



**MINISTRY OF HEALTH
STATE DEPARTMENT FOR MEDICAL SERVICES**

TERMS OF REFERENCE

**COMPREHENSIVE FEASIBILITY STUDY FOR ESTABLISHMENT OF TWO
LEVEL VI HOSPITALS IN BUNGOMA AND KERICHO COUNTIES**

1. INTRODUCTION AND BACKGROUND

The Kenya health sector is guided by Vision 2030, The Kenya Health policy (2014-2030), and Constitution of Kenya Bill of rights (chapter 4). The sector Vision is “A healthy, productive and globally competitive nation” while Mission is “To build a progressive, responsive and sustainable healthcare system for accelerated attainment of the highest standard of health for all people in Kenya”. A healthy nation is critical for economic development, and poverty reduction.

The Kenya Health policy (2014-2030) outlines the sector broad objectives and strategies. In addition, the health sector is committed to several global, regional health and local - related instruments and processes to accomplish set targets. These commitments include: Sustainable Development Goals (SDGs), Africa Union Agenda 2063, Abuja Declaration, International human rights law agreements, International Health Regulations, Universal Health Coverage (UHC), Astana Declaration on Primary Health Care, Ouagadougou Declaration on Primary Health Care and Health Systems in Africa, and Bottom-Up Economic Transformation Agenda (BETA) amongst others. The overall goal is to attain the highest possible standards of healthcare in a responsive manner.

The Kenya Health Policy outlines policy objectives and strategies which are critical in realization of health goal and Universal Health Coverage (UHC).

These are;

1. Eliminate communicable conditions
2. Halt and reverse the rising burden of noncommunicable conditions and mental disorders
3. Reduce the burden of violence and injuries
4. Provide essential healthcare
5. Minimise exposure to health risk factors
6. Strengthen collaboration with private and other sectors that have an impact on health

To achieve these policy objectives, the Kenya Health Policy identifies eight policy orientation /structures. Which includes:

- i. Organisation of Service Delivery
- ii. Health Leadership and Governance
- iii. Health Workforce
- iv. Health Financing:
- v. Health Products and Technologies:
- vi. Health Information:
- vii. Health Infrastructure
- viii. Research and Development

The expected output of investment in these policy orientations is improved access to quality health services, quality of care and demand for services.

Organization of the service delivery

Kenya's health service delivery system is structured into six levels (Level 1–Level 6):

1. **Level 1:** Community services
2. **Level 2:** Dispensaries and clinics
3. **Level 3:** Health centres

4. **Level 4:** Primary care hospitals
5. **Level 5:** Secondary care hospitals
6. **Level 6:** Tertiary care hospitals

While Levels 1 to 5 fall under County government mandate, **Level 6 facilities are national referral institutions under the National government.**

Level 6 represents the highest tier of healthcare delivery and is responsible for highly specialized and advanced medical services. Core functions include:

- a) Provision of specialized and super-specialized healthcare services.
- b) Setting national norms and standards for quality care, in consultation with other health and social care levels.
- c) Providing specialist outreach and referral support to lower-level facilities.
- d) Offering clinical, internship, and practical training opportunities for students and trainees.
- e) Conducting scientific, clinical, and operational research.
- f) Monitoring, evaluating, and reviewing the performance of the national referral system.
- g) Engaging private healthcare providers and coordinating referral mechanisms, including specialized transfers such as air evacuation.

Medium Term Plan IV

The Fourth Medium Term Plan (MTP IV, 2023–2027) of Kenya’s Vision 2030 underscores the imperative of responsive, equitable, affordable, and high-quality healthcare services for all Kenyans, as guaranteed in the Constitution. The health sector therefore remains a central pillar of Kenya’s national development agenda under Vision 2030.

MTP IV prioritises several strategic interventions aimed at accelerating progress towards Universal Health Coverage (UHC). These include:

- Expanding health insurance coverage to all Kenyans, with specific emphasis on the poor and vulnerable populations.
- Leveraging innovation and digital technologies to enhance efficiency, access, and delivery of health services.
- Strengthening primary health care systems, with the Community Health Strategy as a foundational platform for service delivery.
- Enhancing national capacities for pandemic preparedness, surveillance, and response to public health emergencies.

These focus areas reflect the Government’s commitment to building a resilient health system capable of improving health outcomes, safeguarding economic productivity, and advancing social equity.

Universal Health Coverage

Kenya’s Universal Health Coverage agenda aims to ensure all people access quality essential health services without suffering financial hardship. The focus is on strong primary health care, expanded health insurance through the Social Health Insurance Framework, improved referral systems, adequate health workers, essential medicines, and equitable investment in health infrastructure.

A Level VI hospital supports UHC as the national apex referral center that provides highly specialized services not available at lower levels. It improves treatment for complex conditions, reduces expensive overseas referrals, trains specialists, strengthens clinical standards, supports counties through outreach, and improves readiness for emergencies and critical illness services—thereby enhancing access, quality, efficiency and financial protection within Kenya’s UHC system.

Alignment with National priorities

As the apex referral facilities, Level 6 hospitals set clinical standards, trains specialists, drives research and provides outreach support to county hospitals, reinforcing the Primary Health Care and referral network approach. It also

contributes to health security and preparedness through advanced ICU, diagnostic and emergency capability.

Alignment with the National Referral Strategy

The strategy aims to make Kenya's health system more efficient, coordinated, and fair — supporting the Universal Health Coverage agenda.

The strategy:

- i. Organizes referrals from community level up to county hospitals and national referral hospitals.
- ii. Sets standards and protocols for when and how referrals should happen.
- iii. Strengthens capacity of health workers to identify and manage referrals.
- iv. Improves communication and feedback between referring and receiving facilities.
- v. Promotes use of technology to track and coordinate referrals.
- vi. Supports equity and continuity of care, ensuring patients are not stranded or mismanaged.

2. OBJECTIVES OF THE ASSIGNMENT

The overall objective of this assignment is to undertake a **comprehensive, investment-grade feasibility study**—within an agreed timeline—that will determine the technical, financial, economic, environmental, legal, institutional, and operational viability of establishing two new Level VI Teaching and Referral Hospitals at the identified sites, for establishment of two Level VI hospitals in Bungoma and Kericho Counties. The feasibility study will generate the evidence base required for the Government of Kenya and development partners on whether there is a verifiable case for the establishment of tertiary facilities in these localities. This will form a basis of making an informed investment decision on whether to proceed to the subsequent stages of detailed architectural and engineering design, financing, and procurement.

To achieve this purpose, the consultancy shall be guided by the following specific objectives:

2.1 Technical and Engineering Viability

- a) Assess the suitability of the proposed site through topographical surveys, geotechnical investigations, infrastructure assessments, environmental baseline studies, and analysis of access conditions.
- b) Evaluate existing and future capacity for key utilities, including electricity, water supply, sewerage, stormwater, ICT infrastructure, medical waste management, and transport connectivity.
- c) Identify opportunities, constraints, and risks associated with the site that may influence the design, cost, or phasing of the project.

2.2 Health Needs, Demand and Functional Planning

- a) Conduct a detailed assessment of population demographics, epidemiological trends, disease burden, referral patterns, and current service capacity gaps.

- b) Forecast demand for tertiary and quaternary health services over a 20–30-year horizon, including outpatient, inpatient, surgical, emergency, critical care, diagnostic, oncology, trauma, and specialized teaching services.
- c) Develop a comprehensive functional and clinical service plan aligned with national health policy priorities and projected patient volumes.

2.3 Preliminary Schematic Design and Concept Engineering

- a) Prepare feasibility-level design outputs, including a concept master plan, functional block layouts, adjacency diagrams, 3D massing studies, and high-level engineering concepts.
- b) Develop preliminary infrastructure concepts covering roads, internal circulation, mechanical, electrical, plumbing (MEP), ICT, oxygen and medical gas systems, waste disposal, and building services. Consider incorporating green building design features.
- c) Provide an outline medical equipment plan and identify equipment critical to service delivery and cost modelling.

2.4 Financial, Economic and Cost Analysis

- a) Develop preliminary capital cost estimates (CAPEX) and operational cost projections (OPEX), including staffing, utilities, medical supplies, maintenance, and equipment lifecycle costs.
- b) Conduct financial modelling, including cash flow analysis, revenue projections (insurance reimbursements, service charges, teaching income), and financial sustainability assessments.
- c) Undertake a full economic evaluation in line with National Treasury guidelines and international development partner standards, citing the appropriate project appraisal models.
- d) Assess medium- and long-term fiscal affordability and identify potential financing options, including public funding, blended finance, or development partner support.

2.5 Environmental and Social Impact Assessment (ESIA)

- a) Conduct a full ESIA in accordance with NEMA regulations and international safeguards (e.g., AfDB).
- b) Identify potential environmental and social risks, including those related to land use, biodiversity, water resources, waste management, climate resilience, occupational safety, gender, vulnerable groups, and community health and safety.
- c) Develop a costed Environmental and Social Management Plan (ESMP) and stakeholder engagement plan.

2.6 Institutional, Governance, Human Resource and Regulatory Assessment

- a) Review the legal and regulatory framework governing tertiary hospitals, teaching institutions, research facilities, and public infrastructure development.
- b) Assess institutional readiness, governance structures, staffing capacity, and training needs for sustainable operation of a Level VI hospital.
- c) Prepare a comprehensive human resources plan covering staffing numbers, skill mix, training, recruitment sequencing, and residency programs.

2.7 Operationalization and Sustainability Planning

- a) Develop a detailed operational readiness plan covering commissioning, clinical protocols, ICT systems, supply chains, quality assurance, and support services.
- b) Identify sustainability measures, including digital health integration, energy efficiency, climate resilience, waste minimization, and long-term financial sustainability mechanisms.

2.8 Risk Assessment, Phasing and Implementation Roadmap

- a) Identify and assess risks across technical, financial, governance, operational, environmental, and social dimensions.
- b) Develop a comprehensive Risk Register with mitigation strategies and monitoring indicators.
- c) Prepare a phased implementation roadmap, including construction sequencing, procurement strategy, key milestones, and an indicative project schedule from feasibility to commissioning.

2.9 Final Feasibility Study and Documentation

- a) Consolidate all analysis into a complete, bankable feasibility study report compliant with the requirements of the National Treasury, the Ministry of Health, and development partners.
- b) Prepare executive summaries tailored for decision-makers, financiers, and policy stakeholders.
- c) Facilitate a validation workshop and incorporate stakeholder feedback into the final documentation.

3. SCOPE OF ASSIGNMENT

The Consultant shall undertake a comprehensive, multidisciplinary assignment that covers all analytical, technical, environmental, financial, institutional, and operational dimensions necessary for a bankable feasibility study of a Level VI Teaching and Referral Hospital. The work will be executed within an agreed timeframe and shall be carried out through parallel workstreams to ensure timely delivery.

The scope of work shall include, but not be limited to, the following components:

3.1 Technical, Engineering and Site Assessments

The Consultant shall undertake all technical investigations required to establish the suitability and readiness of the proposed site, including:

- a) Site Verification and Due Diligence
 - i. Confirm land ownership, size, tenure, zoning, encumbrances, and access rights.
 - ii. Prepare a detailed site appraisal including topography, natural features, sensitive areas, and potential constraints.
- b) Topographical and Geospatial Survey
 - i. Conduct an accurate topographical survey of the entire site.
 - ii. Produce geo-referenced maps and spatial datasets that inform design and infrastructure planning.
- c) Geotechnical Investigations
 - i. Undertake soil drilling, sampling, laboratory testing, and geotechnical analysis.
 - ii. Assess soil bearing capacity, foundation requirements, groundwater conditions, and seismic considerations.

d) Infrastructure and Utilities Assessment

- i. Review availability and capacity of:
 - a. Electricity supply and backup systems
 - b. Water supply (bulk, borehole potential, storage)
 - c. Sewerage and wastewater disposal
 - d. Stormwater drainage
 - e. Solid and hazardous waste management
 - f. ICT networks and fibre connectivity
 - g. Road access and traffic circulation
- ii. Identify required upgrades and connection points.

3.2 Health Needs, Epidemiological and Service Demand Analysis

The Consultant shall conduct a rigorous assessment of current and projected healthcare needs to justify the scale and design of the proposed facility.

a) Demographic and Population Projections

- i. Analyse population dynamics over a 20–30-year horizon.
- ii. Consider ageing trends, fertility rates, urbanization, and mobility patterns.

b) Epidemiological Profiling

- i. Assess regional disease burden including communicable and non-communicable diseases, trauma, maternal and neonatal health, oncology, renal disease, and emerging health threats.

c) Service Demand Forecasting

- i. Project demand for inpatient, outpatient, critical care, surgical, diagnostic, emergency, rehabilitation, oncology, and specialized services.
- ii. Identify gaps in current service provision and unmet needs.

d) Referral Pathways and System Capacity

- i. Analyse current referral trends and strain on existing Level V and Level VI hospitals.
- ii. Identify opportunities to strengthen the national referral network.

3.3 Functional and Clinical Planning

The Consultant shall develop a detailed functional plan to inform schematic design and cost estimation.

a) Clinical Service Framework

- i. Identify all proposed clinical departments and centers of excellence.
- ii. Define service mix, functional relationships, and clinical workflows.

b) Space Programming and Planning

- i. Develop room-by-room schedules and spatial requirements based on projected service volumes.
- ii. Define circulation patterns, zoning, infection-control pathways, and departmental adjacencies.

c) Teaching, Research and Innovation Requirements

- i. Define teaching, residency, fellowship, simulation, library, research, and laboratory needs.
- ii. Propose partnerships with universities, specialist colleges, and training institutions.

3.4 Preliminary Schematic Design and Concept Engineering

The Consultant shall prepare feasibility-level designs to inform cost modelling and decision-making.

a) Concept Master Plan

- i. Produce site-wide master plan showing placement of buildings, circulation, emergency access, future expansion zones, parking, and utilities.

b) Schematic Architectural Design

- i. Develop block layouts, bubble diagrams, adjacency matrices, and preliminary 2D/3D massing concepts.
- ii. Demonstrate functional zoning, patient flows, and operational efficiency.

c) Infrastructure and Engineering Concept Designs

- i. Prepare high-level engineering concepts for:
 - a. Structural systems
 - b. Mechanical, electrical, and plumbing (MEP)
 - c. ICT and digital health infrastructure
 - d. Medical gases
 - e. Waste management and sterilization
 - f. Energy and climate resilience measures

d) Preliminary Medical Equipment Plan

- i. Identify major medical equipment needs, associated space requirements, and approximate costs.

3.5 Environmental and Social Impact Assessment (ESIA)

The Consultant shall undertake a full ESIA in accordance with NEMA regulations and international financing standards.

a) Baseline Studies

- i. Assess environmental, hydrological, ecological, and social conditions.

b) Impact Identification and Risk Analysis

- i. Identify potential environmental, social, health, gender, safety, and community impacts.
- ii. Analyse project risks including climate-related vulnerabilities.

c) Public Participation & Stakeholder Engagement

- i. Conduct multiple engagement sessions with stakeholders, communities, and county authorities.

d) Environmental and Social Management Plan (ESMP)

- i. Develop a costed ESMP outlining mitigation measures, responsibilities, and monitoring arrangements.

3.6 Economic, Financial and Cost Analysis

The Consultant shall undertake financial and economic evaluation in line with National Treasury guidelines and international best practice.

a) Capital and Operational Costing

- i. Prepare preliminary CAPEX estimates based on schematic design ($\pm 30\%$ accuracy).
- ii. Prepare OPEX projections including staffing, equipment maintenance, utilities, consumables, ICT, and administrative costs.

b) Financial Modelling

- i. Develop a detailed financial model including revenue projections, operating margins, and affordability analysis.

c) Economic Evaluation

- i. Conduct cost-benefit analysis and prepare NPV, ERR, and BCR metrics.
- ii. Quantify economic benefits such as reduced mortality, reduced travel time, productivity gains, and improved workforce readiness.

d) Fiscal Impact and Financing Options

- i. Assess long-term fiscal sustainability.
- ii. Identify potential financing modalities including public funding, blended financing, development partner support, or phased implementation.

3.7 Institutional, Legal, Governance and Human Resources Assessment

a) Legal and Regulatory Review

- i. Review all applicable national laws, licensing requirements, standards, and compliance obligations.

b) Governance and Management Framework

- i. Propose an appropriate governance model for a Level VI teaching and referral hospital, including autonomy considerations.

c) Human Resources Plan

- i. Develop detailed staffing projections, job categories, recruitment requirements, training needs, and residency program considerations.

d) Institutional Capacity Assessment

- i. Evaluate readiness of MoH, county governments, and training institutions to support operations.

3.8 Operationalization and Sustainability Planning

a) Operational Readiness Framework

Define commissioning requirements, SOP development, ICT readiness, supply chain systems, and quality assurance mechanisms.

b) Financial Sustainability

- i. Assess cost-recovery potential, revenue sources, and long-term sustainability risks.

c) Environmental and Social Sustainability

- i. Integrate climate resilience, energy efficiency, waste minimization, and inclusive access measures.

3.9 Risk Assessment and Implementation Roadmap

a) Comprehensive Risk Analysis

- i. Identify technical, financial, environmental, operational, institutional, governance and construction risks.

b) Risk Register and Mitigation Plan

- i. Provide probability-impact scoring, mitigation strategies, and responsible parties.

c) Phased Implementation Plan

- i. Develop construction sequencing, procurement strategy, project phasing, and indicative timelines to commissioning.

3.10 Final Feasibility Study Documentation

a) Complete Feasibility Study Report

- i. Consolidate all thematic workstreams into a single investment for each of the facilities- ready final report.

b) Executive Summary

- i. Prepare concise versions for policymakers, Treasury, Cabinet, and development partners.

c) Validation Workshop

- i. Facilitate sector stakeholder validation and incorporate recommendations.

4. **CONSULTANT QUALIFICATIONS AND TEAM COMPOSITION**

The successful consultant shall be a reputable, legally registered, multidisciplinary firm—or consortium of firms—demonstrating extensive experience in **health infrastructure planning, feasibility studies, hospital design, health systems analysis, and large-scale public investment project preparation**. The firm must have proven capacity to undertake a complex, multi-sectoral assignment within an agreed timeframe and meet the quality standards required by the Ministry of Health, National Treasury, and international development partners.

5. **PROPOSED TIMELINE**

Given the urgency of expanding tertiary healthcare capacity and the Government's commitment to fast-tracking priority health infrastructure under the UHC agenda, the feasibility study shall be undertaken within a **timeframe of 120 days** from contract signature. The Consultant shall organize its workstreams to operate in parallel and deploy adequately staffed teams to ensure timely and high-quality delivery.

Implementation Approach: There is expected to be parallel workstreams, weekly coordination meetings, and continuous stakeholder engagement.

6. **EXPECTED DELIVERABLES**

The Consultant shall prepare and submit high-quality deliverables that collectively form a complete and bankable feasibility study for the proposed Level VI Teaching and Referral Hospitals. All deliverables shall be submitted in both **editable electronic formats (Word, Excel, CAD/PDF)** and **print-ready formats**, and must adhere to Ministry of Health standards, National Treasury project appraisal guidelines, and international best practices.

The Consultant is responsible for ensuring coherence, accuracy, and consistency across all deliverables.