish processes to review feedback regularly, identify patterns and gaps, and translate insights into actionable quality improvement initiatives. Transparency in addressing concerns and communicating changes back to users is critical in building trust and accountability.

Quality assurance frameworks must also evolve beyond a narrow focus on compliance with standards, protocols, and accreditation requirements. While these are essential for ensuring baseline safety, consistency, and regulatory adherence, they should serve as a foundation rather than the ultimate goal. The emphasis must shift towards achieving measurable improvements in health outcomes and patient well-being. This includes reductions in morbidity and mortality, improved functional status, enhanced patient-reported outcomes, and better overall quality of life.

An outcome-oriented quality system requires the use of relevant, reliable, and sensitive indicators that reflect not only clinical effectiveness but also patient experience and system efficiency. Regular clinical audits, peer reviews, and performance evaluations should be institutionalized, supported by strong health information systems and data analytics. Real-time monitoring and feedback loops can enable early identification of gaps and prompt corrective action.

Equally important are accountability and governance mechanisms. Clear roles and responsibilities, performance benchmarks, and periodic reviews should be established at all levels of the health system. Leadership commitment is critical in fostering a culture of quality, where continuous improvement is embedded into everyday practice. Capacity building of healthcare providers, supportive supervision, and a non-punitive environment that encourages learning from errors are essential components of such a culture.

Integration is another key dimension. A holistic model of quality must bring together clinical care, patient safety, user experience, and operational efficiency. Fragmented approaches often lead to suboptimal outcomes, whereas coordinated and integrated care pathways improve continuity, reduce duplication, and enhance overall effectiveness.

Finally, patient-centered care and quality assurance systems must be dynamic and adaptive. They should continuously evolve in response to emerging health needs, technological advancements, and changing societal expectations. Grounded in evidence, informed by data, and guided by user feedback, such systems can ensure that healthcare delivery remains relevant, equitable, and impactful.

In essence, the goal is to create a health system that not only meets prescribed standards but consistently delivers real, measurable improvements in health outcomes, patient satisfaction, and system performance, ultimately contributing to better health and well-being for all

Teamwork

Quality improvement is a shared responsibility and can only be achieved through sustained and coordinated efforts of all stakeholders—including policymakers, health administrators, clinicians, support staff, and community health workers.

Systems Approach

Quality systems should be embedded within the overall health system rather than functioning in isolation. A holistic quality improvement approach

must address all components of the healthcare system.

Continuous Quality Improvement

Quality improvement is an ongoing journey that requires persistent and sustained efforts. The strategy will aim for institutionalizing 'continuous learning and accountability' measures, so that quality improvement efforts shall be assessed not only on adherence to standards but also on demonstrated improvement in outcomes, safety, and patient experience over time.

Process-Oriented Focus

While infrastructure and human resources are essential, desired outcomes largely depend on efficient and standardized processes.

Recognizing Champions

Widespread improvement in healthcare quality is propelled by showcasing success stories, role models, and committed leaders who champion quality practices.

3

Situational Analysis

3.1 Health Status from past to present:

Demographic transition

Kerala has experienced a significant demographic transition over the past few decades, characterised by declining birth rates, improved life expectancy, and an ageing population. The state's fertility rate has dropped to below replacement levels, with a Total Fertility Rate (TFR) of around 1.3, well below the national average (1.9) (SRS Statistical Report 2024). This decline in fertility is a result of improved access to family planning, better female education, and increased urbanisation. Life expectancy in Kerala has risen to 75 years, one of the highest in India, largely due to advancements in healthcare, sanitation, and nutrition. However, this demographic shift is also marked by a growing proportion of elderly citizens, with around 15.1% of the population aged 60 years and above — the highest share of any Indian state (SRS Statistical Report 2024) —, a trend that is expected to increase significantly in the coming decades. As a result, the state faces challenges related to the care of the elderly, a shrinking working-age population, and the increased demand for healthcare services tailored to chronic disease management and geriatric care.

The NSS 80th round highlights a markedly higher burden of reported morbidity in Kerala compared to the national average. The Percentage of Persons Reporting Ailment (PPRA) in the last 15 days stands at 38% in rural and 41.5% in urban Kerala, significantly exceeding the All-India levels of 12.2% and 14.9%, respectively. The disparity is even more pronounced among the elderly, with 77.8% of individuals aged 60 and above reporting ailments, indicating a strong age-related concentration of morbidity. Additionally, hospitalization rates (excluding childbirth) are substantially elevated in Kerala, at 92 cases per 1000 persons annually, compared to the national average of 29. This pattern suggests not only a higher prevalence of illness, likely driven by demographic ageing and a greater burden of chronic conditions, but also better health awareness, reporting, and access to healthcare services in the state.

Epidemiological Transition and shift in disease burden

Alongside the demographic changes, Kerala is undergoing an epidemiological transition, with a marked shift in disease patterns. In the past, infectious diseases such as malaria, tuberculosis, and diarrheal diseases were the leading causes of morbidity and mortality. However, with improved public

health infrastructure, sanitation, vaccination programs, and nutrition, Kerala has successfully reduced the burden of these communicable diseases. Today, non-communicable diseases (NCDs) such as cardiovascular diseases, diabetes, hypertension, and cancer have emerged as the leading causes of death and disability in the state. NCDs constitute eight of the top ten contributors to Disability-Adjusted Life Years (DALYs) in the state, impacting nearly three out of ten adults aged 60 years and older. Hypertension and diabetes contribute the largest share of NCDs.

This transition has been driven by factors such as increased life expectancy, changing lifestyles, rising urbanisation, and dietary patterns that are more sedentary and higher in fats and sugars. Kerala's health system, while successful in managing communicable diseases, now faces the dual challenge of addressing the rising burden of NCDs, which require long-term, comprehensive healthcare strategies focused on prevention, early detection, and management.

In addition, there is a huge burden of mental health and trauma related injuries and deaths.

Environmental and Climatic challenges

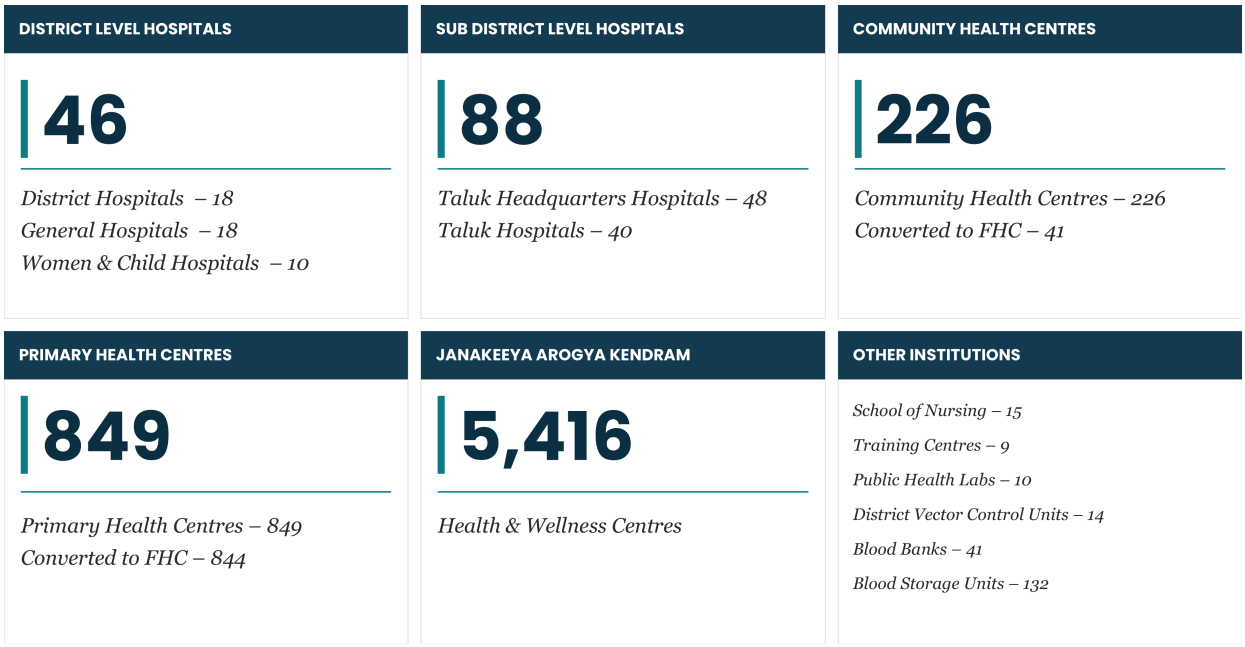
Kerala faces significant public health threats driven by climate vulnerability. Extreme weather events and climate impacts are intensifying outbreaks of waterborne, vector-borne, and heat-related illnesses, disproportionately affecting at-risk populations. Dense forests and land-use changes heighten zoonotic and vector-borne disease risks, as evidenced by repeated Nipah outbreaks. High population density, coupled with migrant and tourist inflows, further compounds these challenges. Climate change also exacerbates the burden of NCDs and elderly care, with extreme heat worsening co-morbidities. Certain districts exposed to climate hazards and socio-economic vulnerabilities urgently need targeted mitigation and adaptation strategies to safeguard public health and strengthen system resilience.

A proactive One Health (OH) approach is critical. Despite Kerala's experience with zoonotic outbreaks, OH coordination remains reactive, with gaps in sustained mechanisms and systematic data sharing between health and animal husbandry sectors. Cross-sectoral collaboration for zoonosis control is weak, complicating outbreak containment. Additionally, rampant antibiotic use in humans and livestock has accelerated antimicrobial resistance (AMR).

Health Care Infrastructure in the State

Kerala's health system is structured across three levels—primary, secondary, and tertiary care—to ensure accessible and comprehensive healthcare services throughout the state. At the primary care level, services are provided through 849 Primary Health Centres (PHCs), 226 Community Health Centres (CHCs), and 5,415 Sub-Centres. These facilities serve as the first point of contact for patients, offering outpatient consultations, immunizations, maternal and child health services, and basic treatments, especially in rural and underserved areas. Secondary care is delivered through 88 sub-district level Hospitals, 18 District Hospitals, and 18 General Hospitals, which provide inpatient care, specialist outpatient services, and emergency treatments. These institutions serve as referral centres for cases that cannot be managed at the primary level. At the tertiary care level, Kerala has 14 Government Medical Colleges and many specialty hospitals, including facilities dedicated to mental health, leprosy, and tuberculosis. These centres offer advanced and super-specialty services, as well as function as key teaching and research institutions. This tiered system enables Kerala to maintain robust public health outcomes and a high level of health service utilization, particularly among rural and economically disadvantaged populations (Health at a Glance, Kerala; 2023-24).

Figure 3. Healthcare Infrastructure of the State



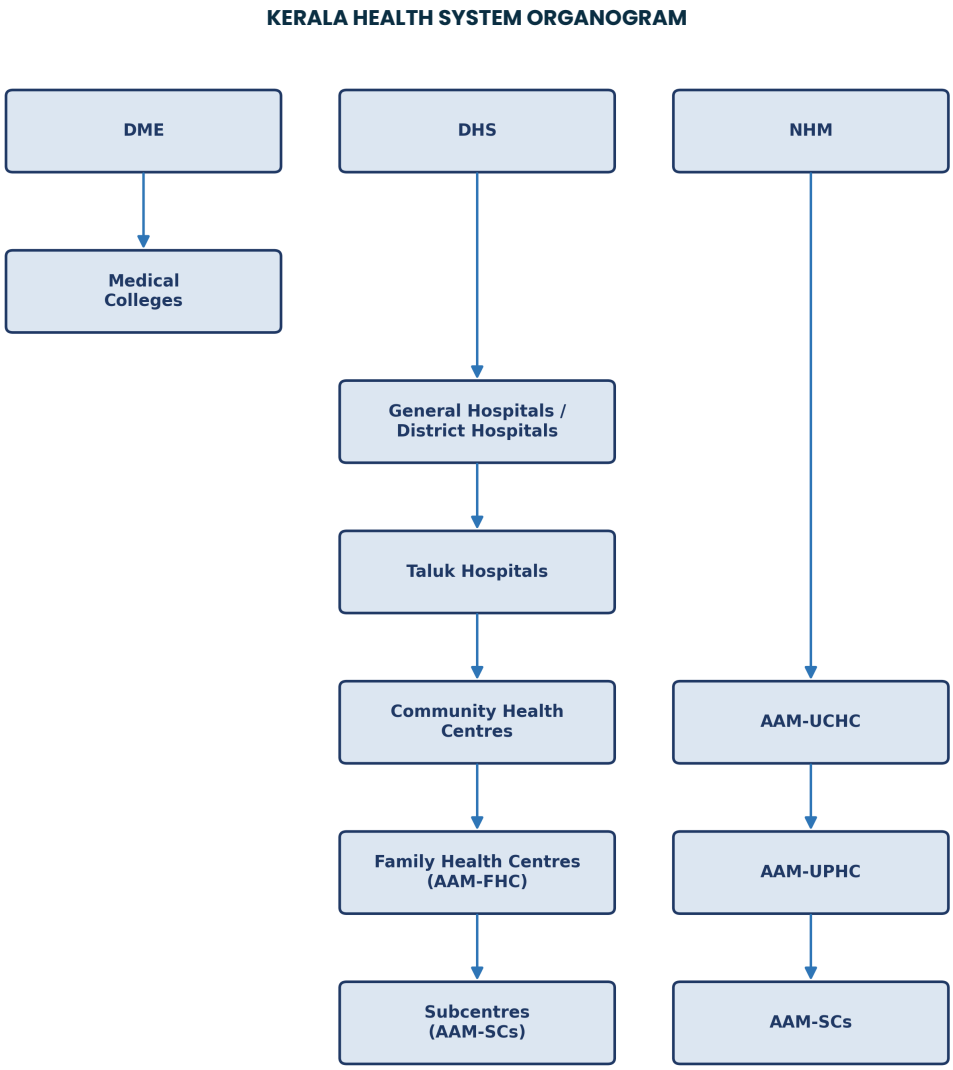
Healthcare utilization and out of pocket expenditure

Despite Kerala's strong public health infrastructure, utilization of public facilities remains relatively low as per the NSS 80th round. Only about 49.2% of the rural and 36.5% of the urban population rely on public institutions for outpatient care. A similar trend is observed in hospitalization (excluding childbirth), where public sector utilization accounts for 30.0% overall (66.5% private, 3.5% charitable) (NSS 80th Round, 2025). Consequently, nearly 70% of patients depend on the private sector for hospitalization, resulting in significantly higher out-of-pocket (OOP) expenditures, averaging ₹9,433 in the public sector versus ₹56,150 in private facilities (NSS 80th Round, Jan–Dec 2025, released April 2026). This indicates that, despite availability, perceived quality, accessibility, or efficiency concerns may be driving patients toward private care, underscoring the need for policy measures to strengthen trust, affordability, and service delivery in the public health system to reduce financial burden on households.

Opportunities, Future Aspirations and Key Challenges

Kerala's healthcare system has garnered national and international recognition for its achievements in public health, evidenced by impressive indicators such as high life expectancy, low infant mortality rates, and high literacy rates. The state has a well- developed healthcare infrastructure, with a robust network of government hospitals, from primary health centres (PHCs) community health centres (CHCs) to Taluk Hospitals (TH) and District Level Hospitals (DH) up to Medical Colleges spread across the state. The government sector is the backbone for primary healthcare delivery, catering to a majority of the population. Kerala has achieved near to 100% institutional delivery, and the state's public health facilities offer a wide range of services, including maternal and child health, immunization, and treatment for communicable diseases. However, despite the success of public health initiatives, there are significant gaps in infrastructure and resource allocation. Many of the secondary care facilities, especially at the district and taluk levels, are undergoing rampant

Figure 4. Organization structure of Kerala Health System



modernization and infrastructural development to meet the growing demand for healthcare services, especially given the shift toward managing non-communicable diseases (NCDs) and the ageing population.

Kerala's healthcare system is widely acclaimed for its exemplary public health achievements, characterized by high life expectancy, low infant and maternal mortality rates, and a robust healthcare infrastructure. In maternal and child health, Kerala has achieved significant milestones. The institutional delivery rate stands nearly at 100% and achieved SDG targets of maternal and child mortality indicators and is almost on par with developed nations.

However, Kerala faces challenges with the rising prevalence of non- communicable diseases (NCDs). NFHS-6 (2023–24) shows a continued rise in NCD risk factors: hypertension prevalence is now 36.6% among men and 31.9% among women (up from 32.8% and 30.9% respectively in NFHS-5); high blood sugar/diabetes affects 31.9% of men and 28.9% of women; and overweight/obesity affects 37.0% of men and 46.7%

of women. These worsening trends underscore the need for enhanced preventive and management strategies for NCDs (NFHS-6 Kerala Fact Sheet, 2023–24)

To address these issues, Kerala has implemented initiatives like the Aardram Mission, aiming to transform PHCs into Family Health Centres (FHCs) to provide comprehensive care. As of latest figures, 844 PHCs and 41 CHCs have been converted into FHCs. Additionally, the state has focused on improving maternal health through the establishment of high- dependency units and the implementation of quality standards in obstetric care.

For improving Quality in Healthcare facilities, various initiatives at national and state- level has been carried out. In FY2025-26, a cumulative number of 474 facilities had been achieved state certification out of which 312 facilities have been nationally certified with NQAS, 17 facilities with LaQshya, and 7 with MUSQAN after national level assessments.

Kerala's healthcare system demonstrates a successful model of public health delivery in India, marked by impressive health indicators and proactive initiatives. However, despite the success of public health initiatives, there are significant gaps in infrastructure and resource allocation. Many of the secondary care facilities, especially at the district and taluk levels, are undergoing rampant modernization and infrastructural development to meet the growing demand for healthcare services, especially given the shift toward managing non-communicable diseases (NCDs) and the ageing population.

Looking forward, Kerala aspires to enhance the quality and efficiency of its healthcare system to meet the evolving needs of its population. This includes improving the infrastructure of public health facilities to meet Indian Public Health Standards (IPHS), the National Quality Assurance Standards (NQAS), integrating more advanced technology, and expanding specialized care, particularly for NCDs and geriatrics.

A key challenge lies in optimising the healthcare workforce, as while Kerala has a relatively high number of healthcare professionals per capita, there is a mismatch in distribution and specialisation, with many rural areas facing shortages of doctors and specialists. Even though, healthcare policies in the state have largely been centred around universal health coverage and public health improvements, there is a need for stronger policy frameworks to address emerging challenges like the growing burden of chronic diseases, re-emerging diseases, one-health and the increasing healthcare needs of an ageing population. Financing remains a critical issue, as Kerala's healthcare system is heavily reliant on government funding, and while health expenditures are among the highest in the country , there is a need for more sustainable and innovative financing models, including public-private partnerships.

In terms of quality, although Kerala has made significant strides in health outcomes, challenges remain in standardising care across government facilities, ensuring patient safety, service accessibility, and accountability at all levels of the health system. Here another challenge is on 'over reliance on accreditation checklists. The over-reliance on accreditation checklists carries the risk of fostering a "checklist mentality," which may mask uneven performance once accreditation is achieved. To mitigate this, there is a need to strengthen the systematic use of performance data as a core driver of quality improvement at both facility and district levels. International experience shows that data availability alone is insufficient; performance information is more likely to be used and to inform meaningful quality improvement when it is embedded in routine management of care processes and linked to clear accountability mechanisms. Such an approach shifts the focus from compliance to continuous performance improvement.

Key Health indicators

Kerala has consistently outperformed the national average in several key health indicators, thanks to its strong public health systems, literacy rates, and successful health interventions. Some of the state's key health indicators, as of the most recent data, include:

Life Expectancy: Kerala has one of the highest life expectancies in India, with an average of 75 years (2016-20), compared to the national average of 70 years. This is a direct result of its high-quality healthcare services, improved sanitation, and a focus on maternal and child health.

Infant Mortality Rate (IMR): Kerala's IMR is 8 per 1,000 live births (SRS Statistical Report 2024), the lowest among Indian states, and below the national average of 24 per 1,000 live births. This reflects the success of the state's maternal and child health programs, such as institutional deliveries, vaccination drives, and effective neonatal care.

Maternal Mortality Ratio (MMR): Kerala's MMR stands at 24 per 100,000 live births (2022-24), one of the lowest in the country, compared to the national average of 87. This is largely due to Kerala's robust antenatal care system, early detection of high-risk pregnancies, and access to skilled healthcare personnel during delivery.

Total Fertility Rate (TFR): Kerala's TFR is 1.3 children per woman, significantly lower than the national average of 1.9. This reflects the state's success in family planning, female education, and empowerment.

Nutrition Indicators: The prevalence of underweight children in Kerala is 17.8% (NFHS-6, 2023–24), down from 19.7% in NFHS-5, and remains significantly lower than the national average. Malnutrition remains a concern, especially in certain marginalised groups, but overall, Kerala's nutrition indicators are better than most other states.

Prevalence of Non-Communicable Diseases (NCDs): Kerala has seen a significant rise in NCDs such as cardiovascular diseases, diabetes, and hypertension. These diseases have become the leading cause of death in the state, with lifestyle changes and an ageing population contributing to the increasing burden of chronic diseases.

Trends Over Time

Kerala's health indicators have shown remarkable improvement over the decades. Since the 1970s, the state has seen a steady decline in both maternal and infant mortality rates, driven by targeted public health interventions and better access to quality healthcare. The success of its public health model, including comprehensive immunization programs, sanitation initiatives, and health education, has contributed to these positive trends. However, there has been a noticeable shift in disease burden, with non- communicable diseases becoming more prominent, a reflection of global health patterns linked to ageing populations, urbanisation, and changing lifestyles.

Kerala's demographic and epidemiological transitions are clearly visible in its health trends. While the state has managed to control infectious diseases effectively over the years, the rise of chronic diseases has shifted the focus of healthcare to long-term management and prevention. The increasing prevalence of lifestyle-related diseases, coupled with the growing elderly population, presents new challenges to the healthcare system. While the state's health indicators remain among the best in the country, these emerging health trends call for a shift in strategy toward more holistic, integrated care models that focus on prevention, early diagnosis, and the management of non- communicable diseases.

Table 1. Key Vital Indicators and Health outcomes in Kerala

Indicator	Kerala	India
Maternal Mortality Ratio (MMR) (SRS Special Bulletin on Maternal Mortality in India, 2021–23)	24	87
Infant Mortality Rate (IMR) (SRS Statistical Report 2024)	8.0	24.0
Neonatal Mortality Rate (NMR) (SRS Statistical Report 2024)	6.0	18.0
Under-5 Mortality Rate (U5MR) (SRS 2022-24)	9.0	28.0
Percentage of men with Hypertension (15 years and above); systolic ≥140 mm of Hg and/or Diastolic ≥90 mm of Hg) or taking medicine to control blood pressure (%) (NFHS-6)	36.6	22.1
Percentage of women with Hypertension (age 15 years and above) (NFHS-6)	31.9	19.4
Percentage of men with Blood sugar level - high or very high (>140 mg/dl) or taking medicine to control blood sugar level (NFHS-6)	31.9	20.9
Percentage of women with Blood sugar level - high or very high (>140 mg/dl) or taking medicine to control blood sugar level (NFHS-6)	28.9	17.8
Suicide rates per 100,000 (NCRB, 2022)	26.9	12.0
RTA (Total numbers) (NCRB-2023)	48,091 (10% of all RTAs in India)	4,80,583

Table 2. Coverage of Health Services (Source, NFHS 6)

Indicator	Kerala	India
≥4 ANC visits	94.8	65.2
Consumed IFA ≥100 days in pregnancy	83.8	54.9
Institutional deliveries	99.9	90.6
Deliveries attended by skilled personnel	99.9	91.3
Caesarean section rate	52-53	27.2
Mothers receiving postnatal care within 2 days	98.7	82.8
Children fully immunized (12-23 months)	95.8	82.6
Children receiving any vaccination	99.4	96.4
Children receiving rotavirus vaccine (3 doses)	96.0	85.4

Table 3. Kerala vs India: Key Health Financing Indicators (NSS 80th Round, 2026)

Indicator	Kerala	India
PPRA (reported morbidity, %)	39.7	13.1
Hospitalization rate (per 1,000 population)	92	29
Share of OPD care in public facilities, rural (%)	49.2	34.6
Share of OPD care in public facilities, urban (%)	36.5	25.2
Share of hospitalizations in public facilities (%)	30.0	36.7
Share of hospitalizations in private facilities (%)	66.5	60.3
Average OOPE per hospitalization (₹)	35,338	34,064
Average OOPE in public hospitals (₹)	9,313	6,631
Average OOPE in private hospitals (₹)	47,490	50,508
Deliveries in public facilities (%)	27.2	61.7
Deliveries in private facilities (%)	70.8	34.5
Institutional deliveries (%)	100	96.2
Average OOPE per childbirth (₹)	36,622	14,775
Average OOPE childbirth in public facilities (₹)	4,463	2,299
Average OOPE childbirth in private facilities (₹)	49,029	37,630

3.2 Status of Quality-of-Care Accreditation in Public health facilities:

Quality certification status.

For improving Quality in Healthcare facilities, various initiatives at national and state-level has been carried out. In FY 2025-26, a cumulative number of 312 facilities had been nationally certified with NQAS, 17 facilities with LaQshya, and 7 with MUSQAN

- NQAS Cumulative Certification Status (Annexure 1)
- LaQshya certified health facilities (Annexure 2)
- MusQan certified health facilities (Annexure 3)
- Health facilities with Kayakalp score of 70% and more (Annexure 4)

Other State Specific Quality Initiatives are mentioned below

The Mother-Baby Friendly Hospital Initiative (MBFHI) A joint venture of the State with IAP, NMF, KFOG, KUHS supported by UNICEF to facilitate and protect breastfeeding in private and public hospitals. The program encourages hospitals to help mothers, and their newborns start with breastfeeding soon after birth.59 Hospitals in Kerala are MBFHI certified -59 (25 Government Hospitals 34 Private Hospitals) Health facilities meeting SUMAN norms (Annexure 5)

KASH (Kerala Accreditation Standards for Hospitals) Kerala accreditation standard for hospitals is a state specific Quality accreditation programme started in the year 2012. The program was

conceived based on the NABH and IPHS standards and the major emphasis of KASH programme is on sensitization of health care organisation towards importance of quality health care services, Involvement of staff for improving the quality of patient services, development review and implementation of policies and procedures for implementation of quality management. The standards are prepared based on the level of care i.e. PHC, CHC, THQH/Specialty/General/District Hospitals. 208 institutions in the state are KASH Accredited.

PQAS -Palliative care Quality Assurance Standards: Kerala is a pioneer state in terms of providing palliative care. The palliative care policy for the state was first approved in the year 2008 and revised in 2019. A high power committee and a working group was formed by the state government for the implementation of the policy. The committee prepared an action plan, key points of which includes Structuring of palliative care activities at various levels, Improving the spectrum of services, Improving the quality of programs and area of coverage. As per the Action Plan (G.O.(Rt)No.1592/2023/H&FWD Dated, Thiruvananthapuram, 03-07- 2023) 'Quality improvement programme in line with KAYAKALP was to be initiated for the palliative care units at different levels based on accepted standards' A state-specific initiative (PQAS) has been designed to enhance quality in Palliative Care Units, with a pilot phase planned for 2025–2026, involving training and internal assessments initially, followed by peer assessments from the second year. The initiative aligns with Sustainable Development Goals (SDGs) and focuses on ensuring universal access to quality care. Checklist was developed based on the patient safety standards on Patient Care Process, Clinical Risk Management, Safe Care Environment and Patient Safety Systems, in the NQAS framework. There are five Areas of Concerns in the Standards namely A) Patient Care B) Inputs C) Psychosocial Support and Community Participation D) Infection Control E) Quality Improvement. The checklist has been devised for different levels of care and had been piloted in Five Primary Units, Six Secondary CHCs, four major hospitals and four training centres during June -July 2024, and state level dissemination workshops conducted. Salient features of the program include

- Developed indigenously by Palliative care team of the state and Supported by Quality & Patient Safety Division
- Introduction of an Area of Concern for Psychosocial support
- Palliative Care Units are Assessed instead of institution. Primary & Secondary Units assessed separately. Institution which serves as the base from which services are given is considered for assessing Inputs
- Presently, assessment only for Government owned Palliative care units
- Emphasis on getting to know the unit's strengths and weaknesses and understand what the expected (best) practices/standards are

NQAS for Integrated Public Health Labs: State has a sound network of public health laboratories. The State Public Health Lab, situated in Thiruvananthapuram is the apex laboratory, with 2 regional labs in Ernakulam and Kozhikode and District level Public Health Labs in other districts. State level workshop for disseminating guidelines on NQAS accreditation of IPHLs have been completed in October 2024. The training, capacity building, and internal assessments of these labs are ongoing. It is expected that National Assessments of 3 IPHLs will be completed by 2026-27.

4

Quality Priorities for the State

Kerala continues to stand out nationally for its strong population health outcomes and near-universal service coverage. However, the State now faces a second-generation quality challenge, one that is less about access or utilization and more about effectiveness, continuity, safety, and financial protection. As other States gradually narrow the gap in basic mortality and longevity indicators, Kerala's future gains will hinge on improvements in the quality of care across the life course, particularly for maternal health, noncommunicable diseases (NCDs), and aging-related morbidity.

From Longevity to Healthy Life Expectancy

Kerala has achieved sustained improvements in life expectancy; however, gains in healthy life expectancy have not kept pace, indicating that individuals are living longer but spending more years with illness and disability. This epidemiological pattern reflects quality challenges in:

- Early detection and long-term management of NCDs
- Continuity of care across providers and levels
- Person-centered, integrated care models, especially for chronic conditions

As the rest of India improves on basic survival outcomes, Kerala's comparative advantage will depend on its ability to compress morbidity, not merely extend lifespan. This shift requires a reorientation of the health system toward effective, coordinated, and patient-centered chronic care, rather than episodic service delivery.

From Coverage to effective coverage

Kerala reports few self-reported access barriers, and service coverage indicators remain strong, as reflected in NFHS-5. There is also a strong stated preference for public-sector utilization, particularly for preventive and primary care services. Despite this, several quality-related gaps persist. As illustration:

- Effective coverage gaps remain among poorer and poorest quintiles, particularly for antenatal care (ANC), indicating inequities in the quality and completeness of care received.
- Early ANC engagement shows a concerning trend: the proportion of mothers receiving first-trimester check-ups declined from 95.1% (NFHS-4) to 93.6% (2019–20), suggesting early engagement and continuity challenges.

Maternal Health—Beyond Survival to Appropriateness and Safety

Kerala has achieved global benchmarks in maternal survival, with:

- The lowest Maternal Mortality Ratio in India (24 per 100,000 live births, SRS 2022-24)
- 100% institutional deliveries, surpassing SDG targets

However, quality challenges persist beneath these headline achievements:

- High-risk pregnancies remain a significant concern, requiring stronger referral systems, specialist availability, and standardized clinical protocols.
- The State records a very high caesarean-section rate, well above optimal levels. Kerala's own caesarean-section rate has continued to climb — from 38.9% (NFHS-5) to 41.3% (NFHS-6, 2023–24), with public facilities at 39.3% and private facilities at 42.5% — far above the national rate, which itself rose from 17.2% (NFHS-4) to 21.5% (NFHS-5) and 27.2% (NFHS-6). This raises concerns about appropriateness of care, clinical decision-making, and potential over-medicalization.

Thus, while maternal survival is assured, clinical quality, patient safety, and rational use of interventions have emerged as the new frontiers.

Fragmentation and Weak Care Continuity, with focus on addressing NCDs

Despite a strong public health legacy, service delivery in Kerala remains fragmented, with:

- Weak referral linkages across levels of care
- Limited coordination between public and private providers
- Insufficient integration across preventive, promotive, curative, and rehabilitative services

These gaps are particularly problematic for NCD management, where Kerala urgently needs a person-centric, integrated care approach covering screening, diagnosis, treatment adherence, and long-term monitoring. Without this, high service utilization does not translate into effective disease control or reduced morbidity.

Public–Private Mix and Quality Perceptions

While public sector utilization remains high, the private sector continues to expand rapidly, driven partly by perceptions of superior quality, convenience, or responsiveness. This dynamic presents both a challenge and an opportunity:

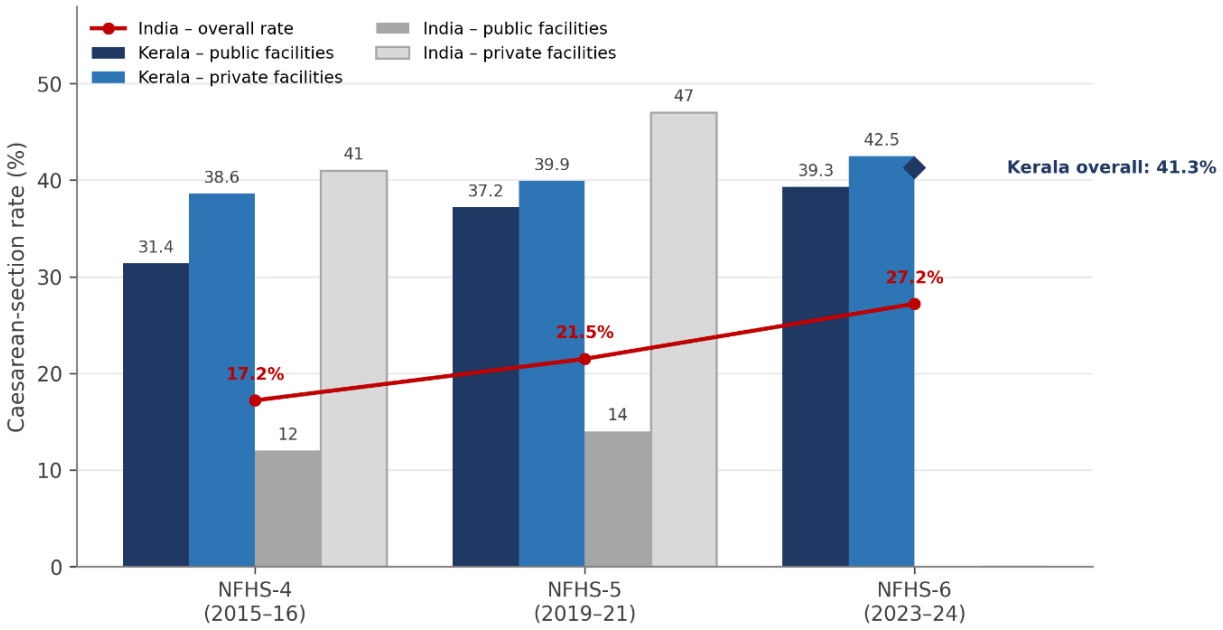
- Quality standards for diabetes, hypertension, and antimicrobial use cannot be achieved without meaningful private-sector engagement.
- Lack of unified standards and monitoring across sectors undermines consistency and safety of care.
- Integration across public and private provision is essential for optimal system performance, particularly in referral pathways, data sharing, and quality assurance.

Financial Protection as a Quality Issue

Kerala faces one of the most severe financial protection challenges in India: (source, NSS 80th rounds)

- 64 % paid as OOP expenditure (India: 43.4%)
- The public hospital (₹9,313) costs a fifth of the private one (₹47,490).
- 22.7% of Kerala's population faced financial hardship due to health spending.

Figure 5. Caesarean-Section (C-Section) Delivery Rate, Kerala vs. India, Public vs. Private (NFHS-4, NFHS-5, NFHS-6)



Source: NFHS-4 (2015–16), NFHS-5 (2019–21), NFHS-6 (2023–24) Kerala & India Fact Sheets.

- 17.4% incurred large out-of-pocket health expenditures but remained above the subsistence poverty line.
- 2.3% were pushed below the subsistence poverty line because of healthcare payments.

High out-of-pocket expenditure (OOPE), particularly in the private sector reflects both gaps in financial risk protection and quality deficits in public care, which drive patients toward costlier private options.

Climate-Resilient, One Health–Oriented Quality of Care

Kerala faces escalating public health threats driven by climate vulnerability, ecological change, and population mobility. Extreme weather events like floods, heatwaves, and changing rainfall patterns are intensifying outbreaks of waterborne, vector-borne, zoonotic, and heat-related illnesses, with disproportionate impacts on elderly populations, the urban poor, coastal communities, tribal groups, and migrant workers. Districts with high exposure to climate hazards and socio-economic vulnerability face compounded health risks, underscoring the need for geographically targeted quality responses.

While Kerala has demonstrated strong outbreak response capacity, these threats reveal persistent quality gaps in prevention, preparedness, coordination, and system resilience, rather than failures of access alone.

A proactive One Health (OH) approach, integrating human, animal, and environmental health—is critical to addressing these evolving risks. Despite Kerala's prior experience with zoonotic outbreaks, OH coordination remains largely reactive, characterized by:

- Insufficiently institutionalized intersectoral governance mechanisms
- Limited routine data sharing between health, animal husbandry, wildlife, and environmental agencies

- Weak operational coordination for surveillance, risk assessment, and joint response

These gaps compromise the timeliness, effectiveness, and safety of outbreak prevention and control—core dimensions of quality. Additionally, widespread and often inappropriate antibiotic use in humans and livestock has accelerated antimicrobial resistance (AMR), posing a systemic quality and patient safety challenge across both public and private sectors. Kerala has initiated important steps to strengthen it's One Health architecture, including:

- Establishment of a State Center for One Health
- Implementation of KARSAP for AMR surveillance and containment

However, the primary challenge lies in embedding quality principles: standardization, accountability, data integrity, and continuous improvement into One Health implementation.

Data Quality, Monitoring, and System Resilience

Kerala has strong monitoring and evaluation traditions, with e-health as the backbone yet:

- There is no structured, routine data quality audit process, limiting confidence in performance measurement and accountability.
- Quality improvement remains uneven and insufficiently institutionalized across both sectors.
- Emerging challenges, such as climate change impacts, infectious disease threats, and demographic aging require a more resilient and adaptive health system.

Strengthening data quality, real-time monitoring, and feedback loops will be critical to sustaining and improving care quality.

5

SWOT Analysis of Quality Accreditation Program

The quality accreditation programs in Kerala's government hospitals, including the National Quality Assurance Standards (NQAS), LaQshya, and Kayakalp, play a significant role in improving healthcare quality, ensuring patient safety, and fostering a culture of continuous improvement.

Below is a SWOT analysis of these accreditation programs.

Strengths:

Standardised Quality Benchmarks: Accreditation programs like NQAS, LaQshya, MUSQAN, KASH, MBFHI and other quality initiatives like Kayakalp provide clear and comprehensive standards for healthcare facilities. These guidelines help standardise care delivery across government hospitals in Kerala, ensuring that healthcare services meet national benchmarks for quality and safety.

Improved Patient Safety and Care: By adhering to accreditation standards, hospitals are compelled to implement patient safety protocols, improve infection control practices, enhance clinical governance, and ensure patient-centred care. This improves the overall safety and experience for patients.

Capacity Building and Staff Motivation: Accreditation programs drive the need for training, skill development, and staff involvement in quality improvement. Healthcare workers in accredited hospitals benefit from continuous learning, which enhances their competence and morale.

Increased Trust and Public Confidence: Accreditation, particularly when hospitals achieve recognition like NQAS, enhances the credibility of government hospitals, building trust among patients and the public. This leads to higher patient satisfaction and confidence in the public healthcare system.

Government Support and Funding: Kerala's health department and LSGIS has shown strong political will in promoting quality assurance programs, providing both financial and technical support for hospitals pursuing accreditation. This backing ensures that hospitals can address infrastructural gaps and resource needs to meet accreditation criteria.

Weaknesses:

Sub centre level accreditation lagging: Despite the successful implementation of accreditation programs, a relatively small proportion of government hospitals in Kerala are accredited. Out of the total health facilities in the state, almost 80% are Subcentres (JAKs/AAMSCs). Our total percentage of certified facilities can be increased only if these facilities are certified. Currently the state has only 102 nationally certified AAM SC and 138 state certified centers and clearly lagging in the target percentage. Most conditionalities are due to difference in service utilization in our subcentres especially for expanded packages like Emergency medical care, Mental Health, etc, and drugs and diagnostics not met as per IPHS. Conditionally certified Subcentres are not eligible to get any incentives.

Resource Constraints: Achieving and maintaining accreditation requires significant investments in infrastructure, equipment, and human resources. Many CHC & Taluk level hospitals, particularly in rural areas, struggle with inadequate infrastructure logistics and funding, and limited access to specialised doctors, which hinders their ability to meet accreditation standards.

Inconsistent Implementation Across Facilities: While some hospitals, especially at the Primary Health Centre level are making significant strides in quality improvement, others, particularly District and Taluk hospitals face challenges in meeting the accreditation requirements due to staffing shortages, lack of training, or limited infrastructure, Human resources, financial and administrative support.

Complexity of Accreditation Standards: The process of obtaining accreditation can be daunting and resource intensive. The standards are sometimes perceived as too complex and difficult to implement, especially for smaller, less equipped hospitals. This can lead to reluctance in pursuing accreditation, particularly in facilities that are already burdened with high patient volumes and limited resources.

Opportunities:

Expansion of Accreditation Reach: There is a significant opportunity to increase the number of accredited hospitals across Kerala. With continued government support and targeted interventions, more hospitals, particularly at the primary and secondary levels, can be brought under the umbrella of quality accreditation.

Integration of Digital Health and Technology: Accreditation programs can be integrated with digital health initiatives to enhance monitoring, data collection, and reporting. This could improve real-time quality assessment, streamline the accreditation process, and reduce manual errors, further enhancing the effectiveness of the programs.

Public-Private Partnerships (PPPs): There is an opportunity to collaborate with the private sector to improve the infrastructure and resources available to government hospitals, making it easier for them to achieve and maintain accreditation. Public- private partnerships can help bridge the gap in expertise, technology, and funding.

Training and Capacity Building Programs: There is an opportunity to expand and enhance training programs for healthcare providers, focusing on quality management, clinical governance, and patient safety. Involving local academic institutions and professional bodies in these programs could increase the quality of healthcare delivery across the state.

Community Engagement and Patient Feedback: Accreditation programs present an opportunity to engage communities in healthcare quality. By establishing robust mechanisms for patient feedback and grievance redressal, hospitals can improve transparency, accountability, and patient satisfaction. Engaged communities are more likely to

support quality improvement efforts, contributing to a better patient experience.

Threats:

Resistance to Change: One of the primary threats to the success of quality accreditation programs is resistance to change from healthcare providers and hospital management. Staff may feel overwhelmed by the new processes and demands that come with accreditation, and there could be reluctance to embrace new policies, especially if they are seen as additional burdens rather than improvements.

Sustainability Challenges: Maintaining accreditation over time requires continuous effort and investment. With limited budgets, especially in rural or under-resourced hospitals, sustaining the quality standards required for accreditation can be challenging. Hospitals may struggle to maintain consistent quality if resources are reallocated elsewhere or if there is insufficient political will to ensure long-term investment.

Overemphasis on Accreditation at the cost of Practical Improvements: There is a risk that some hospitals may focus primarily on meeting the accreditation criteria rather than improving overall patient care and service delivery. This "checklist mentality" could lead to a situation where the process of achieving accreditation becomes more important than actually improving the quality of care.

Rural-Urban Divide: While urban and larger district hospitals have better infrastructure and access to resources, secondary facilities at rural and remote areas may face more significant barriers to achieving accreditation. These hospitals may struggle with limited access to trained staff, technology, and funding, exacerbating health disparities between urban and rural populations.

External Factors: External threats such as the economic climate, changes in government priorities, or public health emergencies like pandemics (e.g., COVID-19), frequently occurring natural calamities etc can divert attention and resources away from quality accreditation efforts. Hospitals may find it difficult to focus on quality improvement during times of crisis, leading to delays or setbacks in meeting accreditation goals.

Kerala's quality accreditation programs for government hospitals offer significant strengths, including the potential to standardise care, improve patient safety, and enhance public trust. However, there are key weaknesses and challenges, including limited coverage, resource constraints, and complex implementation processes. The state's healthcare system has ample opportunities to expand accreditation coverage, integrate digital tools, and engage communities, but it must address threats such as resistance to change and sustainability concerns. Addressing these issues will be crucial to ensuring that the accreditation programs fulfil their potential in improving healthcare quality across the state.

While Kerala's accreditation program has strengthened infrastructure standards, clinical protocols, and organizational readiness, its long-term impact on quality of care will depend on moving beyond compliance-driven certification toward continuous quality improvement (CQI) embedded in everyday practice. International evidence consistently shows that physician leadership and frontline staff engagement are stronger predictors of accreditation success than structural investments alone. In this context, Kerala will aim to systematically link accreditation to mandatory, facility-owned CQI action plans, with periodic follow-up reviews that reinforce learning, accountability, and course correction. Sustained engagement of health care workers and managers through participatory problem-solving, feedback loops, and supportive supervision is recognized as a critical success factor, rather than a secondary enabler. Repositioning accreditation as a dynamic process that empowers teams to identify, own, and address quality gaps will be essential to translating standards into measurable improvements in patient outcomes, safety, and experience.

6

Alignment with National and State Health Priorities

At the national level, the strategy draws from the principles of equity, efficiency, universality, and people-centred care as envisioned in the NHP 2017. Specifically, it echoes the commitment to improve quality across all levels of healthcare by institutionalizing standard treatment protocols, accreditation systems, and regular assessments of service delivery outcomes. It also integrates key components of the National Quality Assurance Standards (NQAS), particularly in strengthening primary and secondary care facilities through supportive supervision, self-assessment, and community engagement. This harmonization ensures that the state's efforts are not isolated but part of a unified national movement toward universal health coverage (UHC) and improved health outcomes.

At the state level, the Kerala Quality of Care (QoC) Strategy aligns closely with both ongoing health system reforms and the Government's broader health priorities. The strategy complements initiatives such as Hridayaragam, which seeks to strengthen prevention, early detection, long-term follow-up, and integrated management of NCDs, by embedding quality standards and continuity of care across the patient journey. By emphasizing coordinated, person-centred care, the QoC Strategy supports Kerala's transition from episodic service delivery towards longitudinal management of chronic conditions, a critical requirement in a state facing a growing burden of NCDs and population ageing.

The strategy also reinforces the objectives of the Health Department's Kayakalpam public outreach initiative, which aims to enhance public trust and responsiveness of government health facilities through improvements in patient experience, facility environment, staff behaviour, and community engagement. Quality of care extends these efforts beyond infrastructure and service availability to focus on safety, effectiveness, equity, timeliness, and patient-centredness, thereby strengthening citizens' confidence in public health services.

In addition, the QoC Strategy builds upon Kerala's ongoing investments in Comprehensive Primary Health Care (CPHC) through Family Health Centres and integrated primary care reforms. Together, these initiatives reflect Kerala's commitment to building a more resilient, inclusive, and responsive healthcare system that meets the needs of all its citizens

The strategy also closely with the program objec-

tive of KHSIP i.e. 'to improve access to and quality of an enhanced range of health services and health system resilience in the state of Kerala'. As per KHSIP, the enhanced range of services includes integrated care pathways for NCDs such as hypertension, diabetes and cancers, comprehensive home-based care for elderly, a multilevel trauma and emergency care system and multisectoral approaches for promoting OH and addressing climate challenges.

By promoting data-driven quality improvement processes, capacity-building of health staff, and patient feedback systems, the QoC Strategy complements Kerala's broader objective of building a responsive and accountable health system. It also contributes to the state's long-standing commitment to equity in healthcare, by aiming to reduce disparities in service delivery, particularly in underserved and tribal areas. The State will try to ensure that 'Quality indicators' will be systematically disaggregated by district, rural–urban location, and population vulnerability to make equity gaps visible and measurable. These data will be actively used to prioritize targeted technical support and financing, ensuring that quality improvement efforts and resources are directed to geographies and groups with the greatest unmet needs.

Through this dual alignment, the Kerala QoC Strategy serves as a bridge between national directives and state priorities, ensuring that quality improvement is not only a policy mandate but a practical and measurable component of daily health service delivery across the state.

7

Stakeholder Mapping and Engagement

This chapter outlines the range and roles of stakeholders that may be important and map their influence.

Key stakeholders from across the health systems:

Kerala's government health system is shaped by a diverse set of stakeholders, each playing a vital role in shaping policies, delivering healthcare, and ensuring accountability. In Kerala, several key agencies and departments contribute to the state's health service delivery, each with specific roles and responsibilities. These stakeholders collaborate closely to ensure the effective delivery of health services across the state, addressing both public health needs and the quality of care in healthcare institutions. At the forefront is the State Government, which provides policy direction, funding, and overall governance. The Health Department under the Kerala State Government is responsible for implementing health programs, managing public health facilities, and setting the standards for healthcare delivery across the state. The Directorate of Health Services (DHS) is the primary agency responsible for public health service delivery in Kerala. It oversees the functioning of district hospitals, taluk hospitals , speciality hospitals, community health centres (CHCs), primary health centres (PHCs), and other healthcare institutions like sub-centres at the grassroots level. The DHS plays a crucial role in implementing health policies, public health programs, disease prevention, maternal and child health services, vaccination programs, and emergency preparedness. It also manages the state's public health surveillance systems, promoting health education and awareness campaigns, and ensuring health service delivery in both urban and rural areas.

The Directorate of Medical Education (DME) is responsible for medical education, research, and the management of medical colleges and teaching hospitals in Kerala. DME oversees the administration of state medical colleges, nursing schools, dental colleges, and allied health education institutions, ensuring that health professionals are trained to meet the growing healthcare demands of the state. It is also responsible for clinical research and upgrading the clinical standards at tertiary care hospitals. Through its teaching hospitals, the DME plays a pivotal role in providing specialised healthcare services to the public, often acting as referral

centres for complex cases. The DME's role is critical in enhancing the quality of healthcare by ensuring that healthcare professionals are equipped with the latest knowledge and skills.

National Health Mission (NHM)

The National Health Mission (NHM), which operates under the Ministry of Health and Family Welfare, is a key player in strengthening health systems in Kerala. The mission focuses on improving the health and nutritional status of rural populations, reducing maternal and infant mortality, and enhancing the overall healthcare infrastructure. NHM Kerala works across all levels of health service delivery, from community health workers in rural areas (ASHA workers) to district hospitals and PHCs. The mission supports the integration of services related to maternal and child health, immunization, family planning, and non-communicable diseases (NCDs). The NHM also funds health initiatives related to the development of health infrastructure, providing financial support for the upgrading of health centres, enhancing health outcomes in underserved areas and ensuring quality of care.

Kerala Medical Services Corporation (KMSCL)

The Kerala Medical Services Corporation Ltd. (KMSCL) plays a key role in the procurement, distribution, and supply of essential medicines, medical devices, and equipment for the public healthcare system in Kerala. It ensures that healthcare facilities across the state have the necessary supplies and equipment to deliver effective services. KMSCL also works to standardise the procurement process, ensuring that hospitals and clinics receive high-quality products at competitive prices. Additionally, KMSCL helps in ensuring the availability of essential medicines in remote areas, thus facilitating continuous and uninterrupted care in government hospitals. The organisation is integral to the state's efforts to reduce the out-of-pocket expenses of patients, especially by making medicines available at lower costs.

eHealth Kerala

eHealth Kerala is responsible for the digitization and integration of healthcare services across the state. Its role involves creating an e-health ecosystem that includes electronic health records (EHR), telemedicine, and healthcare data management. The goal of eHealth Kerala is to streamline health services, enhance service delivery efficiency, and ensure that both healthcare providers and patients have access to real- time health data. The department works to create an integrated healthcare network where patient information can be easily shared across hospitals and clinics, allowing for better coordination of care, reduced duplication of services, and improved patient outcomes. The use of digital tools in healthcare is also critical for monitoring and evaluating health programs, providing teleconsultations, and improving the accessibility of services, especially in rural and remote areas.

State Health Agency

The State Health Agency (SHA) in Kerala plays a pivotal role in coordinating and managing public health services, particularly in relation to health financing, insurance schemes, and the implementation of state health policies. As a key stakeholder, SHA is responsible for overseeing the administration of various health insurance programs, including Karunya Arogya Scheme and Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PM-JAY), which provide financial protection to vulnerable populations. The agency works to ensure that citizens have access to essential health services, reducing out-of-pocket expenditures and improving healthcare equity. SHA also collaborates with the National Health Authority (NHA) to align national health insurance initiatives with state-level needs, contributing to the overall strengthening of

the healthcare financing system. In addition to insurance management, SHA plays a key role in improving health service delivery, ensuring that public health programs are effectively implemented across the state, and helping to monitor and evaluate the outcomes of various health interventions. Its work directly supports the goal of enhancing accessibility, affordability, and quality in Kerala's healthcare system.

Local Self Governments

In Kerala, Local Self-Governments (LSGs) play a critical role in the healthcare delivery system, serving as the primary administrative units responsible for managing healthcare services at the grassroots level. Kerala has a unique model of decentralisation that empowers local bodies—Panchayats (village, block, and district levels), Municipalities, and Corporations—to directly oversee public health programs, resource allocation, and local health infrastructure. The Local Self-Governments act as a bridge between the state government and communities, ensuring that health services are delivered efficiently and equitably, particularly in rural and underserved areas.

Note: Once KHSIP Technical Supporting Unit or Vertical gets established, they will also play a key role in driving the strategy.

Key Roles of Local Self-Governments in Quality Healthcare Delivery

Primary Healthcare Services: Local Self-Governments are deeply involved in the management of primary healthcare services. They oversee the functioning of Primary Health Centres (PHCs) and Community Health Centres (CHCs), which are critical points of access for basic health services such as immunization, maternal and child health care, disease prevention, and health education. At the grassroots level, LSGs are responsible for staffing, infrastructure maintenance, and day-to-day operations of these facilities.

Implementation of National and State Health Programs: LSGs are essential in the implementation of various national and state health initiatives, such as National Health Mission (NHM) programs, immunization campaigns, sanitation drives, vector control, and maternal and child health programs. They are often the first responders in mobilising communities for health programs, organising outreach initiatives, and ensuring that government health schemes reach the most marginalised populations.

Public Health Monitoring and Surveillance: Local bodies also play an active role in health surveillance and disease reporting. They are the first line of defence against communicable diseases, monitoring health trends in their respective regions, identifying outbreaks, and coordinating with higher levels of government for timely interventions. In Kerala, LSGs help collect data on disease incidence, immunization coverage, and other vital health statistics, feeding this information into state and national systems for better health policy planning.

Health Financing and Resource Allocation: Local Self-Governments manage funds allocated for healthcare at the local level. Through decentralised budgets, LSGs ensure the timely release of resources for healthcare programs, medicines, equipment, and infrastructure development. They also mobilise local resources, ensuring that health programs are sustainable and tailored to the specific needs of the community. Additionally, local bodies often provide subsidies and funding for health insurance schemes, helping marginalised communities access healthcare services.

Health Education and Promotion: LSGs play a crucial role in health education and community awareness campaigns. Local bodies conduct pub-

lic health awareness programs on sanitation, hygiene, nutrition, prevention of diseases (such as tuberculosis, malaria, and COVID-19), and lifestyle diseases like diabetes and hypertension. These initiatives are critical in Kerala, where health literacy and public participation in healthcare are high. Local health workers and community organisations often collaborate with LSGs to run these programs, ensuring that communities understand preventive health measures and are actively involved in improving their own health.

Collaboration with NGOs and Civil Society Organizations: Local Self-Governments work closely with non-governmental organisations (NGOs) and civil society organisations (CSOs) to enhance healthcare delivery. These partnerships enable LSGs to expand the reach of health services, particularly in rural or disadvantaged areas. NGOs often support LSGs in conducting outreach programs, health camps, providing palliative care, and addressing specific health challenges in the community, such as mental health or maternal health.

Monitoring and Evaluation of Healthcare Services: LSGs are also involved in monitoring and evaluating the effectiveness of healthcare services at the local level. They assess the quality of healthcare facilities, track the performance of health workers, and ensure that healthcare standards are being met in the facilities under their jurisdiction. They also work with health department officials to resolve issues related to accessibility, quality of care, and service delivery, ensuring that the population receives the best possible healthcare services.

Promotion of Traditional Medicine and Wellness: Local Self-Governments in Kerala also promote traditional medicine practices, such as Ayurveda and Yoga, which are integral to the state's health culture. Panchayats and municipalities support the establishment of Ayurvedic health centres, wellness clinics, and traditional healing practices. Local bodies collaborate with the AYUSH Department (Ayurveda, Yoga, Unani, Siddha, and Homeopathy) to integrate these systems into the broader health care framework, thus ensuring holistic health approaches are available to the public.

Engagement in Quality and Accreditation Efforts: Local Self-Governments are instrumental in promoting and supporting the quality accreditation efforts of public healthcare institutions. They work alongside state and national agencies in the implementation of accreditation programs such as National Quality Assurance Standards (NQAS), Kayakalp, and LaQshya for hospitals and primary care centres. By engaging with health staff, providing resources for infrastructure improvement, and facilitating community feedback, LSGs help ensure that local healthcare facilities meet national standards for quality, hygiene, and patient safety. Their role in ensuring patient-centred care and quality improvement at the grassroots level is crucial for the broader success of quality initiatives.

Local Self-Governments in Kerala play an indispensable role in the state's healthcare system by ensuring that services are delivered effectively, efficiently, and equitably at the local level. Their responsibilities span healthcare administration, public health initiatives, resource allocation, health education, and quality improvement. The decentralisation of healthcare governance in Kerala has empowered local bodies to take ownership of health services, making the system more responsive and accessible to the needs of the population. Their collaboration with the state and central governments, healthcare providers, and civil society organisations enhances the reach and effectiveness of healthcare delivery, ensuring that health outcomes are optimised across the state.

AYUSH Department

The AYUSH Department (Ayurveda, Yoga, Unani, Siddha, and Homeopathy) in Kerala is an impor-

tant stakeholder in the state's healthcare system, providing an alternative and complementary approach to conventional medicine. Kerala has a rich tradition of Ayurvedic medicine, and the AYUSH department plays a pivotal role in promoting and regulating Ayurvedic and other traditional healing practices. It supports the integration of traditional medicine with modern healthcare systems, ensuring that alternative treatments are safe, effective, and accessible to the public. The AYUSH department also plays a critical role in educating healthcare practitioners, managing Ayurvedic hospitals and clinics, and facilitating research in traditional medicine. With rising interest in wellness and alternative medicine, the department contributes to offering holistic healthcare options that complement mainstream treatments, particularly in preventive care and managing chronic conditions

Together, these stakeholders form a collaborative and multi-faceted healthcare ecosystem in Kerala. Their collective efforts contribute to the delivery of healthcare services, quality assurance, medical education, healthcare financing, and access to innovative health technologies. Each organisation plays a unique role, from ensuring infrastructure, supplies, and medicine availability (KMSCL), promoting alternative and traditional medicine (AYUSH), regulating and accrediting clinical establishments (Clinical Establishment), to advancing health education and research (Directorate of Medical Education). Coordinating these entities effectively is key to achieving the state's vision for an equitable, accessible, and high-quality healthcare system.

Secondary Stakeholders:

Patients and Communities: Community health workers, general population, vulnerable groups (women, children, elderly, marginalised communities).

Civil society organisations like Hospital Management Committees (Rogi Kalyan Samithi), Ward Health and Sanitation Committees and Mahila Arogya Samitis (MAS), along with patient groups, help to ensure community engagement, feedback, and social accountability in healthcare delivery. Non-governmental organisations (NGOs), Health Care Professional organisations and community-based organisations (CBOs) often provide supplementary healthcare services, outreach programs, and advocacy for marginalised communities, enhancing access to services, especially in rural areas.

Stakeholders' role and their influence on strategy development.

Each of these stakeholders plays a critical role in the development and implementation of a quality healthcare strategy for the state. The State Government has the authority to set the agenda, allocate resources, and define priorities. As the primary funder and policymaker, its influence on strategy development is profound. Regulators and evaluators provide the framework for quality assurance, setting the benchmarks that hospitals must meet to ensure quality care. Their role in monitoring and evaluation is crucial for ensuring that healthcare facilities are adhering to national standards. Insurance authorities, through their financial mechanisms, influence the accessibility and affordability of healthcare services, shaping both policy and operational strategies, particularly regarding health financing and reimbursement. Healthcare providers across all levels are responsible for delivering care and implementing the policies set forth by the government, and their role in adopting quality improvement measures is essential. Civil society organisations, patient groups, and NGOs bring the voice of the community to the table, advocating for the rights of patients, providing feedback on

healthcare quality, and helping with the mobilisation of resources. Their active involvement ensures that the strategy is people-centred and responsive to the needs of the population. Engaging these stakeholders in a coordinated manner will be key to the successful development and implementation of a quality care strategy. To ensure active engagement, it is essential to build strong communication channels, foster collaboration, and create forums for regular dialogue, ensuring that all stakeholders contribute their expertise, resources, and perspectives to shape the future of Kerala's healthcare system.

Plan for active engagement of stakeholders

Government Bodies (State, District, Local Self-Governments)

Conceptualization and Drafting: The conceptualization and drafting of the strategy through stakeholder engagement will be the key task of Kerala Health Department; with NHM taking up the leading role in drafting along with KHSIP team.

Consultative Committees: Form state and district-level advisory committees with representatives from health departments, LSGs, and civil society organisations to guide implementation and decision-making.

Regular Updates: Monthly or quarterly meetings for progress reviews and sharing updates on quality improvement initiatives, outcomes, and challenges.

Training and Capacity Building: Organise workshops and capacity-building programs for government officials, healthcare administrators, and local self-government representatives to ensure alignment with the Quality of Care Strategy.

Healthcare Providers (Hospitals, Clinics, Medical Staff)

Implementation of activities : The HCPs will play the key role in provision of quality service delivery and will undertake the implementation of key activities under the strategy.

Incentive and Recognition Programs: Develop performance-based incentives for facilities that meet quality standards (NQAS, Kayakalp, LaQshya). Recognize best- performing hospitals and healthcare workers through state and district awards.

Continuous Professional Development: Organise regular training sessions and workshops for healthcare professionals on quality standards, patient safety, clinical guidelines, and best practices in healthcare delivery.

Feedback Mechanisms: Establish regular feedback channels (surveys, focus group discussions) for healthcare providers to share their concerns, ideas for improvement, and experiences with the quality strategy.

Regulators, External Evaluators and knowledge partners:

External assessors: Assessments of health institutions by external assessors and attaining more accreditations in NQAS, NABH etc. The State will also undertake a more rigorous self-assessment process. The state will set up a collaborative framework between regulatory bodies, the health department, and healthcare facilities to ensure compliance with quality standards and facilitate smooth accreditation processes.

Shared Knowledge Platforms: Create forums (webinars, conferences, seminars) for stakeholders and knowledge partners to discuss regulatory changes, quality assessment techniques, and evolving global frameworks and national guidelines.

Civil Society Organizations (CSOs), NGOs, and Community Groups Community Health Committees: Establish local-level community health committees to involve patients, caregivers, and local health workers in quality initiatives and decision- making. There will be systematic efforts to ensure that patient feedback will be taken into account to co-design service delivery channels at local level. These committees should represent marginalised and vulnerable communities.

Public Awareness Campaigns: Engage CSOs in raising awareness about quality care standards, patient rights, and available health services through media, social platforms, and community outreach programs.

Feedback and Advocacy: Enable CSOs to act as advocates for patient rights and quality care, ensuring that community feedback is incorporated into the strategy's implementation.

Insurance Authorities and Professional Associations

Integrated Policy Design: Work with health insurers and professional bodies to design healthcare insurance schemes that incentivize quality care, such as linking reimbursement to NQAS or accreditation status.

Collaborative Research and Data Sharing: Establish collaborative research programs to study the impact of quality of care improvements on health outcomes, healthcare costs, and patient satisfaction.

Engagement Channels and Tools

Yearly/Quarterly/Monthly Stakeholder Meetings: Regular inter-departmental and multi-stakeholder meetings at the state, district, and local levels to ensure ongoing dialogue, identify barriers, and troubleshoot challenges.

Surveys and Polls: Implement digital and offline surveys targeting healthcare workers, patients, and communities to gauge satisfaction levels, service quality, and gather suggestions for improvement.

Joint Task Forces: Form task forces that include representatives from multiple stakeholder groups, focusing on specific quality improvement areas like patient safety, clinical governance, or facility infrastructure.

8

Setting the Priorities for Quality of Care and Activities

The priority activities under the strategy are closely aligned with the state's broader vision of achieving quality across both clinical and non-clinical parameters. This chapter builds on the earlier chapter on 'Quality priorities of the state' setting interventions to address those priorities. These set of interventions are harmonized with State's own vision for Quality, and the result areas defined under KHSIP and EHSDP, ensuring coherence and synergy across all levels of planning and implementation.

Kerala's Quality of Care Strategy is anchored in a systems-based approach that integrates accreditation, continuous quality improvement, disease-specific quality enhancement, One Health, and digital enablers. The strategic direction moves deliberately from **compliance-based quality assurance** towards a **learning health system**, where quality improvement is continuous, data-driven, people-centred, and resilient.

The strategy recognizes that while accreditation provides a strong foundation, sustained quality outcomes require institutional capacity, leadership, accountability mechanisms, and real-time feedback loops. The five priority areas therefore function as mutually reinforcing pillars, collectively advancing safe, effective, equitable, and people-centred care across all levels of the health system.

Priority activities are listed below:

Accelerating Quality accreditation certification processes in public health facilities

The Government of India mandates 100% NQAS accreditation of public health facilities by December 2026, with an intermediate target of 50% accreditation by March 2026. Kerala won't be able to achieve this status in the stipulated time period; but will aim to achieve the target, with a slightly extended timeframe. Kerala will prioritize facilities with strong infrastructure and adequate human resources. Financial support will be leveraged from NHM, Finance Commission grants, and LSGI funding. Timely and priority action will be set to fill staff vacancies with support from DHS, NHM, and LSGIs. Additionally, capacity building will focus on expanding the pool of internal assessors and resource persons through NHSRC, State, and District Quality Assurance Units.

Acceleration Measures

- Prioritize Sub-Centre accreditation with a focus not just on increasing numbers, but on strengthening quality of care at the grassroots level, ensuring sub-centres effectively serve as the first point of contact in the healthcare delivery system.
- To adopt a phased, target-driven approach by selecting at least 3 sub-centres per block with minimum prescribed infrastructure and HR to achieve 40% accreditation by March 2027.
- Strengthen governance and monitoring through constitution of block-level nodal teams and mandatory field visits, supported by regular district-level reviews and joint assessments by program/quality officers.
- Build capacity systematically via district-led trainings, weekly online sessions based on NQAS checklists, and provision of digital certificates for trained staff.
- Ensure convergence and accountability by sensitizing all program officers, standardizing NQAS checklist usage, and channelizing field visits of technical and program teams to targeted sub-centres for progress tracking.
- Rapid assessments in 22 District Hospitals reveal scores between 40–60%, highlighting urgent quality gaps. To address this, a structured quarterly plan will be proposed per district: 1 District Hospital, 2 Taluk Hospitals, 4 CHCs, 7 PHCs, and 2 Sub Centres per PHC/CHC will be selected for accreditation per quarter.
- District and block-level core committees will be established for monitoring and mentorship, supported by trained internal assessors. All facilities will form Quality Circles and conduct weekly meetings.
- Ensure phased NQAS accreditation of all IPHLs by 2030, with dedicated nodal officers (one per lab) and ongoing capacity-building trainings; target 50% accreditation of IPHLs by 2027–28, with full coverage by 2030.
- PQAS standards for palliative care units will be implemented in a phased manner in the state.

Strategic Direction: Achieve universal accreditation while ensuring that certification translates into real improvements in service delivery, patient safety, and user trust.

Short-Term Goals (2026–2028)

- Achieve 50% NQAS accreditation by March 2027
- Prioritize Sub-Centres, PHCs, CHCs, and District Hospitals using a structured district-wise rollout.
- Improve average accreditation scores of District Hospitals from **40–60% to > 60%**.
- Achieve 50% accreditation of IPHLs by 2027–28
- Establish functional quality circles and district/block quality core committees in all districts.

Long-Term Goals (2029–2032)

- Sustain accreditation status across all IPHLs with consistent improvement in scores.
- Achieve 100% accreditation of IPHLs by 2032.
- Institutionalize PQAS standards for palliative care units statewide.

2. Institutionalizing continuous quality improvement measures for post accreditation sustainability

Achieving accreditation is an important milestone, but the real value lies in sustaining and continuously improving quality beyond certification. Post-accreditation sustainability requires systems, cul-

ture, and leadership that ensure standards are not only maintained but progressively enhanced. Quality and patient safety standards should be embedded into everyday clinical and administrative workflows rather than treated as periodic compliance exercises.

Acceleration measures

- Roll out a **State-wide Star Rating Framework for Primary and Secondary Care Hospitals**, with a comprehensive performance measurement system covering service readiness, clinical outcomes, patient experience, cleanliness and infection prevention, digital health adoption, and Local Self-Government (LSG) engagement.
- **Continuous Monitoring and Use of Data with KPIs at all levels:** Facilities will track a core set of quality indicators on a routine basis (KPIs). Regular review meetings at unit, facility, and district/ State levels help identify trends, detect early warning signals, and enable timely corrective actions. Data should be actively used for decision-making, not just reporting.
- **Graded accountability mechanisms:** Explicit, graded accountability mechanisms will be institutionalized across all levels of the health system in Kerala, linking performance monitoring with supportive action and continuous learning. This approach will reinforce a culture of improvement rather than punitive control. Key elements may include:
  - **Supportive supervision for low-performing facilities and teams**, led by district and block-level leadership, with a focus on identifying systemic gaps, strengthening capacities, and ensuring access to necessary resources.
  - **Structured and time-bound mentoring for repeated underperformance**, including peer learning, on-site handholding, and engagement of clinical and managerial mentors to address persistent quality gaps.
  - **Differentiated recognition and operational flexibility for sustained high performers**, such as public acknowledgement though NHM website, press releases, opportunities for innovation, and greater autonomy in local decision-making to encourage excellence and ownership.
  - **Incentivize high-performing district teams** (and facilities) by prioritizing them for advanced trainings, field exposure visits, and workshops, while recognizing best performers to drive motivation and continuous improvement.
- **Strengthening Internal Quality Assurance Mechanisms through Periodic surveillance:** Internal audits, peer reviews, periodic surveillance and departmental assessments will be conducted periodically. These processes help maintain readiness for external assessments and foster a culture of self-improvement rather than external enforcement.
- **Capacity Building and Staff Engagement:** Ongoing training, mentoring, and supportive supervision are essential to sustain competencies. Staff at all levels should be engaged in quality improvement initiatives, with clear roles and accountability mechanisms. Recognizing high performers and supporting those who need improvement is key.
- **Patient-Centred Approach:** Sustained quality depends on continuously listening to patients and caregivers. Feedback mechanisms, grievance redressal systems, and patient satisfaction surveys will be conducted to inform service improvements, ensuring care remains respectful, equitable, and responsive.
- **Building a Culture of Continuous Improvement:** Moving beyond compliance to a "learning health system" approach is crucial. Facil-

ities will be encouraged for local innovation, team-based problem solving, and sharing of best practices across departments and districts. The State will also create avenues to showcase best practices through workshops/webinars.

- **Periodic External Review and Re-Accreditation Preparedness:** Regular mock drills and surprise and surveillance assessments will be conducted to ensure continuous readiness for re-accreditation and reinforce adherence to standards.

In essence, post-accreditation sustainability is about shifting from a one-time achievement to an ongoing commitment—where quality improvement becomes part of the organizational DNA, ensuring safe, effective, equitable, and people-centred care over time. Importantly, these mechanisms will be embedded within a transparent data-use culture, where routine performance reviews at facility and district levels drive timely action, promote accountability, and support Kerala's transition towards a learning health system that is equitable, resilient, and people-centred.

Strategic Direction: Embed quality improvement into routine governance, clinical care, and management processes so that accreditation becomes a baseline rather than an end goal.

Short-Term Goals (2025–2027)

- Pilot and operationalize the Star Rating Framework in one district, including development of indicators, baseline assessments, performance reviews, and public reporting mechanisms to test feasibility and drive quality improvement.
- Establish a **core quality indicator dashboard** at facility, district, and state levels.
- Institutionalize internal audits, peer reviews, and mock assessments across all accredited facilities.
- Introduce graded accountability mechanisms linked to performance review and supportive supervision.
- Strengthen patient feedback and grievance redressal systems in all facilities.

Long-Term Goals (2028–2032)

- Scale up the Star Rating Framework across all districts, institutionalizing periodic performance assessment, benchmarking, and quality-linked improvement plans to strengthen accountability.
- Transition facilities towards a **learning health system model**, emphasizing innovation and shared learning.
- Create differentiated incentive and autonomy structures for sustained high performers.
- Institutionalize re-accreditation preparedness as part of routine operations.

3. Improved quality of care in priority non-communicable diseases (NCDs)

This priority aligns with Result Area 1 (RA1) of KHSIP and addresses Kerala's growing NCD burden. Kerala has an existing NCD prevention and control program under the National Rural Health Mission. The measures listed below are more from quality focus to strengthen the program further. The focus is on processes and outcomes rather than inputs.

Acceleration Measures

- **Community-Level Interventions**: Establish peer support groups in all Janakeeya Arogya Kendrams (JAKs) for sustained lifestyle changes, focusing on hypertension and diabetes.

- **School Health interventions:** Integrate NCD prevention into school curricula, deploy e-health modules, and create supportive environments for healthy behaviours.
- **Institutionalization of 360-Degree NCD Clinics:** The 360 degree NCD clinics which provide quality and comprehensive NCD services under one roof to be expanded to all General and District Hospitals of state in five years of KHSIP period.
- Designate **model training hubs** in each district for hands-on NCD management training and guideline standardization.
- **Private Sector Engagement:** Accredit selected private hospitals and clinics, ensuring adherence to standardized protocols.
- **Digital Integration:** Link Shaili App with eHealth and deploy a digital NCD registry. The expected outcomes include:
  - Significant reduction in hypertension and diabetes burden through early detection and sustained management.
  - Improved treatment compliance and outcomes among vulnerable groups (elderly, BPL households).
  - Universal implementation of 360-Degree NCD Clinics in district and taluk hospitals.
  - Enhanced capacity of healthcare providers via district-level training hubs.
- Private sector participation improving NCD care standards.
  - Deployment of a digital NCD registry ensuring better medication availability and follow-up for streamlined disease management.

Strategic Direction: Shift the NCD program from an input-driven approach to a **quality- and outcome-oriented model** that emphasizes continuity of care, patient engagement, and standardized clinical pathways.

Short-Term Goals (2026–2028)

- Establish **peer support groups** for hypertension and diabetes in all Janakeeya Arogya Kendrams.
- Integrate quality-focused NCD prevention modules into School Health programs.
- Expand **360-Degree NCD Clinics** in District and General Hospitals.
- Designate district-level training hubs for standardized NCD care.

Long-Term Goals (2029–2032)

- Universalize 360-Degree NCD Clinics across all District and Taluk Hospitals.
- Integrate accredited private facilities into standardized NCD care pathways.
- Achieve sustained improvements in treatment adherence and control rates for hypertension and diabetes.

4. One-Health

Kerala has initiated several measures to mitigate climate impacts and reinforce it's One Health framework, including establishing a State Center for One Health and implementing KARSAP for AMR control. Despite these efforts, quality gaps remain, and the strategy aims to integrate quality dimensions into One Health initiatives. The activities will be aligned with KHSIP.

Acceleration measures

- Capacity Building: Expand the Learning Management System (LMS) to include One Health modules for community health workers and professionals at district and state levels.
- Early Warning Systems: Develop EWARS integrating event-based, lab-based, hospitalization, and climate-related data for proactive outbreak tracking.

- Joint Outbreak Investigation Teams: Form multidisciplinary teams (health, veterinary, environmental) for coordinated zoonotic outbreak investigations.
- Operational Research: Undertake research on priority policies and programs under PEID cells to provide evidence-based feedback.
- Antibiotic-Smart LSGIs: Scale up decentralized initiatives involving public and private stakeholders; target 150 LSGIs to achieve antibiotic-smart status.
- Energy Efficiency: Implement energy-efficient practices in healthcare facilities to reduce environmental impact.

Strategic Direction: Embed quality, coordination, and preparedness into Kerala's One Health response, ensuring effective prevention, early detection, and management of zoonotic, environmental, and antimicrobial resistance threats.

Short-Term Goals (2026–2028)

- Integrate One Health modules into the state Learning Management System.
- Operationalize Early Warning and Response Systems (EWARS) integrating health, climate, and laboratory data.
- Establish multidisciplinary joint outbreak investigation teams at district levels.
- Scale up antibiotic-smart initiatives to 150 LSGIs.

Long-Term Goals (2029–2032)

- Fully institutionalize quality standards within all One Health initiatives.
- Strengthen operational research capacity to inform evidence-based policy refinement.
- Reduce healthcare sector carbon footprint through energy-efficient facility practices

Expected outcomes

- Enhanced capacity of health professionals and volunteers to address One Health challenges.
- Functional EWARS enabling timely outbreak alerts and response.
- Improved cross-sectoral coordination through joint investigation teams.
- Evidence-based policy refinement via operational research outputs.
- At least 150 LSGIs certified as antibiotic-smart, reducing AMR risks.
- Integration of quality standards into One Health initiatives, ensuring sustainability.
- Reduced carbon footprint of healthcare facilities through energy efficiency measures.

5. Digital Quality Monitoring: HMIS and eHealth strengthening

The strengthening of HMIS and eHealth platforms to enable real-time, data-driven quality monitoring is also a key focus area. HMIS currently tracks service delivery, infrastructure, and human resources across all facility levels—from Janakeeya Aarogya Kendrams to medical colleges and private facilities through monthly reporting and structured reviews at facility, block, district, and state levels.

eHealth Kerala is the digital solution designed to enable unique patient identification, community-centric tools, and hospital management systems. It serves as the backbone for integrating multiple program applications, including drug delivery and management solutions and public health modules. While eHealth has critical building blocks for a robust digital health ecosystem, current coverage extends to only 60% of health facilities, and the public health module is yet to be fully rolled out.

Under the Quality Strategy, accelerated efforts will focus on:

- expanding eHealth coverage, completing public health module rollout, and fully integrating UHIDs, ensuring seamless integration with HMIS and other digital platforms for comprehensive quality monitoring.
- Link Shaili App with eHealth for NCD management and deploy a digital NCD registry.
- Develop and review quality indicators across clinical and non-clinical domains.
- Ensure timely, accurate data collection and reporting from all facilities.

Strategic Direction: Leverage digital systems to enable real-time quality monitoring, continuity of care, and evidence-based decision-making across clinical and non-clinical domains.

Short-Term Goals (2026–2028)

- Expand eHealth coverage beyond the current 60% of facilities (to 80%)
- Complete the development and roll out of public health modules and fully integrate UHIDs to enable continuum of care.
- Integrate SHAILI App with eHealth and HMIS for NCD tracking.
- Define and operationalize a standardized set of digital quality indicators.

Long-Term Goals (2029–2032)

- Achieve near-universal eHealth coverage across public health facilities.
- Enable end-to-end digital tracking of patient journeys and quality outcomes.
- Institutionalize digital dashboards for routine quality governance at all levels.

9

Operational Planning

Organizational Structure for Quality of Care

The following functional structures are put in place for operationalisation and monitoring of quality of care

As per the operational Guidelines for Quality Assurance in Public Health Facilities, published by the Ministry of Health & Family Welfare, Government of India in 2013, for strengthening the Quality activities, there is a need for organizational arrangements to be set up at various levels, with the roles and responsibilities defined for each level.

State Level Quality Assurance Committee (SQAC)

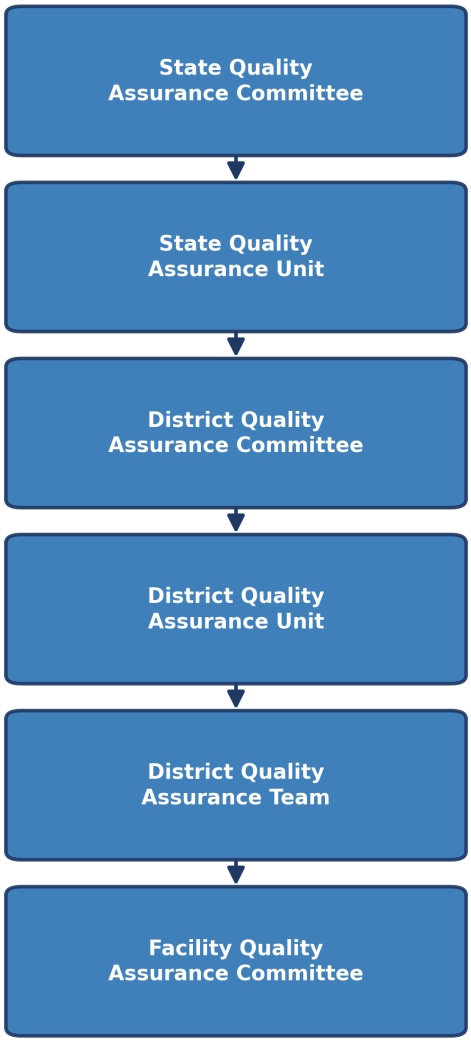
The State Quality Assurance Committee (SQAC) is chaired by the Secretary to the Government, Department of Health and Family Welfare (ACS Health &,Family Welfare) with the Mission Director of the National Health Mission (NHM) serving as the Member Secretary and Director of Health as the Convenor. The committee members, includes DME, Additional Directors, Program Officers and State Nodal Officers in NHM, Nominated Medical Superintendent of hospitals, Director, Medical Education, Director/Principal of state training institution e.g., SIHFW,8. One Empanelled Gynaecologist ,Surgeon , Anaesthetist, Paediatrician, One Medical Specialist (from public institutions), One nominated Medical Superintendent (or equivalent) of DH, One each In-charge of PHC, CHC, and Sub-divisional Hospital State Nursing Adviser (Equivalent)., One member from an accredited private sector hospital/ NGO (health care sector), One representative from the legal cell, One representative from medical professional bodies e.g., KFOG/ IMA/ IAP/IAPSM/,Association of Public Health, Any other member or representatives of public health organisations of eminence as nominated by the state government.

SQAC is a body for the Policy decision & directions. This is also responsible for all Initiative, its success & shortcomings. The primary role of the committees at the state level. Will be to provide overall guidance, mentoring and monitoring of QA efforts in the districts. Some of the ToRs reflected here are operational in nature and shall be implemented by the SQAU, which is the operational and implementation arm of the SQAC.

Functions include

- Developing Quality Assurance Policy & Guidelines for the State

Figure 6. Structure of Kerala's Quality Assurance Committees, State to Facility Level



- Ensuring attainment of the Standards for Quality of Care by Public Health Facilities:
- Mentoring the state/district level units:
- Periodic Review of the progress of QA activities. Review of Quality scores attained under quality initiatives (NQAS, Kayakalp, LaQshya, NQAS for AEFI surveillance, Patient safety etc) by different categories of Public Health Facilities including urban health facilities.
- Take decisions for corrective actions and preventive actions. Defining targets and road maps
- Review and adjudicate compensation claim under the National Family Planning Indemnity Scheme for cases of deaths, complications and failures following male and Review and adjudicate compensation claim under the National Family Planning Indemnity Scheme for cases of deaths, complications and failures following male and female sterilisation procedures.

Supporting quality improvement process: Take visionary decisions for continuous quality improvement and its sustenance. Sanction funds for implementation and improvement of quality. Reflect fund requirement for Quality Assurance in the annual State PIP along with justification. Operationalisation of incentive scheme.

- SISC give directions on implementation of measures to improve quality of sterilization services and review all the quality issues pertaining to Family planning
- Reviewing Key performance indicators of quality
- Reporting and sharing appropriate data to NHSRC

State Quality Assurance Unit

This unit includes Quality Assurance Officer and quality assurance consultants at the state level. Other program officers of Urban, CPHC and program division are also part of the unit

Proposed roles and responsibilities:

- Monitor facility scorecards and rank health facilities accordingly.
- Oversee clinical, morbidity, and mortality audits.
- Support the certification of health facilities in the state (e.g., NQAS/NABH).
- Ensure the conduct of State-level Health Assemblies.
- Recommend interventions or address issues identified during State and District Health Assemblies.
- Plan and support the implementation of interventions recommended in the Kerala QoCS, State Health Policy – Vision 2030, and CME Policy.
- Prepare necessary reports and documents, including presentations for SQAC meetings, and ensure timely sharing of meeting minutes with relevant stakeholders.

District Quality Assurance Committee

- Chaired by the District Collector, this committee consists of members from different departments, societies, projects, private healthcare providers, legal representatives, and professional bodies. The committee meets quarterly. In addition to its existing mandate of monitoring health facility accreditations, the following expanded responsibilities are proposed:
- Promote the adoption and monitoring of scorecards and help improve facility performance.
- Monitor and review the functioning of Facility Quality Assurance Committee meetings.
- Participate in and oversee facility-level audits and provide supportive supervision to health workers.
- Support the certification and accreditation of health facilities in the district.
- Ensure participation in District Health Assemblies and act on identified issues.
- Monitor the implementation of interventions recommended in the Kerala QoCS.

District Quality Assurance Unit

This unit is convened monthly and led by the Deputy Director of Family Welfare, supported by clinicians, program assistants, and consultants. The proposed additional responsibilities are:

- Review the implementation and performance of facility scorecards.
- Assist in certification and accreditation efforts for district health facilities.
- Monitor the progress of Kerala QoC-recommended interventions.

- Provide regular feedback to district health facilities.

District Quality Assurance Team

Headed by the Hospital Superintendent of the District Headquarters Hospital (DHQH) or the Medical Superintendent of the Medical College in the district, this team includes heads of clinical and para-clinical departments, Nursing Matron, Pharmacists, and Hospital Managers. Meetings are held monthly.

Responsibilities include:

- Monitor the implementation and performance of facility scorecards.
- Provide supportive supervision to health workers and health facilities.
- Assist with certification and accreditation activities.
- Support the implementation of Kerala QoC interventions.

Facility Quality Assurance Committee

This newly introduced committee functions at the health facility level. Membership details and responsibilities vary by facility type:

Medical College Hospitals

- **Chairperson:** Hospital Superintendent
- **Members:** Representatives from all clinical departments and Pathology, Microbiology, Biochemistry, and Community Medicine
- Other Members:
  i. Nursing Matron / Nursing Superintendent
  ii. Officer-in-charge of Medical Records Department
  iii. Chief Pharmacist
  iv. Lab Technician
  v. Outsourcing Representative
  vi. Community / Patient Organization Representatives
  vii. Additional members as per institutional requirements

District/Sub-District Hospitals

- **Chairperson:** Hospital Superintendent of DH/SDH
- Members:
  i. Heads of various departments
  ii. Nursing Superintendent
  iii. Officer-in-charge of Medical Records Department
  iv. Chief Pharmacist
  v. Lab Technician
  vi. Outsourcing Representative
  vii. Community / Patient Organization Representatives
  viii. Additional members as needed

Primary Health Centres / Community Health Centres

- **Chairperson:** Medical Officer-in-Charge
- Members:
  i. Medical Officer
  ii. Staff Nurse
  iii. Pharmacist
  iv. Lab Technician
  v. Auxiliary Nurse Midwife (ANM)
  vi. Sanitary Worker / Grade-4 Worker
  vii. Community / Patient Organization Representatives
  viii. Additional members as required

Roles & Responsibilities of the Facility Quality Assurance Committee

- Conduct monthly quality committee meetings.

- Ensure data collection and scorecard reporting.
- Perform routine clinical and care-related audits.
- Undertake activities related to facility certification.
- Document, monitor, report, and resolve patient grievances.
- Implement quality improvement initiatives as per the Kerala QoCS.
- Monitor, audit, and adjust quality interventions, ensuring continuous feedback, documentation, and course correction for Kerala QoCS improvements.

10

Training and Capacity Building

Training and capacity building are critical enablers for achieving and sustaining compliance with the quality framework. A systematic, continuous approach to capacity building is essential to ensure that healthcare teams understand quality standards, effectively implement prescribed processes, and institutionalize a culture of quality, patient safety, and continuous quality improvement (CQI).

Regular and structured training programs shall be conducted to strengthen competencies of healthcare professionals across all levels on NQAS standards, standard operating procedures (SOPs), risk management, patient safety, and documentation requirements. Emphasis shall be placed on translating standards into routine practice to enable progressive movement toward certification and post-certification sustainability.

In alignment with NQAS principles, **team-based capacity building** shall be prioritized over individual-centric approaches. Quality improvement under NQAS is a collective responsibility, requiring functional Quality Teams, departmental ownership, and cross-functional collaboration. Team-building and problem-solving trainings will strengthen shared accountability, continuity of efforts, and sustainability of improvements beyond individual champions.

Clinical and managerial leadership development shall be integrated into the training framework. Core competencies shall include leadership for quality, change management, performance measurement, data analysis, and use of indicators for decision-making. Leaders trained in these competencies will be equipped to guide CQI initiatives, respond effectively to assessment findings, and embed quality improvement into routine governance mechanisms.

Local Self Governments (LSGs) shall be actively engaged in capacity-building initiatives, particularly in team-based trainings related to infrastructure, patient amenities, infection control, and safety standards. Their involvement will enhance awareness of NQAS requirements, strengthen ownership, and facilitate timely mobilization of resources and financial support.

To promote motivation and performance improvement, healthy competition among facilities shall be encouraged through recognition of best-performing institutions based on defined quality indicators and assessment outcomes. The existing cadre of **State-trained Trainers of Trainers (ToTs)** shall be optimally utilized to cascade standardized trainings at state, district, and facility levels, ensuring uniform interpretation and implemen-

tation of NQAS standards.

Existing training programs under national and state health initiatives shall be systematically aligned with NQAS requirements to maximize efficiency and convergence. Adherence to program guidelines related to infection prevention and control, patient rights, clinical care, and support services inherently contributes to NQAS compliance and shall be positioned as complementary to accreditation objectives.

State initiatives such as Arogya Kerala Puraskaram, which assesses performance of Local Self Governments in public health, shall be leveraged as platforms to reinforce NQAS-aligned quality practices and monitoring mechanisms.

Monitoring and evaluation of capacity-building initiatives shall be embedded within existing NQAS review mechanisms. Routine progress monitoring shall be conducted through block-level and District Medical Officer (DMO) review meetings. Periodic internal assessments and facilitated external reviews shall be used to measure readiness, identify gaps, and track improvement against NQAS standards.

Regular review meetings with nodal officers at facility, district, and state levels shall ensure corrective actions and targeted interventions. Structured reporting mechanisms shall be implemented to document progress, challenges, and best practices. An **annual consolidated review** shall be undertaken to assess overall impact and guide revisions to the training and capacity-building strategy in line with NQAS requirements.

11

Measuring Improvement: Monitoring Framework

Monitoring, Evaluation and Learning Framework: A robust Monitoring, Evaluation and Learning (MEL) framework will be established to track implementation of the Quality-of-Care Strategy (QoCS), assess progress toward strategic objectives, and support continuous quality improvement across Kerala's health system. Recognizing that several priority areas under KHSIP, including NCD care, One Health initiatives, and digital quality systems, are still being operationalized, the framework will adopt a phased and adaptive approach. This will allow the State to begin monitoring with available data while progressively expanding and refining the framework as new programmes, systems, and result areas mature.

The framework is designed not merely as a reporting mechanism, but as a core component of Kerala's learning health system approach, enabling evidence-based decision-making, accountability, and continuous improvement at facility, district, and state levels.

Monitoring Principles

The Monitoring and Evaluation framework will be guided by the following principles:

- Routine, not episodic, monitoring to ensure continuous tracking of quality improvement efforts.
- Data use for action, with findings informing corrective measures, policy decisions, and resource allocation.
- Tiered accountability, with clearly defined responsibilities at facility, district, and state levels.
- Integration with existing systems, including HMIS, eHealth, accreditation systems, NHM monitoring platforms, and KHSIP reporting mechanisms.
- Continuous learning and adaptation, allowing indicators and measurement approaches to evolve alongside emerging priorities and programme implementation.

Governance and Accountability for Monitoring

The QoCS monitoring framework will be embedded within the governance and review mechanisms established under the Operational Planning Framework. Roles, responsibilities, reporting timelines,

and review processes will be clearly defined across all levels of the health system.

Facility-level teams will be responsible for routine data collection, analysis, and local quality improvement actions. District-level committees will consolidate and review performance data, identify implementation bottlenecks, and provide supportive supervision. At the state level, designated quality governance structures will periodically review progress, monitor strategic outcomes, and guide policy and programmatic decisions.

This integrated approach will ensure that monitoring findings are systematically linked to review meetings, action planning, and follow-up measures rather than functioning as a standalone reporting exercise.

Phased Development of Quality Indicators

Given the evolving nature of several KHSIP-supported interventions, the monitoring framework will be developed in two phases.

Phase I: Monitoring Using Existing Data Systems

The initial phase will focus on indicators for which reliable data sources already exist. These indicators will support immediate monitoring of strategy implementation and quality improvement efforts.

Key areas will include:

- Accreditation coverage and accreditation scores across facilities.
- Facility-level quality indicators and Key Performance Indicators (KPIs) outlined in the annexures.
- Service delivery, utilization, and performance indicators available through HMIS and eHealth systems.

This phase will establish baseline performance, strengthen reporting systems, and build a culture of data-driven quality management across the health system.

Phase II: Development of Emerging Quality Indicators

As KHSIP priority programmes become operational, additional indicators will be developed and incorporated into the framework. These may include:

- NCD care cascade and clinical outcome indicators.
- One Health-related quality measures.
- Digital quality and interoperability indicators.
- Patient safety, readiness. patient-centered care and experience measures.
- Population health and system-level quality outcome indicators.
- Other strategic result indicators identified jointly by QoCS and KHSIP implementation teams.

The phased approach allows the State to begin implementation immediately while ensuring that future indicators are developed using evolving evidence, programme experience, and stakeholder consultation.

Data Systems and Reporting

The Government of Kerala will strengthen the use of existing digital and routine information systems to support timely, accurate, and reliable monitoring.

Data will be drawn from multiple sources, including:

- HMIS and eHealth platforms.
- Accreditation and quality assessment systems.
- Facility-level quality improvement records.

- Surveys, assessments, and special studies.
- KHSIP monitoring and reporting mechanisms.

Regular reporting schedules will be established at facility, district, and state levels, with a focus on data quality, completeness, timeliness, and usability for decision-making.

Performance Review and Benchmarking

Performance will be periodically assessed against state targets, national benchmarks, and relevant international standards. Benchmarking will help identify variation in performance across facilities and districts, recognize best practices, and prioritize areas requiring targeted support.

Routine review meetings at different administrative levels will use monitoring data to:

- Assess progress toward quality objectives.
- Identify implementation gaps and bottlenecks.
- Track performance trends over time.
- Inform resource allocation and corrective actions.
- Facilitate cross-learning and dissemination of good practices.

Joint Development with KHSIP

The Quality-of-Care Strategy and KHSIP are closely aligned in their objectives and expected outcomes. Accordingly, the development of indicators linked to KHSIP result areas will be undertaken jointly by QoCS and KHSIP teams through a structured process.

This collaboration will include:

- Identification and prioritization of strategic indicators.
- Definition of measurement methodologies and data sources.
- Alignment with KHSIP results frameworks and reporting requirements.
- Integration into state monitoring and review systems.
- Periodic validation and refinement based on implementation experience.

Joint development will ensure consistency across programmes while reducing duplication and strengthening accountability for shared results.

Periodic Review and Framework Refinement

Recognizing that quality priorities, programmes, and data systems will continue to evolve, the Monitoring and Evaluation framework will undergo periodic review and refinement. The State will undertake a formal review of the framework, including KHSIP-linked indicators, within the first 12 months of implementation of the Quality of Care Strategy.

The Monitoring, Evaluation and Learning framework is intended to support Kerala's transition toward a learning health system that continuously generates, analyses, and uses evidence to improve quality of care. By starting with existing data systems and progressively expanding measurement domains as new priorities mature, the framework provides a practical and sustainable pathway for strengthening healthcare quality across the State.

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Conclusion

The implementation of this strategy is expected to significantly enhance the quality of care in Kerala, ensuring that every health intervention, whether clinical or non-clinical meets high standards of safety, effectiveness, and patient experience. By embedding quality principles into program design and delivery, Kerala will move beyond infrastructure-focused approaches to a system that prioritizes processes, outcomes, and accountability. This transformation will strengthen public trust and improve health outcomes across all levels of care. Kerala's ambition is not only high coverage of accreditation, but the creation of a learning health system where quality improvement is continuous, equitable, and people-centred.

Through collective action and a sustained commitment to quality, Kerala can lead the way in redefining public health in India. The goal is to make quality the DNA of all health programs, creating a culture where continuous improvement is integral to service delivery. By institutionalizing quality across domains, from NCD care and One Health initiatives to digital health systems, the State will set a benchmark for patient-centered, resilient, and future-ready healthcare.

While accreditation is an important milestone for ensuring that minimum standards of safety and quality are met across facilities, it should be seen as a starting point rather than the endpoint of quality improvement.

Kerala's broader ambition should be articulated as the development of a learning health system—one that continuously generates, analyses, and applies knowledge to improve care. In such a system, data from routine service delivery, patient outcomes, and user feedback are not merely collected for reporting purposes but are actively used to inform decisions, refine practices, and drive innovation at all levels of care. This creates a dynamic cycle where learning and improvement are embedded into everyday functioning rather than treated as periodic or external exercises.

A learning health system is inherently continuous in its pursuit of quality. Instead of episodic assessments or one-time compliance checks, it promotes ongoing monitoring, regular audits, and real-time problem-solving. Healthcare providers and managers are encouraged to reflect on performance, identify gaps, test solutions, and scale up successful practices. This fosters a culture where improvement is iterative, evidence-based, and sustained over time.

Equity must remain a central pillar of this ambition. Quality improvement efforts should consciously address disparities in access, utilization, and out-

comes across different population groups and geographic regions. A truly effective system ensures that advances in quality benefit all sections of society, particularly the most vulnerable, thereby reducing inequities rather than inadvertently widening them.

Equally important is the commitment to being people centred. This means that the voices, preferences, and experiences of patients and communities are systematically integrated into planning and evaluation processes. Care delivery should be respectful, responsive, and aligned with the needs of individuals and families, ensuring dignity and trust in the system.

Reiterating this vision helps shift the narrative from a compliance-driven approach to a culture of continuous learning and improvement. It signals that Kerala is not only striving for widespread accreditation but is committed to building a resilient, adaptive, and responsive health system—one that consistently evolves to deliver better outcomes, enhanced patient experiences, and greater system efficiency.

In essence, the goal is to position Kerala as a leader in transforming healthcare quality from a static benchmark into a living, evolving process that is data-driven, equitable, and firmly centered on the people it serves.

Annexures

Annexure 1. Cumulative Quality Accreditation Status

Type of Institution	Total # Institutions	Cumulative Achievement as on 10.09.2026				
		State	National	National + State	National + State (%) against the target	National (%) against the Total Institutions
DH	44	4	14	18	40.9%	31.8%
TH	88	2	8	10	11.36%	9.1%
CHC	227	2	14	16	7.05%	6.2%
PHC	846	48	184	232	27.42%	21.7%
UPHC	102	8	53	61	59.8%	51.9%
AAM-SC	5416	138	102	240	4.43%	1.9%
Total	**6723**	**202**	**375**	**577**	**8.58%**	**5.6%**

Annexure 2. LaQshya certified health facilities

Target 2025-2026	Cumulative Status of LaQshya Certification			
	State assessment completed	National certified	State +National	% against the target State + National
36 (80%)	0	20	20	55.55%

Annexure 3. MusQan certified health facilities

Target 2025-2026	Cumulative Status of MusQan Certification			
	State assessment completed	National certified	State +National	% against the target State + National
44 Facilities	0	10	10	23%

Annexure 4. Health facilities with a Kayakalp score of 70% or more

Category	Institutions Scored >70% in external assessments
DH	20
TH/THQH	18
CHC	22
PHC	369
UPHC	65
AAM-SC	514
Total	**1008**

Target for 2024-25 was 521 and state has achieved almost double the target

Annexure 5. Health facilities meeting SUMAN norms

Category	Total Institutions	Institutions Meeting SUMAN Norms	%
MCH	12	6	50%
DH	44	33	75%
TH/THQH	87	56	64%
CHC	227	96	42%
PHC	846	310	37%
UPHC	102	52	51%
AAM-SC	5415	121	2%
Total	**6733**	**674**	**10%**

Key Performance Indicators: Facility Type Wise

KEY PERFORMANCE INDICATORS FOR DISTRICT HOSPITAL

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency	source of data	Significance
Productivity	1	Bed Occupancy Rate	Total Patient bed days (Midnight head count of each day added for the month of all patients) Exclusion – New-borns in Maternity Wards and Day Care Patients	Product of Total number of functional beds in the hospital and days in the month Exclusion:- Labour Room Tables and Observation Beds	(Total Patient bed days /Functional beds*days in month)	Monthly	Mid night census	Indicator for Utilization of Hospital Indoor services
Productivity	2	Lab test done per thousand patients	Total number of tests done for both OPD and IPD patients Exclusion - Test done at Point of care	Total number of patients attended during the month Inclusion:- Both OPD and IPD cases	(Total number of lab tests done*1000/Total number of patients attended)	Monthly	Lab Register	Indicator to measure Utilization of laboratory services
Productivity	3	Percentage of cases of High Risk Pregnancy/obstetric complication treated	Total number of high risk pregnancies registered at the facility Inclusion:-Severe Anaemia ,PPH, PIH/Eclampsia/Pre-Eclampsia, Retained Placenta, HIV Positive Pregnant women, Septic Cases, Obstructed labour including C-Section Exclude:- Referral without any interventions	Total number of obstetric cases admitted in the hospital	Total number of high risk/ complicated pregnancies registered at the facility*100/Total Obs admissions	Monthly	Labour Room Register, OT Register, Indoor Registers	Indicator for preparedness and utilization of EMoC services
Productivity	4	Percentage of surgeries done at night (8 PM to 8 AM)	Total major surgeries conducted during night including LSCS (8 PM to 8 AM) Exclusion – Minor Surgeries	Total major surgeries conducted in Hospital (Day+ Night) Exclusion – Minor Surgeries	Total number of major surgeries conducted during nighttime*100/Total number of major surgeries conducted (Day + Night)	Monthly	OT Register	Preparation of OT at nighttime for major surgeries

Note: Indicators for district hospitals, CHCs, and other secondary care facilities are currently being customized to state requirements. The annexure reflects the existing list and may be revised once finalization is complete.

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency	source of data	Significance
Productivity	5	LSCS Rate	Total number of C-section delivery conducted	Total deliveries conducted	Total number of C-section deliveries conducted*100/ Total number of deliveries conducted	Monthly	Labour Room Register	To check utilization of Hospital for C-section deliveries
Productivity	6	Blood Transfusion Rate	Total no of blood transfusion done in a facility	Total admission in the facility	Total number of blood transfusion done*100/Total Admission	Monthly	Blood transfusion Register	Indicator for Utilization of blood Storage centre
Productivity	7	Percentage of NCD Cases managed in OPD	Total number of NCD cases managed in OPD	Total number of cases managed in OPD	Total number of NCD cases managed in OPD*100/Total number of cases managed in OPD	Monthly	OPD Register	Preparation of OPD to manage NCD cases
Efficiency	8	Percentage of emergency cases admitted at night (8 PM to 8 AM)	Total number of emergency cases admitted at night (8 PM to 8 AM)	Total number of emergency cases admitted (Day + Night)	Total number of emergency cases admitted at night (8 PM to 8 AM)*100/ Total number of emergency cases admitted (Day + Night)	Monthly	Emergency register	To check efficiency of Emergency department at night
Efficiency	9	Percentage of Referral Out of Total Registered patient	Total number of patients referred from the facility Inclusion:- Emergency and indoor cases Exclusion:- LAMA & absconding	Total admission in the facility Exclusion:- Day care Procedures	(No of cases referred out from the hospital*100/ Total no. of cases admitted)	Monthly	Referral Register	Indicator for efficiency of clinical process
Efficiency	10	No of major Surgeries per surgeon (in a month)	Total number of major surgeries conducted	Total number of surgeons appointed in the facility Inclusion:- Ortho, Gynae, Obs, General surgeon, EMOC trained doctors	Total number of major surgeries conducted/Total number of surgeons appointed	Monthly	OT Register	Indicator for efficiency of Surgeons
Efficiency	11	OPD Per Doctor	Total number of patients attended in OPD	Total number of doctors available in the hospital Inclusion: Regular, contractual, Part Time Exclusion:- Doctors not engaged in OPD like MS, Radiologist, Microbiologist	Total number of patient consulted in OPD/Total number of doctors appointed for OPD	Monthly	OPD Register	Indicator for measuring efficiency of Doctors in OPD

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency	source of data	Significance
Efficiency	12	Percentage of EQAS (I.E., VIS or Z score) with in normal limits (VIS < 200 and Z < +/-2)			Take Median of all scores obtained (Arrange scores in increasing order- Pick the middle value if numbers are odd- Take average of middle two values if numbers are even)	Monthly	Lab EQAS register	Indicator to measure efficiency of Lab
Efficiency	13	Percentage of stock outs as per EML	Total stock outs essential & vital as per EML each day added for the month	Product of total no. of drugs as per EML and days in the month	Total no. of Stock out days of essential & vital drugs of EML*100/ Total no. of drugs*Days in Month	Monthly	Stock Register	Indicator to measure efficiency of Hospital to ensure availability of essential & vital drugs as per EML
Clinical care and safety	14	Percentage No of Maternal Deaths out of total admission during ANC, INC, PNC rate	Total number of maternal deaths	Total number of pregnant women admitted during ANC, INC, PNC rate during the month	Total maternal deaths*100/Total admission during ANC, INC, PNC rate during the month	Monthly	Labour Room Register	Indicator to measure clinical care of maternity cases
Clinical care and safety	15	Percentage of neonatal Deaths out of total live births and neonatal admission	Total number of neonatal deaths Inclusion – Neonate died during first 28 days while admitted in the hospital including Out borns admitted in neonate ward/SNCU Exclusion – Still Birth	Total no. of neonates admitted including live births in Hospital and out born admissions	Total number of neonatal deaths*100/No of Live births and Neonatal admission	Monthly	Labour Room Register, SNCU Register, Death Register	Indicator to measure clinical care of neonates
Clinical care and safety	16	Death Rate (Include all deaths except Maternal & Newborn)	Total no. of deaths occurred in a hospital (Excluding Maternal & Newborn deaths)	Total no. of admissions in a hospital	Total no. of deaths occurred in a hospital*100/ Total no. of admissions in a hospital	Monthly	Death Register, Admission register	
Clinical care and safety	17	Percentage of cases for which death review is done	Total number of deaths review done during the month (Excluding Maternal & Newborn deaths)	Total number of deaths occurred	Total number of death review done*100/ Total number of deaths	Monthly	Death Review Register	Indicator of adherence to death review process
Clinical care and safety	18	Average length of stay	Total Patient bed days (Midnight head count of each day added for the month of all patients)	Total number of discharges. Inclusion:- Normal discharge, LAMA, Abscond, Referral, deaths	Total Patient bed days /Total Discharges	Monthly	Admission and Discharge Register	Indicator of Quality of Clinical care and infection control practices

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency	source of data	Significance
Clinical care and safety	19	Percentage of Surgical Site Infection out of total surgeries	Total number of Surgical site infection detected (Any purulent discharge, abscess, spreading cellulitis at surgical site during the month after the surgery)	Total number of surgeries conducted (major & minor surgeries)	(Total number of surgical site infection detected*100/Total number of surgeries Conducted)	Monthly	Infection control monitoring report	Indicator for Quality of infection control practices in OT
Clinical care and safety	20	No of needle stick injuries reported			Number of needle stick injuries reported	Monthly	Needle stick injury register	Indicator of safety
Clinical care and safety	21	Percentage of prescriptions with more than one anti-microbial agent (calculated using sampling methods)	No of prescriptions with more than one anti-microbial agent	Total no of prescriptions	No of prescriptions with more than one anti-microbial agent*100/ Total no of prescriptions	Monthly	Prescription Audit	Indicator of patient safety
Clinical care and safety	22	Family Planning Indicators (as per HMIS reporting)						
Clinical care and safety	23	LaQshya Indicators (As per Annexure 'C of LaQshya Guidelines)						
Service Quality Indicator	24	Percentage of Left against Medical advice (LAMA) Rate out of Total Admission	Total number of LAMA patients from the facility Exclusion:- Abscond and referral cases	Total admission in the facility	(No. of LAMA Patients from the facility*100/Total no. of admission)	Monthly	Admission /Discharge Register	Indicator of service quality and patient satisfaction with treatment and stay in IPD
Service Quality Indicator	25	Patient Satisfaction Score for IPD	Sum of *average satisfaction score* of each respondent (Average satisfaction score = sum total of scores of attributes/number of total attributes)	Total number of respondents	Mean of scores given by each patient in patient satisfaction survey for indoor patients done each month on statistically adequate sample (at least 30)	Monthly	Record of Patient Feedback	Indicator of patient satisfaction in IPD
Service Quality Indicator	26	Patient Satisfaction Score for OPD	Sum of *average satisfaction score* of each respondent (Average satisfaction score = sum total of scores of attributes/number of total attributes)	Total number of respondents	Mean of scores given by each patient in patient satisfaction survey for outdoor patients done each month on statistically adequate sample (at least 30)	Monthly	Record of Patient Feedback	Indicator of patient satisfaction in OPD

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency	source of data	Significance
Service Quality Indicator	27	Registration to Drug time (average)	Time lag for a patient from entering in queue for OPD registration to finally getting drugs at Pharmacy counter		Average time taken by a patient from entering in queue for OPD registration to finally getting drugs at Pharmacy counter observed in time motion study done at peak hours on sample basis (at least 5% patients but not less than 30)	Monthly	Time Motion Study	To observe waiting time for OPD procedures
Service Quality Indicator	28	Consultation time in OPD (average)	Time lag for a patient from entering in queue for OPD Consultation to finally get consultation from doctor		Mean of waiting time for the derived sample observed in time motion study done at peak hours on sample basis (at least 5% patients but not less than 30)	Monthly	Time Motion Study	To observe consultation time at OPD

KEY PERFORMANCE INDICATORS FOR CHC

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency	source of data	Significance
Productivity	1	Bed Occupancy Rate	Total Patient bed days (Midnight head count of each day added for the month of all patients)	Product of Total number of functional beds in the hospital and days in the month	(Total Patient bed days /Functional beds*days in month)	Monthly	Mid night census	Indicator for Utilization of Hospital Indoor services
Productivity	2	Lab test done per thousand patients	Total number of tests done for both OPD and IPD patients	Total number of patients attended during the month Inclusion:- Both OPD and IPD cases	(Total number of lab tests done*1000/Total number of patients attended)	Monthly	Lab Register	Indicator to measure Utilization of laboratory services
Productivity	3	Percentage of cases of High Risk Pregnancy/obstetric complication out of total registered pregnancies at FRU	Total number of high risk pregnancies registered at the facility Inclusion:-Severe Anaemia ,PPH, PIH/Eclampsia/Pre-Eclampsia, Retained Placenta, HIV Positive Pregnant women, Septic Cases, Obstructed labour including C-Section Exclude:- Referral without any interventions	Total ANC registration	Total number of complicated pregnancies registered at the facility*100/Total ANC registration	Monthly	ANC Register	Utilization of ANC services for complicated deliveries
Productivity	4	LSCS Rate	Total number of C-section delivery conducted.	Total deliveries conducted	Total number of C-section deliveries conducted*100/ Total number of deliveries conducted	Monthly	Labour Room Register/OT register	To check utilization of Hospital for C-section deliveries
Productivity	5	Percentage of NCD Cases managed in OPD	Total number of NCD cases managed in OPD	Total number of cases managed in OPD	Total number of NCD cases managed in OPD*100/Total number of cases managed in OPD	Monthly	OPD Register	Preparation of OPD to manage NCD cases
Productivity	6	Percentage of new-born admitted to NBSU out of total live births at facility	Total number of newborn babies' admission at NBSU	Total live births in the facility	Total new-born admission in NBSU*100/Total live births	Monthly	NBSU register	To check utilization of NBSU
Productivity	7	No. of Blood units transfused out of total admission	Total number of blood units transfused at the facility	Total admission in the facility	Total number of blood units transfused /Total Admission	Monthly	Blood transfusion Register	Indicator for Utilization of blood Storage centre

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency	source of data	Significance
Productivity	8	No. of major surgeries done (except LSCS) out of total surgeries conducted	Total number of surgeries done (major & minor surgeries)	Total number of surgeries conducted (major & minor surgeries)	Total number of major surgeries done (except LSCS)/ Total number of surgeries conducted (major & minor surgeries)	Monthly	OT Register	Indicator to check preparedness of OT
Efficiency	9	Percentage of referrals out of Total registered patient	Total number of patients referred from the facility Inclusion:- Emergency and indoor cases Exclusion:- Referral from LAMA & absconding	Total admission in the facility	No of cases referred out from the hospital*100/ Total no. of cases admitted	Monthly	Referral Register	Indicator for efficiency of clinical process
Efficiency	10	OPD Per doctor	Total number of patients attended in OPD	Total number of doctors available in the hospital Inclusion: Regular, contractual, Part Time Exclusion:- Doctors not engaged in OPD like MS, Radiologist, Microbiologist	Total number of patient consulted in OPD/Total number of doctors appointed for OPD	Monthly	OPD Register	Indicator for measuring efficiency of Doctors in OPD
Efficiency	11	Percentage of Critical emergencies cases (Snake bites, Trauma, CVA)	Total number of critical emergency cases registered in emergency department Inclusion:- Snake bites, Trauma, CVA	Total registered patients at emergency	Total number of critical emergencies cases attended*100/ Total registration at emergency	Monthly	Emergency register	Indicator to measure efficiency of A&E department of hospital for critical emergencies cases.
Efficiency	12	Percentage of Stock outs as per EML	Total stock outs as per EML each day added for the month	Product of total no. of drugs as per EML and days in the month	Total no. of Stock out days of essential & vital drugs of EML*100/ Total no. of drugs*Days in Month	Monthly	Stock Register	Indicator to measure efficiency of Hospital to ensure availability of drugs as per EML
Efficiency	13	Percentage of Emergency call attended per specialist per month (8 PM to 8 AM)	Total number of emergency call attended by specialist per month (8 PM to 8 AM)	Total number of specialists appointed at the facility Inclusion:- Gynaecologist, Paediatrician, Anaesthetic	Total number of emergency call attended by specialist (8 PM to 8 AM)/Total number of specialists appointed	Monthly	Call Register	Indicator to measure efficiency of speciality services at night

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency	source of data	Significance
Clinical care and safety	14	Average length of stay	Total Patient bed days (Midnight head count of each day added for the month of all patients)	Total number of discharges. Inclusion:- Normal discharge, LAMA, Abscond, Referral, deaths	Total Patient bed days /Total Discharges	Monthly	Admission and Discharge Register	Indicator of Quality of Clinical care and infection control practices
Clinical care and safety	15	Percentage of Surgical site infection	Total number of Surgical site infection detected (Any purulent discharge, abscess, spreading cellulitis at surgical site during the month after the surgery)	Total number of surgeries conducted (major & minor surgeries)	(Total number of surgical site infection detected*100/Total number of surgeries Conducted)	Monthly	Infection control monitoring report	Indicator for Quality of infection control practices in OT
Clinical care and safety	16	Death Rate (Include all deaths)	Total no. of deaths occurred in a hospital	Total no. of admissions in a hospital	Total no. of deaths occurred in a hospital/ Total no. of admissions in a hospital	Monthly	Death Register, Admission register	
Clinical care and safety	17	Percentage of AEFI cases reported	Total number of AEFI cases reported	Total number of immunizations done	Total number of AEFI cases reported*100/Total number of immunizations done	Monthly	Immunization and AEFI records	Indicator to measure clinical care of immunization services
Clinical care and safety	18	Percentage of cases on DOTs completed the treatment successfully	Total number of TB cases who were successfully treated TB treatment, with or without bacteriological evidence of success	Total tuberculosis cases registered under a national tuberculosis control programme	Total number of TB cases who were successfully treated TB treatment, with or without bacteriological evidence of success *100/Total tuberculosis cases registered under RNTCP	Monthly	DOT register	Indicator to measure clinical care at DOT centre
Clinical care and safety	19	Family Planning Indicators (as per HMIS reporting)						
Clinical care and safety	20	LaQshya Indicators (As per Annexure 'C of LaQshya Guidelines)						
Service Quality Indicator	21	Percentage of Left against Medical advice (LAMA) cases	Total number of LAMA patients from the facility Exclusion:- Abscond and referral cases	Total admission in the facility	(No. of LAMA Patients from the facility*100/Total no. of admission)	Monthly	Admission /Discharge Register	Indicator of service quality and patient satisfaction with treatment and stay in IPD

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency	source of data	Significance
Service Quality Indicator	22	Patient Satisfaction Score for IPD	Sum of *average satisfaction score* of each respondent (Average satisfaction score = sum total of scores of attributes/number of total attributes)	Total number of respondents	Mean of scores given by each patient in patient satisfaction survey for indoor patients done each month on statistically adequate sample (at least 30)	Monthly	Record of Patient Feedback	Indicator of patient satisfaction in IPD
Service Quality Indicator	23	Patient Satisfaction Score (OPD)	Sum of *average satisfaction score* of each respondent (Average satisfaction score = sum total of scores of attributes/number of total attributes)	Total number of respondents	Mean of scores given by each patient in patient satisfaction survey for outdoor patients done each month on statistically adequate sample (at least 30)	Monthly	Record of Patient Feedback	Indicator of patient satisfaction in OPD
Service Quality Indicator	24	Consultation time in OPD (average)	Time lag for a patient from entering in queue for OPD Consultation to finally get consultation from doctor		Mean of waiting time for the derived sample observed in time motion study done at peak hours on sample basis (at least 5% patients but not less than 30)	Monthly	Time Motion Study	To observe consultation time at OPD

KEY PERFORMANCE INDICATORS FOR PHC

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency	Source of data	Significance
Productivity	1	OPD Per Month			Total number of patients attended in OPD for the month	Monthly	General OPD Register	Indicator for measuring productivity of OPD
Productivity	2	Percentage of OPD cases referred from HWC (SC)/ Sub -Centre	Total no. of OPD cases referred from HWC (SC)/ Sub -Centre	Total No. of OPD cases registered	Total no. of OPD cases referred from HWC (SC)or Sub -Centre*100/ Total No. of OPD cases registered	Monthly	Referral register & OPD register	Indicator for the utilization of referral system
Productivity	3	Percentage of NCD cases managed in OPD	Total number of NCD cases managed in OPD	Total number of cases managed in OPD	Total number of NCD cases managed in OPD*100/Total number of cases managed in OPD	Monthly	OPD Register	Preparation of OPD to manage NCD cases
Efficiency	4	Percentage of stock out as per EML	Total stock outs as per EML each day added for the month	Product of total no. of drugs as per EML and days in the month	Total no. of Stock out days for EML*100/ Total no. of drugs*Days in Month	Monthly	Stock Register	Indicator to measure efficiency of Hospital to ensure availability of drugs as per EML
Efficiency	5	Percentage of High risk pregnancy/ obstetric cases referred to FRU	Total number of high risk pregnancies referred from the facility	Total number of high risk pregnancies registered at the facility	Total number of high risk pregnancies referred*100/Total number of high risk pregnancies registered	Monthly	ANC Register	Indicator to measure efficient ANC services
Efficiency	6	Percentage of clients accepting limiting or long term contraception methods of contraception	Total number of clients accepted limiting OR long term contraception method of contraception	Total number of clients counselled for limiting or long term methods of contraception	Total number of clients accepted limiting or long term method of contraception*100/Total number of clients counselled	Monthly	Family Planning Counselling Register	Indicator for measuring counselling services
Efficiency	7	Drop out rate of Pentavalent	Total number of children missed pentavalent 3 dose after Pentavelant1	Total number of children received Pentavelant1	(Pentavelant1-Pentavalent3)*100/DPT1	Monthly	Immunization Register	Indicator to analyse the scenario of dropouts in the three dose of Pentavelant

Type	S No	Quality Indicator	Numerator	Denominator	Formula	Frequency	Source of data	Significance
Clinical care and safety	8	Percentage of High risk pregnancies detected	Total number of high risk pregnancies registered at the facility	Total no.of Pregnant women registered for ANC	Total number of high risk pregnancies registered*100/Total no.of Pregnant women registred for ANC	Monthly	ANC Register	Indicator to measure efficient ANC services
Clinical care and safety	9	IUCD complication rate	Total number of IUCD complication cases reported	Total number of IUCD inserted	Total reported case of IUCD complication*100/Total number of IUCD insertion	Monthly	IUCD Register	Indicator to measure adherence to IUCD protocol
Clinical care and safety	10	Percentage of anaemia cases treated successfully	Total number of anaemia cases treated successfully Inclusion:- ANC cases	Total number of Anaemia cases detected during ANC	Total number of anaemia cases treated successfully*100/Total number of anaemia cases detected during ANC	Monthly	ANC Register	Indicator to measure clinical quality of ANC services
Clinical care and safety	11	Percentage of AEFI cases reported	Total number of AEFI cases reported	Total number of vaccination done	Total number of AEFI cases reported*100/Total number of vaccination done	Monthly	Immunization and AEFI records	Indicator to measure clinical care of immunization services
Clinical care and safety	12	Percentage of DOT cases completed successfully	Total successfully completed TB treatment, with or without bacteriological evidence of success	Total new tuberculosis cases registered under a national tuberculosis elimination programme	Total successfully completed TB treatment, with or without bacteriological evidence of success*100/Total new tuberculosis cases registered under NTEP	Monthly	DOT register	Indicator to measure clinical care at DOT centre
Clinical care and safety	13	Percentage of children with diarrhoea treated with ORS & Zinc	Total number of children treated with ORS and Zinc during diarrhoea	Total number of children reported diarrhoea	Total number of children treated with ORS and Zinc*100/Total number of Children reported diarrhoea	Monthly	OPD Register	Indicator to measure clinical care of diarrhoea cases
Service Quality Indicator	14	Patient Satisfaction Score for OPD	Sum of average satisfaction score of each respondent (Average satisfaction score = sum total of scores of attributes/number of total attributes)	Total number of respondents	Mean of scores given by each patients in Patient satisfaction survey for outdoor patients done each month on statistically adequate sample (at least 30)	Monthly	Record of Patient Feedbacks	Indicator of patient satisfaction in OPD

KPIS FOR URBAN PRIMARY HEALTH CENTERS (U-PHCS)

Type	Sl No	Quality Indicator	Numerator	Denominator	Formula	Frequency	Source of data	Significance
Productivity	1	OPD Per Month			Total number of patients attended in OPD for the month	Monthly	General OPD Register	Indicator to measure utilization of OPD
Productivity	2	Number of ANC conducted per month			Total number of ANC conducted during the month	Monthly	ANC register	Utilization of ANC services
Productivity	3	No. of NCD cases registered			Total no. of NCD cases registered in the facility	Monthly	General OPD Register	Preparation of OPD to manage NCD cases
Productivity	4	Number of outreach session conducted for vulnerable population			Total number of outreach session conducted for vulnerable population	Monthly	Outreach Register	
Productivity	5	Follow up rate of OPD cases	Total number of old patients during the month came for follow-up in OPD	Total number of OPD patients (Both Old and New)	Total number of follow-up cases*100/ Total number of OPD	Monthly	OPD Register	
Efficiency	6	Number of outreach session conducted per ANM	Total number of Outreach session conducted by all ANMs during the month	Total number of ANMs available in the UPHC Inclusion:- All contractual, deputed and regular ANM	Total number of outreach sessions/Total number of ANMs	Monthly	Outreach Register	Indicator to measure efficiency of ANM appointed in the UPHC
Efficiency	7	Dropout rate of Pentavalent	Total number of children missed Penta 3 dose after Penta1	Total number of children received Penta1	(Penta1-Penta3)*100/Penta1	Monthly	Immunization Register	Indicator to analyse the scenario of dropouts in the three dose of Penta
Efficiency	8	Number of Stock out days for EML	Total stock outs as per EML each day added for the month	Product of total no. of drugs as per EML and days in the month	Total no. of Stock out days as per EML/ Total no. of drugs as per EML*Days in Month	Monthly	Stock Register	Indicator to measure supply chain of drugs in the UPHCs as per EDL

Type	Sl No	Quality Indicator	Numerator	Denominator	Formula	Frequency	Source of data	Significance
Clinical care and safety	9	Percentage of high risk pregnancy detected during ANC	Total number of high risk pregnancy detected during ANC Inclusions:- Pregnancy induced hypertension, pre-eclampsia, Pre-eclamptic toxaemia, Syphilis/ HIV Positive, Gestational Diabetes Mellitus, Hypothyroidism, Young primi (less than 20 years) or Elderly gravida (more than 35 years), Twin / Multiple pregnancy, Malpresentation, Previous LSCS, Low lying placenta, Placenta Previa, Positive Bad obstetric history (History of still birth, abortion, congenital malformation, obstructed labour, premature birth etc.),Rh negative, Patient with History of any current systemic illness(es)/past history of illness	Total number of ANC registered during the month	Total number of High risk pregnancy detected during ANC*100/Total number of ANC registered during the month	Monthly	ANC register	Indicator to measure Quality of ANC and detection of High risk cases
Clinical care and safety	10	Percentage of AEFI cases reported	Total number of AEFI cases reported	Total number of immunizations done	Total number of AEFI cases reported*100/Total number of immunizations done	Monthly	Immunization and AEFI records	Indicator to measure clinical care of immunization services
Clinical care and safety	11	IUCD Complication Rate	Total number of clients returns with complications during the months Inclusions:- Changes in menstrual bleeding patterns, Cramping or pain, Infection, IUCD string problems (missing strings or possible IUCD expulsion),Partial or complete expulsion IUCD (confirmed) Pregnancy with an IUCD in place Uterine perforation	Total number of IUCD insertion during the month	Total number of clients returns with complication*100/Total number of IUCD inserted	Monthly	IUCD register	Indicator of clinical care of IUCD service

Type	Sl No	Quality Indicator	Numerator	Denominator	Formula	Frequency	Source of data	Significance
Clinical care and safety	12	Proportion of TB patient on DOTS completed treatment successfully	Number of TB cases notified in a specified time period that were successfully treated by DOTS Inclusion:- cured plus treatment completed	Number of TB cases notified in the same time period	Number of TB cases notified in a specified time period that were successfully treated/Number of TB cases notified in the same time period	Specified time period	TB Register	Indicators for use for monitoring the epidemiological trends of TB
Service Quality Indicator	13	Patient Satisfaction Score (OPD)	Sum of *average satisfaction score* of each respondent (Average satisfaction score = sum total of scores of attributes/number of total attributes)	Total number of respondents	Mean of scores given by each patient in patient satisfaction survey for outdoor patients done each month on statistically adequate sample (at least 30)	Monthly	Record of Patient Feedback	Indicator of patient satisfaction in OPD
Service Quality Indicator	14	Registration to drug time (Average)			Average time taken from the moment patient joined the queue at registration counter to receiving of drugs from pharmacy To be calculated by Time motion study on statistically adequate sample (At least 30)	Monthly	Record of Patient Feedback	Indicators of service Quality of OPD services
Service Quality Indicator	15	Consultation Time in OPD (average)	Time lag for a patient from entering in queue for OPD Consultation to finally get consultation from doctor		Mean of waiting time for the derived sample observed in time motion study done at peak hours on sample basis (at least 5% patients but not less than 30)	Monthly	Time Motion Study	To observe consultation time at OPD

KEY PERFORMANCE INDICATORS - HEALTH & WELLNESS CENTRE -SUBCENTRE

Type	Sl. No.	Indicators
Productivity	1	No. of OPD Cases per month
Productivity	2	No. of follow up cases (repeat visit) per month
Productivity	3	No. of drop out cases following start of the treatment
Efficiency	4	Dropout rate for NCDs
Efficiency	5	No. of stock out days of essential medicines (as per service Package
Efficiency	6	No of VHNDs conducted (for vulnerable population)
Clinical Care Indicators	7	No. of high risk pregnancy identified during ANC
Clinical Care Indicators	8	No. of Children with diarrhoea treated with ORS & Zn
Clinical Care Indicators	9	No. of Anaemia cases treated successfully
Clinical Care Indicators	10	Percentage of cases on treatment achieved blood pressure & blood sugar control
Service Quality	11	Client Satisfaction Score (Patients)
Service Quality	12	Percentage of chronic cases who started treatment at PHC/above are still under treatment for last 3 months



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