



THE STATE OF KENYA'S HEALTH MARKET - 2024



REPORT ON THE STATE OF KENYA'S HEALTH MARKET, 2024

Authors:

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Abbreviations

AIDC	A covine d improve a deficiency	KILE	Kanya Haalthaara Fadaratian		
AIDS	Acquired immunodeficiency syndrome	KHF	Kenya Healthcare Federation		
AWPs	Annual Workplans	KHIS	Kenya Health Information System		
CAPR	Community AIDS Programs Reporting	KMHFL	Kenya Master Health Facility List		
СНМТ	County Health Management Team	KMPDC	Kenya Medical Practitioners and Dentists Council		
CIDP	County Integrated Development Plan	KNBS	Kenya National Bureau Statistics		
ICCs	Interagency Coordination Committees	KPA	Kenya Pharmaceutical Association		
CoG	Council of Governors	KQMH	Kenya Quality Model for Health		
COHSASA	Council for Health Service Accreditation of Southern Africa	KRA	Kenya Revenue Authority		
DHIS2	District Health Information Software 2	LMIS	Logistics Management Information System		
DHPT	Department of Health Products and Technologies	MEDS	Mission for Essential Drugs and Supplies		
DOH	Department of Health	МоН	Ministry of Health		
DQA	Data Quality Assurance	MTEF	Medium-Term Expenditure Framework		
ECHIS	Electronic Community Health Information System	NHIF	National Health Insurance Fund		
EHR	Electronic Health Records	NTSA	National Transport and Safety Authority		
EMR	Electronic Medical Records	PHC	Primary Health Care		
FIF	Facility Improvement Fund	PPB	Pharmacy and Poisons Board		
FKPM	Federation of Kenya Pharmaceutical Manufacturers	PPC	Public private collaboration		
FY	Financial Year	PPD	Public Private Dialogue		
HENNET	Health NGO's Network	PPM	Public Private Mix		
HIV	Human Immunodeficiency Virus	PSK	Pharmaceutical Society of Kenya		
HMIS	Health Management Information System	RMNCAH	Reproductive Maternal, Newborn, Child and Adolescent Health		
HPTS	Health Products and Technologies	RUPHA	Rural Urban Hospitals Association		
HRIO	Health Records Information Officer	SAGAs	Semi-Autonomous Government Agencies		
HSIGCF	Health sector Intergovernmental Consultative Forum	SHA	Social Health Authority		
HSISC	Health Sector Interagency Steering Committee	SHIF	Social Health Insurance Fund		
IFMIS	Integrated Financial Management Information System	ТВ	Tuberculosis		
IHRIS	Integrated Human Resources Information System	TWGs	Technical Working Groups		
KAH	Kenya Association of Hospitals	UHC	Universal Health Coverage		

КАРН	Kenya Association of Private Hospital	USAID	United States Agency for International Development
KEPSA	Kenya Private Sector Association	USAID PSE	USAID Private Sector Engagement

Glossary of Terms

Counterfeits Fake or unauthorized products, particularly medications, that pose risks to public health and market integrity. County A geographical unit created by the 2010 Constitution of Kenya as the new units of devolved government A team responsible for managing health services and resources at the county level in Kenya Data Transparency The practice of making relevant health-related information accessible, understandable, and readily available to patients, providers, and other stakeholders. Digital Health Act Legislation aimed at regulating digital health technologies and practices to enhance healthcare delivery and outcomes Revenue collected at public health facilities as user fees paid to defray the costs of running these facilities Fiscal Year A 12-month accounting period running from 1st of July to 30th June of the following calendar year Healthy Markets Framework Health Sector Advisory and Oversight Committee Health Sector Interagency Steering Committee Health Sector Interagency Steering Committee Health Sector Interagency Steering Committee Health Sector Interagency Teny Froum that brings together the Ministry of Health and Investment Plan (KHSSP). A consultative forum that brings together the Ministry of Health and Investment Plan (KHSSP). A consultative Forum Interagency Coordination Committees Kenya Quality Model for Health Market Data The process of certified standards and policy direction-setting brings together the Ministry of Health and Investments in the health sector. A comprehensive framework for assessing and improving healthcare systems, including various criteria such as financial management, referral systems, equipment, and human resources Market Data	.	
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Market analytics	Capacity and funding to support routine tools such as demand forecasting as well as specific technical analysis needed to understand specific market barriers.
Market Institutions	The policies and institutions necessary for national markets to function well and deliver for consumers. Key market functions such as financing, procurement, supply chain and regulation are supportive of access.
Market Management	Capacity and frameworks to lead and manage market health in both public and private sector, for setting market strategy and targets, acting and monitoring progress.
Pharmacy and Poisons Board	A regulatory body under the Ministry of Health that oversees the marketing authorization and registration of health products
Professional Associations and Councils	Organizations that regulate the licensing and practice of health professions, ensuring adherence to ethical and professional standards
Public Private Mix	A coordination mechanism within the TB program that involves collaboration between the public and private sectors to enhance TB service delivery
Public-Private Sector Coordination Framework	A structured approach for facilitating collaboration between governmental bodies and private entities in healthcare initiatives
KEMSA	A specialized Government medical logistics provider for Ministries of Medical Services/Public Health-supported health facilities and programmes in Kenya
MEDS	A faith-based supply chain and logistics organization that provides Health Products and Technologies, Quality Assurance and Health Systems Strengthening Services
Self-Regulation Systems	Systems implemented by professional associations to regulate themselves at both county and national levels
Social Health Insurance Fund	A financial mechanism designed to pool resources and provide health insurance coverage to all Kenyans and Kenyan residents
Universal Health Coverage	The goal of ensuring that all individuals and communities have access to essential health services without financial hardship

Executive Summary

This report is intended to provide up-to-date information and insights into Kenya's health market for all health stakeholders – public and private – in order to help strengthen the market at the national level and in the counties. This executive summary provides a short overview of Kenya's health market assessment, including key sections, primary findings and recommendations for action. This summary is intended to be used by policy makers and key decision makers as a standalone summary document as required.

Snapshot of Kenya's current health market

Kenya's health sector – and its health market - has undergone significant transformations over recent years. This is partly driven by rapid technological advancements and the development of robust legal and regulatory frameworks such as the Kenyan Constitution of 2010, the Vision 2030 Economic Development Plan, the Kenya Health Policy (2014 – 2030), and various Medium Term Expenditure Frameworks (MTEFs).

Universal Health Coverage (UHC) which is one of the highest priorities of the Government of Kenya, is driving significant change for the public and private health sectors and is supported by new policies and high ambitions for its implementation. Within the last few months alone, Kenya has passed four critical acts of parliament that will bolster UHC: the Social Health Authority Act (2023), the Digital Health Act (2023), the Facility Improvement Fund Act (2024), and the Primary Healthcare Act (2023). These acts aim to address weaknesses in the healthcare system, including inadequate financing, poor availability and flow of data and information, retention of funds in the healthcare system, and the general structure of the healthcare system to allow for efficient coordination and appropriate patient referral. However, challenges remain with overall coordination of the health sector and market, with limited health market management capacity at the national and county levels; financing challenges continue to be prevalent and data availability and sharing across the public and private sectors is low.

Preexisting regulatory frameworks have significantly improved resource availability for the health sector, which is critical as Kenya received Lower Middle Income County status in recent years. As a result, and as Kenya's economy continues to grow, there is an increasing focus on domestic resource mobilization and a trend of decreasing donor resources. The total government budget allocated to health as a percentage of the national and county budgets increased from 7.8% in FY 2012/2013 to 11.5% in FY 2019/2020. The budgetary allocation of Kshs 216 billion in 2019/2020 represented a threefold increase from pre-devolution levels in 2013/2014. However, many respondents in this assessment indicate that there is still an over-reliance on donors, and there are a multitude of challenges with financing the health sector at the national and county levels, including low levels of funding, a reliance on donor funds and late disbursements. Counties are also not financially dependent from the national level.

A key initiative under the Digital Health Act of 2023 is the Digital Healthcare Superhighway initiative which aims to develop a digital ecosystem providing end-to-end visibility of the entire health system, thereby supporting increased access to health services through both public and private channels. The initiative will build the necessary infrastructure to enhance the healthcare system such as data management, telemedicine as well as digital health records management. It is anticipated that such moves will enable greater data availability and use, as well as analytical tools that will enable decision makers to better understand Kenya's health

market, and to make effective decisions to strengthen the market – issues which this assessment finds are current weaknesses at the national and county levels.

Kenya's political ambitions of increasing local manufacturing of Health Products and Technologies(HPTs) presents a great opportunity to further bolster a robust health market and strengthen the private sector. Kenya's strong legislative foundation, combined with a clear political commitment to Section 155 of the Public Procurement and Asset Disposal Act of 2015, presents a prime opportunity to substantially expand domestic HPT manufacturing. This calculated action intends to increase HPT exports in addition to ensuring self-sufficiency in the home market, which should contribute to the persistent supply challenges with some HTPs that continue to exist at the national level and in the counties. Since local production is essential to guaranteeing the accessibility, quality, and affordability of HPTs, specific policy goals have been set to lessen reliance on imports. The objectives encompass broadening the range of products to encompass 90% of medical conditions, augmenting government purchases from local manufacturers to 50%, and promoting the creation of advanced formulations. Despite the underutilization of the local manufacturing potential, which accounts for 30–60% of the market in terms of value and quantity, the government, through the Ministry of Health, continues to be the biggest purchaser of locally made HPTs.

USAID Private Sector Engagement program

The program aims to enhance health outcomes in Kenya by expanding patient access to primary healthcare products and services within the private sector. Implemented by Population Services Kenya (PS Kenya) in partnership with Halcyon and the Kenya Healthcare Federation (KHF), the program seeks to bolster patient choice in the private healthcare market. Funded by USAID and running from June 2023 to June 2028, the initiative aligns with Kenya's UHC goals and its Journey to Self-Reliance. The program has a primary focus on the national level and Nairobi, Nakuru, Mombasa, Kisumu, Uasin Gishu, and Homa Bay counties. It also provide technical assistance to Turkana, Trans Nzoia, Siaya, Vihiga, Nyamira, Taita Taveta and Kakamega counties to strengthen their management of mixed health systems.

The PSE program's primary objectives are to:

- 1. Identify, test, and scale sustainable private sector distribution channels for essential health products and services
- 2. Improve the quality and efficiency of private healthcare product and service delivery
- 3. Strengthen local manufacturing capabilities for health products

The USAID PSE program in Kenya is a practical application of the USAID Private Sector Engagement policy. To ensure program interventions are evidence-based, tailored, and contribute to a more resilient and inclusive health system, the PSE program has conducted a comprehensive health market assessment. Aligned with the USAID PSE policy's emphasis on strategic planning and data-driven decision-making, this assessment will guide the program towards supporting the Kenyan Government towards its journey to self-reliance.

Kenya's health market assessment overview

USAID's Private Sector Engagement program conducted Kenya's first ever health market assessment. This assessment builds on other assessments that have examined various aspects of the health market, such as the role of the private sector, supplies and health financing, but goes further with a whole market perspective that incorporate other critical market components such as market stewardship and management, market data and analysis.

Kenya's health market assessment has been carried out against four key objectives:

- 1. To provide a current snapshot of Kenya's health market
- 2. To document Kenya's health market ecosystem
- 3. To assess Kenya's health market foundations, identify the root causes of market failures, challenges and opportunities for the market to grow
- 4. To assess the market conditions affecting healthcare in Kenya

The assessment utilized the Healthy Markets Framework to answer its objectives. The framework assesses various components of market foundations, conditions, and ecosystems within a health sector which typically make up its health market, which are presented in Table 1 and Figure 1 below.

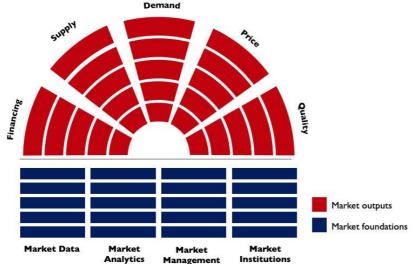
Table 1. Market foundations and market conditions definitions

Market foundations	Definition
Market data	Quality data needed by both public and private sector, to monitor, analyze and shape national markets, understand consumer insights, and need.
Market analytics	Capacity and funding to support routine tools such as demand forecasting and specific technical analysis needed to understand specific market barriers.
Market management	Capacity and frameworks to lead and manage market health in both public and private sector, for setting market strategy and targets, acting and monitoring progress.
Market institutions	The policies and institutions necessary for national markets to function well and deliver for consumers. Key market functions such as financing, procurement, supply chain and regulation are supportive of access.
Market conditions	Definition
Financing	Is the financing for healthcare adequate, sustainable, and predictable enough to meet demand for products from the health system and are mitigation measures available to help cope with supply and financing shocks.
Supply	Is the supply of health-related goods and services sufficient, reliable and robust enough to meet system demand and ensure availability at point of service and to be maintained in the face of supply -side shocks.
Consumer demand	Is the overall system being able to meet the needs and preferences of consumers across geographies and channels and consumers are sufficiently aware of options.
Price	Are products available at the national level to all channels at competitive and affordable prices. Is end user pricing equitable across methods, geographical regions, income groups and service channels. The viability and sustainability of channels is not adversely affected by pricing policies.
Quality	Are products across national market channels meeting appropriate quality standards and there is a robust framework for quality assurance.

To assess the performance of the Kenya's health market, each of the market foundations and market conditions are assessed against a number of key indicators and given an

objective score from 1 – 5 and based on the findings from the assessment. The scores are entered into the framework which provides a snapshot visual on the performance of different market foundations and conditions are shown below in Figure 1. The scoring system within the framework serves as a structured mechanism for quantifying and evaluating these intricate health market components. This systematic approach not only enhances the precision of the assessment but also provides a robust foundation for objectively measuring and interpreting the multifaceted aspects of the health market.





Methodology

The assessment employed a mixed method, crosssectional study approach conducted at the national and county levels in Kenya. The research methodology combined secondary data analysis and primary qualitative research to provide a holistic understanding of the country's health system. Secondary data was sourced from a systematic literature review encompassing qualitative and quantitative

indicators. The findings of the literature review illuminated knowledge gaps, forming the foundation for subsequent primary qualitative research. The primary data collection adopted a qualitative research design, employing key informant interviews (KIIs). This approach facilitated the collection of rich, context-specific data, allowing for a nuanced understanding of the complexities across the target counties.

The study focused on the national level and the six PSE priority counties: Nairobi; Nakuru; Mombasa; Kisumu; Nakuru, and; and Uasin Gishu. Homa Bay was also included as a focus county at the request of USAID. The study population included various public and private sector stakeholders who were purposively sampled at the national level and in the focus counties. Ethical approval was secured from Amref's Ethics and Scientific Review Committee (ESRC) and the National Commission for Science, Technology and Innovation (NACOSTI) as well as ethical approvals from the counties as required.

Summary of key findings and recommended actions

At the national level, Kenya's health market can be considered to be functioning reasonably well in some areas, but underperforming in others. At the market foundations level, the national level performance is best in market institutions - score 3/5 - but there are challenges with regards to the market management, market data and market analysis, all of which only score 2/5. With regards to the market output level, the performance of quality is found to be the highest, with a score of 4/5, followed by demand which scores 3/5. Financing supply and price all score 2/5.

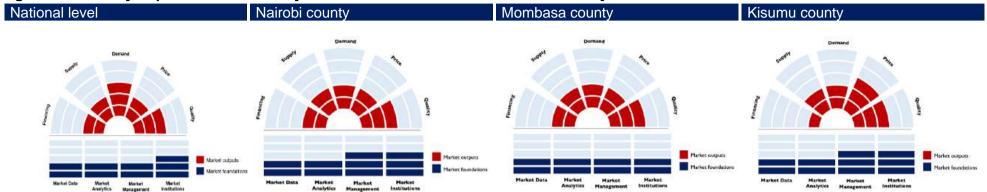
The performance of the health markets in the counties show a slightly varied pattern, but overall the trend is similar to the national level and between the counties: some areas are performing reasonably well but many areas are underperforming. In all the counties, the performance of the market foundations is generally quite limited with most areas scoring only 2/5. Market data and analytics score 2/5 consistently in all assessed counties except for Nakuru county, whose performance in market data scores the highest with 3/5. The performance of market management in Nairobi and Kisumu counties is slightly higher than the other counties, and performance is ranked 3/5 compared to 2/5 for the other counties. Market institutions in the counties has the overall highest level of performance, with Nairobi, Kisumu, Nakuru and Homa Bay counties scoring 3/5. At the market output level, performance is highest for quality in several counties, and in some counties price also scores higher, but with lower performance in all counties regarding financing, price, supply and demand.

Table 2. Summary of market performance at the national and county levels

Market	National	Counties					
foundations		Nairobi	Mombasa	Kisumu	Nakuru	Uasin Gishu	Homa Bay
Market data	2	2	2	2	3	2	2
Market analytics	2	2	2	2	2	2	2
Market management	2	3	2	3	2	2	2
Market institutions	3	3	2	3	3	2	3
Market outputs	National	Nairobi	Mombasa	Kisumu	Nakuru	Uasin Gishu	Homa Bay
Financing	2	2	2	1	3	2	2
Supply	2	2	2	2	2	2	2
Demand	3	2	2	2	2	2	2
Price	2	2	2	3	3	2	3
Quality	4	3	3	3	3	2	3

Figure 2 provides a graphically summary of the performance of Kenya's health market at the national level and in the assessed counties.

Figure 2. Summary of performance of Kenya's health market at the national and county levels







Market Foundation - Market Data

Key finding

a. Kenya's ambitions to transform its health information systems – including the collection and use of data - are significant, especially with the forthcoming Kenya Data Superhighway which has important implications for the private sector

- b. There is no information system specifically for Kenya's health market, which undermines the way in which the entire market and key components are understood and managed. There are no plans or investments to support the development of a health market information system
- c. There is extensive fragmentation and very limited interoperability of the health information systems that are used by the public and private sectors. This hinders the sharing and utilization of market data
- d. Private sector data are not available to the public sector and the private sector has limited access to KHIS, outside of what is needed for regulatory purposes,
- e. Data to understand the public sector market is available and of sufficient quality to be used for some purposes, such as strategy development, annual planning and monitoring especially at the county level
- f. Some private sector data exists, but through numerous, independent systems, and data is not shared in public information systems or between other private sector stakeholders. There is very limited data available on downstream private pharmaceutical stakeholders, such as distributors and pharmacies
- g. There is limited data transparency and mistrust between the public and private sectors regarding the sharing and use of data. Incentives and systems to share information are limited
- h. Kenya has a Data Quality Assurance (DQA) framework, but its rollout is not uniform between the public and private sectors. The are no explicit efforts at-scale to push for an all-market DQA process

- a. Develop an analytics layer that will take advantage of the data within the digital superhighway to provide information for decision makers. Resource mobilization for this needs to be carried out. ICT solutions providers should be provided with information on the information needs of the digital superhighway.
- Revise policies on access to KHIS data to allow the private sector to access data
- c. Support closer collaboration between the public and private sector to allow for data sharing of non-routine data and trends at national and county levels. Terms of reference should include DQA support and developing data briefs that provide relevant analyzed information to public and private sectors
- d. Implement the Digital Health Act 2024 and roll out of the digital health superhighway.
- e. Support capacity-building sessions breaking down the provisions of the Digital Act 2024 and its implications for both the public and private sectors
- f. Map the private sector's technology infrastructure and capacity needs at the national and county level. Mechanisms for data sharing with the private sector should be explored for data utilisation for joint accountability and knowledge sharing.
- g. Explore private sector investment models to ensure the private sector is adequately prepared and resourced for the rollout of the Digital Health Act 2024

- Data on consumer insights is not routinely collected outside of some private sector players and some donor-driven programs and consumer insights are inferred from consumption data
- h. Support DQA capacity building for the private sector
- i. Carry out national consumer needs assessments on a regular basis to understand consumer needs and demands



Market Foundation - Market Analytics

Key finding

- a. There are no market data dashboards or analytics tools available at the national or county levels to support decision making, shaping and strengthening the health market
- b. Some data analytic tools are available in the health sector, but they are largely for the public sector only. The Kenya Health Information System (KHIS), for example, is not encompassing of all the private sector and is mostly limited to vertical programs
- c. The private sector's market analytical tools are extensive in number but they are fragmented, not integrated and only used within specific organizations, networks and associations
- d. The country's ICT hardware is still inadequate for supporting the national HIS and future data ambitions, especially in government-owned and rural facilities
- e. There are no routine collection analytics systems that collect data on consumer insights

Recommended action

- a. Develop a health market dash board with a whole market view to provide whole market level visualization for decision makers to use
- b. Involve private sector in data management and oversight mechanisms to encourage data sharing between the public and private sectors



Market Foundation - Market Management

Key finding

- a. There are several important health sector coordination forums, structures and policies in place that should support and strengthen the management of Kenya's health market. The implementation of these forums, structures and policies is limited by inadequate financing and human resources
- b. The forums, structures and policies that are in place are not explicitly focused on the wider health market, although they offer potential for the public and private sectors to work together, specifically around areas of mutual interest such as the vertical disease programs and attainment of the UHC

- a. Review the Kenya Health Sector Partnership and Coordination Framework to assess its suitability. Revise the framework to make sure that it is fit for the current purpose
- b. Develop policy frameworks for the coordination of the whole market at county level, and which is aligned to the Kenya Health Sector Partnership
- c. Enhance the Council of Governors health secretariat to support the coordination

- c. The Kenya Health Sector Partnership and Coordination Framework (2018) has only been partially implemented. The partnership secretariat has been convened and a number of intergovernmental forums have been held but all other structures have not been activated
- d. Stakeholders generally report that the management of the health sector including the private sector and at both national and county levels is more challenging now than e. in the recent past
- e. There is low appreciation by public sector health managers of the need to manage the f. entire health market and not only public sector health service delivery
- f. The Kenya Health Sector Partnership and Coordination framework only stipulates the coordination mechanism at the national level. This has left the counties without guidance on how to structure the coordination of the sector
- g. Relationships and coordination between the national level and counties is strained
- h. The CoG's health secretariat has limited human resources capacity to support the collaboration of the counties and the national MoH
- Resources for market management functions at all levels are not adequate resulting in reliance on donor funding for management functions such as routine meetings of coordinating bodies

- between the counties and the national government
- d. GoK to budget for and dedicate sufficient resources to the market management and coordination function. GoK leverage existing capacity within partner agencies to support market management
- e. Lobby the treasury to increase funding for market management on an ongoing basis
- f. Train new health managers on government systems and protocols as well as existing policies that need to be implemented coordination of the health market, market dynamics and market management
- g. Align GoK performance management frameworks and incentives to health market management performance
- h. Explore the representation of the counties in the Interagency Coordination Committees (ICCs). The capacity of the ICCs to set market strategy and objectives



Market Foundation - Market Institutions

Key finding

- a. The roles and responsibilities of each market a.
 institution is unclear and the functionality of many institutions is limited
- The multiplicity of market institutions limits the overall impact on Kenya's health market as there are significant needs of better coordination of market institutions, communication and data sharing
- c. The capacity to govern and manage market institutions need strengthening, with a focus on building government's ability to steward both public and private health market institutions
- d. A lack of coordination, financing and supply chain issues continue to pose challenges for functionality of these institutions

- a. Conduct a comprehensive review of market institutions to clearly define roles and responsibilities, reducing overlaps and improving efficiency
- Disseminate findings from the review are shared to key stakeholders for action
- c. Update the existing comprehensive regulations and guidelines for the safe and effective use of newer technologies

- e. Limited information flow between public and private sectors hinders effective coordination and planning between national and county levels
- f. **Most market institutions face significant funding challenges**, with insufficient funding from the national treasury and a heavy reliance on donor funding
- g. Regulatory institutions like the Pharmacy and Poisons Board are yet to draft policies accommodating newer technologies. This regulatory lag impacts the health market's ability to innovate and adapt to emerging technologies



Market Conditions - Financing

Key finding

- a. The Kenyan health sector relies on several funding sources which include government allocations at national and county level, donors, private bodies, implementing partners and households
- b. Kenya has a low budgetary allocation to the health sector, despite having more financial resources than it did 15 years ago
- c. Donors still play a critical role in funding critical disease areas and activities within the health sector although their role has been declining in recent years
- d. There is still an overreliance on donors financing of health at national and county levels despite the increase in public allocations
- e. The GoK is expected to increase its funding for health as donor funds decrease. Domestic resources, however, do not meet the funding gap, which undermines access is exacerbated late fund

- a. Advocate for the implementation of national and county policy frameworks that would lead to increased domestic resources mobilization from health sector like FIF and review of bank loan rates
- b. Develop advocacy plans that would lead to incremental budgetary allocation that responds to the ever-changing and increasing health needs as the country's population grows
- c.
 d. Advocate for joint public and private health sector planning and forecasting discussions to support health priorities
- e. Support the discussions on the inclusion of the donor funded HIV/AIDs, TB and family planning products into health insurance benefits package to improve on access and domestic financing from a pooled fund
- f. Support and advocate for resources to be allocated for health insurance awareness creation activities. This will increase the health insurance coverage, utilization and reduce out-of-pocket health expenditure
- g. Strengthen the government UHC indigents program by incorporating counties in allocating financial resources to support the most vulnerable to have health insurance
- h. Automate the claims management process to improve turnaround time for all level 2 and 3 health facilities
- i. Invest resources in capacity building for health facility staff on claims management processes and

- disbursements from the national treasury
- f. Counties are over reliant on national government j. revenue allocation, but there are frequent delays in the exchequer disbursements to counties k
- g. Only 26% of the population has health insurance cover.

 Health insurance fraud by beneficiaries and the healthcare providers is extensive
- h. The GoK has enacted the Social Health Insurance Act introducing three funds that aims to expand access to essential services through an enhanced benefits package
- There is limited capacity to predict and manage health risks due to the lack of information sharing among the insurance industry players
- j. There's limited empanelment of the private sector facilities by NHIF and the private health insurance. The situation is worse for the pharmaceutical industry that has less than 5% of the pharmacies empaneled.

- the claims management and compliance teams at NHIF (SHIF) regional and head offices to improve the review and approval process
- Support counties to expand their own source revenues by automating revenue collection across all sectors. This has the potential to minimize revenue leakages
- k. Advocate and support the implementation of facility improvement financing in the public sector to improve on the county revenue collection efforts in national and county health facilities
- I. Advocate and support the engagement frameworks that will lead to timely exchequer disbursements from the national treasury to the counties and other players in the health sector including the referral hospitals. This will help avoid negative impact like the ones that were associated with Linda Mama reimbursements.
- m. Support structured health financing dialogue mechanisms between the counties (through the CoG), national government and the private sector players to guarantee sustainable cashflow
- n. Advocate for the enforcement of the high penalties for fraud by beneficiaries, healthcare providers and insurance firms by the insurance regulatory bodies and firms.
- Advocate for the enforcement of the high penalties for fraud by beneficiaries, healthcare providers and insurance firms.
- p. Insurance firms to consider strengthening their This will help reduce fraud resulting from facilities and their collusion with beneficiaries. Regulatory bodies, private health insurance firms and facilities to initiate dialogue on acceptable legal frameworks for patient data sharing to enable the insurance companies to efficiently define their benefits package and minimize risks for fraud in the market



Market Conditions - Supply

Key finding

a. Periodic stockouts are still common due to inadequate funding for procurement and other administrative challenges such as inadequate planning and coordination

- b. There is still a dependence on donor funding for specific products and which still brings into doubt the sustainability of the supply chain at national and county levels
- c. Funds for health products and c. technologies have not substantially increased between 2020 and 2023
- d. Cash flow challenges due to the poor funds flows from the national d. level are major contributors to supply shortfalls at the county level
- e. There is an underutilization of the established local manufacturing capacity of pharmaceuticals, which is expected to contribute to a stronger supply chain
- f. There is a drive towards use of digital solutions and technological f. integration to enhance supply chain efficiency, improve inventory management, and reduce stockouts
- g. Supply chain data is not completely reliable and is available in various systems usually provided by vertical programs. Supply data in the private sector is also not visible to the public sector making a whole market view difficult to generate

- a. Increased budget allocation for health products to meet the quantified needs at both national and county levels
- b. Under the Social Health Insurance Funds together with the FIF Act 2024, collect more funds at the facility level and retained within the county health system. Priority should be given to settling existing debt and preventing further debt accumulation
- Strengthen the maintenance of cash flow within the HPT supply chain ecosystem to support local manufacturing which is especially sensitive to cash flow challenges
- d. Strengthen existing systems for forecasting and inventory management systems to near real-time data to better anticipate demand and prevent stockouts
- e. Explore new technologically integrated supply chain systems that are linked with transport infrastructure and almost real-time data linking dispensing to quantification and procurement
- f. Explore new funding sources and mechanisms including increasing domestic funding allocations (leveraging the FIF Act 2024 and Social Health Insurance Funds)
- g. Develop long-term financial plans that ensure adequate funding for health commodities as part of county plans and medium-term expenditure plans
- h. Meet the Presidential directive for 50% of procurements for the essential medicines list be procured from local manufacturers by mapping manufacturing capacity, and developing strategic partnerships



Market Conditions - Demand

Key finding

a. There is a nationwide shortage of healthcare demand data

b. SHIF may drive higher demand for healthcare as it will provide an opportunity to cushion poorer households

Recommended action

- a. Increase financial support for more critical research and studies to be carried out on consumer demand (or lack of) for specific health priorities
- Conduct consumer demand studies nationally and in the focus counties every 3-5 years, building this into existing national surveys such as KDHS



Market Conditions - Price

Key finding

- a. The government is transitioning from the National Health Insurance Fund (NHIF) to the Social Health Insurance (SHI) which is mandatory to all Kenyans as part of the commitment to achieve UHC. The transition is expected to have all citizens and residents of Kenya covered by the SHI including for those in the lower economic segments
- b. NHIF/SHI has been a key price setter in the Kenya health sector owing to their large market share
- c. There are no price control policies for health services and products which allows each private provider and individual counties to determine their prices
- d. There is no evidence of mechanisms used to monitor any adherence to pricing guidelines, which can allow providers to charge higher amounts beyond the recommended margins
- e. Private health insurance companies negotiate with their individual providers on the amounts charged on services which can provide incentives to over-supply unnecessary health services and therefore overcharge some clients
- f. The prices of HPTs in Kenya's health market have been shown to be higher than in other East African countries and some products more than 30 times more expensive
- g. There is an overreliance approximately 70% of Kenya's HPTs needs on imported HPTs which are vulnerable to the changes in international

- Assess the pricing of health services and products to ensure appropriate setting and regulation of prices.
- b. Support joint public and private sector engagement on insurance pricing and benefits packages to improve insurance uptake and utilization to eliminate out-of-pocket expenses
- c. Conduct health sector taxation status analysis to assist in advocating for key health products and technologies not to be taxed (zero rated or exempted)
- d. Conduct whole health market health products and technologies costing and investment feasibility studies to inform development of policies to support the subsidization of local pharmaceutical manufacturing
- e. National government to draft tax incentives package for local pharmaceutical manufacturers to create investment and lower local prices



Market Conditions - Quality

Key finding

- a. Kenya's quality standards are generally considered to be high. There are a number of bodies that oversee the quality in the public and private sectors and quality is generally improving
- b. Quality improvement is seen as being too costly for smaller private **providers** such as level 2 private health c. facilities and chemists who report to have relatively low revenue
- is absence an comprehensive, overarching policy quality across the entire private healthcare sector. Instead, numerous specific health priorities such as HIV, TB, and other diseases
- d. The enforcement of quality standards faces challenges due to limited human resources and capacity especially for the post market surveillance
- e. As the production of locally to increase, it is crucial to develop sufficient local capacity to test and maintain quality
- f. There are no forums that bring the public and private sectors together to focus on quality outside of vertical programs

- a. **Develop** customized quality improvement models that will vield profits for the smaller private **providers** as well as improve on peoples' health
- b. Identify potential innovative funding sources to support quality **improvement** in the private sector
- Allocate targeted funds for quality improvement for support of private providers with the lowest capacity, offering grants or low-interest loans for infrastructure upgrades.
- specifically focused on ensuring d. Assess existing quality standards and **regulations** for private healthcare providers
- individual policy documents address e. Develop policies/ guidelines on self**regulation** for Kenya's private sector
 - Develop quality improvement quidelines for local manufacturers which can then be used to assess the future quality
 - Develop local capacity to test and maintain the quality products that are locally manufactured
- manufactured products is expected h. Increase the number of HRH personnel and strengthen capacity particularly in post-market surveillance, to effectively implement existing quality standards

1. Introduction

1.1 The USAID Private Sector Engagement (PSE) program

The USAID Private Sector Engagement (PSE) initiative aims to enhance health outcomes in Kenya by expanding patient access to primary healthcare products and services within the private sector. Implemented by Population Services Kenya (PS Kenya) in partnership with Halcyon Consulting Limited and the Kenya Healthcare Federation (KHF), the program seeks to bolster patient choice in the private healthcare market. Funded by USAID and running from June 2023 to June 2028, the initiative aligns with Kenya's universal health coverage goals and its Journey to Self-Reliance.

Focused on Nairobi, Nakuru, Mombasa, Kisumu, Uasin Gishu, and Homa Bay counties, the program will also provide technical assistance to Turkana, Trans Nzoia, Siaya, Vihiga, Nyamira, Taita Taveta, and Kakamega counties to strengthen their management of mixed health systems.

The program's primary objectives are to:

- 1. Identify, test, and scale sustainable private sector distribution channels for essential health products and services
- 2. Improve the quality and efficiency of private healthcare product and service delivery
- 3. Strengthen local manufacturing capabilities for health products

The USAID PSE program in Kenya is a practical application of the USAID Private Sector Engagement(PSE) policy, aiming to enhance healthcare access and quality through sustainable, market-driven solutions. By collaborating with government and county health departments and the private sector, the initiative contributes to both improved health outcomes and broader economic growth, aligning with Kenya's journey to self-reliance.

The PSE program has carried out a comprehensive health market assessment to identify key challenges and opportunities within the private healthcare sector. This data-driven approach ensures that program interventions are tailored to the specific needs of the Kenyan market.

By prioritizing evidence-based decision-making and strategic planning, the assessment reinforces the core principles of the USAID PSE policy. The findings will guide the program's efforts to build a more resilient and inclusive health system, ultimately demonstrating the policy's effectiveness in achieving sustainable development in Kenya.

1.2 Background

The health sector in Kenya has undergone significant transformations, marked by a blend of public and private players. Over the past decade, the dynamic health market has shifted from a heavy reliance on external donor resources to a more balanced system. This is driven by rapid technological advancements and the implementation of a robust legal and regulatory framework. Key milestones include the right to the highest standard of healthcare as enshrined in the Kenyan Constitution of 2010, the Vision 2030 economic development plan, the Kenya Health Policy 2014-2030, and various Medium Term Expenditure Frameworks (MTEF).

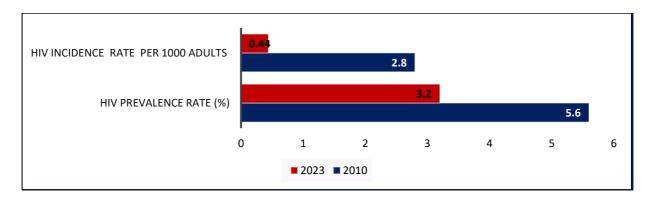
Universal health coverage (UHC) is a stated goal of the Government of Kenya, supported by new policies and high ambitions for its implementation. Most recently, Kenya has passed four critical acts of parliament that will bolster UHC: the Social Health Authority Act 2024, the Digital Health Act 2024, the Facility Improvement Fund Act 2024, and the Primary Healthcare Act 2024. These acts aim to address weaknesses in the healthcare system, including inadequate financing, poor availability and flow of data and information, retention of funds in the healthcare system, and the general structure of the healthcare system to allow for efficient coordination and appropriate patient referral. A key initiative under the Digital Health Act of 2024 is the Digital Healthcare Superhighway initiative which aims to develop a digital ecosystem providing end-to-end visibility of the entire health system, thereby supporting increased access to health services through both public and private channels. The initiative will build the necessary infrastructure to enhance the healthcare system such as data management, telemedicine as well as digital health records management.

The preexisting regulatory frameworks have significantly improved resource availability for the health sector. The total government budget allocated to health as a percentage of the national and county budgets increased from 7.8% in FY 2012/2013 to 11.5% in FY 2019/2020. The budgetary allocation of Ksh 216 billion in 2019/2020 represented a threefold increase from predevolution levels in 2013/2014.

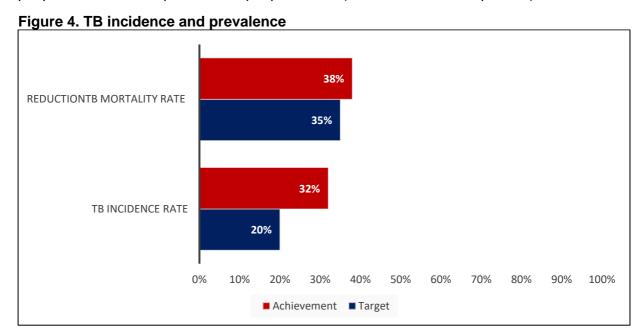
Additionally, the political ambitions of increasing local manufacturing of Health Products and Technologies(HPTs) presents a great opportunity to further bolster a robust health market and strengthen the private sector. Kenya's strong legislative foundation, combined with a clear political commitment to Section 155 of the Public Procurement and Asset Disposal Act of 2015, presents a prime opportunity to substantially expand domestic HPT manufacturing (PPDA, 2015). This calculated action intends to increase HPT exports in addition to ensuring self-sufficiency in the home market. Since local production is essential to guaranteeing the accessibility, quality, and affordability of HPTs, specific policy goals have been set to lessen reliance on imports. The objectives encompass broadening the range of products to encompass 90% of medical conditions, augmenting government purchases from local manufacturers to 50%, and promoting the creation of advanced formulations. Despite the underutilization of the local manufacturing potential, which accounts for 30–60% of the market in terms of value and quantity, the government, through the Ministry of Health, continues to be the biggest purchaser of locally made HPTs(Republic of Kenya, Ministry of Health, 2020a).

Over the years, Kenya has demonstrated remarkable improvements in its health indicators. The HIV prevalence rate for the country has dropped from 5.6% in 2010 to 3.2% in 2023. The incidence rate has also plummeted from 2.8 in 2010 to 0.44 in 2023 per 1000 adults(UNAIDS, 2023).

Figure 3. HIV incidence and prevalence, 2010 - 2023

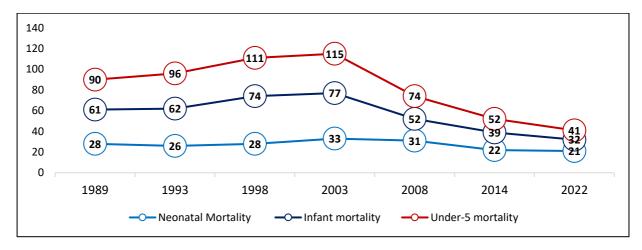


By 2020, Kenya had achieved a 32% reduction in TB incidence rate against a global target of 20% and a 38% reduction in mortality rate against a 35% target, surpassing the global TB targets. These is evidenced by the reduction of people developing TB from 531 per 100,000 people in 2010 to 237 per 100,000 people in 2020(STOP TB Partnership, 2020).



The average number of children born to Kenyan women has decreased significantly. In 1989, women had an average of 6.7 children, but this number dropped to 3.4 children by 2022. Additionally, the percentage of Kenyan women using contraception has risen from 37% in 2012 to 45% in 2023(FP 2030, 2024; KNBS & ICF, 2023). With significant support from USAID PMI, the prevalence of malaria in high-burden lake areas was cut in half between 2010 and 2020, decreasing from 38.1% to 18.9%. The infant mortality rate has decreased from 53.3% in 2010 to 41.1% in 2022 and the under-five mortality rate has fallen from 104/1000 live births in 1990 to 46/100 live births in 2017(UNICEF, 2022).

Figure 5. Childhood mortality trends in Kenya, 1989 - 2022



Source: KDHS 2022

While Kenya has made progress in many health areas, significant challenges persist. Maternal mortality remains alarmingly high, increasing by 55% between 2017 and 2020. This surge is linked to a complex interplay of factors including financial, geographic, educational, and sociocultural disparities. Disrespectful care, gender inequalities, limited decision-making power for women, and restricted access to resources further exacerbate the problem. Moreover, a recent health facility census revealed that less than half of healthcare facilities offer maternity services, with only a third providing emergency obstetric care.

Climate change and agricultural practices like deforestation are anticipated to increase malaria prevalence(Elnour et al., 2023). Key obstacles hindering progress in malaria prevention include individuals' lack of confidence and proper understanding about using and maintaining mosquito nets. Additionally, there are significant gaps in the administration of antimalarial drugs to pregnant women, particularly concerning the second, third, and fourth antenatal care visits.

According to the Kenya AIDS Strategic Framework II, HIV infections have increased in several counties, including Nandi, Narok, Nakuru, Baringo, Samburu, Uasin Gishu, Elgeyo-Marakwet, Kisii, Laikipia, Kajiado, Bomet, Marsabit, Kisumu, and Trans Nzoia. Notably, Nairobi, Kisumu, Homabay, Nakuru, Mombasa, and Uasin Gishu rank among the top ten counties with new HIV infections in children aged 0-14 years. Public health facilities face significant challenges in providing adequate HIV care due to limited resources and overwhelming patient numbers. Long wait times and overcrowding are common, indicating a shortage of HIV services. While the potential of private healthcare providers to address this gap is largely untapped, increasing their involvement could improve access to care. It is also important to note that women aged 20-34 are disproportionately affected by HIV compared to their male counterparts.

Kenya still faces significant challenges in combating tuberculosis (TB) and pneumonia. TB rates remain high at 237 per 100,000 population in 2022, with a substantial number of deaths (60 per 100,000 population)reported annually(World Bank, 2022). Pneumonia, particularly affecting children, is also a major health issue, exacerbated by factors like air pollution and poor living conditions. Data from the Kenya health Information System shows that the number of pneumonia cases has dramatically increased in recent years from 477,186 cases in

2020/2021 to 793,864 cases in 2022/2023. There is also a gap in treatment coverage, with only half of eligible patients receiving care.

Despite a plethora of laws and policies governing the health sector, there's a widespread perception of poor implementation. New policies continue to be formulated even as existing ones remain largely unfulfilled. For instance, the Kenya Partnership and Coordination Framework of 2017, designed to foster sector-wide collaboration, has been underutilized due to resource limitations. This has led to a disconnect between policy creation at the national level and its execution at the county level. Furthermore, a dearth of coordination and communication mechanisms, particularly at the county level, has eroded trust between public and private health stakeholders. Consequently, a unified approach to achieving health goals remains elusive. Insufficient direct government funding for coordination has exacerbated the issue, necessitating frequent appeals for support from partner agencies.

Despite increased funding, the health sector grapples with persistent cash flow challenges. Delays in fund transfers to counties and the National Health Insurance Fund (NHIF) disrupt the healthcare system, leading to frequent stockouts of essential medical supplies and compromised care quality. Effective resource allocation and management for commodity security are crucial to address this. Moreover, the absence of a comprehensive pricing policy for medical services and products exacerbates healthcare accessibility, leaving many unable to afford necessary HPTs.

Kenya has made strides in improving healthcare access and quality, ranking second in Africa on the Health Access and Quality (HAQ) index, though still below the global average. While the country's HAQ score is rising, challenges persist. For instance, despite the existence of the Kenya Quality Model for Health (KQMH), its implementation remains limited, primarily to the public sector facilities and predominantly those supported by vertical disease programs.

Data availability and quality remain significant challenges across the health sector. While the Kenya Health Information System (KHIS) is widely used at the sub-county level, data accuracy, particularly from the private sector, is questionable. The private sector often withholds critical data, sharing only what is mandated by regulations. Additionally, information sharing between the public and private sectors, as well as private sector involvement in policymaking, is insufficient.

Kenya has established itself as a leader in digital innovation, demonstrating a strong capacity to develop and utilize digital systems. Data analytics are employed in the health sector, especially within vertical programs, to inform decision-making. However, there is a critical gap in comprehensive health market analysis through data analytics.

1.3 Assessment objectives

- 1. To provide a snapshot of Kenya's health market in 2023/24
- 2. To document Kenya's health market ecosystem
- 3. To assess Kenya's health market foundations, identify the root causes of market failures, challenges and opportunities for the market to grow.
- 4. To assess the market conditions affecting healthcare in Kenya

1.4 The Healthy Markets Framework

The assessment utilized the Healthy Markets Framework to answer its objectives. The framework assesses various components of market foundations, conditions, and ecosystems within the health sector. The scoring system within the framework serves as a structured mechanism for quantifying and evaluating these intricate health market components. This systematic approach not only enhances the precision of the assessment but also provides a robust foundation for objectively measuring and interpreting the multifaceted aspects of the health market.

The healthy markets framework looks at the market foundational factors as well as the market conditions that affecting the health market. All the factors are given a score of one to five and can be improved over time through concerted efforts by the market players. Table 3 below explains the framework further.

Table 3. Definitions of the market foundations and market conditions that are used in the healthy markets framework

tne nealtny market	s framework
Market	Definition
foundations	
Market data	Quality data needed by both public and private sector, to monitor, analyze and shape national markets, understand consumer insights, and need.
Market analytics	Capacity and funding to support routine tools such as demand forecasting as well as specific technical analysis needed to understand specific market barriers.
Market	Capacity and frameworks to lead and manage market health in both public
management	and private sector, for setting market strategy and targets, acting and monitoring progress.
Market institutions	The policies and institutions necessary for national markets to function well and deliver for consumers. Key market functions such as financing, procurement, supply chain and regulation are supportive of access.
Market	Definition
conditions	
Financing	Is the financing for healthcare adequate, sustainable, and predictable enough to meet demand for products from the health system and are mitigation measures available to help cope with supply and financing shocks.
Supply	Is the supply being of health-related goods and services sufficient, reliable and robust enough to meet system demand and ensure availability at point of service and to be maintained in the face of supply -side shocks.
Consumer demand	Is the overall system being able to meet the needs and preferences of consumers across geographies and channels and consumers are sufficiently aware of options.
Price	Are products available at the national level to all channels at competitive and affordable prices. Is end user pricing equitable across methods, geographical regions, income groups and service channels. The viability and sustainability of channels is not adversely affected by pricing policies.
Quality	Are products across national market channels meeting appropriate quality standards and there is a robust framework for quality assurance.

Each of the market foundations and market conditions are given an objective score from 1-5 and based on the findings from the assessment. The scores are entered into the health markets framework which provides a snapshot visual on the performance of different market foundations and conditions are shown below in Figure 6.

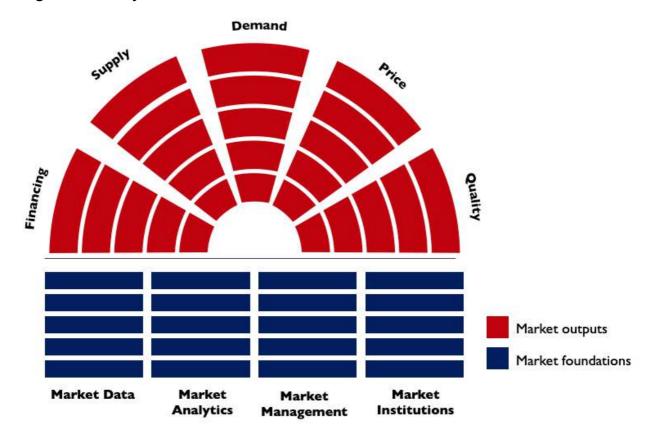


Figure 6. Healthy markets framework

1.5 Methodology

Assessment design

The assessment employed a mixed methods cross-sectional study approach conducted at the national and county levels in Kenya. The research methodology combined secondary data analysis and primary qualitative research to provide a holistic understanding of the country's health system. Secondary data was sourced from a systematic literature review encompassing qualitative and quantitative indicators. The findings of the literature review illuminated knowledge gaps, forming the foundation for subsequent primary qualitative research The primary data collection adopted a qualitative research design, employing key informant interviews (KIIs). This approach facilitated the collection of rich, context-specific data, allowing for a nuanced understanding of the complexities across the target counties.

Study area

Kenya, a multicultural and dynamic country in East Africa, is divided into forty-seven administrative counties, each of which has distinct characteristics and a distinct system of government. Kenya's counties offer a rich tapestry of landscapes, cultures, and economic activity, ranging from the bustling city of Nairobi in Nairobi County to the pristine coastline

shores of Mombasa in Mombasa County. Due to its dynamic healthcare system, Kenya makes for an interesting case study for a market analysis of the private health sector. One notable feature of the country's healthcare system is the robust private sector, which plays a crucial role in providing healthcare to a growing populace.

For any market analysis in this industry, consideration of Kenya's varied socioeconomic and cultural environments is essential. Additionally, Kenya is a great place to research the junction of public and private healthcare provision because of the changing regulatory environment and government policies in this area, providing insightful information for potential investors and stakeholders in the private health sector. The study focused on six counties namely, Nakuru, Mombasa, Kisumu, Nakuru, Homa bay and Uasin Gishu which are the focus of the USAID PSE Program. These counties were sampled because of their health indicators-HIV and TB, FP, Maternal and Child Health and -, have a vibrant private health sector and are priority counties for the USAID PSE program.

Study population

The study population included various stakeholders across the Kenyan health ecosystem as detailed in Annex 3. The inclusion/ exclusion criteria were:

- Willingness to be part of the study which was ensured through administering of informed consent to all participants.
- Residents of the sampled counties where applicable
- Respondents representing various segments across the health markets ecosystem.

Sample size determination

At the national and county levels, we conducted more than 90 KIIs to obtain a thorough representation of a variety of stakeholders. Rather than aiming for broadly applicable findings, the main objective of the qualitative research approach was to delve deeply into the experiences, perceptions of key informants. The selection of a sample size was driven by the objective of obtaining a comprehensive range of perspectives from key representatives in each county and across various stakeholder categories within the health market. The sample size was determined after saturation point

Sampling procedures

We employed purposive sampling of respondents to guarantee a broad spectrum of perspectives from relevant respondents and focus counties. Our sampling strategy aligned with the assessment objectives, addressing knowledge gaps identified in the literature review and drawing on the comprehensive sector experience of our team.

Recruitment of participants

Participants were chosen based on recommendations from PSK regional teams, non-governmental organizations collaborating with disease-specific technical working groups, county Ministry of Health offices, and public and private health facilities within counties. The recruitment process employed maximized variation sampling, aiming to encompass a wide breadth, range, and depth of data. Additionally, snowballing was utilized to ensure the identification of appropriate respondents following the KII guide. We also ensured to seek for informed consent.

Ethical considerations

Ethical approval was sought from Amref Ethics and Scientific Review Committee (ESRC) and the National Commission for Science, technology and Innovation (NACOSTI) before the data collection exercise. We also sought county ethical approvals. Other specific components on the ethical considerations are detailed in Table 4 below

Table 4. Key components for ethical consideration

Components of ethical consideration	Description
Obtaining consent from research participants	Consent was sought through informed written consents and participants were allowed to withdraw at any point
Achieving privacy and confidentiality	All collected data in this study was de-identified and anonymized during analysis. Secure storage measures were put in place and was accessible only to authorized members of the research team
Risk and potential harm associated with the assessment	The study involved collecting responses to open ended questions related to health markets and every effort was made to ensure the safety and comfort of participants.
Benefits of the research study	There were no direct benefits to the participants in this study. The study is primarily designed to contribute to the broader body of knowledge in the field of health markets.
Compensation	The assessment offered compensation to participants inform of transport/ airtime compensation

Data management and analysis

The data was analyzed manually by thematic analysis conducted by the research team. A continuous data-driven inductive approach was used, incorporating emerging themes from preliminary interviews into subsequent ones, with multiple perspectives drawn from the interviews. Following Braun's 2006 stages of thematic analysis, the team familiarized themselves with the data, developed initial codes, used mind maps and memos to identify subthemes and themes, and refine these themes with the strongest quotes selected for the final report. Data collection conformed to a phenomenological approach, with interviews allowing participants to share personal experiences, augmented by desk reviews. The transcribed data and recordings will be securely retained throughout the duration of the USAID PSE program and responsibly destroyed afterward

Study limitations and risks, and mitigation of the risks

Study limitations included the limited generalizability due to the purposeful sampling method and context-specific findings from the six sampled counties. The interpretive and context-dependent nature of qualitative research adds to the challenge of replicating the study exactly. Different researchers may interpret data differently, and variations in context may lead to different findings in similar studies due to reflexivity. Additionally, there is potential for social desirability bias, as participants may have provided responses they perceived as socially desirable, introducing bias into the data.

The research team proactively addressed these limitations and risks through careful planning, ethical considerations, transparency in reporting, and ongoing reflection throughout the research process. However, some key respondents were unavailable to participate in key

informant interviews (KII), particularly at the national level. This included representatives from the Pharmacy and Poisons Board (PPB) and some Ministry of Health (MoH) vertical program leads.

Another limitation of the study was the general unavailability of recent data, particularly secondary data, which mostly spanned from 2018 to 2021. There was very little data available on healthcare markets between 2021 and 2024. Additionally, there were few previous studies on the entire private healthcare market for comparison, with the last comprehensive study conducted by the World Bank in 2010. Most other studies focused on specific markets or vertical programs, further limiting the availability of relevant comparative data.

2. Key Findings: Market Foundations

2.1 Summary

At the market foundations level, the national level performance is best in market institutions - score 3/5 - but there are challenges with regards to the market management, market data and market analysis, all of which only score 2/5.

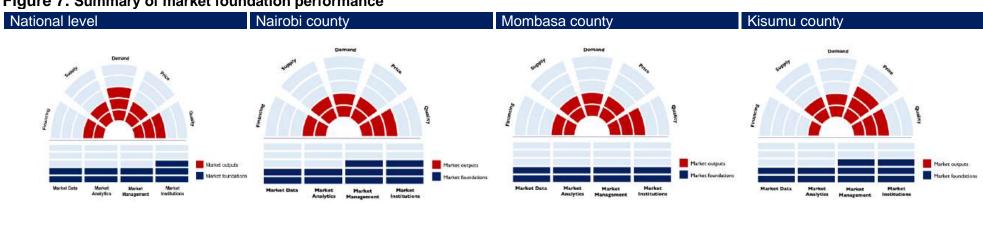
The performance of the health markets in the counties show a slightly varied pattern, but overall the trend is similar to the national level and between the counties: some areas are performing reasonably well but many areas are underperforming. In all the counties, the performance of the market foundations is generally quite limited with most areas scoring only 2/5. Market data and analytics score 2/5 consistently in all assessed counties except for Nakuru county, whose performance in market data scores the highest with 3/5. The performance of market management in Nairobi and Kisumu counties is slightly higher than the other counties, and performance is ranked 3/5 compared to 2/5 for the other counties. Market institutions in the counties has the overall highest level of performance, with Nairobi, Kisumu, Nakuru and Homa Bay counties scoring 3/5.

Table 5. Summary of market foundation performance

Market	National	Counties					
foundations		Nairobi	Mombasa	Kisumu	Nakuru	Uasin Gishu	Homa Bay
Market data	2	2	2	2	3	2	2
Market analytics	2	2	2	2	2	2	2
Market management	2	3	2	3	2	2	2
Market institutions	3	3	2	3	3	2	3

USAID Private Sector Engagement Program

Figure 7. Summary of market foundation performance





2.2 Market Data





Score: 2/5 Data is available through the KHIS system. This data is collected through both paper based and electronic systems, transferred to a paper-based system then entered the KHIS system at the sub-county level. Market data that is available in the private sector is generally unavailable to the public sector. Data on consumer insights is generally not collected and where collected not shared. Outside of vertical programs data on products is not generally available. Private sector market data outside data required by regulation is not shared.

2.2.1 Key Findings

- a. Kenya's ambitions to transform its health information systems including the collection and use of data are significant, especially with the forthcoming Kenya Data Superhighway which has important implications for the private sector
- b. There is no information system specifically for Kenya's health market, which undermines the way in which the entire market and key components such as product availability and financing functions, how it is understood and managed. There are no plans or investments to support the development of one
- c. There is extensive fragmentation and very limited interoperability of the health information systems that are used by the public and private sectors. This hinders the sharing and utilization of market data
- d. Outside of what is needed for regulatory purposes, private sector data are not available to the public sector and the private sector has limited access to KHIS
- e. Data to understand the public sector market is available and of sufficient quality to be used for some purposes, such as strategy development, annual planning and monitoring especially at the county level
- f. Some private sector data exists, but through numerous, independent systems, and data is not shared in public information systems or between other private sector stakeholders. There is very limited data available on downstream private pharmaceutical stakeholders, such as distributors and pharmacies
- g. There is limited data transparency and mistrust between the public and private sectors regarding the sharing and use of data. Incentives and systems to share information are limited
- h. Kenya has a Data Quality Assurance (DQA) framework, but its rollout is not uniform between the public and private sectors. The are no explicit efforts at-scale to push for an all-market DQA process
- i. Data on consumer insights is not routinely collected outside of some private sector players and some donor-driven programs and consumer insights are inferred from consumption data

2.2.2 Introduction

Health information is "The Pillar of Pillars" the foundation of decision-making across all levels and building blocks of the health system. Reliable health data is essential for health planners and implementers to make informed decisions to improve health outcomes(WHO, 2008). Population-based health surveys have been conducted periodically to collect retrospective data to inform planning and policy needs(Mutuku & Regina, 2018). These nationally representative health surveys are expensive, infrequent and might not reflect the current situation, particularly in a dynamic health environment. By contrast, health facility-based data are collected on a routine basis and have the potential to present more real-time data for decision making, allowing disease control programmes to direct interventions in a more timely manner(Republic of Kenya, Ministry of Health, 2020a). Health facility-based data reported through routine health information systems form the primary data source for programmatic monitoring and evaluation in Kenya(Manya & Nielsen, 2016). The adoption of Kenya Health Information Systems (KHIS) (formerly known as the District Health Information System (DHIS2)) has contributed to improved availability of routine health facility-based data in Kenya as in other low-and middle-income countries (Government of Kenya, 2013; Manya & Nielsen, 2016).

Many parallel data collection systems exist whereby data for the health sector is held in different databases. This creates a situation where there is a lot of data redundancy resources and time wastage in data collection and management(Muinga et al., 2020a). To realize the potential of KHIS, different databases need to be implemented in an interoperable environment. Interoperability refers to the capacity for different information systems to meaningfully exchange data. In the context of KHIS, this enables them to be implemented across organizational boundaries to effectively deliver healthcare services and advance the health status of individuals and communities(Nyangena et al., 2021a). The Ministry of Health (MoH), has taken steps to facilitate a more conducive environment for health information exchange across different information systems. These include, for example, the enactment of the Digital Health Act 2023, the development of guidance documents on digital health standards for electronic KHIS, a national enterprise architecture, a master health facility list, and a health worker registry, among others(Ibid). While these are significant milestones in health system interoperability, much is still required.

While Kenya's health information systems are generally more advanced than many of its regional neighbors, for several years the government and partners have been aware of the fragmentation of data systems, lack of a culture of data use for decision-making, donor-driven Data Quality Assessment (DQA), underfinancing of data collection systems, and the over-reliance on data officers as challenges(Muinga et al., 2020a; *Report of the Kenya Health Data Collaborative*, 2017). Over recent years, several major interventions, including regulatory improvements as summarized in Box 1, have been undertaken to mitigate these challenges and strengthen its health information and data systems and capacities further. Undoubtedly, Kenya now has major ambitions at the national level for its data ecosystem, which has significant implications for its market data, particularly through the Kenya Data Superhighway, which is covered in Box 2.

Box 1. Regulatory frameworks in Kenya and health information

The existing legal and regulatory frameworks in Kenya, such as the Kenya Health Policy 2014 – 2030 and the Health Information Systems Policy 2018, emphasize the need to strengthen the national health information systems in order to provide information to augment evidenced-based decision-making for the health sector(MOH Kenya, 2014, 2018). This anchor policy is

supported by other legal, policy, and regulatory documents such as the Kenya Health Systems Interoperability Framework 2020; the Data Protection Act No. 24 of 2019; the Kenya Health Act No. 21 of 2017; the Kenya Standards and Guidelines for eHealth Systems Interoperability, Version 2, July 2015; the Kenya National eHealth Policy 2016 – 2030; and the Data, System Governance and Change Management Framework of 2018(Government of Kenya, 2018).

The enactment of the Digital Health Act of 2023 strengthens and specifies the roles of the national, county, and service providers in the collection, collation, analysis, and management health-related data. The Digital Health Act of 2023 establishes an integrated health information system that aims to optimize the integration of information and communication technologies in healthcare and provides for the private sector to participate in data governance.

The Kenya Health Sector Data Quality Assurance Protocol provides a framework for guidance to achieving data quality. This framework is meant to support all service providers in Kenya (both public and private)(Government of Kenya, 2014). The UHC program will require the private sector to have robust mechanisms for data quality assurance. National level dialogue and engagement to support this framework will be required.

"If we (senior leaders of the private sector) cannot answer how the healthcare digital superhighway will roll out and how it could affect the private sector, what do you think is happening in Shamakhokho."

The Kenya Health Act of 2017 and the Health Information System Policy 2014-2030 provide an overarching legal and policy framework governing the deployment and operation of national health information systems (HIS (Government of Kenya, 2017; Kenya Health Information System Health Information Policy, 2013). These policy documents encompass establishing standards for electronic HIS, developing and maintaining a national health

enterprise architecture, a master health facility list, a health worker registry, and regulation of national HIS through various policies and guidelines. The HIS policy introduced in 2010 (revised in 2013) guided the transition from paper-based to electronicintegrated HIS(Government of Kenya, 2014). Several legislations were enacted to support the adoption of digital HMIS in the country, including the Kenya Information and Communications Act (2015), the Health Act (2017), the Access to Information Act (2016), the Open Data Protection Act (2019), and a draft Cyber Security and Protection Bill (2016). These laws and policies aim to regulate the use of eHealth for the collection, retrieval, processing, storage, use and disclosure of personal health information. The Kenya e-health strategy was developed based on the policy frameworks provided by the Kenya Health Policy (2014-2030), Health Information System Policy (2014-2030), and the Information Communication and Technology (ICT) Policy 2006(Ministry of Medical Services & Ministry of Public Health & sanitation, 2011). Several Health Information Systems (HIS) and platforms are used across the country's health system. These include various Electronic Medical Record (EMR) systems used within clinical settings, Laboratory Information Systems (LIS), Logistics Management Information Systems (LMIS), the District Health Information System 2 (DHIS2), the Kenya Master Health Facility List (KMHFL); the Kenya Health and Research Observatory (KHRO); among others. These collectively form the network called the Kenya Health Information System (KHIS)(Ministry of Health, 2021a).

These different systems pool data from different levels, often stored in different formats across various platforms and locations, making access, sharing, and analysis difficult or impossible to achieve. There have been ongoing efforts by the MoH to ensure interoperability, security, quality, and meaningful use of ICTs in healthcare. These include developing and

disseminating the Standards and Guidelines for Electronic Medical Record (EMR) Systems in Kenva 2010, the Kenva Health Enterprise Architecture 2015, and the Kenva Standards for eHealth Systems Interoperability 2015(Ministry of Health, 2010) The MoH introduced the Kenya Health Information Systems and Interoperability Framework (KHISIF) in 2020 for digital information system interoperability. The MoH also makes reference to international data standards such as the high level seven (HL7) family of standards relating to the exchange, storage, and use of electronic health information; the CEN/TS 15699:2009: Health Informatics: the ISO/IEEE 11073 Medical/Health Device Communication Standards and the Multimedia Framework for eHealth Applications; and Emergency eHealth Services Standardization(Government of Kenya, 2013).

Table 6. Health Information Systems Components in Kenya (MOH Kenya, 2018)

Health data collection modes	Health data collection tools	Types of data collected	<u> </u>
Manual medical records	Registers and other paper- based tools	Routine data	Healthcare workers and HRIOs
Electronic medical records (EMRs) and mobile technologies (m-health)	Kenya Health Information System (KHIS)	Captures data on patient information, disease surveillance, laboratory information, supply chain management, health indicators	Health Information Systems Team – CHRIO, HRIOs
	Other EMR systems, including those used by vertical programs, e.g. Integrated Disease Surveillance and Response System (iDSR) and Kenya Master Health Facility List (KMHFL) ¹	Patient information, health outcomes	HRIOs and other healthcare workers
Other forms of data sources	Surveys: Kenya Demographic Health Surveys, Kenya Household Health Expenditure and Utilization Survey, Kenya Malaria Indicator Survey, Kenya AIDS Indicator Surveys	Relevant health indicator outcomes	Kenya National Bureau of Statistics (KNBS) and MoH

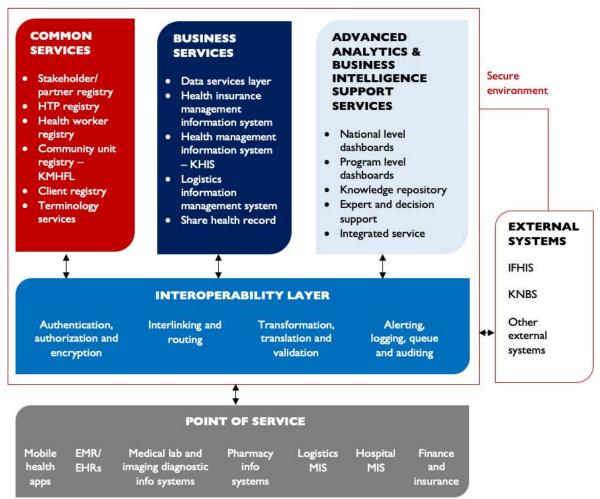
Box 2. Kenya's Data Superhighway

The Data Superhighway intends to improve fiber connectivity countrywide (over 100,000km of cable to be laid) and has most of the government services available online (Ministry of Investments, Trade and Industry, 2024). Part of this system will introduce a unique person identifier that will offer access to government services, including healthcare (Republic of Kenya, 2023b). The health sector iteration of the digital superhighway is intended to integrate

¹ Other HIS include: Integrated Financial Management; TIBU; integrated Human Resources Information System; electronic Community Health Information System; Integrated Financial Management Information systems The State of Kenya's Health Market - 2024
Assessment report

various stand-alone systems. The Kenya digital health superhighway is intended to integrate currently separate data ecosystems. A national health information exchange (HIE) that will consolidate patient information and client information (backed by a health workers registry, a health facility registry, a community health registry, a client registry, and shared records) is in development. An interoperability layer will allow for integrating patient portals, private sector HMI systems, other government and partner agency systems, and even point-of-care systems(Kenya Healthcare Federation, 2024). The private sector is expected to link its varied electronic records systems with the HIE. The HIE has data portability as one of its key features. This will allow for data sharing between all service providers, with the patient owning their data. A potential opportunity also opens up to supporting small healthcare businesses with infrastructure to link to the digital health superhighway as payments by the social health insurance will be through the digital superhighway. The private sector has to ensure that the rollout of the HIE should be seen as a strategic national asset and not a government one (in line with the Digital Health Act).

Figure 8. National digital/eHealth architecture



Source: MoH Technical team adaptation of Open Health Information Exchange (Kenya Health System Interoperability Framework)

"My facility has very rich data. However the government has neither asked to see the data and neither have I endeavoured to try and share it with them." Health data is available in both the public and private sectors, but the extent of data availability in both sectors differs. Data from communities and individual clients is consolidated in facilities. There are instances of underreporting in some lower-level facilities (levels two and three) due to a shortage of paper-based reporting tools in both

the public and private sectors. In the public sector and private sector facilities that share data with the public sector, this is then shared with sub-county health record and information officers (HRIOs) who input it into the KHIS at the sub-county level. Aggregated public and private sector data at county level is transferred into the MoH summary reporting tool by the County HRIO, which consists of standardized health indicators that are tracked across the country. This data is available in the KHIS and can be visualized by stakeholders who have access rights, although often access is limited to only a few individuals. HRIOs give access credentials to other public sector cadres of health workers and managers, but uploading and editing rights are limited to HRIOs and the HIS team at the national level to maintain the integrity and quality of the data(Ministry of Health, 2014).

2.2.3 National and County Findings

Private sector players report limited access to public sector data. Access to KHIS is highly regulated. Access to the system is predominantly vested in health records officers. Smaller private facilities cannot afford to hire records staff outright. This process leads to challenges in the timeliness and accuracy of reports and fails to leverage the advantages of some well-established private sector health information systems(Ajwang et al., 2018). It also means that private sector stakeholders and other market players are not able to easily access health sector data at the national and country levels, which limits their understanding of health sector performance, and disincentivizes the private sector to provide data into the national HMIS. There is limited access to information in the public sector and even worse for the private sector as they work in silos. Furthermore, the lack of awareness and restricted access to systems like KHIS hampers informed decision-making in the public and private sectors. Over time, a deep-rooted mistrust has developed between the public and private healthcare sectors. Unfortunately, this lack of trust directly impacts the willingness of private entities to share critical healthcare performance data and other relevant information.

"There are too many HMIS systems in the market with limited interoperability"

National-level implementing

At national and county levels, health information systems are deemed to still be too fragmented – and the private sector data is not largely captured. There are separate systems, for instance, for human resource management, supply chain, patient data, finance management, vertical disease programs, facilities recognition and registration,

claims management and so on. All HIS apart from TIBU, EHR and IDSR are not interoperable since the different systems pool data from different levels, often stored in different formats across various platforms and locations(Center for Epidemiological Modelling and Analysis, 2021). The net result of this fragmentation of data systems and the lack of interoperability means that data aggregation at the national level is challenging. This leads to a) delays in detecting changes in disease trends, which would be easier with integrated HMIS systems(Appleford et al., 2022) and b) challenges to market shaping since specific data elements needed, including pricing, quality, consumer feedback, consumption, production capacity, and product/service availability, are not uniform. The private sector faces difficulty to access adequate information to guide their investments.

The myriad of private sector stakeholders, operate large numbers of their own HMIS systems that are not directly linked to the government's reporting systems. There are occasionally insufficient data collection tools available to handle standard issues. Furthermore, private providers might find it difficult to efficiently collect data needed to make informed choices. Standardizing reporting procedures may also present difficulties, possibly leaving out important data points or problems. Consequently, there is under-reporting of the disease burden thus suggesting the need to strengthen the implantation of the regulatory requirement for mandatory reporting from the private sector as outlined in the Kenya HIS Policy (2013)(Government of Kenya, 2013).

"Hospitals are afraid of revealing information for fear of Kenya Revenue Authority imposing further taxation and harsh business regulations on them" Private Hospital in Homa Bay County

The private sector do not routinely report their data into KHIS despite the regulatory requirement for mandatory reporting. Respondents shared that private facilities fear sharing data because they don't not know how it will be used. The threat of shared data being

used to impose more regulation or taxes pushes private

facilities to limit the information they share with the public sector. Some private facilities, especially those operating illegally, choose not to report any data at all. This complex interplay of trust and regulatory requirements poses significant challenges to achieving transparent and comprehensive health data sharing.

""There was no reporting of the consumption data from the pharmaceutical products retailers in the county despite most of them serving as the first point of service for most county residents. We sell a lot of the family planning products and antimalarial products and yet nobody has ever engaged us on reporting framework"

Private Pharmacy, Mombasa County

There is limited data on the downstream private pharmaceutical supply chain (distributors, chemists, and pharmacies. A lot of data is not reported or accessible from the private sector in the pharmaceutical industry. Across all counties, it was found that pharmacies and chemists are the first point of care for most populations. However, there needs to be more structures to collect health data from them. There have been limited efforts to have the pharmaceutical retail industry report on their consumption data. These

efforts have been driven by partners who focus on specific products, and the players in the industry do not see the need for or incentive for reporting. The lack of data from the downstream pharmaceutical supply chain is made worse by the disjointed supervision of chemists and pharmacies, which is carried out by the pharmacy and poison boards with little support from the county health leadership.

"Transparency is not there even within the government data. Any form of DQAs have shown a lot of gaps. The private sector is mostly not shared with the health leadership" National level Government respondent (SAGA).

The private sector do not widely share health information and data with each other. There are challenges in data transparency with accessibility to relevant information. This is brought about by the limited interoperability of data systems, private sector data not being availed to the public sector, and a general lack of a data-sharing mechanism between the public and

private sectors.

"We do not share data amongst ourselves as private health sector and we do not report anywhere on our production or sales data. We are not under any obligation to report to the government except feedback on drug reactions."

Private Pharmaceutical distributor Kisumu County

Kenya has frameworks and procedures for data quality assurance (DQA) in both the public and the private sectors. However, the public sector tends to use the DQA frameworks more frequently and with a greater emphasis than the private sector. CHMTs use standardized tools to conduct data verification, mentorship, assessments, and other DQA activities on a quarterly basis. The public sector conducts far greater numbers of DQA visits of MoH facilities

and the private sector is often not included in a

significant way, which has major implications on Kenya's HIS. DQAs

"Vertical programs work across public and private sector. Data quality improvement in the private sector is largely driven by the vertical programs. This is because commodities shared from vertical programs are based on the reports submitted"

County government official Nakuru County

conducted by the government are heavily dependent on donors due to the limited resources in the public sector, which partly explains why the private sector is often not sufficiently included by the public sector in their DQA activities. Some larger and more-established private sector networks and associations do carry out some DQA of their facilities, but in some cases, this is dependent on donor funding, and in other cases does not happen frequently. In other instances, DQAs in the public and private sectors are not shared openly to strengthen data quality across national and county markets, which further

emphasizes siloed ways of working, and undermines the potential for shared learning and improvements in data quality that can be used to make effective decisions. It can also lead to under or over-estimation of the health market needs which are cited as among the reasons for stockouts in the facilities, including for the vertical program products. The differences in DQA systems between the public and private sectors have ramifications. Private sector data provided to the government to meet regulatory requirements must be reliable to support the development of evidence-based policies and initiatives. This underscores the need for enhancing DQA in the private sector, especially in light of the government's UHC program, which will be predominantly data powered. Insufficient DQA in the private sector hinders private enterprises' ability to make informed decisions and evaluate performance.

Vertical programs tend to have better data quality across all counties and at the national level due to well-facilitated dialogue, availability and size of funding and stronger quality assurance mechanisms. There are data and performance review meetings for both the private and public sectors, as the program coordinators reported having quarterly review meetings facilitated by partners. Vertical programs share health commodities with the private sector providers, which incentivizes them to report. The private sector has shown a willingness to avail data if involved in the decision-making process by the health markets leaders – county and national government as they're in the vertical programs.

The public sector at the national and county levels utilizes available data from the KHIS to develop longer-term strategies, County Integrated Development plans (CIDPs, Annual

"We use data in our forecasting, planning, and budgeting but feel wasted as resources are not allocated as per the need and still can't easily access the allocated resources"

County government official in

Workplans (AWPs), and set targets for the sector. The data is also used to inform planning and forecasting for resource allocation during the budgeting process. The quantification and forecasting are done through the HPT units, which comprise the Head/Coordinator/Manager, Quality Assurance Lead, Supply Chain Lead, and Logistics Management Information System (LMIS) Lead(Ministry of Health, 2022a).

Primary data findings across the counties and at the national level indicate that data is generally used to provide insights for strategic planning, policy formulation, and resource allocation for the health market at the national level. 64.40% of all the respondents agreed that market data is used to monitor and shape national and county markets, and 67.50% agreed that health market data is used to understand consumer access and needs, with

21.50% of respondents disagreeing that data is used to understand consumer access and needs.

"The government doesn't use data to monitor and shape national and county health market." Private hospital Kisumu County. Some of the county respondents felt that data rarely influences resource allocation due to the limited resource envelopes they receive and the budgeting approach, which is program-based. Additionally, due to the limited financial resources available and competing priorities at the county and the national level, the available resources do

not match the actual need. Apart from that, the political leadership primarily makes final decisions. As a result, this situation can demoralize the technical team, making them less inclined to harness the power of data.

"The government KHIS system is not easily accessible to all the private healthcare players who need it to inform their market strategy, but the government wants access to the private sector data" **Private health logistics firm** There is no health market HIS that specifically monitors Kenya's health market and provides quality and analyzed data to stakeholders to make decisions. For planning purposes, decision-makers rely on data sources they can access at national and county levels, which is incomplete, due to the limited/no inclusion of private sector data and issues with data completeness and quality. The KHIS system has analytics (KHIS aggregate) that are useful for planning and

forecasting purposes for the public sector at national and county levels. It has data on different disease indicators and health products and technologies (HPTs) which can be disaggregated by county and sub-county(Center for Epidemiological Modelling and Analysis, 2021). Findings from primary data collected across counties present varying opinions on how data is utilized at facility and leadership levels in the public and private sectors. The public sector has clear structures and frameworks that guide when, where, and how to utilize health data in decisions that influence resource allocation in health. There needs to be more information on how private sector players utilize their data at the county and national levels. There is limited information on if the private sector utilizes data for forecasting, budgets, and planning, as most work in silos with their individual data. Private sector respondents across the counties reported limited use of data to set strategy, especially for the pharmaceutical retail industry and smaller healthcare, due to limited HR capacity and access to the health-related data that would help inform strategic decisions.

Box 3. Consequences of not having a health market HIS

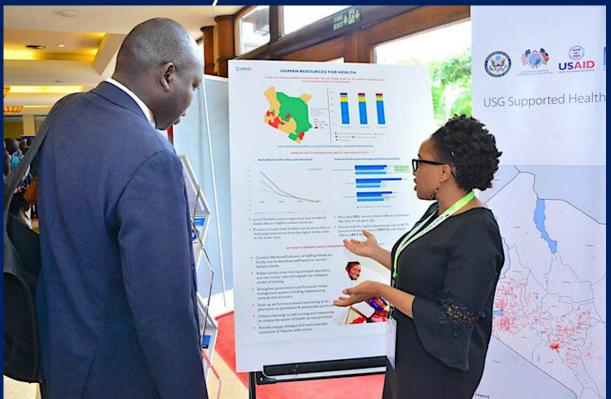
- 1. Under-estimation of HTPs that are required nationally and in county health markets.
- 2. Under-estimation of the size of the health market, the distinct roles of the private sector players within the market
- 3. Under-estimation can lead to shortfalls in essential health supplier and an over-resourcing of the public sector, which results in scare finances being used inefficiently.
- 4. Limited data to make informed and accurate decisions.
- 5. The private sector will continue to be reluctant to invest in the health sector as they require information to make informed business decisions
- 6. Despite increasing availability of health information that is routine collected, distrust in routinely collected data results in low use of such data for decision making.
- 7. With this lack of a clear whole market view, developing interventions that optimize the entire value chain from the consumer their access to products and services, right through

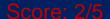
to the production of pharmaceuticals, non-pharmaceuticals will remain a challenge. This will delay Kenya's meeting its goals in health service provision, including elements such as increasing local production of health products(MOH Kenya, 2023).

2.2.4 Recommendations

- 1. Disseminate health data-related policies and guidelines widely at the national and county levels and across the private and public sectors. Orientation on the recent changes to the sector such as the Kenya Data Superhighway and the Digital Act 2024 and their implications for both the public and private sectors needs to be carried out to ensure that stakeholders are aware of its implications. ICT solutions providers should be provided with information on the information needs of the Data Superhighway
- 2. Assess the private sector's technology infrastructure and capacity needs at both national and county levels to ensure it can meet the data requirements of the Data Superhighway. Explore investment models to support the necessary scale-up and strengthening for the rollout of the Digital Act 2024
- 3. Secure financial support for the development of Kenya's first health market information system that will specifically track and monitor Kenya's health market, collate and share data for decision making, and include data on downstream private pharmaceutical supply chain stakeholders, such as distributors, chemists and pharmacies
- 4. Assess the most appropriate ways for the health markets information system to be integrated into interoperable national and county systems, including as a data layer within the future Data Superhighway
- 5. Set up national and county-level health market technical committees representing public, private and development sector partners. These will enable the sharing of data between the public and private sectors to take place on a routine basis which will improve data transparency and trust between the public and private sectors and improve overall market performance
- 6. Explore ways to incentivize the private sector to comply with routine reporting requirements at the national and county levels, such as through supervisory visits, DQAs and others that should be co-created with the private sector
- 7. Support an all-market DQA process where by public and private sector health providers receive the same assessment and equal support
- 8. Review and modify policies regarding KHIS data to ensure more access and use of the available data by the private sector
- 9. Build capacity building for the private sector to be able to undertake DQA
- 10. Support national consumer needs assessments to be carried out on a regular basis to understand consumer needs and demands

2.3 Market Analytics





Kenya has implemented several data systems with inbuilt analytics including the Kenya Health Information system (KHIS), Kenya Health Research Observatory (KHRO), Kenya Health Master facility list (KHMFL), Logistic Management systems (LMIS) among others. There is no analytic tools to understand the whole healthcare market. Vertical programs have analytic tools for their products and services with limited resources outside these for analytic tools.

2.3.1 Key Findings

- Kenya has prioritized the development of data utilization for decision-making. The Kenya Health Data Collaborative convenes key stakeholders to strengthen the country's health information system
- b. There is no Kenya dashboards or analytics tools available at the national or county levels to support decision making, shaping and strengthening the health market
- c. Both the public and private sectors have data analytic tools based on several disaggregated information systems
- d. Some data analytic tools are available in the health sector, but they are largely for the public sector only. The Kenya Health Information System (KHIS), for example, is not encompassing of all the private sector and is mostly limited to vertical programs
- e. The private sector's market analytical tools are extensive in number but they are fragmented, not integrated and only used within specific organisations, networks and associations
- f. The country's ICT hardware is still inadequate for supporting the national HIS and future data ambitions, especially in government-owned and rural facilities
- g. Kenya has a well-established routine HMIS system that collects and reports data across the health sector. The on-time submission of monitoring reports are generally improving although further progress is required for certain health priorities and indicators at both national and county levels
- h. There are no routine collection analytics systems that collect data on consumer insights

2.3.2 Introduction

Data analytics are utilized by healthcare providers to improve patient care through risk identification and deployment of proactive prevention measures (Western Governors University, 2023), improve operational efficiencies, for example, improving human resource management and supply chain systems (Morsani College of Medicine, 2023), drive organizational performance by collecting, analyzing, and interpreting large volumes of data and providing actionable insights (Alam, 2024) and reduce costs for healthcare organizations and improve business intelligence (Comptia, 2024).

Kenya has prioritized the development of data utilization for decision-making. The Kenya Health Data Collaborative convenes stakeholders in the health data ecosystems to strengthen the country's health information systems(*Report of the Kenya Health Data Collaborative*, 2017) The collaborative has developed the Kenya Health Research Observatory (KHRO), which has dashboards that summarize priority health-related indicators covering health service coverage, health services, health status, and risk factors(Kenya News Agency, 2023). The data is broken down to the county level within KHRO, allowing for access to county-level data visualization. The data and dashboards provide useful information, especially for vertical programs.

The country's ICT hardware, including computers, servers, printers and accessories, is insufficient to support the national HIS(Nyangena et al., 2021b). The 2018 Kenya Health Facility Assessment survey showed that, overall, 50% of the facilities in the country had a communication equipment, and 31% had a computer with internet access (Table 7). However, the availability of these resources varies across regions, with health facilities in Nairobi (77%) and Laikipia (58%) counties having the highest availability of a computer with internet connectivity, while facilities in Lamu (10%), Baringo (10%) and West Pokot (5%) counties had the lowest(Ministry of Health, 2019a).

Availability also varies by facility type, managing authority, and location, with secondary and tertiary hospitals having better access than dispensaries. Government-owned and rural facilities had the least access to a computer with internet access (Table 7). Furthermore, a 2016 survey showed that computer accessibility in public hospitals varied by department, with the Comprehensive Care Centre (CCC) providing HIV/AIDS services being the most computerized (88%), followed by outpatient (38%), billing (26%), pharmacy (23%), and laboratory (23%) departments. The in-patient (7%) and radiology (7%) departments were the least computerized (Muinga et al., 2020b).

Table 7.Availability and distribution of ICT equipment and connectivity

	Communication equipment	Computer with Internet access
Facility type		
Secondary & tertiary hospitals	100%	100%
Public primary hospitals	89%	73%
Private/NGO/FBO primary hospitals	97%	89%
Health centers	70%	48%

	Communication equipment	Computer with Interraccess	net
Dispensaries	34%	13	3%
Medical clinics	53%	37	7%
Managing authority			
Government	40%	16	6%
NGO/FBO	61%	50	0%
Private	59%	44	4%
Urban/Rural			
Urban	67%	58	8%
Rural	42%	18	8%
Total	50%	3.	1%

Source: Kenya Harmonized Health Facility Assessment (KHFA) 2018/19

Through the MoH, the Government has initiated steps to facilitate a more conducive environment for health information exchange across different information systems (Center for Epidemiological Modelling and Analysis, 2021; Njoroge et al., 2017a). Several projects have been implemented in the country, covering all eHealth strategic focus areas, with the majority (69%) focusing on eHealth, HIS (13%), eLearning (11%), and telemedicine (7%)(Njoroge et al., 2017b). Thirty-two percent of eHealth innovations focused on client education and behavior change communication, 19% on data collection and reporting, and 7% on EMR systems. The majority (28%) of the eHealth projects focused on primary care, followed by HIV/AIDS (25%), maternal and child health (16%) and malaria (11%)(Ministry of Health, 2022c).

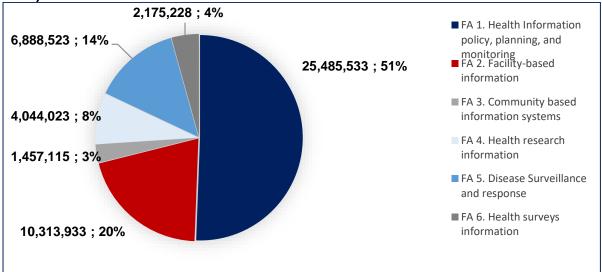
Other forms of data analytics, specifically dashboards, are available that provide insights into the health care systems, including Kenya Health Information Systems (KHIS) aggregate, which aggregates and analyses information from monthly reports submitted to the Ministry of health(Center for Epidemiological Modelling and Analysis, 2021), KHIS tracker to track individuals' health data(KNBS & ICF, 2023). Departments within the Ministry of health also have specific programs and systems such as the blood bank management system, mental health portal, standards, guidelines and policies portal, the Kenya Master Health Facilities List (KMHFL), Kenya Quality Model for Health, Community Led Total Sanitation and the Electronic Community Health Information System (eCHIS)(dhis2, 2024) which have inbuilt analytics. Moreover, the government aims to establish a total of 315 Smart Primary Care Networks (PCNs) across the country. To date, 160 PCNs have been successfully operationalized, with plans to launch an additional 41 in the near future (Kenya News Agency, 2023; Ministry of Health, 2024a). Additionally, the Department of Health Products and Technologies (DHPT) have data analytics tools supporting the supply chain. All these are in the process of consolidation through the Kenya Health Information Exchange. One of the major observations from the secondary literature on health data analytics in Kenya is the absence of information on the private and faith-based sectors on these main dashboards (though data from these may have been included). There is also limited data on consumer information, such as consumer preferences.

The Kenya Health Data Collaborative (KHDC), established in 2016 by global stakeholders interested in collaborating on health data investments to bolster the nation's statistical capacity The State of Kenya's Health Market - 2024

and stewardship and align partners' technical and financial commitments around an effective nationally owned HIS and standard monitoring and evaluation plans(Ministry of Health, 2017a).

The 2017 HIS/Monitoring and Evaluation (M&E) resource mapping report revealed that 27% of the overall budget was allocated to the national level to support HIS/M&E activities from KHDC partners(Ministry of Investments, Trade and Industry, 2024). The remaining funding was allocated to support HIS/M&E activities across all counties (24%) or specific counties (47%). Half (51%) of the stakeholders' investments were in health information policy, planning, and monitoring (Figure 9). Health survey information, health research information and community-based information systems allocated the least resources, each receiving less than 10%(Ministry of Investments, Trade and Industry, 2024).

Figure 9. KHDC's budget distribution across HIS/M&E focus areas (Financial Year 2016-2017)



Source: Kenya Health Data Collaborative Report, 2017

Certain focus and sub-focus areas receive higher budgetary allocations at national and county levels. At the national level, budgetary support is limited to four focus areas (health information, policy, planning, and monitoring), whereas all six HIS focus areas (health information, policy, planning, monitoring, health research information and disease surveillance) are supported at the county level(Ministry of Investments, Trade and Industry, 2024). The KHDC mapping report indicated that the health information policy, planning, and monitoring focus area received the largest allocation (67%) and was funded the most in nearly all counties. However, health research information and disease surveillance and response did not receive support at the national level and health research information received the lowest allocation in all counties (Ministry of Investments, Trade and Industry, 2024).

Moreover, funding distribution across counties was uneven in FY 2016/17. seven (Embu, Isiolo, Kirinyaga, Kitui, Laikipia, Narok, and Tana River) of the 47 counties, did not receive any funding support for HIS/M&E activities, and only 11 received support for at least three of the six focus areas(Ministry of Investments, Trade and Industry, 2024). This disparity may be attributed to overreliance on donor funding, which comprised 95.2% of the health sector's HIS/M&E budget. Investments from stakeholders were concentrated in health information policy, planning, and monitoring focus areas, accounting for 51% of the total investment.

Furthermore, the MoH M&E framework did not include a budget pegged to the HIS/M&E focus and sub-focus areas. Thus, it is crucial to involve health sector stakeholders in developing a comprehensive investment plan for HIS and M&E that aligns with the overall health strategy. This plan should prioritize implementing HIS and M&E activities in identified priority areas and align technical and financial assistance with national and county-defined priorities(Ministry of Investments, Trade and Industry, 2024).

2.3.3 National and County Level Findings

"My facility has analytics that allow me to track patients data an support clinical decisions for the benefit of the patients including reminders to individual patients to take medication and track who does and doesn't take their prescribed medications" National level private sector leader and facility owner Several analytical tools are currently in use within the Kenyan health market. These tools are bundled up with existing health management systems, and a majority of the respondents at the national and county levels acknowledge the availability of these analytic tools. Apart from the analytic tools associated with routine collection data mechanisms (such as KHIS), surveys and questionnaires are the most common form of market analytics.. There is capacity to utilize the available analytical tools, especially for annual work plan development and budgeting.

Little is known about the overall capabilities of the private sector's analytic tools. Primary data from this assessment points at the availability of high-quality data analytic tools in the private sector (especially large urban facilities). The lack of involvement of the private sector by the public sector in target setting and annual workplans also reduces the visibility of these analytic tools to the public sector and represents a major missed opportunity.

"We use data from KHIS for strategy development (annual work plans and county investment and development plans) at the county level." The available analytical tools have restricted access which consequently limits utilization of the analytical tools. Due to the heavy investment in data system for vertical programs, there exists highly sophisticated data systems within the vertical programs with accompanying analytics. A case in point is the HIV program which has; a) HIV Implementing Partners Online Reporting System

which reports on interventions and resources allocated in the HIV response by implementing partners, b) Community AIDS Programs Reporting (CAPR) that captures non-health facility data and generates reports on HIV activities at the community level, c) Maisha Certification System, a platform for the public sector to report on HIV indicators in line with the government sector performance contract d) Kenya HIV and Health Situation Room that provide real-time data visualization allowing utilization of epidemiological, service

"Data may be available to service level points but there's no mechanisms of aggregation for the data to be useful to the decision makers. KHIS would be a good start but there's limited access and use in the private sector"

delivery, logistics information, and community-level data for decision making at all levels, e) Maisha Maarifa Research Hub that consolidates peer-reviewed research reports(Ministry of Health, 2024b). Lesson learnt from the set-up, management and utilization of these tools should be leveraged in the setting up and management of whole market analytics systems. These existing systems could also be utilized to support other health areas that are not within the current ambit of

the

vertical disease programs.

"The government has limited capacity to use existing data. The private sector do have individual capacity but could do better if there was good collaboration between players in the market. There is some unwillingness to share data within the government for reason better known to key decision makers"

There are limited financial resources to fund robust data analytics infrastructure adequately. Investing in advanced tools, training, and maintenance becomes challenging without sufficient financial backing. The healthcare budgets at the county level have to pass through county legislatures. Several respondents pointed to the deprioritization of some budget items recommended by the technical teams (including data systems) during this budgeting phase. Health departments at the county level should improve their lobbying efforts to ensure that the health department's budget remains a priority area with

support within the legislature.

There is a need for the government at both the national and county level to reduce reliance on partner funding for data systems as part of building a resilient and sustainable healthcare system. For consumer insights, there is limited information on analysis of it apart from collection of it through suggestion boxes. There is need for investment in capturing consumer insights and utilizing analytical tools related to this.

During the assessment, both data on, and analytic systems to gain consumer insights were found to be lacking with the most common mechanism for collecting consumer insights being suggestion boxes. Capacity in the collection and analysis of data from consumers is needed. Lessons learnt from the private sector could be shared with the public sector. Private sector players especially at the national level indicated that they do utilize consumer insight tools to improve their services for their clients such as the net promoter score.

"We use our data service statistics to justify funding, we use consumption data as well. Problem comes in forecasting. Politicians make the final decision on allocation."

Primary data findings indicate some utilization of routine analytical tools for forecasting and quantification, development of the annual workplan, and budgeting in the public sector. Similar to the national level, the private sector access to the analytical tools at the county level is limited to those with a qualified HRIO or Data Officers and those who receive commodities from

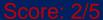
the vertical programs (similar to findings in the market data section). This then leaves behind the rest of the private sector, which makes up the largest proportion as per the Kenya Health Facility Census report of 2023(Ministry of Health, 2023b). It was also noted that there is limited political goodwill to adhere to evidence-based resource allocation, which then discourages the use of data and utilization of tools in the health markets. Consequently, this affects the rationalized allocation of human resources for health and budgetary allocation, which affects commodity availability. The limited deployment of the analytical tools in decision-making has in part led to underestimating the real market needs, as evidenced by the reported stockouts at counties, including in some vertical programs as quoted under the market data section.

2.3.4 Recommendations

- 1. Secure resources for the development of a health market dash board and analytical framework
- 2. Develop health market dash board and analytical framework to provide whole market level visualization for decision makers to use. Ensure the integration of private sector's market analytical tools into the dashboard
- 3. increase investments in the requisite IT infrastructure and personnel particularly in PHC facilities in the public sector to support enhanced data analytics

2.4 Market Management





Kenya has a well-articulated management and coordination framework at the national level. The Kenya Healthcare Partnership and Coordination Framework 2018 is the guiding document for health market coordination, but it has not been implemented. Counties are expected to set up coordination mechanisms that respond to their own specific needs without specific guidance on this, and therefore, comprehensive market strategies have not been developed.

2.4.1 Key Findings

- a. There are several important health sector coordination forums, structures and policies in place that should support and strengthen the management of Kenya's health market. The implementation of these forums, structures and policies is limited by inadequate financing and human resources.
- b. The forums, structures and policies that are in place are not explicitly focussed on the wider health market, although they offer potential for the public and private sectors to work together, specifically around areas of mutual interest such as the vertical disease programs and attainment of the UHC
- c. The Kenya Health Sector Partnership and Coordination Framework (2018) has only been partially implemented. The partnership secretariat has been convened and a number of intergovernmental forums have been held. All the other structures of the framework have not been activated
- d. Stakeholders generally report that the management of the health sector including the private sector and at both national and county levels is more challenging now than in the recent past
- e. There is low appreciation by public sector health managers of the need to manage the entire health market and not only health service delivery through the public sector
- f. The Kenya Health Sector Partnership and Coordination framework only stipulates the coordination mechanism at the national level. This has left the counties without guidance on how to structure the coordination of the sector. As a result, the counties' coordination frameworks are independent of the national coordination framework and different coordination mechanisms are used between the counties. Relationships and coordination between the national level and counties is strained
- g. The CoG's health secretariat has limited human resources capacity to support the collaboration of the counties and the national MoH especially in policy development and implementation.
- h. Resources for market management functions at all levels are not adequate resulting in reliance on donor funding for management functions such as routine meetings of coordinating bodies

2.4.2 Introduction

The Constitution of Kenya 2010 guarantees access to good quality health as a right to all Kenyans. It also enshrines the principle of public participation in developing essential laws and policies/regulations in any sector(Republic of Kenya, 2010). The Health Act of 2022 provides a framework for healthcare management and regulation(Government of Kenya, 2017). The importance of the whole sector approach is highlighted by mentioning of all healthcare sector players (government, private sector, and development partners) in the sector's guiding policy documents, such as the Kenya Health Sector Policy 2014-2030(MOH Kenya, 2014) and other specific program strategic plans(Republic of Kenya, 2018).

The Ministry of Health has developed a specific policy document to guide the sector's management. The health sector partnership and coordination framework provides the coordination mechanism for the implementation of the health policy 2014 – 2030(Ministry of Health, 2014). This framework emphasizes the collaborative involvement of government (at both national and county levels), the development sector, and the private sector in the comprehensive management of the entire health system. Figure 10 below outlines the coordination entities at various levels that support sector coordination.

The Health Sector Advisory and Oversight Committee (HSAOC), led by the Cabinet secretary, serves as the highest strategic interventions and policy direction-setting body. Its membership includes development partners, the Council of Governors, the Faith-based sector, the private sector, and civil society. This membership is replicated in all subordinate committees. The Health Sector Intergovernmental Consultative Forum (HSIGCF) is a consultative forum that brings together the Ministry of Health and the County Executive Committee members (CECs) of Health. The HSICF reports to the Council of Governors. Technical forums under the HSIGCF are designed to align with the Interagency Coordination Committee's to avoid duplication of activities.

The Health Sector Interagency Steering Committee (HSIC) brings together representatives of key sector partners. It provides technical-level strategic leadership to realize UHC and the Kenya Health Sector Strategic and Investment Plan (KHSSP). HSIC also represents the health sector in the Medium-Term Expenditure Framework (MTEF).

The Interagency Coordination Committees (ICCs) provide a forum for joint planning, coordination, and monitoring of specific investments in the sector. The five core committees are a) Service Delivery, Quality Assurance, and Standards; b) Human Resources for Health; c) Health Financing, Leadership & Governance, and Legal; d) Health Products and Supply Chain and Infrastructure; and e) Health Information, Research, M&E. The framework advises the formation of county-level coordination mechanisms based on the county's specific requirements. The primary purpose of the county coordination mechanisms was to provide the county health sector leadership with all health activities within the county.

The Ministry developed the Kenya Public Private Collaboration Strategy (2020) to strengthen collaboration between the public and private sectors to improve health outcomes and attain the universal health coverage goal(Ministry of Health, 2020d). Other coordination policies and mechanisms at the program level are aimed at improving the engagement of the private sector in specific service delivery. For example, the TB program has developed the Public Private Mix (PPM) in TB(World Health Organization, 2024).

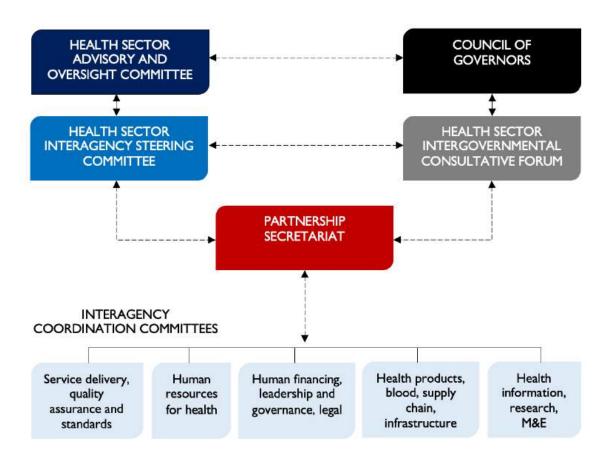


Figure 10. Health sector partnership and coordination framework

"There are existing laws and regulations but a gap exists when it comes to anchoring the Council of Governors as an institution that supports high-level coordination in collaboration with the Ministry of Health.."

National level private sector enterprise leader.

Market players are also organized into sub-sectoral groups, which makes it easier to bring them to the table to discuss sectoral issues. organizations include The Rural Private Hospitals Association of Kenya (RUPHA), Health NGO's (HENNET), Federation of Network Pharmaceutical Manufacturers, Kenya Association of Private Hospitals (KAPH), Christian Health Association of Kenya (CHAK), Kenya Episcopal Conference-Catholic Secretariat. Association of Hospitals (KAH), Kenya Association

of Pharmaceutical Industry, Medical Insurance Provider Association of Kenya and The Kenya Healthcare Federation (KHF)(Ministry of Health, 2024; Ministry of Health, 2017a). These organizations are already participating in sector engagement activities that can be leveraged.

2.4.3 National and County Findings

"The constitution provides for these frameworks but they're not funded and therefore not functioning well."..... Semi-autonomous Government Agency respondent

Kenya has a robust legal and regulatory framework to coordinate the market. Despite this, perceptions of the existence and implementation of these frameworks are varied. 75% of government respondents were aware of the existence of coordination frameworks, as opposed to only 42% and 44% of private and development sector respondents respectively who reported existence

of these framework. There is an asymmetry of knowledge on the existence and functioning of these frameworks. Market players need to be provided with information on the existing coordination framework (Ministry of Health, 2024c).

"The department of intergovernmental relations receives funding from the exchequer. What we receive is not adequate. It would need up to 20 people for it to carry out its functions effectively."

National MoH respondent

Support for the coordination mechanisms at the national level was noted to be suboptimal, with little to no financial support for these frameworks. This poor resourcing has resulted in human resource and operational support gaps; hence, national-level entities that are meant to support the coordination function, such as the Department of Intergovernmental Relations and the Council of Governors, are not able to play their coordination function effectively.

Interagency coordination meetings at the national level are held, but these are held ad-hoc and predominantly supported by partner agencies. Higher-level coordination mechanisms have, however, suffered from this lack of support and are not held with the required regularity. This has the effect of a missing link between the policy level at the national level and the operations level at the county (through to sub-county) level.

"Yes, we have the ICCs; however, due to financial capacity issues, we normally meet under specific themes that have partners' support or when there is an emerging national issue."

Semi-autonomous Government

Despite these funding shortfalls for the coordination frameworks established by policy, the government at the national level has still demonstrated a willingness to engage with stakeholders in the sector. The ministry's senior leadership (including the Cabinet and Principal Secretaries) has been noted as very willing to engage with the private and development sectors. These alternate mechanisms offer a current

mechanism through which policy discussions can happen.

"We have done well at the national level. The Cabinet Secretary can meet private sector easily. Unfortunately, this ends at the national level. This collaboration mechanism does not work at the county level where CHMT works with individual facilities."

The lack of regular channels of engagement between the stakeholders is leading to information gaps that reduce the sector's capacity to leverage capacities, reduce inefficiencies, and prevent potential conflicts. Challenges in sectoral coordination are also noted within the private sector. For instance, the insurance sector meets with the private sector in healthcare under the auspices of the Kenya Private Sector Association (KEPSA). However, the interaction between insurers and the private sector is inadequate. This

has been attributed to the lack of a singular goal for cross-

sectoral engagement.

The counties' coordination frameworks are independent of the national coordination framework. The national partnership and coordination framework is seen as a national coordination framework, with each county having its coordination framework.

Table 4. Coordination frameworks identified in each PSE focus county.

County	Sector coordination framework
Mombasa	The Public-Private Sector Coordination framework is in progress. Stakeholders were also engaged based on key interest areas, such as maternal, prenatal, and neonatal deaths and family planning.
Kisumu	The Kisumu Health Stakeholders Forum is held twice a year. TB program also has a TWG that brings stakeholders together.
Homa Bay	Homa Bay has a private healthcare association, though this does not often meet with the government (ad hoc). There are also program-specific TWGs in vertical disease programs such as HIV.
Nairobi	No stakeholder forum or TWG brings together the public and private sectors except for the vertical programs.
Nakuru	Stakeholder forums are held under specific disease programs, especially HIV and TB.
Uasin Gishu	Stakeholders were brought on board to develop the County Investment and Development Plans (CIDP). Vertical disease programs (RMNCAH and TB) have TWGs with voluntary memberships.

"We have tried a forum under KEPSA and it did not work. When we put people together there should be something that brings them together a goal. Players typically come with different goals and interests. It is better to work with the groups separately."

Private medical insurance

Both national and county-level respondents indicated that the government has the capacity (technical competence) to manage the healthcare market. This capacity is not fully realized due to several challenges, including insufficient human resources for market management, poor implementation of the coordination framework, and poor funding to the units in charge of the market management function.

The lack of cross-sectoral experience (experience working for the state as well as non-state actors) among market managers was identified as a potential cause of their lack of appreciation of the unique needs of the various subsectors. The motivation of the healthcare managers to develop a whole market view was stated as one reason that more attempts had not been made to institute whole market approach mechanisms at the national level. There is also lack of devolution human resources for health and lack of sufficient HRH management capacity at the central level is partially responsible for the repeated labor related issues within the sector. Across all the countries, there was agreement that the government can manage the market, albeit with some existing challenges.

Table 8. Market management capacity in the PSE focus counties

County	Management capacity
Mombasa	The government can manage the sector. What is needed is more financial capacity for management (e.g., calling for stakeholders' meetings) and the will to implement health market priorities.
Kisumu	Management capacity is available. However, the rapid turnover of management staff is a risk. Erratic funds flow from the central government is a limiting factor. Technology can be leveraged to improve management.
Homa Bay	The human resource capacity to manage is there, but it needs to be complemented by adequate financial resources (vertical programs can be leveraged for this).
Nairobi	The county has relevant human resources capacity regarding skills but is limited in numbers. There are also limited financial resources for the CHMT to manage the market effectively. The weak link between the regulatory bodies
Nakuru	The government has the capacity, and the requisite regulations are in place. What is missing is the goodwill and mechanisms for whole market management that will leverage the relative strengths and weaknesses of both the public and private sectors.
Uasin Gishu	The government has the human resource, operational, and procurement capacity to manage the health market. Corruption should be tackled as it is a major risk. We also need to improve the government's capacity to manage beyond simply regulating.

"There is need to establish a framework where there is accountability for implementation of laws, manifestos etc. This should be attached to proper leadership in service delivery..." Private health provider Nakuru

Respondents noted positive and negative incentives for managing the healthcare market in Kenya. Finance was cited as one of the most incentives for proper management. Through a whole market approach, the government should take advantage of available data/information to increase revenue collection through a whole market approach. This is a potential solution to the perennial dependence on partners for funding specific activities.

Across the counties, most respondents were hard-pressed to identify specific incentives for market management. This indicates a need for the development of packages of support for the county health leadership to identify underlying incentives for whole market management. Nakuru was a stand-out county, with a number of respondents having stand-out incentives for market management. A private sector respondent mentioned the need for the government to have accountability and implementation mechanisms. Government respondents mentioned that improving health systems' capabilities is a major incentive for the government to manage the market and deliver on the promises made to the population.

"Inexperience in market management and poor interfacing between departments lead to the ministry not seeing the value of whole market management. The Ministry of Health (MoH) doesn't work with KRA and other ministries to figure out revenue opportunities and seal loopholes, for example, working with NTSA to reduce road accidents." **National-level** vlqque chain respondent.

Six out of 11 national-level respondents mentioned the current changes in the legal framework for healthcare in Kenya (UHC bills) as a significant opportunity to improve market management. The government was also seen as being in an excellent position to take advantage of the improving economy to strengthen the market. government could take advantage of all these changes to incentivize manufacturing and support service delivery by leveraging synergies brought by private sector (such as private sector efficiency), with the government playing a more significant role as a regulator rather than a service delivery arm.

Table 9. Market management opportunities in the PSE focus counties

County	Opportunities to market management
Mombasa	The policies are in place, and the goodwill for engaging the public and private sectors (building on the work done by programs such as USAID STAWISHA) in public-private collaboration is there.
Kisumu	There is an opportunity to leverage digital technologies for management (as well as data to understand consumer needs) and other emerging technologies, such as drones, to improve service

County	Opportunities to market management
•	delivery. Changes happening in the health financing space allow for the amalgamation of activities such as licensing (one license),
Homa Bay	There is political goodwill for proper market management, a private sector organization that the government can work with, and partner support that can be utilized to improve market management.
Nairobi	Private sector is willing to engage with the county. The county health department has the capacity and is willing to work with the private sector but are limited in terms of finances
Nakuru	Establishing the Social Health Insurance Fund, an industrial park in Naivasha that could support local manufacturing and emerging ICT systems will allow regulators to consolidate information.
Uasin Gishu	The business community is willing to work and support the government.

Table 10. Market management incentives in the in the PSE focus counties

County	Management incentives
Mombasa	No noted incentives for market management were outside the government's regulatory responsibilities and the fact that they collect licensing fees.
Kisumu	The county is incentivized to utilize new technologies to meet its health needs. The top leadership of the county has a strong focus on the utilization of technology to improve health services and is very supportive of introduction of new technologies.
Homa Bay	There were no discernible incentives for the market outside of subsidized products.
Nairobi	The Digital Health Act implementation and the county automation efforts to help in improved decision-making and understanding of the entire health market
Nakuru	The Government should be incentivized to provide sound market management as it is an avenue for delivering political promises, having an accountability framework in healthcare to meet the population's health needs, developing goodwill with the private sector, reducing counterfeits in the market by working with local manufacturers, and bringing about a culture change in healthcare.
Uasin Gishu	There were no discernible incentives for the market outside of the government's mandate to provide healthcare to the population.

Table 11. Barriers to market management in the PSE focus counties

County	Barriers to market management
Mombasa	Availability of resources for policy dissemination and implementation, unfavorable business conditions leading to the closing of private health businesses,
Kisumu	Lack of an engagement framework between the public and private sector, political appointments to technical/managerial positions and lack of a data sharing mechanism between the public and

County	Barriers to market management
	private sector play a role in preventing effective market management.
Homa Bay	Technical capacity to manage the market is there but there is lack of resources required to be able to effectively manage the market.
Nairobi	Limited financial and human resources capacity, low political goodwill, and limited use of data in decision-making
Nakuru	Misappropriation, a lack of integrated systems (across departments within the government), a lack of resources and market conditions (inflation, forex fluctuations impacting the cost of commodities), and climate change's impact on a largely agrarian population are noted as challenges.
Uasin Gishu	Capacity to engage stakeholders at all levels, corruption and lack of resources to roll out engagement frameworks.

2.4.4 Recommendations

- 1. Review the implementation of the Kenya Health Sector Partnership and Coordination Framework to assess its future suitability. Revise and improve the framework so it will be fit for purpose to support Kenya's whole market and serve as a coordination framework for counties
- 2. Develop whole market coordination forums at national and county levels. These should be aligned to (current and to-be-revised) Kenya Health Sector Partnership and Coordination framework
- 3. GoK should leverage the existing capacity within partner agencies to support market management in the immediate term
- 4. Secure dedicated long-term financial and human resources to the market management and coordination functions that will oversee the whole market coordination forums, including lobbying with the Treasury to secure domestic resources
- 5. Technical orientation and capacity building on the coordination of the health market, market dynamics and market management also needs to be carried out routinely at the national and county levels
- 6. Review all coordination meetings currently in place across various programs, and directorates, under the CoG and within counties. Harmonize all meetings to reduce duplication, harness technical capacity vertical (county to national) and horizontally (across counties, directorates and ICCs)
- 7. Explore the representation of the counties in the Interagency Coordination Committees (ICCs). The capacity of the ICCs to set market strategy and objectives by product category should be enhanced.
- 8. Assess the technical capacity needs assessment of the Council of Governors health secretariat particularly regarding the coordination between the counties and the national government as well as their level of knowledge on health markets
- 9. Deploy Council of Governors secretariat staff to be represented adequately at the various ICCs which will enable technical support and communication to the counties on the implementation of new policies
- 10. Train new health managers on government systems and protocols, existing policies that need to be implemented, and emerging issues in health care and the health market. The Kenya School of Government should offer this training
- 11. Align performance management frameworks and frameworks for key staff at the national and the county levels to the performance of the health market

2.5 Market Institutions



Score: 3/5

Kenya's healthcare market is vibrant and diverse, comprising various public, non-profit, and for-profit institutions that collectively shape the sector. Overall effectiveness is hindered by unclear roles, limited functionality, and insufficient coordination. Strengthening governance, improving coordination, and addressing financing and supply chain issues are crucial to enhancing the performance and impact of Kenya's

2.5.1 Kev Findings

- a. Kenya boasts a large and dynamic healthcare market. This market is shaped and strengthened by a diverse range of institutions, including public, non-profit, and for-profit entities
- b. The roles and responsibilities of each market institution, however, is unclear, and the functionality of many institutions is limited
- c. The multiplicity of market institutions limits the overall impact on Kenya's health market as there are significant needs for better coordination of market institutions, communication and data sharing
- d. The capacity to govern and manage market institutions need strengthening, with a focus on building government's ability to steward both public and private sector health market institutions
- e. Although supportive policies and institutions exist, a lack of coordination, financing and supply chain issues continue to pose challenges for functionality of these institutions.
- f. Kenya's healthcare market is characterized by a large number of diverse institutions with unclear roles and responsibilities, resulting in fragmented service delivery and limited data sharing
- g. Limited information flow between public and private sectors, as well as between national and county levels, hinders effective coordination and planning
- h. Most market institutions face significant funding challenges, with insufficient funding from the national treasury and a heavy reliance on donor funding
- i. Regulatory institutions like the Pharmacy and Poisons Board are yet to draft policies accommodating newer technologies such as drone technology. This regulatory lag impacts the health market's ability to innovate and adapt to emerging technologies

2.5.2 Introduction

There is an impressive number of organizations and institutions that are necessary for the functioning of the health market in Kenya. Table 12 below summarizes the various categories of institutions that are involved the health market of Kenya (Kenya Healthcare federation, 2023; Ministry of Health, 2022b). The Ministry of Health has established various regulatory agencies, semi-autonomous government agencies (SAGAs), and councils involved in managing the healthcare market in Kenya. These are summarized in Table 12 below (Ibid)

Figure 10. Categories of institutions involved in Kenya's health market

PUBLIC SECTOR

- MoH national and county levels
- Government health facilities, including hospitals and pharmacies
- Medical schools
- KEMSA
- Regulatory agencies
- SAGAs
- Public service commissions and boards

NON-PROFIT PRIVATE SECTOR

- Faith-based organizations (FBOs)
- Non-governmental organizations (NGOs)
- Professional associations
- Mission/FBO health facilities, including hospitals and pharmacies
- NGO facilities, including hospitals and pharmacies
- Medical schools
- MEDS

PRIVATE FOR-PROFIT SECTOR

- Manufacturers
- Importers
- Distributors and suppliers
- Retailers
- Health facilities, including hospitals and pharmacies
- Training institutions
- Medical schools

The world over, policies change with changes in regime. In order to have sustained growth in any sector, a measure of stability in policies is required. Strong institutions are key to achieving this. Kenya has a robust set of institutions that support the health care market as illustrated above. These institutions are recognized across the country with most respondents responding to the affirmative when asked if they know of institutions that manage the market.

Table 12. Key institutions involved in market management in Kenya

Institutions	What they do
SAGAS	 Kenyatta National Teaching and Referral Hospital (KNH): KNH is a national level referral hospital that provides specialized services. It is currently the largest teaching and referral hospital in Kenya. It collaborates closely with KMTC, which it hosts, and KEMRI. Kenya Biovax Institute: a parastatal established in 2021, the institute Manufactures, packages, and brings to market HPTs including, vaccines, pharmaceutical diagnostics and other medical products. The institute focus is also on technology transfer, research and development and providing support to local pharmaceutical industries Kenya Health Professions Oversight Authority (KHPOA): Established by enactment of the Health Act, 2017, KHPOA works at the national level to oversee the licensing, registration, and training of health professionals, as well as the regulation of health care services, and make sure Kenyans continue to receive the best possible healthcare. Institute of Primate Research (IPR): a private research institution established in 1961 focusing on biomedical research for improved human health. Kenya Hospital Authority Trust Fund: The Kenya Hospital Authority Act of 2017 established KHATF with the aim of raising funds for the advancement and betterment of Kenya's healthcare infrastructure. The authority is anticipated to carry out its goal of guaranteeing that every Kenyan has access to high-quality healthcare services. Kenya Medical Research Institute (KEMRI): a state corporation established in 1979. It is the national body mandated to undertake human health research in Kenya. KEMRI's mission is to improve the health and quality of life of people through capacity building, research, innovation and service delivery. Kenya Medical Supplies Authority (KEMSA): a state corporation established under the KEMSA Act of 2013. KEMSA is mandated to procure, store and distribute HPTs for public health programs, national referral hospitals, national strategic sto

- <u>Kenya Tissue and Transplant Authority (KTTA)</u>: Established in 2000 as the Kenya Blood Transfusion and Transplant Service (KBTTS) now KTTA through a gazette notice in 2022, the authority provides oversight, technical support and regulation for safe and quality blood transfusion, human organs and tissue transplant services. It also develops guidelines and standards for these services in Kenya.
- <u>Kenyatta University Teaching Research & Referral Hospital (KUTRRH)</u>: a public national referral hospital (level six) focusing on providing patient centered and evidence-based healthcare. The hospital mandate spans service delivery, training, research, and innovation
- <u>Mathari National Teaching and Referral Hospital</u>: Established in 1901, it is a state corporation and a level six tertiary hospital offering specialized neuropsychiatric services as well as research and training in mental health.
- <u>Moi Teaching and Referral Mental Hospital (MTRH)</u>: a multispecialty international teaching and referral hospitals serving the East Africa community. It is also a teaching hospital for Moi university's college of Health Sciences and other medical training institutions continuously working towards generating new knowledge and building human resources for health. MTRH works with other MOH partners including AMPATH the largest HIV/AIDS treatment center in Africa.
- <u>National Health Insurance Fund (NHIF)</u>: a state parastatal established in 1966 mandated to provide medical insurance cover to all its members and their dependents. Membership is open to all Kenyan adults.
- <u>National Cancer Institute (NCI)</u>: is mandated to The institute's mandate spans resource mobilization, regulation of
 practice, policy advisory, public education, research, capacity building and maintaining the national cancer registry.
 The institute works closely with hospitals and other state agencies including Kenya Network of Cancer Organizations
 (KENCO), NHIF and KEMSA.
- <u>Spinal Injury Hospital</u>: is a level six hospital that specializes in the treatment of spinal cord injuries.

• <u>Clinical Officers Council</u>: regulates the training, registration, licensing and practice of clinical officers

- <u>Kenya Medical Practitioners and Dentists Council (KMPDC):</u> is a state corporation that regulates training, registration, licensing, practice of medicine, dentistry and healthcare institutions ensuring provision of quality, ethical and people centered healthcare. The council also approves all medical and dental training institutions in Kenya.
- Kenya Health Human Resource Advisory Council (KHHRAC): is a state agency mandated to review policy and establish standards and norms for healthcare workers while addressing human resource gaps in healthcare. The state agency inaugurated in 2023 also standardizes welfare and schemes of service for health care professionals and manages doctor rotations enhancing service delivery in the country. Other functions include maintaining as health practitioners master register, provide advisory on training of health professionals in counties and ensure consultation between the national and county governments to post interns to national and county government's health facilities, intercounty transfer of health professionals and transfers from one level of government to the other.
- <u>National Syndemic Diseases Control Council</u>: is a state corporation mandated to manage Syndemic diseases including HIV, STIs, Leprosy, TB, Lung disease and Malaria. The agency does this through resource mobilization, providing

Councils

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- technical support and capacity building, coordinating stakeholders and supervising responses, public education, communication and advocacy as well as developing and implementing policies, strategies and guidelines.
- <u>Nursing Council of Kenya</u>: a statutory body that was established to ensure delivery of safe and effective midwifery and nursing care through best practices and quality education. It is the body that regulates all cadres of midwives and nursing in the country.
- Occupational Therapy Council of Kenya: is a state agency enacted in 2017 to regulate all aspects of occupational therapy including the training, registration, licensing and practice of occupational therapists in Kenya.
- <u>Physiotherapy Council</u>: is a state agency that provides regulation and oversight into the training, licensing, and practice of physiotherapists.
- <u>Public Health Officers and Technicians Council</u>: provides supervision and controls the training, practice and employment of public health technicians and officers and provides advisory to the government on public health practitioners. The council regulates public health training and promotes professionalism, ethics, and integrity in its practice

Regulators

- <u>Counselors and Psychologists Board</u>: is a regulatory body for the registration, training, licensing and practice of psychology and counseling.
- <u>Health Records and Information Managers Board</u>: is a regulatory body established in 2016 to provide oversight of the training, registration, licensing and practice of health records and information managers in the country.
- Kenya Medical Laboratories Technicians & Technologists Board: is an organization that provides supervision over training, employment, business and practice of laboratory medicine and advices the government on all aspects related to it.
- <u>Kenya Nuclear Regulatory Authority (KENRA)</u>: a state agency that regulates utilization of radiation and nuclear technology ensuring safe, secure and peaceful utilization.
- <u>Kenya Nutritionists and Dieticians Institute</u>: determines and sets the framework for the professional practice of nutritionists and dieticians and well as setting and enforcing standards of practice. The institute's other roles includes supervising research, training and building capacity building of nutritionists and dieticians.
- <u>National Quality Control Laboratories (NQCL)</u>: is a state corporation mandated to carry out tests, research and analysis
 to ensure that Health products and technologies (medicines and medical devices) meet international quality
 requirements ensuring patient safety. NQCL works in close collaboration with Pharmacy and Poisons Board (PPB),
 KEMSA, MOH, Kenya Association of pharmaceutical Industry (KAPI), WHO, USAID, USP, FKPM among other
 partners.
- <u>Pharmacy and Poisons Board</u>: is the drug regulatory authority regulating the practice of pharmacy and the manufacture and trade in drugs and poisons with the aim of achieving the highest standards of safety, quality and efficacy of drugs, chemical substance and medical devices to ensure consumer protection.

	• <u>Tobacco Control Board (TCB)</u> : is a state corporation mandated to regulate and advise the government on the production, manufacture, sale, advertising, promotion, sponsorship and use of tobacco and tobacco products. The goal is to improve health and well-being of the people through the control and prevention of tobacco use.
Private-sector institutional Associations (for profit)	 Kenya Association of Pharmaceutical Industry: is a membership organization that represents biopharmaceutical manufacturer and champion for responsive and enabling policies for the pharmaceutical and biotechnology industry in Kenya. Kenya Healthcare Federation: is the health sector arm of the Kenya Private sector Alliance (KEPSA) and works with healthcare providers, pharmaceutical manufacturers, hospitals and insurers. KHF is committed to involving the government and all pertinent stakeholders in achieving quality healthcare by optimizing the contribution of the private sector. Its goal is to encourage effective public-private partnerships toward achieving nationwide access to high-quality healthcare. Rural Private Hospitals Association of Kenya: is a non-profit that represent rural health facilities and urban facilities serving underserved communities. RUPHA seeks to raise the standard of treatment provided by private hospitals in Kenya's poorest neighborhoods. The association represents the interests of its members by promoting laws and policies that encourage the expansion and advancement of private healthcare facilities. Federation of Kenya Pharmaceutical Manufacturers: is an umbrella body that advocates for the bolstering of domestic pharmaceutical production in order to increase, maintain, and grow the pharmaceutical market share in Kenya, East Africa, and worldwide. Through FKPM, local pharmaceutical manufacturers articulate and convey their interests regarding regulations, policies, trade and quality to relevant fa and stakeholders. Kenya Association of Private Hospitals (KAPH): is a membership organization committed to delivering the greatest service to healthcare stakeholders and working in tandem with the government and other partners in the health sector to fulfill its purpose of enhancing national health.
Private-sector institutional Associations (Not for profit)	 Health NGO's Network (HENNET): is a membership organization whose main aim is to coordinate Civil service organizations in the health sector and provide a platform for collaboration, networking, advocacy and experience sharing. Hennet's membership comprises NGOs, FBOs and research institutions working in all 47 counties of Kenya in health.

Private-sector institutional Associations (Faith based)

 Christian Health Association of Kenya: was first established as the hospital's committee of the national Christian Council of Kenya (NCCK) in the 1930s. CHAK's mandate since its name change in 1982 is to facilitate the role of the church in healthcare and healing. It provides technical support to member church health facilities with a focus on advocacy, representation, lobbying, programmes development, resource mobilization, capacity building and health systems strengthening.

Private-sector institutional Associations (Professional Associations)

- <u>Christian Medical & Dental Association (CMDA) Kenya</u>: is a membership organization comprised of the Christian Medical Association and the Christian dental association. CMDA gives Christian healthcare professionals and students access to resources, networking opportunities, education, and a public voice.
- Kenya Pharmaceutical Association: is a membership organization open to professionals with a minimum qualification
 of Diploma in Pharmacy from a recognized institution. The Association strives to safeguard the public from professional
 misconduct and privilege abuse by pharmaceutical practitioners, as well as to enhance the welfare of its members and
 advance high standards of pharmaceutical practice. The association has several county chapters.
- <u>Pharmaceutical Society of Kenya</u>: is a representative organization formed to enable pharmacists to employ their professional expertise in patient care. Since its formation, PSK has consistently promoted a common standard for professional conduct and a code of ethics for its members, while advocating for the welfare of pharmacists.
- <u>Community Health Services & Development Officers Association</u> is a professional association for community health in Kenya. For its members, the Association offers resources, networking opportunities, public policy, marketing, and education.
- <u>National Nurses Association of Kenya</u>: is a professional association representing all cadres of nurses in Kenya. The association exists to promote excellence in nursing and midwifery.
- Kenya Progressive Nurses Association: is a national and global professional voice of Kenyan nursing. It represents
 over 135,000 nurses in all the counties across Kenya. Its members also include nursing associations, unions and
 colleges affiliated with nurses. The association seeks to advance nursing excellence and positive health outcomes for
 the public while ensuring socio-economic wellbeing of its members.
- <u>Kenya Midwives Association</u>: The goal of the Midwives Association of Kenya (MAK) is to ensure and develop high-quality midwifery care. Our goals are to establish midwifery as the gold standard for childbearing, support midwifery as an independent profession, and strengthen the midwifery profession to improve the quality of care. We achieve these goals through advocating for quality, encouraging creativity, exhibiting leadership in the provision of services, and persistently striving for the acknowledgement, prominence, and worth of midwives.
- <u>Kenya Clinical Officers Association</u>: is a professional society that promotes continuous professional development and welfare of its members – clinical officers through training, capacity building, advocacy, mobilization and socioeconomic empowerment.

- Kenya Association of Physicians: is a professional membership organization that represents physicians committed to
 offering high-quality, specialty healthcare. The Association is dedicated to offering ongoing and engaging educational
 programs, governing through an ethics code, advocating on behalf of the public, and working with other relevant healthcare stakeholders in Kenya and beyond.
- Kenya Medical Association: is a national organization of physicians and dentists, and the promotion of high-quality
 medical practice in Kenya is one of its members' mandates. As a member of national decision-making boards for the
 protection of patients and the practice of medicine in Kenya, KMA maintains a critical position in the country's health
 sector policy. As the sole operator in the sector where professionals can provide their views on personnel concerns,
 KMA is making use of its nationwide professional reach.
- <u>Kenya Medical Women's Association</u>: was founded in 1983 by women doctors with the goal of developing women doctors professionally and advocating for women's health, children and the vulnerable.
- <u>Kenya Obstetrical Gynecological Society</u>: promotes the delivery of high-quality, value-added sexual and reproductive health rights (SRHR) services by engaging in training, research, mentoring, advocacy, and leadership. The society acts as an advocate for women's sexual and reproductive health rights as well as for families and communities.
- <u>Kenya Pediatric Association</u>: is a nonpartisan, nonprofit organization of pediatric professionals dedicated to providing timely, high-quality care to children. The association promotes excellence among its members -Kenyan pediatricians-who are dedicated to promoting the best possible social health and welfare for newborns and young children in Kenya.

2.5.3 National and County Findings

"There is a component of regulation- a national function. There needs to be collaboration between the national and county governments to ensure regulation goes smoothly"

CHMT Mombasa County

From the primary data most of the respondents both at the public and private as well as across counties agree that the market institutions exist. However, sub-optimal collaboration between institutions themselves, between national and county levels, and between the public and private sectors hinders the effectiveness of these organizations in fulfilling their regulatory and legislative mandates. A report highlights this challenge. citina instances of inadequate

coordination by regulatory bodies like the Pharmacy and Poisons Board (PPB), Medical Laboratory Technologists Board (MLTB), National Quality Control Laboratory (NQCL), and Kenya Bureau of Standards (KEBS). This lack of coordination leads to inefficiencies in crucial Health Products and Technologies (HPT) supply chain functions, such as quality testing, quantification and planning, and procurement(Republic of Kenya, Ministry of Health, 2020a). Another study on health sector coordination in Kenya identified several issues between the MoH state agencies such as unclear job descriptions, high staff turnover, and inadequate handover systems. These problems led to overlapping responsibilities, conflicts over duties, and ultimately hindered decision-making and staff performance. The findings also revealed fragmented coordination among MoH SAGAs regarding health regulation functions, leading to overlapping assessments and regulatory requirements. For instance, regulatory roles are duplicated by KHPOA, NHIF, and KMPDC.

"Institutions are there but poor flow of information and engagement between players in the market" Private Sector Association at national level Another study noted that collaboration within the public and private sector institutions is limited by an inadequate flow of information between these sectors(Ong'era & Musili, 2019). A different study also emphasizes the difficulties in efficiently exchanging data at the county and national levels. These difficulties make it harder to coordinate planning and response actions, which exacerbates

county differences in resource distribution and commitment levels. The overall efficacy of the health sector's coordination mechanisms is impacted by this inefficient data flow, which makes it more difficult to coordinate health interventions and policies (Nyawira et al., 2023). This points to the need to enhance the implementation of health regulations and standards, particularly in the private sector, by involving the private sector in the partnership framework and creating a system that unites all regulatory agencies in a single policy discussion forum (Mulaki & Muchiri, 2019).

"They are supportive but not organized. The donors skew their support to the public sector and the money mostly used as per diems for the government officials rather than serve the purpose of service delivery and strengthening the system" Implementing partner

Funding for market institutions has emerged as a significant concern due to limited finances. The exchequer has not provided sufficient funding, and donor funding is skewed towards public sector institutions. Devolution has dramatically impacted the financing of key market institutions, with counties achieving some autonomy to finance healthcare through instruments like the FIF. However, financing challenges persist as most health resources are managed nationally. Counties receive funds for service delivery from County

Revenue Accounts but often receive only a portion of the budgeted amount due to budget limitations. Significant discrepancies in resource distribution across counties lead to inequities in healthcare access and quality. Secondary data also shows that due to budget limitations, county governments always allocate suboptimal amounts to finance healthcare(Ministry of Health, 2017a). Additionally, a study on county-level coordination highlights that planning and budgeting processes are often misaligned, with budgets typically exceeding available funds. The study also identifies several other coordination challenges, including frequent leadership changes within the County Department of Health (CDOH), which can be disruptive and negatively impact coordination.

"The institutions exist. The challenge is on their financial capacity to manage the market. They rely mostly on donors" Private Insurance Company

There is also fragmented coordination between neighboring counties and between the County Health Management Teams (CHMT) and the Sub-County Management Teams (SCMT). (Ibid) To address these issues, both county and national governments need to improve tax collection and advocate for adequate healthcare funding. Opportunities also exist to collaborate with the

private sector to utilize allocated resources effectively through mechanisms for resource sharing.

It was also reported that vertical programs often duplicated functions such as monitoring and evaluation, with each program maintaining its own M&E unit. This lack of coordination could lead to fragmented information. Additionally, vertical programs typically operate independently, with minimal interaction with county government implementation activities(*Report of the Kenya Health Data Collaborative*, 2017) Respondents in the primary data noted that institutions receiving donor support through vertical programs were perceived

"The national treasury's allocations fall short of the required funding for the effective implementation of market strategies. Consequently, many policies drafted to enhance market operations remain unimplemented due to these financial constraints" Implementing partner

as more effective due to the financial support for human resources and HPTs provided by donors. As Kenya aims to reduce donor dependency and counties continue to grow, the sustainability of these institutions and programs becomes a concern. Furthermore, there is a prevailing belief that funding intended to support key functions is often misused, with funds being diverted to other expenses such as per diems. Donor arrangements are shifting towards co-financing mechanisms and requiring sustainability clauses, ensuring programs gradually transition from donor support to government funding. For example, health workers

contracted under these programs are expected to transition to the government payroll over time although challenges exist such as labor disputes, HR manangement gaps and coordination issues(Thuku et al., 2020).

Health financing institutions were a recurring theme critical to the health market. Challenges in these institutions were noted to have a major impact on the effectiveness of the health market. Table 13 below outlines these institutions and the recurring concerns that were noted.

Table 13. Key market institutions mentioned and the existing challenges

Institutions	Challenges
NHIF	 Delayed claims including Linda MAMA had reimbursements delays Accreditation process is not straightforward Treasury release funds very late
Credit institutions	 Banks not accommodating the health sector as they don't have tailored product for the health market.
PPB	 The regulatory institutions like pharmacy and poison board are yet to draft accommodative policies for newer technologies like the drone technology

"The institutions are there but they don't function optimally e.g. NHIF would fail to disburse funds because liquidity caused by failure of both levels of government submitting their staff premium contributions or disbursement of the Linda mama funds"

Implementing partner

With the formation of the Social Health Authority, there are fears that this institution, as well as other emerging institutions, may jeopardize specific segments of the private sector. Concerns were raised about the prospects of the private medical insurance industry, with 2.75% of incomes being directed to social health insurance(Thuku et al., 2020). These fears have been compounded by the sub-optimal communication between market institutions noted above.

"There is need for linkage/collaboration with the private sector when it comes to health financing whether it is the manufacturers, suppliers, distributors, health private providers and suppliers. The market is there, but the financing institution does not understand the market so there is a NEED so that opportunities that are there for financing in the health sector can be seen and also the beneficiaries like manufacturers, private distributors. health providers start seeing how they Improved collaboration between market management institutions and the private sector is identified as a potential mechanism to ensure the sustainability of these institutions. This would require improved collaboration between the public and private sector, by reversing the lack of proper coordination frameworks between institutions. This is more so for specific parts of the healthcare value chain that have not been involved in existing coordination frameworks such as manufacturers and distributors. At the national coordinating mechanisms level. establishing among institutions will assist in gradually closing collaboration gaps while harmonizing policies and frameworks for improved delivery of healthcare. At county level, creating intersectoral fora and/or avenues for public and private sector to dialogue presents an opportunity for collaboration and synergistic use of limited human and financial resources as noted from primary data. This is in line with the objectives of the medium term expenditure framework for 2024/25-2026/27(Republic of Kenya, Ministry of Health, 2023).

2.5.4 Recommendations

- 1. Conduct a comprehensive review of market institutions at national and county levels to clearly define roles and responsibilities, reducing overlaps and improving efficiency
- 2. Revise roles accordingly and disseminate widely the revised responsibility for all institutions at the national and county levels
- 3. Actions on coordination at the national and county level is discussed in the market management section
- 4. Findings from the review are shared to key stakeholders for action
- 5. Develop a sustainable funding model that includes both government and private sector contributions to ensure financial stability for market institutions
- 6. Update the existing comprehensive regulations and guidelines for the safe and effective use of newer technologies such as drone technology in the healthcare

3. Key Findings: Market Conditions

3. I Summary

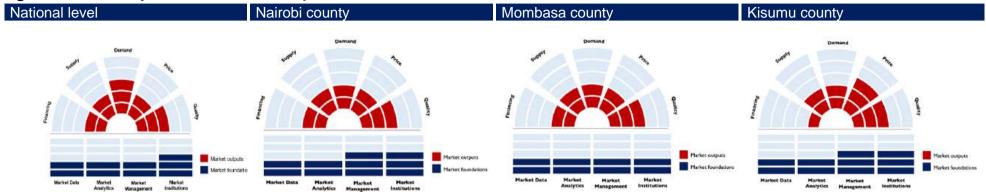
At the national level, the performance of the market outputs, is mixed. The performance of quality is found to be the highest, with a score of 4/5, followed by demand which scores 3/5. Financing supply and price all score 2/5.

The performance of the health markets in the counties show a slightly varied pattern, but overall, the trend is similar to the national level and between the counties: some areas are performing reasonably well but many areas are underperforming. In all the counties, the performance of the market foundations is generally quite limited with most areas scoring only 2/5. Market data and analytics score 2/5 consistently in all assessed counties except for Nakuru county, whose performance in market data scores the highest with 3/5. The performance of market management in Nairobi and Kisumu counties is slightly higher than the other counties, and performance is ranked 3/5 compared to 2/5 for the other counties. Market institutions in the counties has the overall highest level of performance, with Nairobi, Kisumu, Nakuru and Homa Bay counties scoring 3/5. At the market output level, performance is highest for quality in several counties, and in some counties, price also scores higher, but with lower performance in all counties regarding financing, price, supply and demand.

Table 14. Summary of market outputs performance

Market outputs	National	Counties					
		Nairobi	Mombasa	Kisumu	Nakuru	Uasin Gishu	Homa Bay
Financing	2	2	2	1	3	2	2
Supply	2	2	2	2	2	2	2
Demand	3	2	2	2	2	2	2
Price	2	2	2	3	3	2	3
Quality	4	3	3	3	3	2	3

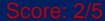
Figure 11. Summary of market foundation performance





3.2 Financing





Progress is being made to meet the Abuja Declaration - the allocation to health currently at 11% of the total government budget, but this is still insufficient to meet the current health system demands which relies on donors for financing of strategic diseases areas, counties dependency on the national treasury disbursement that are inconsistent, coupled with 26% insurance coverage which increases exposure to catastrophic

3.2.1 Key Findings

- a. The Kenyan health sector relies on several funding sources which include government allocations at national and county level, donors, private bodies, implementing partners and households
- b. Despite having more financial resources than it did 15 years ago, Kenya has a low budgetary allocation to the health sector
- c. Donors still play a critical role in funding critical disease areas and activities within the health sector although their role has been declining in recent years. Many stakeholders still see an overreliance on donors in the health sector at national and county levels
- d. The GoK is expected to increase its funding for health as donor funds decrease. Domestic resources, however, do not meet the funding gap, which undermines access to health services for many Kenyans, and which is exacerbated late fund disbursements from the national treasury
- e. Counties are over reliant on national government revenue allocation, but there are frequent delays in the exchequer disbursements to counties
- f. Only 26% of the population has health insurance cover. Health insurance fraud by beneficiaries and the healthcare providers is extensive
- g. The GoK has enacted the Social Health Insurance Act introducing three funds PHC Fund, SHIF and the ECCF that aims to expand access to more of the Kenya Essential Package of Health services through an enhanced benefits package¹
- h. There is limited capacity to predict and manage health risks due to the lack of information sharing among the insurance industry players

"There are no formal dialogue mechanisms to address financing gaps. AKI and IRA do support but more needs to be done especially in the management of the brokers." Private Insurance

society. An organized health financing structure should be able address the revenue raising and resources pooling to guarantee equity. A functional health market needs a well-designed health financing arrangement that promptly disburses funds to healthcare providers. This will incentivize the healthcare providers to properly coordinate the delivery of quality services to the patients as this is them to sufficiently provide HPTs and

enables them to sufficiently provide HPTs and recommended staff levels. Therefore, health financing remains a key determinant of a stronger health system that can meet the needs of the market in a sustainable way.

"......The government has the capacity. They need to make a deliberate decision and stop focusing on donor funding for some key areas of health"

The Kenyan government acknowledges the significance of financing as a crucial condition to accomplishment of UHC (Republic of Kenya, Ministry of Health, 2020b). Under Article 43 (1) (a) of the 2010 Constitution and as a signatory to the Sustainable Development Goals (SDGs). In addition, Kenya's Health Policy (2014 – 2030) was developed with the main goal of ensuring

attainment of the highest possible quality of health to all Kenyans(Ministry of Health, 2014). To achieve this, the Kenya Health Financing Strategy (2020 – 2030) was developed. This highlights strategies that will guarantee the mobilization of adequate resources, efficiency in resources allocation and utilization to improve on accessing health and eliminate the direct out-of-pocket payments for essential health services.

"Dialogue mechanisms are limited and, in most cases, driven by donor interests. For instance, RMNCAH or nutrition actors would only limit the dialogue around financing to their scope." Implementing Partner The MoH convenes national dialogues on health financing in Kenya(National High Level Dialogue on Health Financing, 2023) . Following the recommendation of the 32nd AU summit in 2019 where 52 heads of state ratified the "Addis Ababa Commitment toward shared responsibility and Global Solidarity for Increased Health Financing Declaration" — otherwise known as Africa Leadership Meeting (ALM) Declaration.

The first National High-Level Dialogue on Health Financing was held in June 2023 and brought stakeholders from National, County and development partners to advocate for increased Domestic Resource Mobilization (DRM) for sustainable health financing towards Universal Health Coverage. In the health financing dialogues, four health pillars are discussed as outlined in the ALM. These include:

- a. More money for more health: increasing domestic resources for health
- b. More health for the money: improving how domestic resources for health are invested.
- c. Equity: improving access to health services and reducing the financial
- d. Governance: increasing coordination within and between government ministries, private sector, and partners on domestic health financing

"The government should figure out how to use the information available to collect more revenues from the market. The government needs to figure out how to pay the least while achieving the highest possible outcomes (best value for money)." National-level supply chain

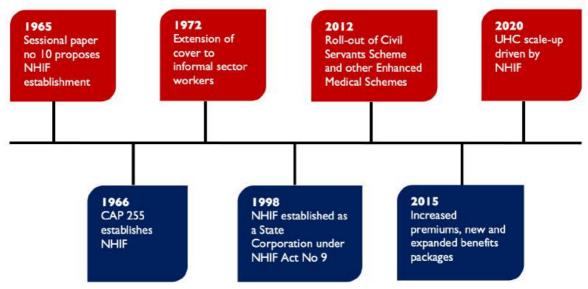
Kenya has made strides to improve the insurance coverage and minimize the impact of catastrophic health expenditures resulting from the out-of-pocket expenditure. The efforts started immediately after independence when user fees were abolished in 1965 through the Sessional Paper No 10 which proposed the establishment of NHIF(NHIF, 2021). The abolishment of user fees was meant to improve access to outpatient care and child medical services in the public health facilities as shown in the Figure 12 below.(NHIF, 2021). NHIF

"The Government needs to get more involved in pricing and Health technology assessments. It should manage inputs, outputs, and outcomes of the market by looking at opportunities in the pricing of products and services. It should incentivize investors in manufacturing. I don't see why the Government needs to run hospitals, they need to work with The investors. work of government is to set rules and regulations and to act as referee." National-level vlagus chain

was formally established in 1966 under CAP 255 to offer health insurance cover to those in formal employment. Since then, NHIF has undergone several reforms and expansion of the benefits cover over the years with the major ones being the rollout of the civil servants' scheme and enhanced medical schemes in 2012, and the rollout of the Linda Mama, HISP, new benefits package and the increase of the premiums to facilitate the expanded benefits package in 2015(NHIF, 2021). The insurance coverage to about 26% of the population according the KDHS 2022 report. But the insurance coverage didn't achieve the expected coverage target due to low number of accredited facilities, low benefits package awareness by the community and limitations within the benefits package (Ministry of Health, 2021b). The government enacted the Social

Health Insurance Act of 2023 (SHI Act 2023) that established Social Health Authority (SHA) that has replaced NHIF. The act also introduced three funds — Primary Healthcare (PHC) Fund, Social Health Insurance Fund (SHIF) and the Emergency, Chronic and Critical Illness Fund (ECCF) that will replace all the several pools that were being managed by NHIF(Republic of Kenya, 2023). The new development hope to increase the health insurance coverage, increase access to quality healthcare, improve on equity in accessing health and stop the administrative costs of the many schemes that were under NHIF.





Source: Kenya NHIF

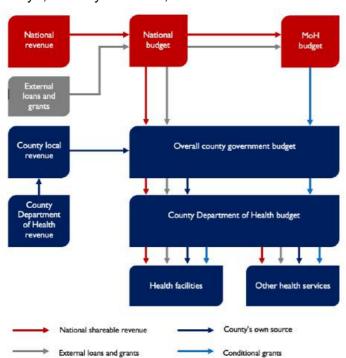
"SHIF: snatches the 2.75% jeopardizing the private insurers. may affect the individual expenditure for someone. People mostly do not prioritize insurance a person who is paid 500000 can pay up to 165,000 in a year and so may not want to take up a private insurance. They should have a capping of 5000 so someone could spend on the private insurance"

However, due to the limited fiscal space for health in Kenya, there are still challenges in the supply, access and use of health services and products in the health sector (Ministry of Health, 2018). The cost of health products, human resources, health infrastructure and the distance to health facilities are among the issues that are noted to affect supply and access to healthcare. With an overall poverty rate of 38.6%(Kenya National Bureau of Statistics, 2021), and a health insurance coverage of 26%(KNBS & 2023), appropriate health mechanisms are needed to minimize financial barriers to accessing health as the country moves towards UHC. In addition to safeguarding the majority of Kenyans from crippling medical bills through

initiatives that enroll them in health insurance and remove out-of-pocket expenses, financial resources are essential for ensuring the sustainable delivery of healthcare(Ministry of Health, 2020a). Just like the government needs resources to ensure equity in access and delivery of health services, the private sector too needs the same to meet the cost of delivering the desired healthcare (Gatome-Munyua et al., 2015).

Public sector spending is guided by the Public Finance Management (PFM) Act of 2012 which defines the management and accountability of all government revenues and expenditure at national and county levels(Republic of Kenya, 2012). The government has structures that clearly define the entire budgeting process and the expenditure reporting mechanisms. All public institutions are required to have resources allocated and accounted for up to the program level. The flow of funds within the public health sector is detailed as in Figure 13 below(Republic of Kenya, Ministry of Health, 2022).

Figure 13. Kenya's public sector financial resources – sharing arrangement (Republic of Kenya, Ministry of Health, 2022



The main sources of financing for the public health sector are from government, households out-ofpocket payments and donors support which may be in the form of loans or grants both at national and county levels(Ministry of Health, 2019b). The private health sector, comprising both for-profit and not-for-profit entities, relies on various funding sources including donor contributions. retained insurance earnings, reimbursements, and financial institution loans as detailed in the Table 15 below (Ministry of Health, 2020a; Munge & Briggs, 2014).

Table 15. Funding sources in the Kenyan health markets

Table 15. Funding sources in the Kenyan health markets				
Source	Description			
Government (tax)	The government uses taxes, loans and other non-tax revenues from semi-autonomous government agencies (SAGAs) to set aside money for health services and infrastructure (Ministry of Health, 2019b). For instance, the government pays health insurance premiums for the most vulnerable persons within the UHC programs. Some of the SAGAs are KEMSA, Kenyatta National Hospital, Moi Teaching and Referral Hospital, KEMRI, Kenyatta University Teaching and Referral hospital and Jaramogi Odinga Teaching and Referral Hospital.			
Private firms	Private companies make investments in healthcare services and infrastructure, which helps to finance healthcare. For instance, the private insurance firms, local pharmaceutical manufacturers and distributors, and private hospitals are some examples of private sector investments in health(Ministry of Health, 2018). Banks do also offer capital in form of loans to the private health sector players for expansion of services and products delivery. The firms do also plough back their earnings to strengthen their ability to deliver health services and products to the communities they serve.			
Households (out-of-pocket payments)	These are contributions from individuals and families through out-of-pocket payments for healthcare services.			

Donors

Faith-based groups, non-governmental organizations, and other outside parties that contribute money to health-related projects and programs fall under this category

USAID has been a significant catalyst for private sector health financing in Kenya. Based on comments from key informant interviews at the county level, while bank loans have supported business growth, challenges such as fluctuating interest rates and foreign exchange rates have limited the sector's capacity. Consequently, the private sector charge comparatively higher prices than the public sector, this limits access for the vast majority of Kenyans living in poverty. To address these challenges, USAID and other partners have made substantial investments. A notable example is the 2016 partnership between Sidian Bank and the Medical Credit Fund, which provided Ksh 2 billion in loans to private healthcare providers. Building on this success, Sidian Bank secured a Sh965 million guarantee deal from USAID and DFC in 2022 to support SMEs in the health sector. This initiative aims to bridge the financing gap by reducing collateral requirements for clinics, hospitals, pharmacies, and medical supply businesses. In addition to financial support, USAID-funded programs like Maisha Meds are enhancing data quality, contributing to a more informed healthcare landscape. The Eastern and Southern African Trade and Development Bank has also played a crucial role, investing USD 122.5 million to bolster the private health sector. These collective efforts underscore the critical role of USAID and other financial partners in strengthening Kenya's healthcare system.

By reducing collateral requirements for clinics, hospitals, pharmacies, and medical supply businesses, initiatives like the Sidian Bank guarantee deal aim to bridge the financing gap, empowering these providers to expand their services and improve access to care.

"The government fiscal and monetary policies are the main source of market shocks. The tax regime doesn't support private sector players and do not offer any incentives for local manufacturing..."

The main sources of financing the Ministry of Health budget are the government and donors (both grants and loans) (Ministry of Health, 2019b). There is still significant reliance on donors to fund the health sector in Kenya despite the fact that the support has been declining especially for the strategic disease areas (Republic of Kenya, Ministry of Health, 2022). This has had an impact on the availability of the essential health

commodities affecting their access by those who need them. The policy makers also need to pay special interest on minimizing or eliminating the out-of-pocket expenditure as the country focuses on attainment of UHC. The role of government in Kenya's Total Health Expenditure has also been growing overtime as shown in the below Figure 14.

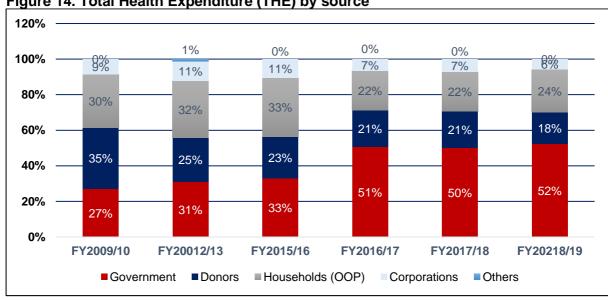


Figure 14. Total Health Expenditure (THE) by source

Source: Kenya National Health Accounts, 2019

"There are some health areas whereas a country we are still dependent on donors, and we currently don't have enough resources to support those areas as a government."

The government has consistently increased the allocations to health by over 216 percent from Kshs 78 billion in FY2013/14 to Kshs 247 billion in FY 2020/21 which constituted 11.1 percent of the total government budget (Republic of Kenya, Ministry of Health, 2022). The allocation still falls short of the expected minimum of 15 percent of the total budget as recommended in the 2001 Abuja Declaration of

Kenya is a signatory and which was meant to increase available resources to which support access and provision of essential health services to the citizens (OAU, 2001).

"Yes, there a lot of risks. If donors pull out, then our clients won't be able to afford HIV medication. We need to have mitigations strategies. We are beginning to have discussions on the journey to self-reliance. We hope it will be possible to have a fully government funded HIV

The increase has seen the share of government financing taking a more pivotal role in the financing of the development budget (Republic of Kenya, Ministry of Health, 2022). A good example is the Cofunding of strategic programmes for HIV, TB, Malaria, family planning, nutrition and immunization that the required commitment is Kes 20 billion per year but the expected allocation for the FY2024/25 is Kes 5 billion (25% of the need), and the National Cancer Institute needs Kes 669 million in FY2024/25 but the expect an allocation of Kes 213 million(Ministry of Health, 2021b). More needs to be

done as there are more areas that are still underfunded, and donor funding is not a sustainable approach of financing health as compared to the government sources. In this regard, the government has been increasing the health budget and instituted reforms aimed at stabilizing health financing with the target of attaining UHC with the enactment of the Social Health Insurance Acts of 2023. The Medium Expenditure Framework captured in the Health Sector report of 2023 highlights the real gap in financing the health in Kenya. Figure 15 below summarizes the requirements against the allocations. For example, the health sector development requirement for the FY2025/26 Kes 262.45 billion while the sector expects an allocation of Kes 64.48 billion which is approximately 25% of the actual need. The situation remains the same for the recurrent needs where the sector needs Kes 148.93 billion and expects an allocation of Kes 91.93 billion which is about 62% of the need in FY2025/26. This is not a promising estimate for the sector that's working towards attainment of UHC. The reforms highlighted in the other sections of this report on SHI remains the main hope for raising more revenue to facilitate delivery and access to quality healthcare services. The government, both national and county, need to increase their budgetary allocation to health to meet its targets on health outcomes.

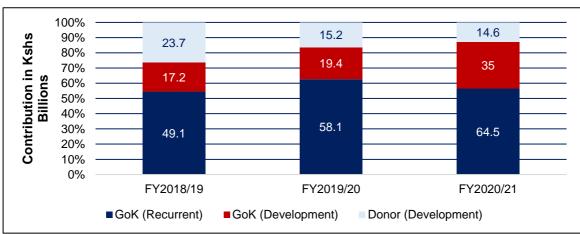
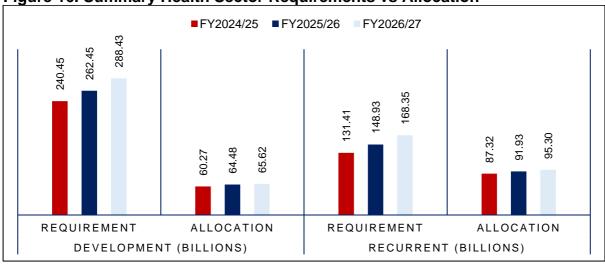


Figure 15. MoH budget allocation in Kshs billions, FY 2018/19–2020/21

Figure 16. Summary Health Sector Requirements vs Allocation



Source: Health Sector Report, (MTEF) 2023

Despite over 60% of the MoH budget being disbursed to support SAGAs, it still does not meet their budgetary requirements (Ministry of Health, 2021b). This has hampered their ability to deliver on their mandates. The SAGAs took over 60% of the MOH recurrent expenditure for FY2019/20 at 63.5% and 61.9% in FY2020/21. This leaves limited resources available to support other recurrent needs like personnel emoluments and operations and maintenance.

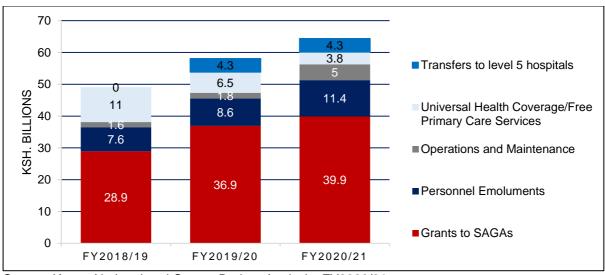
Based on the Health Sector Report of 2023, the government has not been able to meet the budgetary needs of most of these institutions. This cripples the institutions ability to meet their human resources for health, HPTs, infrastructural requirements and therefore, are unable to offer the desired services and products or deliver on the mandate for which they are established. For instance, the same report states that KEMSA is not well resourced, and this has made health facilities to experience low fill rates for the essential HPTs as was highlighted by the key informants. Counties owe KEMSA over Kshs 3 billion that they received HPTs and are yet to pay. KEMSA is key in the distribution of essential products especially to the public health sector but can only afford a 51% order fill rate due to the cash flow challenges. Cashflow is crucial for efficient delivery and access of HPTs. The key informants at county raised concerns on the delayed treasury disbursements as the main reason for their inability to pay KEMSA timely and the same affects KEMSA's commitments to the suppliers. Table 16 below is a summary of KEMSA's fill rate for the last three financial years (Ministry of Health, 2021b, p. 20). The highest fill rate for period under review was 54% which means most the public facilities that rely on KEMSA for their essential HPTs had stock outs at least 46% percent of the time in their public health facilities. With patients missing essential HPTs whether in public or private, it's bound to affect their health seeking behavior negatively as some may opt to seek services from other traditional solutions that will not guarantee quality of outcomes as they operate outside the quality controls of the government like the unregistered traditional midwifes.

Table 16. KEMSA order fill rate, 202 - 2023

	FY2020/21	FY2021/22	FY2022/23			
Order Fill rate for KEMSA Capital -						
Essential HPTs	54%	50%	51%			
Target for KEMSA EMMS	90%	90%	90%			
Order fill rate for Program EMMS (HIV,						
TB, FP, Malaria)	94%	85%	80%			
Target for KEMSA EMMS (HIV, TB, FP,						
Malaria)	98%	98%	98%			

Source: Ministry of Health, Health Sector Report

Figure 17. MOH recurrent budget allocations by major classification, FY2018/19 – FY2020/21



Source: Kenya National and County Budget Analysis, FY2020/21

HIV/AIDs, TB, malaria and RMNCAH continue to take over 40% of the Total Health Expenditure (THE) highlighting the importance of their impact on the government spending (Ministry of Health, 2019b). HIV and TB clients receive their products and services receive them at no cost in government facilities, FBOs and in some selected private sector facilities. The private facilities note that it is not easy for them to offer those services at no cost and therefore, discussions are ongoing on the inclusion of some of these conditions to be covered by the Social Health Insurance benefits package.

Insurance coverage for the strategic disease areas: Most MoH strategic disease areas with heavy reliance on donors are not included in the NHIF benefits package. To easily manage this, the enactment of the SHI Acts through the Emergency Chronic and Critical Illness Fund (ECCF), should consider their inclusion to ease the impoverishing effects on the Kenyan population and the limited government resources (Kenya TB Financing Roadmap FY2023/24-FY2027/28, 2024).

"We depend on revenue and equitable funding from the government which takes forever to come. Even if you align your program and priorities and the funding is delayed, we are forced to prioritize high impact programs which are mostly short term" CHMT, Uasin Gishu County

While government investments have increased, the resources allocated are insufficient to offset the decrease in donor financing. For instance, the donor financing to HIV/AIDS declined by about Kshs 7 billion between FY2018/19 and FY2019/20 while the government increased by only Kshs 430 million. While Kenya has committed to the USAID HIV Sustainable Financing Initiative and the government investment in HIV

increased from Kshs 2.6 billion in FY 2025/16 to Kshs 2.8 billion in 2016/17, it is still not enough as per the health sector report of 2023 estimates. This financing shortfall leaves a gap that has historically resulted

in stock outs of vital HPTs, a problem that was pointed out by the majority of key informants in the public and private health sectors.

"Proper implementation of the FIF acts to ensure availability of resources to the frontline workers" CHMT Homa Bay County

The counties prioritization of health has been improving as more resources are allocated through diversified funding sources that includes the treasury equitable share, conditional grants, facility improvement financing, other own source revenue and the external sources(Office of the Controller of Budget, 2023; Republic of Kenya, Ministry of Health,

2022). The county budgets grew from 27.2% in FY2018/19 to 29.2% in FY2020/21 as shown in Figure 18 below. Counties recurrent expenditure rose from 78.7% in FY2018/19 to 82.3% in FY2029/20 leaving little for HPTs and other development projects (Ibid). With HPTs being a key factor considered by most people when seeking care, this negatively impacts demand for and access of healthcare services.

"Donor money, where it goes, needs to change how it is handled. CoG has stated that donor funding is causing crisis by funding ministry for county functions. Same to the exchequer. This sometimes makes the ministry to overstep. This confusion of funding flow is a critical cause of failure in financial flows."

Private Sector Association,

To address some of these challenges in the public sector, the national government enacted the FIF Act of 2023 to have public facilities retain and use all the user fees collected to help meet their operational costs. The Council of Governors technical team is working together with the County Assembly to enact facility autonomy by assenting to the facility Improvement Financing Bills. The user fees charged in the in the public sector serves as a key source of financing the operational expenses for the public facilities and therefore the implementation of the FIF Act 2023 is a welcome

move

as per the feedback from county key informants interviewed.

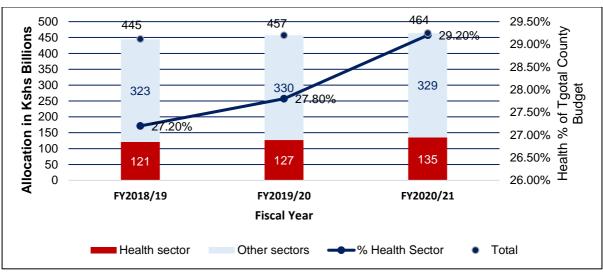
"The budgeting and planning cycles are well aligned but the public sector is negatively affected by delays in treasury disbursement."

CHMT Homa Bay County

Counties experience delays in the treasury disbursements which negatively impacts on service delivery and budget absorption. Delays in finding cause counties to have higher incidences of stockouts since they cannot buy from the private sector like MEDS, and they cannot also be supplied by KEMSA until they are able to pay their debts (KEMSA supplied

counties HPTs worth over Kes 3 billion that they are yet to pay)(Nation, 2024). This affects the counties' ability to deliver services and also KEMSA's ability meet its obligations to the suppliers. Cashflow management is key to sustainable delivery of healthcare. Therefore, there is need for more own source revenue generation to supplement the treasury disbursement to address gaps in HPTs needs.

Figure 18. County governments' allocation to health and all other sectors, FY2028/19 - FY2020/21

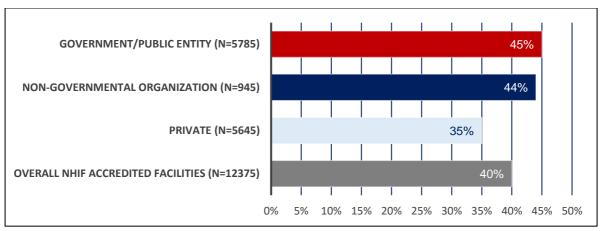


Source: MOH, National and County Budget Analysis, FY 2020/21

The NHIF reimbursement to the private health facilities is more than the public facilities despite the fact that the public has more accredited facilities. NHIF reimbursed private facilities a total of Kshs 18 billion in FY2016/17 and Kshs 28 billion in FY2017/18 which is 89% and 83% of the total claims received by NHIF respectively (HEFREP, 2019). Private sector hospitals do have specific staff who will help in claims processing and follow up and most are in private sector associations through which they push for the reimbursement of their claims. This might be the main reason for the difference in the amount NHIF disburses to the private sector as compared to the public sector.

According to the Kenya Health Facility Census Report of 2023, only 40% of the facilities are accredited, with 35% among the private facilities, 44% for the non-governmental and 45% of the public health facilities as shown Figure 19 below (Ministry of Health, 2023). This was highlighted by the Health Financing Experts Panel on NHIF reforms towards UHC as one of the reasons high insurance attrition and low uptake due to low facility coverage. For the USAID PSE counties, Uasin Gishu and Kericho who have over 51% of their facilities are accredited while Mombasa, Nakuru, Homa bay and Nairobi have less than 50% of their facilities accredited as shown in Figure 20 below. This means that the majority of the residents might end up seeking health care from facilities that are not empaneled and hence have to use out-of-pocket expenditure.

Figure 19. Overall facilities NHIF accreditation and by ownership



Source: Kenya Health Facility Census Report 2023

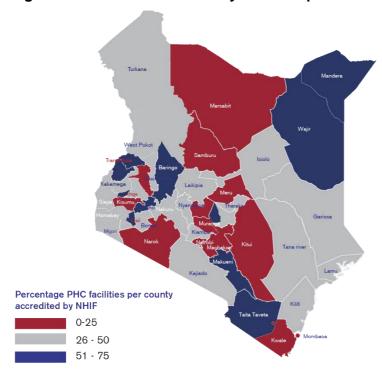


Figure 20. NHIF Accreditation by ownership and KEPH level

The public sector health facility loss of autonomy has had an impact on the revenues raised within the sector based on the key informant interview at county level. The NHIF Panel of Health Financing Experts also noted loss of facility autonomy in the public since the onset of devolution affected had the revenue collection by the facilities as the healthcare workers didn't have the motivation to raise and follow up on the claims in case of any errors in submission. The healthcare workers also affirmed of the same during the primary data collection as they complained of having little control on the allocation of health resources generated

which doesn't even meet the

facility needs.

For the private sector, the main sources of funding are NHIF, financial institutions, development partners (for vertical programs), other private health insurance schemes and households. The private sector receives a disbursement of over Kshs 28 billion (USD 218,750,000) from NHIF according to the Health Financing Expert Panel Report (Edwin et al, 2019) in addition to the private health insurance(Insurance Regulatory Authority, 2022). Reports from the Association of Kenyan Insurers 2022 performance report indicate that the private health insurance firms collected premiums worth about Kshs 51billion (USD 398,437,500)(Insurance Regulatory Authority, 2023). The private health insurance invests in government securities (treasury bill and bonds) and therefore, if the government's fiscal space is constrained and delays in any way to disburse funds, then their ability to meet their obligations to the hospital claims is hampered.

Private hospitals experience challenges with delayed disbursements from the insurance both private and NHIF. For instance, this was also raised by the private hospitals associations which claimed to be owed close to Kshs 7 billion () by NHIF. The poor cashflow hampers the ability of these hospitals to expand and meet the clients' needs. The fluctuations in the bank loan rates were also mentioned as affecting their ability to access capital and making loans to be very expensive and unpredictable. Facilities have failed to expand due to the late reimbursements affecting their ability to offer quality services since can't meet the HPTs and HRH needs of the facilities. The effect of cashflow and access to credit facilities is worse for the pharmaceutical retailers, who said they depend on out-of-pocket customers. The key informants from the retail pharmaceutical industry highlighted difficulties in being granted credit facilities by the local financial institutions as they can't meet all the requirements. But

some of them noted to have minimized the effect fluctuations in the international currency by the high margins they charge as captured in the pricing section on what comprised the price of HPTs. The lack of accurate whole health market data available for the players leads to decisions made through assumptions according to a key informant from private insurance.

The fluctuations in monetary and fiscal policies as set by the government have been identified as significant issues impacting the ability of market players in both the public and private sectors to effectively predict and sustainably plan for the market, particularly regarding products and technologies. These fluctuations create uncertainty and hinder long-term planning, affecting the stability and growth potential of businesses across various sectors. For example, recent currency market fluctuations have had adverse effects on the prices of health products and technologies for service providers, as well as local manufacturers and distributors. For instance, the Kenya Shilling depreciated from Kes 130 to Kes 163 an against the United States Dollar within a few months in the Financial Year 2023/24(Central Bank of Kenya, 2024). The shilling would fluctuate sometimes on a weekly basis. Kenya's heavy reliance on the international market exacerbates this problem. Additionally, the instability of bank lending rates has had an antagonistic effect on the market players' cost of doing business. Consequently, these create accessibility and affordability challenges within the market. For those who rely on the international market, the prices of commodities may turn out to be expensive as one of the private hospital owners in the counties lamented. It was hard to predict the market prices and the actual import duties to be paid due to the changes in the currency.

The market players interviewed had various approaches and mitigation measures and plans to cope with financial shocks faced. Table 17 below summarizes some of the approaches utilized by the respondents at the national and county level including the private sector.

USAID Private Sector Engagement Program

Table 17. Stakeholder mitigation measures against financial shocks

Causes of	Mitigation measures		
financial shocks	National level	County level	Private sector
Delayed exchequer fund disbursement	 Collaborate with donors in health to address and fill gaps in finance Strengthen CoG and Intergovernmental Summit engagement with the national government on timely disbursements. Through the summit, the counties are able to directly engage with the president who through the cabinet can address the delays. 	generation to complement exchequer disbursements Collaborate with donors in health to address and fill gaps in finance	Diversify the client base to go beyond the government especially for the those who invest in government securities.
Delayed NHIF disbursement	Diversify to have all the referral hospitals accredited with private insurances	 Seek financial credit facility arrangements with financial institutions and suppliers Use of supplementary budgets to fund emergency Authority to Incur Expenditures (AIE) by the facilities. Have the county fund facilities from other county revenue sources when they need emergency financial support in compliance with Public Finance Management Act of 2012 Use of user fees 	 local banks Diversify funding sources by seeking private sector insurance accreditation Develop market friendly pricing packages for out-of-pocket payments

Currency, taxes and bank interest rate fluctuations	Create a predictable and stable tax system and Central Bank Rates that		 Proper use of data in planning and forecasting to help in identification and management of risks relating to bank rates and currency fluctuations.
Overreliance on donor funds	 Introduction of SHIF to increase resources available in the health sector Initiate discussions on friendly policies to strengthen local manufacturing Improve on efficiency in SAGAs to generate more domestic revenue to self-fund their operations Allocate more resources during budgeting 	revenue through ring fencing of health revenue i.e. implementation of facility autonomy through enactment of the Facility Improvement Financing Acts as	Diversification of revenue sources e.g. FBOs have diversified sources of revenue

Within the private sector, there exists efforts to form lobby groups such as RUPHA, KAPH Pharmaceutical manufacturers associations, PSK and others. Some of the private sector associations do not feel the impact of KHF in representing their concerns on matters affecting their access to finances. These form the basis for engaging policy makers and other market players on the financing challenges faced within the market like discussions on the benefits package by NHIF/SHIF and the private health insurance, bank loan interest rates, taxes and other levies by national and county governments. The high loan interest rates were highlighted by private hospital and pharmaceutical providers as a key factor affecting their expansion and ability to meet market demands but they didn't have a platform to air their dissatisfaction.

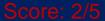
3.2.4 Recommendations

- Develop advocacy plans that would lead to incremental budgetary allocation from both levels of government that responds to the ever-changing and increasing health needs as the country's population grows. Conduct research and advocacy initiatives to support the development and implementation of policy frameworks
- 2. Use research findings to advocate for the inclusion of HIV/AIDs, TB and FP products in the Social Health Insurance (SHI) and other health insurance firms' benefits package. This will help improve access and domestic financing for the strategic diseases.
- 3. Strengthen national and county governments engagement platforms through and with the CoG on health financing, planning and budgeting to include the private sector to improve resource mobilization
- 4. Support the development of policy frameworks that support timely exchequer disbursements from the national treasury to the counties
- 5. Conduct an assessment on the ability to pay in the informal sector to inform the minimum monthly premium for those in the informal sector
- 6. Strengthen the government universal health coverage indigents program by incorporating counties in allocating financial resources to support the most vulnerable to have health insurance instead of the waivers and exemptions given to them when they can't afford to pay for the health services in public health facilities.
- 7. Support the automation of the SHI claims management process to improve turnaround time for all level 2 and 3 health facilities. Advocate for friendly fiscal incentives that would make the required digital infrastructure affordable to most of the health sector players.
- 8. Build capacity of the claims management and compliance teams at NHIF (SHIF) and private health insurance firms to improve the review and approval process. Invest resources in capacity building for health facility staff on claims management processes and the benefits package. This will reduce the claims process by reducing the errors that cause delays in claims reimbursements.
- 9. Expand counties' own source revenues by automating revenue collection across all sectors to improve revenue collections. Enlist the Kenya Revenue Authority (KRA) support in capacity building the county revenue collection teams at the county level
- 10. Allocate every beneficiary and their dependents with unique identifiers to eliminate or minimize impersonation by the patients. Implementation by all insurance players will help minimize fraud.
- 11. Support insurance regulatory bodies and firms to enforce higher penalties for fraud
- 12. Employ additional human resources to conduct facility audits and patient spot checks to improve on
- 13. Regulatory bodies and the private health insurance firms and facilities to initiate dialogue on acceptable legal frameworks for patient data sharing to enable the insurance players efficiently define their benefits package and minimize risks for fraud in the market
- 14. Private health insurance should consider empaneling more of the public sector facilities.

15. Social Health Insurance and the private health insurance firms should review the quality regulatory requirements and improve on their empanelment of the retail pharmaceutical retailers to reduce high out-of-pocket spending and improve access to HPTs for most Kenyans					

3.3 Supply





Supplies exist to meet demand for most products. Supply shocks are experienced due to cash flow challenges and suppliers cutting supplies due to delayed payments, management challenges that lead to delayed procurement and high reliance on donor funding. Infrastructure for supply chain is in place both in the public and private sector. Manufacturing capacity is underutilized but government policy to increase local

3.3.1 Key Findings

- a. The regulation of health supplies is governed by several key statutes, authorities, strategies and policies. Kenya's National Pharmaceutical Policy and recent HPT Supply Chain Strategy (2020-2025) aim to enhance the coordination and governance of health supply chains, promoting more reliable access to quality health products
- b. Periodic stockouts are common due to inadequate funding for procurement and other administrative challenges such as inadequate planning, coordination and execution that leads to delays in procurement, especially with program commodities
- c. Dependence on donor funding for specific products still brings into doubt the sustainability of these programs and the supply chain at national and county levels
- d. Funds for health products and technologies have not substantially increased between the years 2020 and 2023
- e. Cash flow challenges due to the poor funds flows from the national level are major contributors to supply shortfalls at the county level
- f. There is an underutilization of the established local manufacturing capacity of pharmaceuticals, which is expected to contribute to a stronger supply chain
- g. There is a drive towards use of digital solutions and technological integration to enhance supply chain efficiency, improve inventory management, and reduce stockouts
- h. Supply chain data is not completely reliable and is available in various systems usually provided by vertical programs. Supply data in the private sector is also not visible to the public sector making a while market view difficult to generate

3.3.2 Introduction

In Kenya, the regulation of health supplies is governed by several key statutes and authorities. The Pharmacy and Poisons Act (2012)establishes the Pharmacy and Poisons Board, regulating pharmacy practices and the trade of drugs and poisons. The act also governs the manufacture, distribution and sale of pharmaceuticals in Kenya (for both the public and private sector). The(Republic of Kenya (2013) Kenya Medical Supplies Authority (KEMSA) Act mandates KEMSA to procure and distribute medical commodities to public health facilities. The Health Act Kenya (2017) provides comprehensive regulations for health services, emphasizing the safety and efficacy of health products. Additionally, the Kenya Bureau of Standards (KEBS) sets quality standards for medical supplies, while the Public Procurement and Asset Disposal Act ensures transparency in public procurement processes.

Kenya's National Pharmaceutical policy (2012) ensures that quality medicines are available, affordable, and used safely through sustainable financing, rational use, and reliable supply chain management. KEMSA oversees the procurement, distribution, and supply chain management of health products for public facilities aiming to enhance efficiency, accountability, and transparency focusing on essential commodities and supplies and donorbased procured commodities such as Rapid Test Kits (RTKs), ant-malarial, antiretroviral drugs (ARVs) among others (PPB, 2020). This is regulated through the Public Funds Management Act regulations of 2015, the National Government Affirmative Action Fund Regulations 2016. Legal Notice Number 69 (public procurement and assent disposal) regulations 2020, and the Public Procurement and Asset Disposal Regulations 2020. The National Pharmaceutical Sector Strategic Plan (2020/21-2024/25) strengthens regulatory capacity, supports local pharmaceutical manufacturing, and advances research and development. Additionally, the E-Health Strategy 2016 leverages information and communication technologies to improve health services and track health supplies efficiently. The recent launch of 2020-2025 HPT Supply Chain Strategy, initiated by Kenya's Ministry of Health, targets critical supply chain challenges with robust policies to enhance coordination, governance, and strategic investments, ensuring access to affordable, quality health products. The strategy is complemented by the 2023 Kenya Drug Formulary List, which standardizes drug use guidelines to promote safe, effective, and economical healthcare practices nationwide including for the private sector(Guidelines, Standards & Policies Portal, n.d.).

Kenya is a major pharmaceutical market. The market stood at USD 1 billion in 2017, accounting for 50% of the pharmaceutical market in East Africa (which stood at USD 2.1 billion) and 8% of the total pharmaceutical market in Africa. This market is growing at a Compound Annual Growth rate of 9-10%(PPB, 2024) The market for nonpharmaceutical health products is also experiencing significant growth with a CAGR of 8.9% and expected to hit a value of USD 197 million in 2026. Of note is the low production of non-pharmaceutical products with 90% of medical consumables being imported from India and China(United States Government, 2022).

There are currently 26 registered manufacturers on the Pharmacy and Poisons Board register to manufacture pharmaceuticals in Kenya(PPB, 2024). Only 40-60% of established manufacturing capacity is in use, with only 30% of the local market for pharmaceuticals being met by local manufacturers and 70% of the need being met by imports. The largest purchaser of local prescription medication is the Government of Kenya with 30% of its prescribed medication being from local manufacturers. Artemisinin (used in the manufacture of antimalarial drugs) is the only active pharmaceutical ingredient that is produced in Kenya, and it is exported 100% for purification. The local manufacturing landscape in Kenya is summarized in Figure 21 below(Ministry of Health Ministry of Industrialization, Trade and Enterprise

Development, 2020) local manufacturers fulfil about 30% of the country's needs, while international manufacturers either directly (through their locally registered importing agencies) or through local independent importers fulfill the remaining 70% of demand. The public, private, and faith-based sectors all take up between 30% and 40% of all drugs in almost equal measure.

As of 2019, the trend was towards an increase in imports and a decrease in exports of pharmaceuticals.

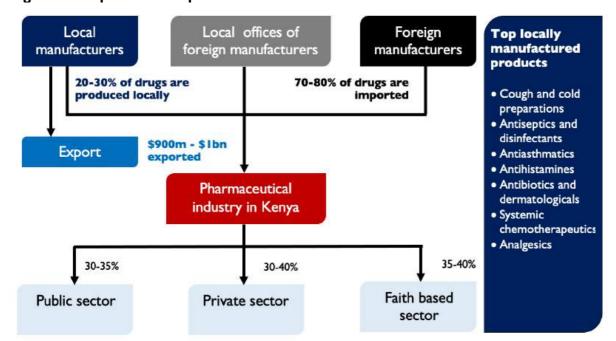


Figure 21. Exports and Imports of Medicinal Products

3.3.3 National and County Findings

Pharmaceutical manufacturing in Kenya faces a variety of challenges. Figure 22 below summarizes the challenges to local manufacturing of Pharmaceuticals(Ministry of Health Ministry of Industrialization, Trade and Enterprise Development, 2020). Some challenges of note include the fact that 95% of the raw inputs into the manufacture of pharmaceutical in Kenya are imported with only 1-2% of inputs being locally sourced (Republic of Kenya, Ministry of Health, 2020a).

Figure 22. Challenges to local manufacturing of pharmaceuticals

REGULATORY	OPERATIONAL	HUMAN RESOURCES
Regulations supporting an	Raw materials are not	Workforce is
import-driven market	locally manufactured and readily available	inadequately trained
Inability to strictly enforce		Labor costs are high
GMP guidelines	Equipment and spare	
	parts are not locally	Skills gaps among
Presence of unregistered	available	workforce (especially
pharmacies		industrial pharmaceutical)
	Access to land is	
Manufacturers' lack of	problematic	Curriculum is too
documentation skills		theoretical
delays the registration	High cost and low quality	1-1-6-111
process	of electricity supply	Lack of collaboration
Lank of PDR incomedian of	In a diameter contain and a line	between industry,
Lack of PPB inspection of local and foreign	Inadequate water supplies	academia and regulators
manufacturers affects	Multiple supply chain	Scarcity of other skills
GMP enforcement	inefficiencies	such as engineering and business
	High capital costs	
		Student lack interest due to scarcity of
		manufacturing jobs

The Government of Kenya is looking at incentivizing the development of local manufacturing of pharmaceuticals. Through a presidential directive, by the President of the republic, Kenya aims to ensure that 50% of the 4,000 drugs in the essential drugs list purchased by the public sector are locally(MSH, 2024) (see link to the essential medicines list below (Ministry of Health, 2023a). The various incentives have been put in place to spur local manufacturing are summarized in Figure 23 below(Ministry of Health Ministry of Industrialization, Trade and Enterprise Development, 2020).

We have not optimized aspects of technology transfer, transfer pricing, use of generics and brand names, bulk purchasing, and protection of local manufacturers...myy administration is aware of the challenges faced by local pharmaceutical manufacturers. Mark these dates as it is important for you local manufacturers, by 2026, at least 50% of the medicines in the essential medicines list will be manufactured and available locally"

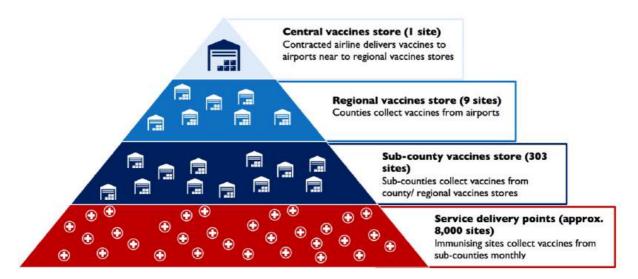
The government of Kenya has put in place regulatory and operational promote local incentives to manufacturing of pharmaceutical products. These include pricing preferences at KEMSA, increased importation taxes such as the railway development levy (RDL) procurement of certain medication strictly from Kenyan manufacturers as summarized in Figure 23 below.

Figure 23. Incentives for local manufacturing(WHO, 2011)

REGULATORY	PUBLIC PROCUREMENT	PRIVATE PROCUREMENT
Faster timelines for registration of locally manufactured products	KEMSA gives a 15% price preference for locally manufactured products	MEDS gives a price preferences of 10% for local products
Greater profits can be made from locally manufactured products, especially if import fees are increased	Less competition - in 2019, KEMSA opened up a tender for local manufacturers only	Medsource, is expanding the reach through a network of member hospitals and retailers (but market share is currently small)

Kenya's health market is viewed as having three distinct supply chains that support the public, private for profit and private not for profit supply chains as seen in Figure 24 below(Ministry of Health Ministry of Industrialization, Trade and Enterprise Development, 2020). The public supply chain system has a well-developed drug delivery mechanism that includes national, regional and sub-county stores, with data collection and transmission systems backed by data analytics systems at the Directorate of Health Products and Technologies and KEMSA. The supply chains are not completely siloed. During COVID, the interplay between public and private sector players in the efficient delivery of vaccines was noted.

Figure 24. Kenya vaccines supply chain



These data systems include KEMSA ordering Logistics Management and Information System, KHIS2 (programmatic and tracer drugs consumption data from facility level are uploaded onto KHIS at the sub-county level. The data is then available for decision making at various levels.), and WebADT (a point of use medical records systems that is used to manage supplies at facility level for some vertical programs) that provide visibility on health products status within the supply chain. Data on complimentary areas such as pharmacovigilance is also collected and reported electronically to the Directorate of Health Products and technologies (DHPT).

There are still challenges associated with supply chain data including data quality issues within the public sector, and use of manual systems at primary data collection that necessitates the transfer of data into electronic system downstream. Management of the public supply chain system is led by the Division of Health Products and Technologies (DHPT) at the national level with county level Health Product Units (HPTU) units having been put in place in 2022 through the support of USAID(USAID, 2020).

There is also the obvious lack of access into private sector data including no insights into private sector pricing of pharmaceuticals(Republic of Kenya, Ministry of Health, 2020a). Further details on this are presented in the market data and market analytics sections of this report. A summarized version of the entire supply chain can be seen in figure 25 below.

PRIVATE COMMERCIAL PUBLIC **PRIVATE NON-PROFIT** Medicine and medical commodities Essential Medical Medicine and medical drugs equipment commodities CHAK De-centralized Private GoK (centralized projects) projects **KEMSA KEMSA** MEDS National distributors/manufacturers regional health lab central warehousing services Private not-Private forstore for-profit facilities and Private not-Public for-profit facilities and shops facilities and District hospitals, district shops stores/shops/lower level outlets Public facilities and shops

Figure 25. Kenya pharmaceutical supply chain (Ministry of Health Ministry of Industrialization, Trade and Enterprise Development, 2020)

Pharmaceuticals manufactured both in country and imported are distributed through various distributors. These include KEMSA as a public sector distributor, MEDS for the faith-based sector, and a number of private distributors that work at national, county, and sub-county levels. These medicines are then dispensed through various channels.

There is a significant number of private sector players in the pharmaceutical supply chain in Kenya.

Table 18 below summarizes the numbers of manufacturers, wholesalers, retailers and hospitals in the supply chain of pharmaceuticals in Kenya(PPB, 2024). All these are predominantly private sector players. Only Kenyatta University Teaching and Referral Hospital (KUTRH) is registered as a manufacturer by the PPB to manufacture radioactive pharmaceuticals (radionuclides) for the imaging of cancer patients through Positron emission Tomography (PET) scans. There is also a disparity in the regulation of public and private sector supply chain players. Very few government hospitals are listed in the Pharmacy and poisons board facilities register while this is an enforceable requirement for private sector players.

Table 18. Pharmaceutical sector supply chain stakeholders

Stakeholder	Number registered with PPB
Manufacturers	26
Wholesaler	702
Retail	7639
Hospitals	2010

The National government has and is still working on ensuring adequate supply of products get into the country by streamlining the national supply chains to meet funded system demand and ensure sufficient availability at the point of service. Through collaborative efforts involving

the Ministry of Health, key pharmaceutical suppliers such as KEMSA and MEDs, manufacturers, donor agencies including USAID and the Global Fund, implementing partners like Chemonics and MSH.

"There are recurrent stockouts forecasting is not done right, the supply system could be having some challenges" Implementing partner The Ministry of Health in collaboration with County Governments and donor-based agencies/Implementing partners has been working toward enhancing supply chain management and reliable stocking strategies which are essential to meet growing demands and ensure uninterrupted patient access to treatments. Tools like QuanTB (a

USAID quantification tool) have gone a long way in improving forecasting and management, reducing stockouts significantly by improving accuracy of quantification, strengthening of the capacity of the Ministry of Health and KEMSA to manage TB commodities and enhancing early warning for TB commodities(Quant TB, 2020). While counties have some autonomy to purchase health products, they are affected by supply chain issues that emanate from the national level.

Periodic stock shortage and insufficiency of essential medicines and vertical programme commodities such as ARVs, HIV self-test kits and TB medicines has been experienced in Kenya. Stock shortages are experienced at both central and central level (KEMSA) and at the peripheral levels. Table 19 and Table 20 provide samples of shortages of various commodities in Kenya(The Global fund Office of the Inspector General, 2022).

Kenya has been experiencing periodic shortage and stock out across HPTs, For example, In August 2022, testing facilities reported shortage / stock out of RTKs- determine that stalled HIV testing for a while (Nation Media, 2022). This called for emergency re-distribution and procurement through negotiation with the National treasury.

Table 19. Stock outs at central level

Health priority	Details of stock outs
HIV	 LPV/r 100/25MG was stocked out centrally in March 2019, whereas in April and May '19 the stock balance was 56 Packs (0.01 MoS), too low to meet Health facility needs. NVP Oral Suspension – 10MG/ML was stocked out centrally in April & October 2019. Low stock levels were registered in March 2019 (18 packs (<1 MoS); 2 packs (<1 MoS) from July to September 2019. Stock levels of TLD were consistently below recommended minimum stock levels of 6 MoS from June 2019 (4 MoS) to January 2020 (2 MoS) and from November 2020 (5 MoS) to April 2021 (2 MoS). Stock levels stagnated at 2 MoS from April to June 2021.
ТВ	 INH 300mg 28s was stocked out centrally for 16 consecutive months from March 2020. Whilst INH 300mg 672s was available, the stocks were too low to meet the health facility needs as stock levels gradually reduced from 1 MoS in February 20200.01 MoS in April 2021 before stocking out in May 2021.
Malaria	 All pack sizes of Artemether/Lumefantrine were stocked out centrally for 3 consecutive months from August to October 2019. Malaria RDTs were stocked out centrally for 3 consecutive months from July to September 2018 and for 6 months from June to November 2029.

- Artesunate injection was stocked out centrally for 4 months from July to October 2019.
- 10% (n=2) of health facilities experienced stock-outs of this product during the same period.

Table 20. Stockouts at health facilities

Product/medicine	No. Of sampled facilities that were stocked out (%)	Overall average of stock- out days	Highest No. Of days for an individual stock-out
Malaria Drugs and Commodities			
ACT – Artemether + Lumefantrine (AL) 20+120 mg (6)	12 (57%)	154	485
ACT – Artemether + Lumefantrine (AL) 20+120 mg (12)	9 (43%)	131	445
ACT – Artemether + Lumefantrine (AL) 20+120 mg (18)	5 (24%)	92	258
ACT – Artemether + Lumefantrine (AL) 20+120 mg (24)	13 (62%)	135	418
Artesunate injection	7 (33%)	98	489
mRDT (Malaria Rapid Test Kits 25 Tests)	2 (9.5%)	65	210
HIV Drugs and Commodities			
Tenofivir/Lamivudine/Dolutegravir (TLD) 300mg/300mg/50mg - 30s	8 (38%)	30	86
Tenofivir/Lamivudine/Dolutegravir (TLD) 300mg/300mg/50mg - 90s	6 (28.6%)	52	129
Tenofivir/Lamivudine/Efavirenz (TLE) 300mg/300mg/400mg – 30s	7 (33%)	92	354
Atazanavir/Ritonavir (ATV/r) 300mg/100mg	3 (14%)	12	31
Nevirapine Oral Suspension – 10mg/ml	5 (24%)	39	106
Zidovudine/Lamivudine – 300/150mg	3 (14%)	52	184
Lopinavir/Ritonavir 100/25mg	3 (14%)	125	494
Abacavir/Lamivudine 120mg/60mg	5 (24%)	150	401
HIV Test Kits (Determine)	9 (43%)	12	36
HIV Test Kits (First Response)	10 (47.6%)	35	113
Oral HIV Self-test Kits	12 (57%)	69	373
TB Drugs			
RHZE 150mg/75mg/400mg/275mg	8 (38%)	168	540
RHZ (75/50/150) 3FDC RHZ D.S	2 (9.5%)	54	163
Isoniazid 300mg	9 (43%	270	933

Stockouts continue to be reported and are attributed to lack of funding to counties(The Daily Nation, 2024). As of May 2022, KEMSA was owed Ksh 2,949,506,365.8(The Kenya

Parliament, 2022). This figure continues to be high with counties owing KEMSA ksh 2.88 billion as at May 2024(The Daily Nation, 2024).

Inefficient processes are delaying procurements and affecting medicine availability across the supply chain. Inefficient planning, coordination, and execution have been noted as causes of procurement delays. Coordination is seen as a particular challenge due to the need to collaborate with multiple partners (donor agencies, treasury, counties), all of whom may have different procurement plans and cycles(The Global fund Office of the Inspector General, 2022). A lack of standardization of specifications of health products was also noted to be a challenge(Modibo Dicko, Jeniffer Adungosi, Olivier Defawe, 2023) Various programs has started addressing the standardization challenges through development of program specific procurement/quantification guidelines such as the reproductive and maternal health units National Guidelines for Quantification, Procurement and Pipeline Monitoring for Family Planning Commodities in Kenya(Government of Kenya, 2016).

Evidence supports counties in Kenya do experience product specific health supply challenges such as stockouts, supply chain inefficiencies, and sustainability concerns. For example, in March 2022, a Global Fund audit reported that KEMSA has challenges in having visibility of stocks, poor commodity accountability, ineffective controls over deliveries, and poor ICT control environment leading to vulnerabilities(The Global fund Office of the Inspector General, 2022).

The Health Sector Report for 2023-2025 show cases KEMSA's order fill rates having declined for both Essential medicines and program. This decline is attributed to several factors including delayed payments by counties, lack of order scheduling systems, and ongoing reforms within KEMSAs leadership after the COVID pandemic. Table 21 below summarizes the order fill rates for essential medicines as well as program specific commodities(Republic of Kenya, Ministry of Health, 2023, p. 2).

Table 21. Fill rates for essential medicines and specific products

Fiscal Year	Essential Med Medical Suppl		Program-specific (HIV, TB, Family Planning, Malaria),		
	Target Fill Rate (%)	Fill Rate (%)	Target Fill Rate (%)	Fill Rate (%)	
2019/20	90	69	98	90	
2020/21	90	54	98	94	
2021/22	90	50	98	77	

Table 22 below summarizes the product – specific supply challenges situations identified in each County.

Table 22. Product – specific supply challenges situations identified in each county

County	Product-Specific Supply Challenges
Mombasa	The county has experienced challenges in maintaining a steady supply of HIV and TB medications due to procurement delays and dependency on donor funding.
Kisumu	Family planning supplies were reported to have been received as required, compared to the malaria supply chain volatility that has led to periodic shortages of anti-malarial drugs.

Homa Bay	The county does recognize the strong regulatory framework, with established policies and institutions supporting critical market functions, ensuring a robust foundational support system for supply chain management and access to all specific health products such as TB commodities which are generally well-supplied. Despite so, there has been periodic stockouts of HIV medications and other essential medicines still occur.
Nairobi	TB commodities in the county face more frequent stockouts compared to the relatively well-supplied HIV medications, highlighting ongoing challenges in maintaining consistent availability of essential health products.
Nakuru	While most respondents from the county agreed that pricing supports consumer access to products and services, indicating a positive perception of affordability, the county has experienced periodic shortages and stockouts of contraceptives and laboratory reagents overtime.
Uasin Gishu	Despite the existence of supportive institutions aid from both national and county contributing to a stable environment for the supply of health products and technologies, the county has experienced periodic shortages of key commodities like anti-malarial drugs and contraceptives.

Kenya faces significant challenges in commodity availability due to insufficient funding. This has led to frequent shortages, particularly in essential medicines, underscoring the need for better financial planning and sustainable funding sources. The reliance on imported medicines, affected by currency fluctuations and supply chain issues, exacerbates the situation.

"There are occasional shortage of testing commodities. The main reason is poor planning and delayed funding from donors." To address the funding challenges, the Ministry of Health developed the Supply Chain Strategy 2020-2025, which outlines the Health Products and Technologies (HPT) strategy costing from a health systems perspective using the Activity-Based Costing (ABC) approach. This approach enabled

the Ministry to estimate the total cost required and identify funding gaps for HPTs. It was determined that KES 464 billion is needed to implement the HPT supply chain strategy from 2020 to 2025. Figure 26 below, summarizes the estimated costs needs by strategic plan implementation year. The activity based costing approach entailed considering the quantities of inputs, frequency in which inputs were required, and unit costs of relating to the inputs for specific activities included in the implementation plan. These quantities however only considered supplies for the public sector(The Global fund Office of the Inspector General, 2022).

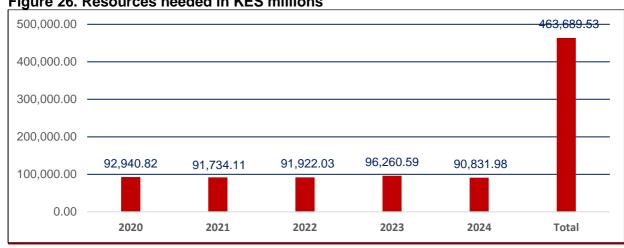
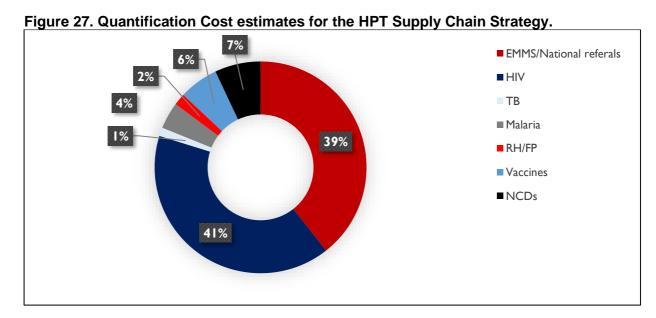


Figure 26. Resources needed in KES millions

The MOH was able to establish estimates for HPT quantifications cost for the specific HPT Strategy (KES Millions) for the review period (2020 - 2025) as shown in Figure 27 below (Ajwang et al., 2018).



From the above, HVI HPTs take up the highest cost of the total amount required at 20.4% followed closely by EMMS/ National referrals at 39.4% and the least cost being RH/FP(Republic of Kenya, Ministry of Health, 2020a).

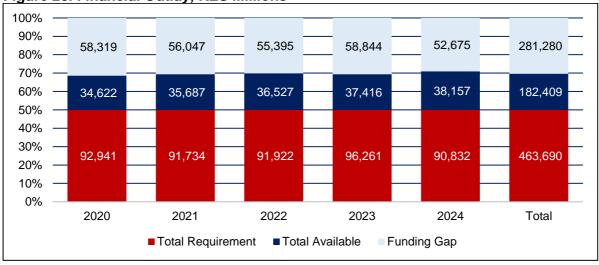
With the above insights, the ministry does have estimates of core sources of funding; i.e. domestic funding primarily comes from government financial commitments documented in national and county budgets and medium-term expenditure plans, including counterpart funding for strategic programs. While external funding is based on current commitments by multilateral and bilateral partners. Table 23 below is a summary of funding sources per year(Republic of Kenya, Ministry of Health, 2020a).

Table 23. Estimates and Projections for Financial Resources Available by Funding Source (KES Millions)

Funding Source	2020	2021	2022	2023	2024	Total	Percentag e
Total Domesti c	14,659. 0	15,015. 4	15,657. 8	16,347. 1	17,087. 9	78,767.3	43.2%
External Funding	19,962. 6	20,671. 7	20,869. 5	21,069. 2	21,069. 2	103,409. 5	56.8%
Total	34,621. 6	35,687. 2	36,527. 2	37,416. 3	38,157. 1	182,409. 5	100%

Finally, the MOH, has capacity to establish total Health Products and technologies (HPT) amounts required, total amount available from the different funding sources and the funding gap per year with time, there has been an increase in HPTs both amount required and funding gap over period from 2020 – 2024 as stated in Table 23(Ajwang et al., 2018).

Figure 28. Financial Outlay, KES Millions



Despite there being obvious financing gaps, utilization of the existing funds within the public sector was not 100%. Table 24 summarizes the absorption rates of global funds for the year 2020 and 2021(The Global fund Office of the Inspector General, 2022).

Table 24. Absorption of Global Funds Grants to Kenya, 2020 and 2021

	Grant Number	Principal Recipient	Total Budget amount (USD)	Absorption Dec 2020 (%)	Absorption Jun 2021 (%)
HIV	KEN-H-TNT	The National Treasury	190,295,823	79.6%	85.5%
HIV	KEN-H- KRCS	Kenya Red Cross Society	76,852,690	82.8%	94.9%

ТВ	KEN-T-TNT	The National Treasury	46,603,938	79.8%	83.1%
ТВ	KEN-T- AMREF	AMREF Health Africa Kenya	40,324,780	89.6%	85.4%
Malaria	KEN-M-TNT	The National Treasury	74,063,824	39.5%	73.9%
Malaria	KEN-M- AMREF	AMREF Health Africa Kenya	16,059,470	76.8%	81.2%
Total			444,200,470	73%	85%

Factors leading to this low absorbing include; 1) Inefficiencies and bottlenecks in procurement initiation and execution. This is predominantly due to the complex procurement processes with multiple levels of approvals. 2) Gaps in procurement planning & coordination affect the supply of commodities occasioned by poor coordination between the Ministry of Health, treasury and KEMSA in order to be aligned with the varied dates that need to be met for the various funding agencies taking into consideration the needs of various vertical programs. Lack of coordination between partner agencies is also a contributory factor. 3) Delays in securing tax waivers 4) lack of standardized specifications for some commodities (malaria has standardized specifications but other vertical programs e.g. TB do not)(Republic of Kenya, Ministry of Health, 2020a).

3.3.4 Recommendations

- 1. Improve coordination between public and private sectors through the inclusion of the private sector in national and county level forecasting and quantification processes and coordination mechanisms
- 2. Explore and establish new funding sources and mechanisms including increasing domestic funding allocations (leveraging the FIF act 2024 and Social Health Insurance Funds)
- 3. Secure increased budget allocation for health products at the county and especially health facility levels through the Social Health Insurance Fund working with the FIF Act 2024 in order to increase the amount of funds that are allocated to supplies by health facilities
- 4. Support lobbying and advocacy for increased allocation towards for HPTs at county and national levels
- Support long-term financial plans that ensure adequate funding for health commodities should be developed as part of county investment and development plans and mediumterm expenditure plans
- Support the upgrade of LMIS systems to near real-time data and predictive analytics to better anticipate demand and prevent stockouts, and which pilot and scale new ways of ensuring last mile delivery of products through innovations such as drones, and leveraging the potential of the Digital Superhighway
- 7. Investment in continuous education of supply chain personnel on existing and new LMIS systems, best practices and technologies to improve efficiency and responsiveness
- 8. Strengthen local manufacturing capacity through greater domestic and donor investments in local pharmaceutical manufacturing, including providing incentives for local producers, such as tax breaks, subsidies, and technical support
- 9. Map the established manufacturing capacity to understand the overall pharmaceutical manufacturing capacity of the country

- 10. Strengthen regulatory frameworks to ensure the quality and safety of locally produced health products
- 11. Develop strategic partnerships for contracting local manufacturing capabilities
- 12. Actualization of a technologically integrated supply chain system with the seamless integration of transport infrastructure and almost real-time data linking dispensing to quantification and procurement
- 13. Mapping of existing technological and transport systems needs to be undertaken to understand the entire supply chain ecosystem in Kenya
- 14. Strategic partnerships with players in logistics and information technology should be forged towards attaining the goal of an integrated supply chain infrastructure
- 15. Advocacy for the private sector to leverage these systems should also be carried out.

3.4 Demand





Score: 3/5

Nationwide healthcare demand data is largely lacking, except for family planning statistics. Demand for healthcare is affected by financing, information access, and sociodemographic factors, with insurance coverage and service access playing key roles. To maintain and boost healthcare demand, it is essential to enhance service provision and address healthcare professional shortages, with initiatives like SHIF

3.4.1 Key Findings

- a. Demand for healthcare services is influenced by factors such as financing, information availability, access to services, and sociodemographic characteristics. Studies show that increased health insurance coverage, better access to health information and services, and variations in age, gender, education, and income significantly impact healthcare utilization
- b. There is a nationwide shortage of healthcare demand data, with the exception of data related to family planning which is widely available in national surveys, such as the KDHS. Data and evidence on consumer demand for specific health priorities is limited and only exist through a small number of national level studies
- c. Sustaining created demand requires and involves strengthening service provision and resolving the HPT shortages
- d. SHIF provides an opportunity to cushion poorer households and may drive higher healthcare demand

3.4.2 Introduction

Unlike any other good, the need for healthcare is driven by the basic need for good health, which is necessary for investment as well as consumption(Grossman, 1972). Understanding healthcare demand is crucial for policymakers to allocate resources. Demand is influenced by various factors especially within the health markets. Various studies have theorized determinants of demand in various categories as detailed below.

Another study done on the determinants of demand for healthcare services in private hospitals in Kenya grouped the determinants of health as detailed in the Table 25 below(Gakii, 2013)

Table 25. Key demand considerations for key socio-economic groups

Group	Key components
Economic determinants	IncomeCost of careHealth Insurance and expenditures
Socio- demographic and cultural determinants	 Age Genre, Professional status Family status Education level (check FP data) TB and HIV data myths and misconceptions Origin and ethnicity
Disease related determinants	Severity of diseasePrevious health status
Healthcare supply related determinants	 Access to health care services Waiting time Quality of healthcare services

The findings section will provide an in-depth analysis of the key factors driving demand for healthcare in the Kenyan health market and explore its various determinants.

3.4.3 National and County Findings

According to the Kenya Health Facility Census report of 2023, there has been a significant growth in the market share for private health sector facilities with private and faith based/non-governmental organizations making up almost half of the health facilities nationally. This could potentially be an indication of the increased demand for healthcare(Dutta et al., 2018; Ministry of Health, 2023b).

Kenya has conducted demographic health surveys for the past 35 years, with the most recent survey completed in 2022(Kenya National Bureau of Statistics, 2023; KNBS & ICF, 2023). While the surveys do not directly measure consumer demand for healthcare, it gathers key sociodemographic data that can be used to understand what health services Kenyans might be demanding. They provide a valuable starting point for understanding the demand within the Kenyan healthcare markets.

Healthcare needs are not always clear-cut. This is because people's health concerns, how urgently they feel they need care, and their own ideas about health can all vary. Unlike other markets where demand is more predictable, healthcare is fuzzier. This means we need to

consider all these factors when deciding how to allocate resources and deliver healthcare services, especially when informed by data from the KDHS(Rodriguez Santana et al., 2023).

Health Expenditure and Insurance Coverage in Relation to Healthcare Demand. The Kenya Household Health Expenditure and Utilization Survey (KHHEUS) 2018 identified high costs as a major factor influencing healthcare demand. Despite this, research findings indicate a 47% decrease in the proportion of families citing high healthcare costs as their primary barrier to accessing medical services(Manya & Nielsen, 2016)

According to the Kenya Demographic and Health Survey (KDHS) 2022, one in four Kenyans has health insurance coverage. This coverage is more prevalent in urban areas compared to rural areas. Additionally, higher wealth quintiles correlate with greater health insurance coverage, as shown in Figure 28 below. Studies have demonstrated that as health insurance coverage increases, so does the demand for healthcare services. An example is a study on maternal health demand for private hospitals in Kenya, which revealed that owning health insurance significantly increases the likelihood of utilizing maternal health care services in private hospitals (Mose & Orayo, 2020).

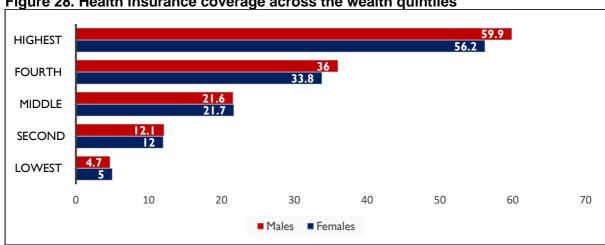


Figure 28. Health insurance coverage across the wealth quintiles

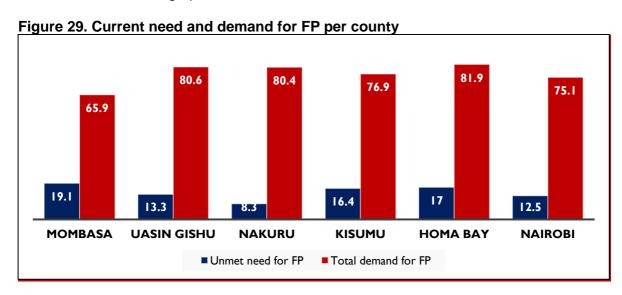
These findings highlight the significant impact of health insurance on reducing financial barriers and increasing healthcare demand in Kenya.

The KDHS 2022 reports an overall increase in the demand for family planning (FP) methods in Kenya. Among married women, 76% expressed a demand for FP, while this figure rises to 89% among sexually active unmarried women. Several factors influence this demand, including education level, number of living children, and wealth. Table 26 below details findings on this demographic characteristics

Table 26. Demographic characteristics

Sociodemographic characteristics	Findings from KDHS 2022
Educational level	 Education plays a crucial role in FP demand. Women with higher levels of education are more likely to use FP methods. The unmet need for FP among currently married women drops significantly with increased education, from 23% among those with no education to 10% among those with more than a secondary education
Number of Living Children	 Women with more living children tend to have a greater desire to either space or limit future pregnancies. 81.4% of women with six or more children wish to limit further childbearing, compared to just 2.7% of women without children who have the same desire. This increased desire correlates with a higher demand for FP methods.
Wealth Quintiles	 Wealth also impacts FP demand. The unmet need for FP decreases with rising wealth, from 22% among currently married women in the lowest wealth quintile to 10% among those in the highest wealth quintile.

Figure 29 provides a detailed breakdown of the need and demand for FP among currently married women by county, highlighting regional variations and further emphasizing the influence of sociodemographic factors on FP demand.



The use of contraception has significantly increased, doubling from 39.3% in 2003 to 62.5% in 2022. Concurrently, the number of women not currently using family planning methods has decreased from 60.7% in 2003 to 37.5% in 2022. These findings could also be attributed to increased knowledge of contraception, as the survey indicates high awareness levels across all demographics, with approximately 9 out of 10 people being informed about contraception.. See Figure 30 that shows the trends of use over the years.

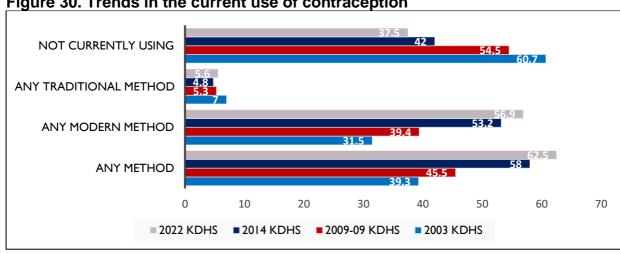


Figure 30. Trends in the current use of contraception

Numerous sociodemographic indicators show that TB is widely known; 97% of women and 98% of men report having heard of the disease. Even with such high awareness, there are still some misconceptions, especially about the link between HIV and TB. This misconception is more commonly held by older respondents and those from rural areas. Relatively speaking, those in the wealthier quintiles are less likely to hold this misconception.

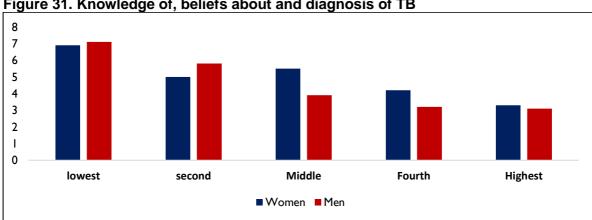


Figure 31. Knowledge of, beliefs about and diagnosis of TB

Understanding beliefs about TB and improving diagnosis play crucial roles in healthcare demand. Addressing misconceptions, enhancing knowledge, and improving diagnostic capabilities are essential steps toward effective TB management and overall healthcare demand.

Informed HIV prevention awareness positively influences healthcare demand by promoting timely interventions and reducing transmission rates. Data from KDHS shows that respondents with less education had lower percentages of knowledge of HIV prevention. Awareness of HIV prevention was higher in rural areas compared to urban areas for both men and women. Among men, 63.3% in urban areas were aware of HIV prevention, compared to 51.2% in rural areas. Similarly, among women, 57.2% in urban areas were aware of HIV prevention, compared to 52.2% in rural areas.

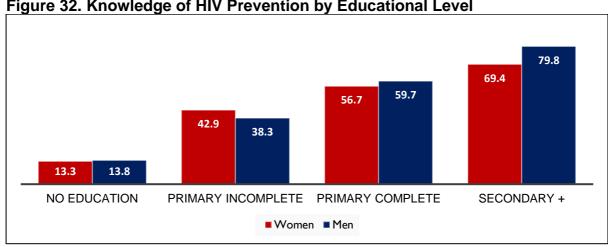


Figure 32. Knowledge of HIV Prevention by Educational Level

Also, findings from KDHS indicates that prior HIV testing rates are notably higher among married and divorced couples. Specifically, among women, the testing rates are 95.1% for married individuals and 95.4% for divorced individuals. Similarly, among men, the rates are 95.5% for married individuals and 95.9% for divorced individuals. The increased HIV testing demand within this groups could be attributed to increased awareness through mass media campaigns and advocacy efforts(Kaiser et al., 2011).

Other key sociodemographic characteristics influencing healthcare demand include literacy. educational attainment, and exposure to mass media. According to KDHS data, Kenya boasts high literacy levels among both women and men, with literacy rates increasing alongside wealth quintiles. Among women, the highest literacy rate is 96.6%, and among men, it is 98.5%. Nairobi leads with the highest literacy levels at 96.5%. Literacy is more prevalent in urban areas compared to rural areas, with urban literacy rates at 93.6% for women and 96.7% for men, versus rural rates of 83.8% for women and 89% for men. Higher literacy rates are associated with better health outcomes and higher utilization of health services. This underscores the importance of improving literacy to enhance health awareness and service demand. Educational attainment is also closely linked to wealth, with higher educational levels associated with higher wealth quintiles for both men and women. In terms of mass media exposure, urban respondents are more likely to have greater access than their rural counterparts, for both genders. Additionally, individuals with higher levels of education are more exposed to various media sources, and this trend is consistent across different wealth quintiles. These interconnected factors collectively influence the demand for healthcare services in Kenya.

Data on consumer demand within Kenya's health markets is nascent at both national and county levels. The public sector primarily relies on suggestion boxes, but there's no evidence of follow-up and analysis of the collected feedback. Private sector facilities on the other hand utilize exit surveys but use of analyzed data is limited to the individual facilities furthermore. secondary data from the KDHS indicates a scarcity of consumer demand data.

"The biggest barrier is financing. Funds are never enough. The capacity/skills in forecasting and ordering is a barrier" CHMT Uasin Gishu County

Both public and private health sectors identified limited human resources as a critical barrier to the market's ability to meet patient needs. Kenya only has 8.3 nurses per 10,000 people, falling short of the WHO's recommendation of 25 nurses per 10,000 people. Furthermore, Kenya has less than half (13.8%) of the 44.5 doctors, nurses, and midwives that the WHO recommends for every 10,000

people(Kinuthia et al., 2022). To increase demand for healthcare services and products, a combination of supply and demand side financing is required. The adoption of SHIF and SHA presents an opportunity to cushion individuals and households from costs that limit demand(Murray et al., 2012; Republic of Kenya, 2023d)

Additionally, there must be a deliberate effort to create demand for healthcare in order for communities to profit from access to them. KHSSP IV (2014–2018) states that efforts to create demand is raising the general public's awareness of health issues and services, as well as improving the behaviors of those who seek medical attention. This helps the populace make the most use of the promotive, preventive, and curative health services that are available(Mulaki & Muchiri, 2019).

Once demand for healthcare is created, it is critical for the supply of it to be sustained. Respondents pointed out that the inefficiencies in the public sector's supply chain may have contributed to commodity stockouts. Delays in government funding and outstanding payments from counties to KEMSA have hampered smooth operations. This has resulted in lower order fill rates, leading to shortages of essential products. Additionally, respondents noted that there is poor access and utilization of the market data resulting in underestimation of the market need which has led to stock outs even in the vertical programs. This underscores the importance of strengthened forecasting in meeting the demand for services and HPTs(Republic of Kenya, Ministry of Health, 2020a)

Financial access to health services continues to be a barrier to care utilization, despite significant advancements indicating that there is need for concerted efforts to provide financial protection. KHHEUS 2018 data shows that families cited the high cost of healthcare as their main obstacle to receiving medical services. This has declined over the years even though it still exists as a significant demand-side barrier(Nyangena et al., 2021a)

Financial barriers as a result of limited resources for both consumers and providers is still a significant barrier to demand. Poorer households spend a disproportionately small amount on healthcare and are less likely to seek medical attention, despite having higher health demands(Ministry of Health, 2018). The lack of sustainable financing for products in key disease areas was highlighted as one of the key reasons for unmet need of HPTs. This has led to underfunding of vertical disease programs as government struggles to meet its expected share of the contribution.

Pricing variations in the private health sector can often create challenges in meeting consumer needs(UNICEF, 2022). This can be influenced by the broader economic climate, including fiscal and monetary policies. A contributing factor is the high reliance on imported HPTs. Dependence on foreign currencies can make these imports more expensive. While Kenya does not currently have specific pricing policies for HPTs, this allows private providers some flexibility in setting their markups. This flexibility can sometimes result in prices that exceed what some consumers can afford, leading to unmet needs. This is particularly concerning

because only about 26% of Kenyans have medical insurance cover. This limited insurance penetration restricts their ability to access and pay for these essential HPTs(UNAIDS, 2023)

3.4.4 Recommendations

- 1. Increase financial support for more critical research and studies to be carried out on consumer demand (or lack of) for specific health priorities
- 2. Conduct consumer demand studies nationally and in the focus counties at key opportunities, such as building consumer research questions into national surveys such as KDHS
- 3. Support initiatives to collect, aggregate and analyze healthcare demand data beyond FP to inform demand forecasts (linking to national and county level forecasting and quantification processes)

3.5 Price





The shift to a mandatory SHI and the promotion of local manufacturing are positive steps toward lowering the cost barriers to healthcare access, but the absence of explicit price control policies or guidelines poses a significant barrier to affordability, as prices are set at the discretion of each county and individual private sector players, who may choose to charge higher than the suggested margins.

3.5.1 Kev Findings

- a. The government is transitioning from the National Health Insurance Fund (NHIF) to the Social Health Insurance (SHI) which is mandatory to all Kenyans as part of the commitment to achieve UHC. The transition from NHIF is expected to have all citizens and residents of Kenya covered by the SHI in order to remove the financial barriers to accessing healthcare, especially for those in the lower economic segments
- b. NHIF/SHI has been a key price setter in the Kenya health sector owing to their large market share (covers 89.4% of the insured population)1, size of financial resources pooled (more than KES 80 billion in FY 2021/22)1 and expanded benefits package1
- c. There are no price control policies for health services and products at the national and county levels which allows each private provider and individual counties to determine their prices
- d. There is no evidence of mechanisms used to monitor any adherence to pricing guidelines, which can allow some private providers to charge higher amounts beyond the recommended margins
- e. While the Insurance Regulatory Authority of Kenya regulates the premium amounts that private health insurance companies charge their beneficiaries, private health insurance companies negotiate with their individual providers on the amounts charged on services provided to beneficiaries1 which can provide incentives to over-supply unnecessary health services
- f. The prices of HPTs in Kenya's health market have been shown to be higher than in other East African countries: **Error! Bookmark not defined.** In the private sector, prices of HTPs have been noted to be higher than international reference prices, with some products more than 30 times
- g. There is an overreliance approximately 70% of Kenya's HPTs needs on imported HPTs which is vulnerable to the changes in international markets, and which can dramatically increase prices to consumers.

3.5.2 Introduction

The price of healthcare goods and services are critical in determining Kenyans' access to healthcare as well as influence the behavior of providers of healthcare (Barber et al., 2024). As such, high prices for healthcare products and technologies in unregulated markets remains a key barrier of access to needed healthcare interventions (Asmamaw et al., 2021). The situation is even more worrying if the cost of HPTs and healthcare is not effectively managed and most of the poor are not covered by any prepayment mechanisms. In addition, the situation is worsened when providers are incentivized to provide unnecessary and overpriced care where there are no price regulation policies or mechanisms for enforcement are weak (Dzampe & Takahashi, 2022). Consequently, as financing reforms are put in place to achieve UHC, regulating prices in Kenya's healthcare market is a key policy priority. Access and utilization of healthcare services are mainly influenced by the affordability of healthcare services (Ongarora et al., 2019).

Nearly four in 10 Kenyans (38.6%) live in overall poverty, according to the 2021 Kenya Poverty Report(Kenya National Bureau of Statistics, 2021). This, coupled with the country's low health insurance coverage (26%)(KNBS & ICF, 2023), creates a significant risk of people facing catastrophic healthcare expenses in an environment with uncontrolled retail prices(Gatome-Munyua et al., 2015). According to the Kenya Health Financing Strategy 2020 – 2030, only 3% of the lower economic quintile have any form of health insurance compared to 42% of the upper economic quintile. In addition, there is evidence of high attrition rates from the NHIF among informal sector members due to the unaffordability of monthly premiums (Ovando et al., 2023). Out-of-pocket healthcare payments in Kenya are arguably high, with 4.9% of the population experiencing catastrophic health expenditure(Chuma & Maina, 2012). All these factors affect equity in accessing healthcare in Kenya with the poor being the most affected. In its efforts towards UHC attainment, the Kenyan government, in partnership with development partners, has implemented several social health protection programs, including the UHC indigents program, the Linda Mama Project, the Health Insurance Project for Elderly People and Persons with Severe Disabilities (PWSDs), including orphans and vulnerable children.

Although NHIF remains the main health insurance in terms of coverage which was at 89.45%, there are other health insurance players in the market according to the KHHEUS report of 2018. Table 25 below summarizes the market share of in the health insurance industry. The health insurance coverage has been expanding overtime with several reforms being instituted within the industry. For instance, Figure 33 details the insurance coverage trends between FY2003 and 2018(Ministry of Health, 2018). The coverage has increased from 9.7% of the population in 2003 to 19.9% in 2018. The latest statistics puts the insurance coverage at 26% according to the KDHS 2022 report.

Table 25. Insurance Coverage in Kenya, 2018 (Ministry of Health, 2018)

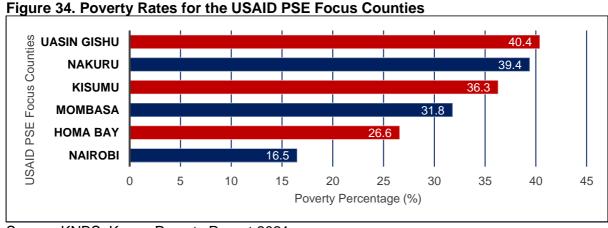
Insurance Type	Population Covered (%)
NHIF	89.45
Private	5.1
Employer/Institution	3.9
Community-based health insurance	0.7
County scheme	0.7
Other	0.1

Source: KHHEUS, 2018

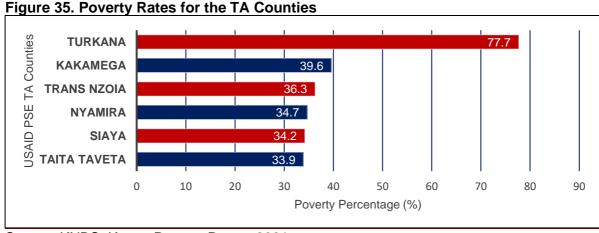
20 19.9 Percentage (%) 15 10 10 9.7 2003 2007 2013 2018 Year

Figure 33. Trends in health insurance coverage - 2003 - 2018(Ibid)

For the program focus counties, Turkana has the highest poverty at 77.7% while Nairobi has the lowest at 16.5%. Four of the focus counties have poverty rates that are higher than the national average of 38.6%. With low insurance coverage among the poor, this exposes the population to more impoverishing expenditure. The poor are disadvantaged in insurance access and are more likely to use out-of-pocket to pay for healthcare services.



Source: KNBS, Kenya Poverty Report 2021



Source: KNBS, Kenya Poverty Report 2021

3.5.3 National and County Findings

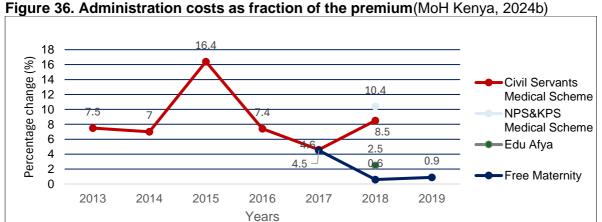
Having health insurance is likely to reduce catastrophic and impoverishing effects of OOP health expenditure, thus enabling access to healthcare (Gatome-Munyua et al., 2015). People are free to access care when they need it without paying OOP. Health insurance firms pool resources and negotiate with providers for better prices on behalf of their enrolled members. In the public sector, NHIF started in 1966 covering only those in formal employment and has since been expanded to cover those in the informal sector. This has improved access to healthcare for Kenyans who have the cover. The government encouraged the private sector investment in health insurance and the sector has recorded a tremendous growth that they have a market value of approximately Ksh 51.4 billion(Insurance Regulatory Authority, 2022). NHIF control over Ksh 80 billion (Health Sector Working Group Report, 2021) in terms members premium contributions and hence its decisions have a great impact on the market prices. Ministry of Health, (2018) and has been reimbursing the healthcare providers in both public and private sector a total of between Ksh 60 billion (USD 468,750,000) to Ksh 70 billion (USD 546,875,000)(Ministry of Health, 2021b). Since its expansion to include the informal sector in 2015 (NHIF, 2021). NHIF covers over 89.45% of insured Kenyan households as compared to private health insurances(Ministry of Health, 2021b).

NHIF had some limitations in terms of its benefits package which did cover of the disease areas like HIV/AIDS, family planning and TB(Republic of Kenya, Ministry of Health, 2024). The Social Health Insurance Act of 2023 which establishes Social Health Insurance is intended to enable the poor access all the essential services they need without experiencing financial barriers. All the beneficiaries and healthcare providers will have equal benefits and access regardless of your economic status with the successful implementation and addressing the gaps that made NHIF not achieve the intended objectives(Republic of Kenya, 2023d).

SHI will have three funds that will collapse all the existing different schemes under NHIF:

- 1. PHC Fund this will be tax funded and will reimburse for PHC services offered mainly by the PHC facilities both public and private sector. Beneficiaries have to register with SHIF but not necessarily a paid-up member.
- 2. SHIF this is mandatory for all citizens and residents of Kenya. You have to be a paid-up member to benefit from the fund. To be accessed for services accessed in level 4 to level 6 facilities
- 3. ECCF meant to cater for emergency, critical and chronic illnesses. Its tax funded and comes in when the SHIF is exhausted. A beneficiary doesn't have to be a paid-up member or registered with SHIF to access the services for the first 24 hours, but the conditions apply afterwards.

These programs were being implemented through the National Health Insurance Fund (NHIF)(Ministry of Health, 2021b; NHIF Plays a Major Role in Social Health Protection through Subsidy Programs for UHC, 2021). The fragmentation of the NHIF schemes coupled with high administrative costs and limited awareness creation at the community level, affected the effective management and delivery of these programs (see Figure 36). As part of the ongoing UHC reforms, the MoH has coalesced all the above programs into one inclusive benefits package under SHI that will be managed by SHA and financed through PHC fund, SHIF and the Emergency Chronic and Critical Illness Fund(Republic of Kenya, 2023d). Additionally, healthcare pricing is also a key factor in the designing of the health insurance benefits packages which incorporates various provider payment methods that incentivize healthcare providers to deliver quality care(Barber et al., n.d.). For instance, it costs about Ksh 42,000 to maintain one person on anti-retroviral therapy (ART) for one year according to the policy brief by National Aids Control Council (NACC, 2018). These costs are considered when determining what to include in the benefits package and since they have a high annual and lifetime cost liability, NHIF did not include it in the benefits package(National AIDS Control Council, 2018).



Source: Health Financing Reforms Expert Panel for the Transformation and Repositioning of the NHIF as a Strategic Purchaser for UHC

Fluctuations in the international prices ripple throughout Kenya's entire health system and market, impacting the cost-of-service delivery for both public and private sectors. Due to Kenya's heavy dependence on imported Health Products and Technologies (HPTs), the healthcare system is susceptible to price fluctuations (see the supplies section). Only 30% of HPT needs are being met by local manufacturing as acknowledged within the Health Products and Technologies Supply Chain Strategy 2020 – 2025 and therefore, the industry is vulnerable to the fluctuations in the international market(Republic of Kenya, Ministry of Health, 2020a). As a result, healthcare providers and local pharmaceutical distributors are forced to adjust their prices, potentially affecting affordability for patients. To address this challenge, the government's focus on becoming a regional pharmaceuticals hub holds great promise. Increased local HPT production could significantly improve availability and affordability to patients and strengthen the entire healthcare sector(Republic of Kenya, Ministry of Health, 2020a). Local manufacturing would significantly reduce the prices as freight costs incurred on imported goods would not be incurred. Therefore, all efforts should be directed in supporting the local manufacturing environment to meet the country's HPTs needs.

The pricing of health services in the public sectors are determined annually. Health is a devolved function as defined within the Kenya constitution 2010, Schedule 4 which means that healthcare charges are determined annually during the budgeting process in compliance with the Public Finance Management Act 2012. The act guides the management and expenditure of public resources both at national and county level in Kenya. The public health facilities at the county level set the user fees in consultation with the county treasury. The user fees are normally lower than the prices charged by the private sector(Republic of Kenya, 2023c) This is one of the reasons why a larger share of the Kenyan population seek care from the public health facilities, especially those that have lower spending ability. There are efforts to ensure that the public facilities retain and spend all the revenues raised through user fees to facilitate the operations of health facilities through the government's enactment of the Facility Improvement Fund (FIF) Act) of 2023 as explained further in the financing section of this report. For example, the Nairobi City County health facility charges range from HIV tests in level 3 facilities being offered for free to AK prosthesis at Ksh 120,000 (Ibid). The user fees have shown to affect the decision on where patients seek the services as shown in the Table 26 below.

Table 26. Utilization of outpatient services in public and FBO health centers

Factor	Time Period	Total	Total Months	Average per Months	P<0.05	% Increase
Public Health Ce	enters and	Dispensarie	S			
Total	Before	767.289	19	40.384	Yes	124.9%
outpatient visits (under age 5)	After	958.385	19	50.442		
Total	Before	1,433.433	19	75.444	Yes	137.0%
outpatient visits (Over age 5)	After	1,958.190	19	103.063		
FBO Health Centers and Dispensaries						
Total	Before	310.491	19	16.342	No	-125.0%
outpatient visits (under age 5)	After	233.468	19	12.288		

Total	Before	525.859	19	27.677	Yes	119.0%
outpatient visits (Over age 5)	After	626.855	19	32.992		

^{*}Total is the sum across all facilities of either FBO or public facilities(Maina, T. and D. Kirigia, 2015)

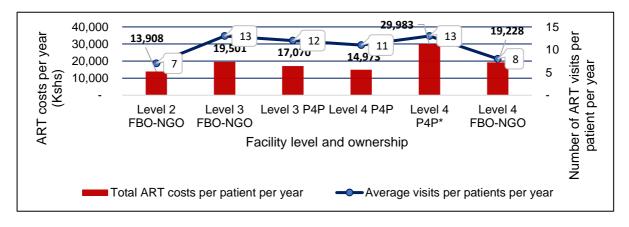
"The HIV commodities in the public sector they are supposed to be free of charge and these commodities are available to the private sector at zero cost. The private sector charge because for them to cover their overhead costs, the day to day running, the electricity, the human resource..."

CHMT Nairobi County

For priority diseases like HIV, TB, and malaria, access to HPTs faces fewer financial barriers for consumers compared to the other diseases. This is because donors and the government work together to negotiate favorable pricing through pooled procurement mechanisms (National AIDS Control Council, 2018). It costs Kshs 42,000 per annum(National AIDS Control Council, 2018) for and Kshs 26,041.49 for one TB episode or more for the drug resistant TB(Ministry of Health, 2017b). From the key informants, there was no budgetary allocation for HPTs relating to these diseases in all the focus program counties.

However, as outlined in graph 5 from a study conducted in 2015, the price of ART is higher among private for-profit providers compared to faith-based or NGO providers. To improve accessibility of these services in both public and private sector, inclusion of these services in the Social Health Insurance Benefits Package will be key.

Figure 37. Total cost of HIV ART services in Kenya, 2015(Gatome-Munyua et al., 2015)



"In government facilities, they get their commodities subsidized from KEMSA and MEDs. but in the private sector they would get it at a higher price. I cannot access products from KEMSA/MEDs. The structure in essence is not supportive to the private sector. Those with NHIF, I prefer they get it from the public sector because it is cheaper but there is short supply in the government. If the market was opened that would be great but that would mean pricing policies

The Cost of the vertical programs: The vertical programs are primarily supply side financed through the national and county governments with limited mechanisms of engaging the private sector(Ministry of Health, 2017b). The government and donors support the procurement and distribution of the HPTs relating to TB, HIV and some of the reproductive health ones and therefore, the facilities are only required to offer the services without selling the products to the beneficiaries. Consumers access these services from the public sector at no cost while some private facilities charge overhead costs in the form of consultation fees. The key informant interviews highlighted that most of the private facilities wanted to charge a small facilitation fee to support the delivery of the services. This was also noted in the Kenya Tuberculosis Patient Survey of 2017

where private sector had costs 10 times more than the public health sector. With limited NHIF coverage among the patients (13.6% of TB patients in 2017) and lack of HIV coverage makes it difficult for the poor to access these services. Additionally, the overreliance of donor support for these programs affects sustainability and any fluctuations in the international markets affects prices and ultimately access. The increase in government allocation to these strategic disease areas has not been sufficient to offset the declining donor support as detailed more in the financing section of this report(Republic of Kenya, Ministry of Health, 2022). The Global Fund, US Government and other donors have been meeting over 90% of the HIV, TB and malaria financial needs in Kenya(Mutuku & Regina, 2018).

"There is no pricing policy. However, there was a committee founded in the ministry by the previous government (was a three-year contract) that was to ensure affordability through a pricing system. This has so far not been achieved."

The public sector enjoys lower prices through access to KEMSA and MEDS which offer the lowest prices in the market while the private sector facilities have no access to KEMSA and limited access to MEDS. MEDs offers services to government, FBOs, and a few selected private for-profit facilities which leaves out most of the other private sector player. This impacts the patients as they cannot enjoy access to affordable HPTs and disadvantages other players who have charge their services higher and get less margins to be competitive. This results in the private sector offering their services and products at a relatively

higher price due to the inclusion of their operational costs which are subsidized in the public sector(Siddiqi et al., 2023).

"Fiscal and monetary policies.
The decisions of the big
purchaser like the Social Health
Insurance can also shape the
market prices by the kind of the
benefits package they offer."

Pricing control policies in Kenyan health market: Like all other countries in the East African Community block, with the exception of Rwanda, Kenya does not have direct price control policies for HPTs and healthcare in general. The lack of price controls allows health providers to set their own prices. This freedom leads to significant price variations between the public and private sectors and can mean that Kenyans are unable

afford quality healthcare. For instance, an analysis by the IMIS institute revealed

that unlike countries like India and the Netherlands, Kenya's HPTs market prices is dominated by distributors and retailers margins (see graph 6 below) (Aitken, 2016). The favorable medicines prices on the international markets are not transferred to the patients as retailers freely set prices that are more than double the manufacturers' prices. This creates a challenge of access for most Kenyans especially the poor. This gives the distributors and retailers freedom to set high margins without transferring the benefits to the consumers despite the government tax policy exempting imported health products (Aitken, 2016; Republic of Kenya, 2020). This leads to high prices that reduce accessibility of essential HPTs for many Kenyans. The lack of price controls in the market has led to different prices being charged in the public and private sectors and even within the private sector. The guidelines shared by the Legal notice No. 131 Medical and Dentists practitioners' rules of 2016 gives a range which allows the private providers to settle on different prices based on their costs. Figure 38 below details the different average costs patients incur to access the services in Kenya. The average costs for services for both inpatient and outpatient services vary depending on the level of care and the service utilization. The FBO organization recorded lowest costs needed to access the healthcare(Gatome-Munyua et al., 2015).

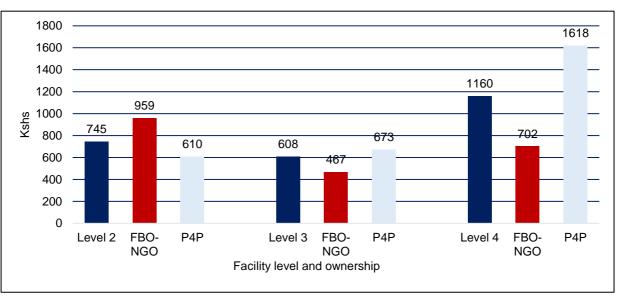
"Private sector pricing is more to make a kill than serve patients. Extortion takes place in the private sector where majority of the population are

"In the private sector there is freedom to charge for your services/products as you see fit." **Private chemist Nakuru** The lack of price controls allows health providers to set their own prices for HPTs. This freedom leads to significant price variations between the public and private sectors. For instance, an analysis by the IMIS institute revealed that unlike countries like India and the Netherlands, Kenya's HPTs market prices is dominated by distributors and retailers margins (graph 6)(Aitken, 2016). The favorable medicines prices on the international markets are not transferred to the patients as retailers freely set prices that are more than double the manufacturers' prices. This creates a

challenge of access for most Kenyans especially the poor (KHHEUS, 2018). This leads to high prices that reduce accessibility of essential HPTs for many Kenyans. The lack of price controls in the market has led to different prices being charged in the public and private sectors and even within the private sector. The cost of accessing the outpatient services in the private sector ranges from Kshs 467 to Kshs 1,618. These costs are a barrier to most of the Kenyans who are poor and not insured in a country where approximately 38% of the population are considered poor.

The guidelines shared by the Legal notice No. 131 Medical and Dentists practitioners' rules of 2016 gives a range which allows the private providers to settle on different prices based on their costs. Graph 6 below details the different average costs patients incur to access the services in Kenya. The average costs for services for both inpatient and outpatient services vary depending on the level of care and the service utilization. The FBO organization recorded lowest costs needed to access the healthcare(Gatome-Munyua et al., 2015).

Figure 38. Average cost of an outpatient visit in the private sector, by facility level and ownership (Kshs)(Gatome-Munyua et al., 2015)



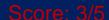
Source: Gatome et al. 2015

3.5.4 Recommendations

- 1. Assess the pricing of health services and products across Kenya
- 2. Develop a pricing policy for HPTs in the Kenyan health market to improve affordability of HPTs, including for poorer population groups. Include a price policy on retail margins range to enable transfer of the low-price benefits to patients
- 3. Support joint public and private sector engagements through national and country level whole market coordination forums to improve insurance uptake and utilization
- 4. Conduct health sector taxation status analysis to assist in advocating for key health products and technologies not to be taxed (zero rated or exempted)
- Conduct a whole market health products and technologies costing and investment feasibility studies to inform development of policies to support the subsidization of local pharmaceutical manufacturing
- 6. National government to draft tax incentives package for local pharmaceutical manufacturers and engage with developed countries for international pharmaceutical companies to set up factories in the country through bilateral agreements

3.6 Quality





Kenya scores highly in continental quality assessments but concerns still remain on the quality of services and products. While private sector providers often score better in quality measures, smaller providers face challenges due to high costs and low revenue. As local manufacturing grows, there is a need to bolster local testing capacity and address enforcement challenges, particularly in post-market surveillance across all products.

3.6.1 Key Findings

- a. Kenya's quality standards are generally considered to be high. There are a number of bodies that oversee the quality in the public and private sectors and quality is generally improving
- b. Some studies such as the Kenya Health Service Delivery Indicator Survey 2018 shows that private sectors scored better than public sector in the measured quality parameters
- c. Quality improvement is seen as being too costly for smaller private providers such as level 2 private health facilities and chemists who report to have relatively low revenue
- d. There is an absence of a comprehensive, overarching policy specifically focused on ensuring quality across the entire private healthcare sector in Kenya. Instead, numerous individual policy documents address specific health priorities such as HIV, TB, and other diseases
- e. The enforcement of quality standards faces challenges due to limited human resources and capacity especially for the post market surveillance
- f. As the production of locally manufactured products is expected to increase, it is crucial to develop sufficient local capacity to test and maintain the quality of these products
- g. There are no forums that bring the public and private sectors together to focus on quality outside of vertical programs

3.6.2 Introduction

Providing high-quality healthcare is crucial because it guarantees citizens' access to safe and effective medical treatment, upholding their constitutional right and enhancing general health outcomes(Ministry of Health, 2020b). Ensuring high-quality health products and technology is pivotal for delivering superior healthcare. Medical devices, pharmaceuticals, and diagnostic tools must meet rigorous standards to ensure their effectiveness and safety in patient. When the system to measure and enforce quality care is weak, it creates big problems for both patients and those funding healthcare - patients are unsure if they will get good treatment, and funders cannot be certain they are making the best investments or getting good value for their money. Patients are unwilling to prepay for uncertain care, and healthcare providers struggle financially without steady income, in turn making it difficult for them to improve the quality of the services they offer, creating a vicious cycle(Spieker, 2020).

Kenya has made significant strides in improving healthcare quality. According to NQCL laboratory testing, the failure rate of samples tested show a significant decrease, from 6% in 2018 to 1% in 2019. There were similar results from MEDS laboratory with 13.2% failure rate of sample as in 1997 as compared to 1.5% in 2019.(Ibid).

The counterfeits are there but they do not land in the government facilities because of the strict procurement procedures and evaluation. There is a likelihood to find them in the private facilities" **CHMT Kisumu**

However, there are still major obstacles. The Kenya Health Service Delivery Indicator Survey 2018 report assessed key indicators related to service quality in basic health services. It covered a sample of 3,094 health facilities, including 1,781 public and 1,313 private facilities. Overall, it reports that progress has been made in improving the quality of health services. Abolishing charges in public maternity wards and NHIF contributions

have positively impacted maternal and child health outcomes.

However, challenges persist, as outlined in Table 27 below(Lang'at et al., 2019).

Table 27. Summary of some of Kenyan's quality challenges

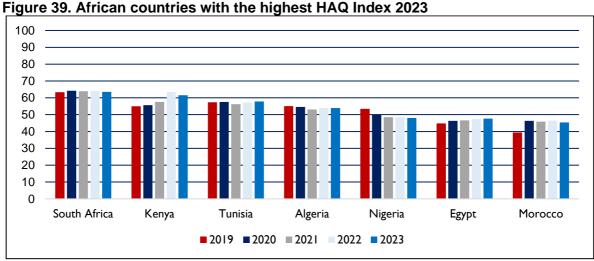
Health Domains	Description
Maternal Care	 The expanded free maternity policy (Linda Mama) improved access to maternal care, but challenges remain in workload, infrastructure, and respectful treatment of mothers.
Primary Health Care (PHC)	 During the pandemic, PHC faced challenges, emphasizing the need for multisectoral approaches and adherence to the Astana PHC framework.
Inequality	 Disparities exist in health services utilization and quality, favoring richer population groups. Public and private facilities serve different socio-economic segments.

3.6.3 National and County Findings

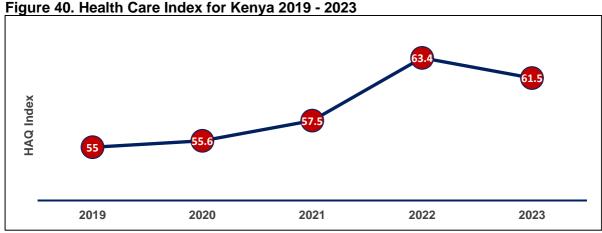
While there is significant progress within the private health sector over the years the Healthcare Access and Quality (HAQ) Index shows that Kenya is not doing as well as it is expected and also as compared to the global average. The HAQ Index provides a summary measure of personal healthcare access and quality for a given location. It is based on risk-standardized mortality rates or mortality-to-incidence ratios from causes that, in the presence

of quality healthcare, should not result in death (also known as amenable mortality). In 2023, Kenya had the second highest Healthcare Access and Quality (HAQ) index in Africa, scoring 61.5, just behind South Africa's 63.5. The previous HAQ index survey, which examined data from 1990 to 2015, showed a steady increase in Kenya's HAQ index from 42.6 in 1990 to 61.5 in 2023. This places Kenya ahead of the Eastern Sub-Saharan Africa average. However, Kenya's HAQ index has remained below the global average, which includes data from 195 countries, throughout this period. The survey also highlighted considerable HAQ gaps in Kenya despite its socio-demographic development progress, with a gap score of 6.8 in 1990 increasing to 12.4 in 2015.

Figures 39 and 40 below illustrate the HAQ scores for Kenya compared to the top 7 African countries with the highest HAQ Index. They also show Kenya's HAQ scores over the past 5 years(Cowling, 2024; GBD, 2015)



Source: Statista



Source: Statista

Available data at county level shows that Mombasa scored the highest with a HAQ score of 83.47 as compared to Kisumu which had a score of 44.44

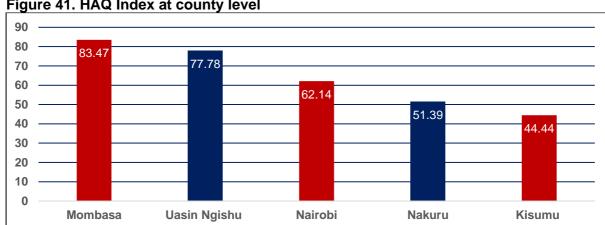


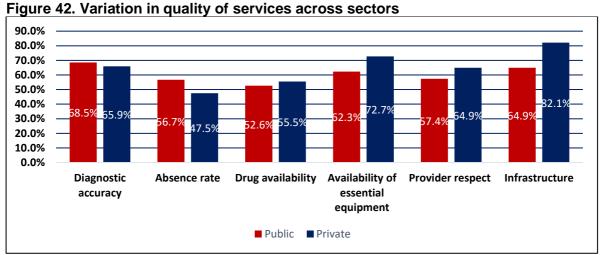
Figure 41. HAQ Index at county level

Source: Numbeo

Samples from an annual PMS activity for antimalarials, anti-TB drugs, and ARVs were analyzed in 2019 and found to comply with the requirements. This is in line with sentiments from the primary data collected where respondents perceived vertical programs HPTs to meet international QA standards as they were strict donor requirements in quality even for local manufacturers. Their distribution is controlled therefore same quality applies in the public and private sectors. A different study made the point that donor funding is currently covering the majority of the relatively high cost of quality assurance associated with quality programs (Spieker, 2020).

The Kenya Association of Pharmaceutical Industry estimated in 2017 that the yearly sales of counterfeit medications amounted to approximately Ksh 9 billion (US\$100 million), accounting for 20-25 percent of the entire legitimate commercial pharmaceutical sector(Mulaki & Muchiri, 2019).

The Kenya Health Service Delivery Indicator Survey 2018 highlights the varying levels of quality of services in the Kenyan public and private sector as detailed in Figure 42 below. The private sector scored higher in four of the six components that compared the 2 sector (Republic of Kenya, 2019).



While the private sector has demonstrated strengths in certain aspects of health service delivery, a separate study focusing on the quality of primary healthcare performance in private facilities in Nairobi revealed that overall, the quality of primary care provided by these facilities was low(Mohamoud & Mash, 2022). Another study conducted by the African Health Markets for Equity (AHME) examined the experiences of social franchisees in Kenya. The study aimed to implement a package of interventions to enhance the quality of care (QoC). Findings revealed that while providers were willing to adopt quality improvement measures, cost remained a significant barrier. Notably, most of the programs heavily relied on subsidies from donors, resulting in a lack of long-term sustainability(Republic of Kenya, 2023)Error! Bookmark not defined.

Both sectors have roles to play in improving the quality of care in Kenya. There is an opportunity for the private sector to collaborate with the public sector to address quality gaps in service delivery. Partnerships could focus on sharing best practices, joint initiatives in underserved areas, or supporting public health infrastructure improvement projects. Given the challenges faced during the pandemic and the incoming UHC Acts, there is a need for stronger multisectoral approaches in primary health care (PHC). The public sector can benefit from collaborating with the private sector to improve overall outcomes and adhere to the Astana PHC framework which emphasizes the critical role PHC plays globally(World Health Organization, 2023)

Quality assurance and controls in Kenya are currently centrally overseen by the national government. Within the counties, there exists quality improvement teams. These teams are made up of county health inspectors who conduct routine inspection of health facilities in their respective counties under the coordination of Kenya Health Professions Oversight Authority and also other regulatory agencies. As per the Kenya's health sector MTEF 2024/25 – 2026/27, 140 county health inspectors had been trained on assessing health facilities on compliance to quality and patient safety using the Joint Health Inspection Checklist. Counties have also been able to set up Quality improvement Teams(Mulaki & Muchiri, 2019).

The Kenya Bureau of Standards (KEBS) is the main government organization responsible for creating and enforcing quality standards for all products entering Kenya across all sectors, including health. KEBS is authorized to test random samples of commercially available products including HPTs for both the public and private sector. These examinations determine whether the product satisfies stated requirements and accepted benchmarks for quality. Goods that fail to meet quality standards are not allowed into Kenya's health market(KEBS, n.d.).

Every product registered in Kenya is a valid Product registration is very rigorous and quality controls are in place. as long as it is listed on the portal it should be okay..."

Manufacturer National

The Pharmacy and Poisons Board (PPB) is the regulatory authority responsible for the regulation and control of pharmaceuticals, medical devices, and other health products in Kenya. The PPB ensures the quality, safety, and efficacy of these products through various functions, including registration and licensing, quality control, regulation of manufacturing and distribution, post-

market surveillance, pharmacovigilance and enforcement of regulations. The PPB plays a crucial role in protecting public health by ensuring that healthcare providers have access to high-quality HPTs and by taking action against violations of regulatory requirements (MOH Kenya, 2023). It also provides provisions for the regulation and registration of pharmacists, the control of the pharmacy profession, authorization for pharmacists to sell HPTs, and the taking of corrective action in the event that professional conduct and discipline

are violated(Republic of Kenya, 2023a). The National Quality Control Laboratories (NQCL) is a government regulatory body that works with PPB in testing the HPTs across Kenya(MoH Kenya, 2024a)

In the private sector especially for the FBOs, the Mission for Essential Drugs and Supplies (MEDS) plays a crucial role in maintaining quality control for HPTs, ensuring safe and effective health products reach patients. MEDS conducts prequalification of suppliers, inspects health commodities, and performs post-market sampling and testing. It operates a well-established Quality Control laboratory. This facility provides testing services for HPTs to clients within the country and beyond(MEDS, 2024) . They are also partnering with other research teams to assess and establish innovative approaches for characterizing and ensuring the quality of biopharmaceuticals(Ishii-Watabe et al., 2020)

KEMSA uses strict inventory management systems, rigorous quality assurance procedures, and procurement standards to guarantee HPT quality control. To protect product integrity, they make sure that distribution adheres to Good Distribution Practices (GDP) and maintain ideal storage conditions in their warehouses. KEMSA provides staff training and capacity-building programs in addition to ensuring compliance with all applicable regulations through collaboration with national regulatory bodies such as the PPB. Feedback systems are put in place to quickly address any quality concerns, guaranteeing the efficacy and safety of medical supplies supplied to healthcare facilities(Republic of Kenya, 2013) Table 28 below breaks down the key players within quality controls in Kenya and their roles.

Table 28. Key HTP oversight bodies

HPT Oversight Bodies	Role	
MOH	Policy, Standards and capacity building	
PPB	Regulator; Standards, Enforcement, Pharmacovigilance, capacity building	
National Quality Control Laboratory	Testing; Pharmacovigilance	
Missions for Essential Drugs	Procurement and distribution; quality testing; Capacity building	
Kenya Medical Supplies Agency	Procurement and distribution; systems strengthening	
Kenya Bureau of Standards	Regulation; standards enforcement; quality testing; calibration of equipment	
Anti-Counterfeit Agency	Combating substandard and falsified products	
Port health - Kenya Revenue Authority	Managing Ports of entry-several counties lie across the international boarders	
Kenya Medical Research Institute	Research; HPT manufacture; Validation of RDTs RTKs etc.	

To ensure the delivery of quality health services, the MoH implements the Quality-of-Care Certification Framework (QCCF) which is a legally-mandated system that ensures public and private healthcare facilities in Kenya adhere to minimal requirements for patient safety, infrastructure, and service delivery(Ministry of Health, 2020c). This framework is guided by the Kenya Quality Model for Health (KQMH) which is a voluntary framework for ongoing quality enhancement in a number of healthcare delivery domains namely; patient safety, clinical effectiveness, consumer satisfaction, leadership, and service procedures(Kenya, Ministry of Health, 2014). Derived in 2001 by the MoH Department of Standards and Regulatory Services,

KQMH has undergone multiple reviews with the one in 2018 being the latest and which aligns with recent Kenyan health policies, strategies and plans as well as various clinical standards and guidelines, and alignment with international developments and best practices in the delivery of health services. However, there is no cohesive framework for guiding collaboration between the two sectors poses challenges that impact the quality, affordability, and accessibility of healthcare services, despite significant patient movement from the public to the private sector, especially for specialized diagnostic purposes. A standardized mechanism for guiding referrals and counter-referrals is notably absent(World Health Organization, 2016)

Kenya does not have a unified official policy regulating the private sector. Existing laws attempt to oversee aspects like supply, pricing, and standards through compulsory licensing but encounter enforcement hurdles. Notably, there is a lack of dedicated legislation overseeing the operations of private health insurers. While the private sector has expanded rapidly, challenges persist in monitoring unqualified practitioners entering the market due to constraints in resources and capacity within the Ministry of Health(Kimani et al., 2004; Republic of Kenya, 2023a)

QCCF and KQMH are not mandatory, but they apply to both public and private health facilities. practitioners can demonstrate their commitment to quality and improve patient outcomes by voluntarily implementing KQMH principles. Health insurance providers often negotiate direct billing arrangements with these hospitals, streamlining payment processes for insured patients. Additionally, the National Hospital Insurance Fund (NHIF) has embraced quality improvement by domesticating the SafeCare international standards. Hospitals complying with these standards become KQMH-certified and can receive rebates for serving NHIF members(Nation, 2020; NHIF, 2015; Spieker, 2020; Syengo & Suchman, 2020).Table 29 below breaks down various private sector segments and how they can utilize KQMH for continuous quality improvement

Table 29. Private sector stakeholders and KQMH

Private sector	Application of KQMH
Private Hospitals and Clinics	KQMH provides a framework for private hospitals and clinics to improve the quality of care they offer. It helps them implement best practices in areas like: patient safety; clinical effectiveness; customer care and leadership and management
Private Diagnostic Laboratories	KQMH can be used by private diagnostic labs to ensure the accuracy and reliability of their test results. It helps them implement quality management systems for: equipment calibration; staff competency and internal controls
Private Pharmacies	KQMH can be a valuable tool for private pharmacies to ensure they are dispensing safe and effective medications. It helps them implement best practices for: medication storage and handling; staff training on dispensing procedures; patient counselling
Other Private Healthcare Providers	The KQMH framework can be adapted to various private healthcare providers, including: optical shops; dental clinics and rehabilitation centers

Source: KQMH(Ministry of Health, 2020b)

There are other quality control initiatives geared towards health care services in the Kenyan health markets(LangBuisson, 2023; PharmAccess, 2018). Please see the notable ones in Table 30 below. Some of these have resulted in positive outcomes in the quality of care for both public and private sectors especially within maternal health. A study that was done in

Kenya and Tanzania on the application of selfcare quality guidelines and a number of other interventions such as easing access to health services, financial support and respectful care as well as health education led to better maternal and health outcomes (Izudi et al., 2023; Johnson et al., 2016)

Table 30. Selected quality standard initiatives

Quality standards initiative	Description	Applicability within the sectors
SafeCare	Provides healthcare practitioners with a methodical strategy to enhance both quality and efficiency. It offers materials and tools based on globally accepted standards. They have created clinical standards that are reliable, safe, and appropriate for environments with limited resources	Both public and private sectors
the Council for Health Service Accreditation of Southern Africa (COHSASA)	Carries out accreditation and quality improvement programs in a variety of healthcare facilities in Africa indicating that patients can anticipate receiving high-quality and safe care at these facilities. Kenya adapted this quality control system most recently. Only two private sector organizations -Avenue Hospital, Parklands and Metropolitan Hospital - have been accredited and entered for the quality improvement program and has been assessed against and complied with standards recognized by the International Society for Quality in Health Care External Evaluation Association (ISQua-EEA). This is the global body overseeing accreditation and quality improvement programmes in healthcare organizations in 70 countries around the world.	Primarily for private sectors
Joint Commission International (JCI)	Provides hospitals that satisfy strict quality and safety criteria with a globally recognized accreditation program.	Private sector

Kenya's commitment to quality healthcare extends beyond product and service regulation. Regulatory bodies for health professionals and professional associations play a crucial role by overseeing the licensing and practice of various health professions(GBD, 2015; National Nurses Association of Kenya, 2009; The Republic of Kenya, 2019). The regulatory bodies for health professionals are in charge of establishing policy guidelines for each cadre of health workers as well as standards for pre-service training, service delivery, professional codes of practice, and standards. A list of both public and private professional bodies related to quality control are in Table 31 below.

Table 31. Key regulatory bodies

Regulatory bodies for health professionals	Professional Associations
 Kenya Health Professionals Oversight Authority (KHPOA) Nursing Council Kenya Medical Practitioners and Dentist Council (KMPDC) Clinical Officers Council Kenya Medical Laboratory Technicians and Technologists Board (KMLTTB) Pharmacy and Poisons Board (PPB) National Quality Control Laboratories (NQCL) Kenya Health Human Resource Advisory Council (KHHRAC) 	 Kenya Health Federation (KHF) Kenya Association of Pharmaceutical Industry (KAPI) Federation of Kenya Pharmaceutical Manufacturers (FKPM) Kenya Association of Manufacturers Rural & Urban Private Hospitals Association of Kenya (RUPHA) Kenya Association of Private Hospitals (KAPH) Pharmaceutical Society of Kenya Kenya Pharmaceutical Association Kenya Medical Association Kenya Dental Association Kenya Optometric Association

"Most products are approved by the PPB. They have a challenge of market supervision due to limited HR and poor linkage with the county health management teams."

Private Sector Association

While Kenya has comprehensive regulations in terms of quality of services, there is need to go beyond focusing on controlling the entry of private providers and health insurers, but expand to include effective monitoring and control over the type, volume, distribution, quality, and price of health care services(Doherty, 2015). This finding aligns with the respondent's perception of PPB effectiveness in licensing but not continuous

supervision. However, there appears to be room for improvement in terms of continuous supervision. Although the Kenyan constitution mandates counties to supervise service delivery in county health facilities and pharmacies, County Governments, represented by the

PPB do inspection of actual production processes, quality control processes and results, they also do market surveillance where they sample these products at market level. all these are geared towards making sure QA standards are met"

COG, have not been adequately involved, and there has been limited sharing of information (Ibid). This opinion is supported by a study evaluating local government and accountability in Kenya's decentralized health system. The paper makes the case that Kenya has only partially devolved health functions, which has left confusion over who is responsible for service delivery and coordination issues between the national and county governments. These problems run the risk of undermining the promises and opportunities that

devolution seeks to bring about(Ochieng, 2017).

Post-marketing surveillance refers to all processes and activities conducted to consistently monitor the quality, safety, and effectiveness of medical products and health technologies after they have been authorized. This is done by PPB to prevent and detect substandard and falsified HPTs. The National Pharmacovigilance and Post-Marketing Surveillance (PMS) Technical Working Group comprises essential technical stakeholders from the Ministry of Health, PPB, public health programs, central procurement agencies, quality control testing laboratories, and research and teaching institutions. The PMS system also involves a wide array of participants such as public, private, non-governmental, and mission healthcare providers, public health programs, the pharmaceutical industry, central procurement agencies, quality control testing laboratories, marketing authorization holders, and manufacturers. In Kenya, the PMS system encompasses all healthcare facility levels (private, public, and faith-

"The PPB has been quite aggressive in doing inspections, testing batch numbers and being able to single out counterfeits..."

CHMT Nakuru

based), all medical products and health technologies used in the country, and all categories and specialties of healthcare providers. Both public and private sectors were reported to be vigilant about recalling substandard health products and technology from the market, demonstrating a unified commitment to

maintaining healthcare excellence and patient safety(Republic of Kenya et al.,

2023)

"Those funded by donors- the requirements and regulatory bodies involved are more stringent than non-donor funded especially Global Fund, USAID-PEPFAR. for you to be prequalified, you must be internationally certified. e.g. WHO prequalification of those given approval by FDA is most likely to be accepted in those countries. local manufacturers-Cosmos, universal have met these standards before. sustaining

The country's capacity for testing medical equipment is also limited, necessitating ongoing efforts to enhance local testing capabilities. Monitoring the quality of essential health products and technologies has been inadequate, mainly focusing on sporadic analysis of reported substandard or falsified samples prompted by public or provider complaints. According to the regulator, inadequate storage infrastructure and practices are significant contributors to the high observed Post-Marketing failure rates in Surveillance (PMS) samples, compared to other factors. Both regulatory bodies and certain private sector entities agree that insufficient human resources pose challenges to effectively enforcing assurance standards quality across board(Maarifa Centre, 2023)

By the year 2021, 43 local and 1313 foreign manufacturing sites received approval certificates to trade in HPTs in Kenya with 6,475 products(PharmAccess, 2018). While there has been significant goodwill to encourage local manufacturing in Kenya, the number of registered local manufacturing sites remains limited(Maarifa Centre, 2023). As the production of locally manufactured products is expected to increase, it is crucial to develop sufficient local capacity to test and maintain the quality of these products.

3.6.4 Recommendations

- 1. Invest in and carry out research to determine what return-on-investment quality improvement initiatives make on peoples' health and Kenya's health system
- 2. Use research findings to develop customized quality improvement models that will yield profits for the smaller private providers
- 3. Assess small private providers in the USAID PSE focus counties as a pilot on clinical practices, infrastructure, and adherence to quality standards
- 4. Identify and pursue potential innovative funding sources to support private providers with the lowest capacity, offering grants or low-interest loans for infrastructure upgrades
- 5. Simultaneously, update and modify existing programs (if needed) for small providers and implement quality improvement initiatives to enhance service delivery.
- 6. Conduct research to understand existing practices, identifying gaps, and formulating robust policies and mechanisms for effective self-regulation
- 7. Develop policy guidelines on self-regulation for Kenya's private sector
- 8. Develop guidelines for local manufacturers to assess the product quality
- 9. Build local capacity to test and maintain the quality of locally manufactured products.
- 10. Implement rigorous monitoring practices by conducting regular checks and audits, establishing feedback loops for continuous improvement, and addressing any deviations promptly
- 11. Increase the number of HRH personnel and strengthen their capacity, particularly in postmarket surveillance, to effectively implement existing quality standards

4. Action plan

Table 32. Recommendations actions against the key findings

Market foundation/	Key findings, gaps and challenges	Proposed actions	Level where action is required		Lead	Timeline
output			National	County		
Market data	No overall health market information system that specifically tracks and monitors Kenya's health market, collates and share data	<u> </u>			 Digital health lead Health, research and M and E ICC 	2026
	There is limited sharing of data between the public and private sector. Rich data sources in the private sector (outside those needed for	Policies on access to KHIS data by the private sector have to be revised to allow for more reliable access to KHIS by the private sector. Currently only monitoring and evaluation staff have access and they			- Digital Health Agency	2026
	regulatory purposes) are not available to the public sector and the private sector has limited access to KHIS.	Closer collaboration between the public and private sector to allow for data sharing of non-routine data and trends.			Digital Health AgencyCounty M and E leads	2025
	Extensive fragmentation and very limited interoperability of health information systems used	2024 and roll out of the digital health			- Digital Health Agency	2026

Market foundation/	Key findings, gaps and challenges	Proposed actions	Level where action is required		Lead	Timeline
output			National	County		
	by the public and private sectors which hinders the effective utilization of whole market data at the national and county levels	breaking down the provisions of the			Digital Health AgencyCHMTKHFCounty private sector associations	2025
		Map the private sector's technology infrastructure and capacity needs at the national and county level.			Digital health AgencyCHMTs	2025
		Private sector investment models should be explored through a co-creation process to ensure the private sector is adequately prepared and resourced for the rollout of the Digital Health Act 2024			Digital health AgencyCHMTsKHFCounty Private sector associations	2025
	The Data Quality Assurance (DQA) framework rollout is not uniform between the public and private sector	technical committees representing public,			 CHMT KHF County Private sector associations Partner agencies 	2026
at-scale t market whereby private providers	private sector health providers receive the same assessment and	Capacity building for the private sector to be able to undertake DQA			 CHMT KHF County Private sector associations Partner agencies 	2026

Market foundation/	Key findings, gaps and challenges	Proposed actions	Level where action is required		Lead	Timeline
output			National	County		
	Data on consumer insights is not routinely collected outside of some private sector players and some donor-driven programs and consumer insights are inferred from consumption data	A national consumer needs assessment should be carried out on a regular basis to understand consumer needs and demands.			 Department of Standards Ministry of Health CHMT Partner agencies KHF 	2026
Market analytics		·			 Digital health Agency Health information, research and M and E ICCs 	2026
	Kenya has prioritized the development of data utilization for decision-making. The Kenya Health Data Collaborative convenes stakeholders in the health data ecosystems to strengthen the country's health information systems	delivery organizations in data management and oversight mechanisms			- CHMT	2026
Market Management	The Kenya Health Sector Partnership and Coordination Framework	Full implementation of the Kenya Health Sector Partnership and Coordination Framework.			Directorate of Sector coordination and intergovernmental relations	2025

2018 has only been partially implemented. The partnership secretariat has been convened and a number of intergovernmental forums have been held. All the other structures of the framework have not been activated.	A review of the framework needs to be carried out to assess its suitability considering the major changes that have happened in the sector since its development. Amendments to the framework should be carried out to make sure that it is fit for the current purpose (whole market view and also provides a coordination framework for counties).		CoGKHFPartner agencies	
The Kenya Health Sector Partnership and Coordination framework only stipulates the coordination mechanism at the national level. This has left the counties without guidance on how to structure the coordination of the sector at their level.	A template for a policy framework for the coordination of the whole market at county level must be developed. This framework needs to be aligned to The Kenya Health Sector Partnership and Coordination framework and should utilize the whole market approach.		- Council of Governors	2026
The CoGs health secretariat has limited capacity in terms of human resources to support the collaboration of the counties and the national Ministry of Health especially in policy development and implementation.	The council of Governors health secretariat must be enhanced and adequately resourced to support the coordination between the counties and the national government Sufficient human resources needs to be deployed for the secretariat to be represented adequately at the various ICCs, provide roving technical support and communication to counties on the implementation of new policies. A technical capacity needs assessment needs to be carried out at the secretariat.		- CoG	2026

Resources for market management functions at all levels are not adequate resulting in reliance on donor funding for management functions such as routine meetings of coordinating bodies.	The Government should budget for and dedicate sufficient resources to the market management and coordination function. Research on the impact of the market management function on health outcomes and its economic impact needs to be carried out to provide justification for the need for more resources for the market management function. Intense lobbying with the treasury to increase funding for management should be carried out on an ongoing basis. The government should also leverage the existing capacity within partner agencies to support market management.		 Principal secretary CECM's Health Financing, Governance, and Legal ICC Partner agencies Government thin tanks e.g. KIPPRA	2026
place. However, further capacity building is required, especially with new managers who may	Training of new health managers on government systems and protocols, existing policies that need to be implemented, and emerging issues in health care should be an ongoing activity. The Kenya School of Government should offer this training. Health managers need to be introduced to concepts around the health value chain and the impact of policies and regulations on this value chain. Capacity building on the coordination of the health market, market dynamics and market management also needs to be carried out.		 Kenya School of Government Principal Secretary Health Financing, Governance and Legal ICC	2026

not public hea delivery.	Ith service				
Health manag incentivized b on improving l outcomes or in resources to t sector. There	etter based health ncreased he health	The performance management frameworks should be looked at to align management incentives to the performance of the health market.		Directorate of Public HealthCECMs	2027
incentive for the lobby aggress more resource sector at all le develop, innovement mechanisms to resources in the corresponding to the local sector. There is not aggress to the local sector at all le develop, innovement and in the local sector. There is no the local sector. There is no the local sector.	nem to sively for es to the vels or to vative o increase he sector, apacities	Hiring of specific cadres of health managers for example human resource managers at the county level.		Directorate of Public HealthCECMs	
Coordination a relations between national and of levels especial development a implementation as challenging	een the county ally in policy and on is seen	The representation of the counties in the Interagency Coordination Committees (ICCs) must be explored. The capacity of the ICCs to set market strategy and objectives by product category should be enhanced. A review of all coordination meetings currently in place across various programs, and directorates, under the CoG and within counties needs to be undertaken. A harmonization of all these meetings needs to be carried out to prevent		 Directorate of Intergovernmental Relations CoG Health secretariat Partner agencies All directorates at the Ministry of Health. 	2025

		duplication, harness technical capacity vertical (county to national) and horizontally (across counties, directorates and ICCs). Integrating secretariats such as the CoG health secretariat and the partnership secretariats need to be strengthened to ensure they adequately participate at the levels that they operate at.				
Market Institutions	Kenya's healthcare market is characterized by a large number of diverse institutions with unclear roles and responsibilities, resulting in fragmented service delivery and limited data sharing.	Need to document and disseminate the responsibility for all institutions		-	MoH with support from partners ,PPB, Kenya Health Professions Oversight Authority and also other regulatory agencies	2025 and onwards
		Actions on coordination at the national and county level is discussed in the market management section		-	MoH Inter-Agency Coordinating Committees, County government National and county health management teams	By mid- 2025
	There is a lack of coordination among market institutions, which affects the overall	Conduct a comprehensive review of market institutions to clearly define roles and responsibilities, reducing overlaps and improving efficiency		-	Donors together with MoH	2025.
	impact on the healthcare market.	Findings from the review are shared to key stakeholders for action		-	Donors/CSOs Private Sector Associations with MoH	2025.
sig chains the a h	Market institutions face significant funding challenges, with insufficient funding from the national treasury and a heavy reliance on donor funding.	Conduct research and X advocacy, develop partnerships		-	Donors/CSOs Private Sector Associations with MoH	2025.
		Develop a sustainable funding model that includes both government and private sector contributions to ensure financial stability for market institutions		-	MoH SHIF and Private Sector Associations, private health insurers, private health providers	by mid- 2025.

	Regulatory institutions like the Pharmacy and Poisons Board are yet to draft policies accommodating newer technologies such as drone technology. This regulatory lag impacts the health market's ability to innovate and adapt to emerging technologies.	Update the existing comprehensive regulations and guidelines for the safe and effective use of newer technologies such as drone technology in the healthcare sector.		-	PPB, MoH, private health sector and CSOs	2025
	Limited information flow between public and private sectors, as well as between national and county levels, hinders effective coordination and planning.	Covered in the market management section in section X of the report		-	National Ministry of Health Directorate of Health Financing County Departments of Health Private health sector players including insurance	
Financing	Overreliance on donor funding for the strategic disease areas like HIV/AIDs, TB, FP and malaria	Develop national and county policy frameworks that commit the government to increased domestic resources and budgetary allocation to support strategic diseases.		- Health	firms Donors Health sector NGOs NHIF (SHIF)	Continuo us with a target of the year 2027
		Conduct impact evaluation research on government investing in strategic diseases on individual households and the country at large to be used to advocate for increased resources allocations.				By end of 2026

	Ensure the direct involvement of the counties and the private sector in the planning and budget forecasting discussions improve the private sector investment to the strategic diseases				Immedia tely and continuo us
Low budgetary allocation to the health sector	Put in place policy frameworks that can guarantee increased national and county level budgetary allocation to healthcare and enforcing ringfencing of the health sector revenues.			National Ministry of Treasury National MoH County Departments of Treasury County Departments of Health Donors Council of Governors Health sector NGOs	By financial year 2026 - 2027
NHIF benefits package does not cover donor funded HIV, malaria, TB and family planning products. The products are offered at no cost in public, FBOs and those private health facilities that report in the KHIS while excluding those that don't report.	Conduct a cost-effective analysis of inclusion of the currently donor funded HIV/AIDs, TB and family planning products into health insurance benefits package to improve on access and domestic financing from a pooled fund.			NHIF(SHIF) National MoH Research agencies Donors	Continuo us with a target of the year 2026
Low health insurance coverage (26% of the population). NHIF premium payments have been mandatory for	Review the health insurance monthly premiums so that they can be based on the percentage of one's income in the formal sector and mandatory to all		-	NHIF (SHIF) Private health insurance firms	Ongoing and continuo us
those employed and voluntary for those in the	Conduct an assessment on the ability to pay in the informal sector to inform the		-	NHIF (SHIF)	Ongoing and

informal sector. This is currently undergoing reforms to make it mandatory for all Kenyans.	minimum monthly premium for those in the informal sector		 Private health insurance firms National MoH County departments of health Research agencies 	continuo
	Strengthen the government universal health coverage indigents program by incorporating counties in allocating financial resources to support the most vulnerable to have health insurance instead of the waivers and exemptions given to them when they can't afford to pay for the health services in public health facilities.		 National Ministry of Treasury National MoH County Departments of Treasury County Departments of Health 	Ongoing and by financial year 2025 - 2026
Delayed NHIF reimbursement to health facilities, especially leve 2 and 3 facilities Counties are over relian on national government revenue allocation	all level 2 and 3 health facilities		 NHIF (SHA) Private hospitals Counties health facilities National referral hospitals Providers – specialists Pharmacies 	Continuo us and target by end of year 2025
	Invest resources in capacity building for health facility staff on claims management processes and the benefits package in order to improve reimbursement processes		NHIF (SHA)County Departments of Health	Immedia tely and close by continuo us
	Build capacity of the claims management and compliance teams at NHIF (SHIF) regional and head offices to improve the review and approval process		- NHIF(SHA)	Ongoing and continuo us
	Counties to expand own source revenues by automating revenue collection across all sectors to improve revenue collections		- County Departments of Health	Immedia tely and by 2027

		- County Departments of Treasury	
	Enlist the Kenya Revenue Authority (KRA) support in capacity building the county revenue collection teams or revenue collection at the county level	County TreasuryKRA	Financial year 2025 - 2026
Delays in the exch disbursements to counties	strengthen national and county governments periodic engagements on financing and jointly develop policy frameworks that support timely exchequer disbursements from the national treasury to the counties on a monthly or quarterly basis	 National Treasury Council of Governors Donors NGOs and civil society 	By 2026
	Establish and support structured financing dialogue mechanisms between the counties (through the CoG) and the national government	 National Ministry of Treasury National MoH County governments County Departments of Treasury County Departments of Health Council of Governors Donors 	Financial year 2025 - 2026
Health insurance f by beneficiaries ar healthcare provide extensive	nd the dependents with unique identifiers to	NHIF(SHIF)Private health insurance firms	Continuo us with target of financial year 2025 - 2026

		Insurance regulatory bodies and firms to enforce high penalties for fraud by beneficiaries, healthcare providers and the insurance firms.		 Insurance Regulatory Authority (IRA) Association of Kenyan Insurers (AKI) Public health leadership at both national and county private hospitals and pharmacies private health insurances NHIF(SHIF) 	Ongoing and continuo us
		Employ additional compliance and quality assurance officers to conduct facility audits and patient spot checks in all health empaneled facilities.			Ongoing and continuo us
	Limited capacity to predict and manage health risks due to lack of information sharing among the insurance industry players. For instance, a beneficiary can have multiple insurance without the insurance firms knowing.	Regulatory bodies and the private health insurance firms and facilities to initiate dialogue on acceptable legal frameworks for patient data sharing to enable the insurance players efficiently define their benefits package and minimize risks for fraud in the market. This will benefit the beneficiaries, patients, health facilities and the insurance firms as the risks will be better defined.		 Insurance Regulatory Authority (IRA) Association of Kenyan Insurers (AKI) Public health leadership at both national and county Private hospitals and pharmacies Private health insurances NHIF(SHIF) Public health level facility managers 	
Supply	Periodic stockouts are common due to inadequate funding for procurement and other administrative challenges such as inadequate planning, coordination and	Increased budget allocation for health products to meet the quantified needs at both national and county levels. Under the Social Health Insurance Funds working in concert with the FIF act 2024, more funds are expected to be collected at the facility level and retained within the health system at the county		 Department of Health Products and technologies. HPT ICC Treasury County health product and technologies- units 	2028

de es	Recution that leads to elay in procurement, specially with program ommodities.	level This will mean more resources will be available at the facility level that should be directed towards improving commodity security. Priority should be given to settling existing debt and preventing further accumulation of the same. Maintenance of cash flows within the HPT supply chain ecosystem will also promote local manufacturing as this is especially sensitive to cash flow challenges. Lobbying and advocacy for increased allocation towards for HPTs should be carried out at county and national levels.			
		Capacity building on the utilization of existing systems for forecasting and inventory management systems and systems upgrade to near real-time data and predictive analytics to better anticipate demand and prevent stockouts.		 Department of Health Products and technologies Partner agencies Technology provider County health product and technologies- units 	2026
		Investment in continuous education of supply chain personnel on best practices and technologies to improve efficiency and responsiveness and to cater for staff changes.		 Department of Health Products and technologies. Partner agencies County health product and technologies- units 	2025
fur	ependence on donor nding for specific oducts	Improved planning, coordination and procurement administration to prevent stock outs due to administrative delays. and		Department of Health Products and technologies.County health product and technologies- units	2026

	New funding sources and mechanisms need to be explored and established. This includes increasing domestic funding allocations (leveraging the FIF act 2024 and Social Health Insurance Funds)		- Department of Health Products and technologies.	
	Create innovative health financing models that reduce dependency on external donors especially for HPTs.		Department of Health Products and technologies.County health product and technologies- units	
	Long-term financial plans that ensure adequate funding for health commodities should be developed as part of County Investment and development plans and medium-term expenditure plans.		Department of Health Products and technologies.County health product and technologies- units	2026
Underutilization of the established local manufacturing capac of pharmaceuticals	procurements for the essential medicines		 KEMSA CEO Directorate of Health Products and technologies Academic and research institutions (including KEMRI) Partner agencies 	2026

	Supply chain data is not completely reliable and is available in various systems usually provided by vertical programs. Supply data in the private sector is also not visible to the public sector making a while market view difficult to generate.	Actualization of a technologically integrated supply chain system with the seamless integration of transport infrastructure and almost real-time data linking dispensing to quantification and procurement. Mapping of existing technological and transport systems needs to be undertaken to understand the entire supply chain ecosystem in Kenya. Strategic partnerships with players in logistics and information technology should be forged towards attaining the goal of an integrated supply chain infrastructure. Advocacy for the private sector to leverage these systems should also be carried out.		- - -	Digital Superhighway lead KEMSA DHPTU KHF Digital Health Agency	2030
Demand	Data and evidence on consumer demand for specific health priorities is limited and only exist through a small number of national level studies	Increase financial support for more critical research and studies to be carried out on consumer demand (or lack of) for specific health priorities		- ! - (- (National Ministry of Treasury National MoH County Departments of Treasury County Departments of Health Donors	Immedia tely and continuo us
		Conduct consumer demand studies nationally and in the focus counties every 3 years building this into the KDHS questions much more and other similar national surveys across all health areas such as HIV, TB etc.		l 1	MoH, KNBS, Private healthcare facilities and pharmaceutical companies, donors	2025
	Limited human resources for quality assessment at both the	Addressed in the supply and finance sections			MoH, Private healthcare facilities and	Immedia tely and

public and private sectors			pharmaceutical companies, donors	continuo us
Improve supply chain management to reduce stockouts and ensure continuous availability of essential products	Refer to the supply chain actions		- KEMSA, , Private healthcare facilities and pharmaceutical companies	Immedia tely and continuo us
There exists a gap in awareness, accessibility, affordability, or trust in healthcare services, leading to unmet health needs	Launch campaigns to increase access to healthcare information and drive demand		 County health departments, CHWs and NGOs 	2025 and continuo us
High healthcare costs serve as a major barrier to accessing essential medical services, leading to financial hardship, delayed or forgone care, and adverse health outcomes for individuals and communities	Refer to the financing and pricing sections of the report		Refer to the financing and pricing sections of the report	Refer to the financing and pricing sections of the report
Insufficient health insurance coverage among lower-income populations, leading to limited access to healthcare, financial instability due to out-of-pocket medical	Refer to the financing and pricing sections of the report		- Refer to the financing and pricing sections of the report	Refer to the financing and pricing sections of the report

	expenses, and poorer health outcomes				
Price	There are no price control policies for health services and products which allows each private provider and individual counties to	Conduct an extensive assessment of the pricing of health services and products across Kenya to ensure appropriate setting and regulation of prices.		 National MoH Regulatory bodies, e.g. PBB, KMPDC, Nursing Council etc. Private sector associations 	By 2025 -2026
	determine their prices. This affects access to health services by the majority of Kenyans especially those not covered by health insurance.	Joint public and private sector engagement or dialogue mechanisms on insurance pricing, benefits package and awareness creation to improve insurance uptake and utilization to eliminate out-of-pocket. This will reduce out-of-pocket and the impact of high prices on patients due to the pooling of risks by the insurance firms.		 Private sector hospitals, chemists, distributors, insurance firms and manufacturers NHIF (SHIF) County governments Donors NGOs and civil society 	Immedia tely and continuo us
		Conduct the health sector taxation status analysis to assist in advocating for key health products and technologies not to be taxed (zero rated or exempted) in addition to having a price policy on retail margins range to enable transfer of the low-price benefits to the patients. This will make products to be cheaper and hence easily affordable to the majority.		 Private sector hospitals, associations, chemists, distributors and manufactures Private insurance firms National Ministry of Treasury National MoH 	Financial year 2025 - 2026

	Overreliance on imported HPTs that is vulnerable to the changes in international markets and which can dramatically increase prices to consumers	Conduct a whole health market health products and technologies costing and investment feasibility studies to inform development of policies to support the subsidization of local pharmaceutical manufacturing.			Private sector hospitals, associations, chemists, distributors, insurance firms and manufacturers National Ministry of Treasury National MoH County governments County Departments of Treasury County Departments of Health KHF Health Sector	Immedia tely and ongoing
		National government to draft tax incentives package for local pharmaceutical manufacturers and also engage with developed countries for international pharmaceutical companies to set up factories in the country through bilateral agreements. This will lower local prices and reduce the impact of international markets on local prices of health products and technologies in line with the government's goal for 50% local manufacturing capacity by 2027.			National government foreign affairs ministry National ministry of health Ministry of trade Ministry	Continuo us and target financial year 2026 - 2027
Quality	Quality improvements is seen as too costly for smaller private providers such as level 2 private health facilities and chemists who report to	Invest in and carry out research to determine what return-on-investment that quality improvement initiatives make on peoples' health and Kenya's health system		-	Private sector Associations KHF, RUPHA, KAPH and so forth Donors Research agencies such as KEMRI	2025

have relatively low revenue	Findings of the research to be used to develop customized quality improvement models that will yield profits for the smaller private providers as well as improve on peoples' health and Kenya's health.	-	Private sector Associations KHF, RUPHA, KAPH MoH NGOs and donors	2026
	Assess small private providers in the USAID PSE focus counties- as a pilot-, evaluating clinical practices, infrastructure, and adherence to quality standards	-	Small private facility and pharmacy owners	2025
	Identifying potential innovative funding sources to funding support quality improvement in the private sector	-	Research institutions Private sector association, MoH , County department of health, NGOs, Professional bodies	
	Allocate targeted funds for quality improvement for support of private providers with the lowest capacity, offering grants or low-interest loans for infrastructure upgrades.	-	NGOs, Donors, Banks, county health departments, and quality improvement teams, donors	2026
	Simultaneously, update and modify existing programs (if needed) for small providers and implement quality improvement initiatives to enhance service delivery.	-	NGOs, health training institutions, and donors	2025 onwards
There is an absence of a comprehensive, overarching policy specifically focused on ensuring quality across the entire private healthcare sector in	Identify existing quality standards and regulations for private healthcare providers.	-	MoH, KHF and private sector associations, professional bodies county health departments	2025

Kenya. Instead, numerous individual policy documents address specific health priorities such as HIV, TB, and other diseases.				
Establish a unified quality policy for private healthcare providers	Analyze gaps and inconsistencies in these standards in focus counties		 MoH, KHF and private sector associations, professional bodies county health departments 	2026
	Assess the current quality landscape of private healthcare providers		 MoH, KHF and private sector associations, professional bodies county health departments 	2026
	Identify key stakeholders (providers, patients, government, insurers, etc.).		 KHF and private sector associations, professional bodies county health departments 	2026
No specific overarching self-regulation guideline framework for the entire private healthcare sector.	Conduct comprehensive research on with a focus on understanding existing practices, identifying gaps, and formulating robust policies and mechanisms for effective self-regulation			2025
	Develop policies/ guidelines on self- regulation for Kenya's private sector			2026
Local manufactured products will need to be quality assured as their volumes increases in	Conduct quality assessments on the capacity of local manufacturers		 Universities NQCL and PPB, Kenya Association of Manufacturers, 	2026
Kenya.	Assess the quality capacity of the existing manufacturers		 Universities NQCL and PPB, Kenya Association of Manufacturers, 	2026

	develop guidelines for local manufacturers which can then be used to assess the future quality		-	Universities NQCL and PPB, Kenya Association of Manufacturers,	2026
	quality criteria will need to be developed for new local manufacturers to given permission to set up manufacturing		-	Universities NQCL and PPB, Kenya Association of Manufacturers,	2026
	Develop local capacity to test and maintain the quality of locally manufactured products.		-		2025
	Implement rigorous monitoring practices by conducting regular checks and audits, establishing feedback loops for continuous improvement, and addressing any deviations promptly		-	MoH, NGOs NQCL and PPB, Kenya Association of Manufacturers,	Continuo us after the capacity building sessions
There are no forums that bring the public and private sectors together to focus on quality outside of vertical programs.	An example of an immediate coordination is implementing a regulatory system for managing referrals between the public and private sectors to ensure continuity and quality of care for patients transitioning between private and public facilities, and to cover the costs of specialized diagnostic services for clients referred from public to private facilities.		-	Whole markets TWG formed at the national and county level with support from USAID Partner	2025 and continuo us
Enforcement of quality standards is hampered by both a shortage of HRH personnel and inadequate capacity for conducting quality checks, particularly in post-market surveillance	Increase the number of HRH personnel and strengthen their capacity, particularly in post-market surveillance, to effectively implement existing quality standards.		-	MoH with support from partners ,PPB, Kenya Health Professions Oversight Authority and also other regulatory agencies	2025 and onwards

5. Annexes

Annex 1. Detailed scoring of the Healthy Markets Framework

Market foundation components

Rating Scale	Market Data	Market Analytics	Market Management	Market Institutions
	Minimal or very poor-quality data is available to monitor, analyze and shape product markets and understand consumer insights and need.	There is minimal capacity and/or funding to support routine tools such as demand forecasting or technical analyses to understand market barriers.	There is minimal or no coordination and organization by the government among key players in the market to agree on market strategy, fund analysis and interventions and deliver action.	Key market functions including procurement, supply chain, policies and regulation are not in place or require significant strengthening to support markets that meet consumer needs.
	Limited data is available to monitor, analyze markets, and only for public sector and some products; consumer insights may be available for certain products but gaps exist.	Limited capacity and/or funding to support routine tools for understanding markets, may be limited to one sector or a few products.	Coordination mechanisms may exist but not organized to support or focused on development of a comprehensive market strategy and action plan.	Limited market functions in place but not implemented in a way that is supportive of a comprehensive market approach and meeting consumer needs.
	Quality data is available on public markets, but minimal data is available on private sector product needs. Some consumer insights available but gaps exist.	There is some capacity and funding to support routine tools, but not sufficient to fully understand the product market and barriers.	Government and partners organize key players around specific topics, but not fully aligned around an overall market strategy and action plan or not fully inclusive of all relevant actors.	Some key market functions are in place, but others are missing or require strengthening to support markets that meet consumer needs.
	Quality data is available on public and private sectors and some consumer insights, with a few gaps.	Capacity and funding to maintain routine tools, with some identified opportunities to improve use and utility for identifying and addressing market barriers.	Government and partners organized to assess and address market health, with some known gaps in inclusivity or implementation.	Policies and institutions and supporting market functions are in place, with some identified opportunities to improve consumer responsiveness and access.

	Quality data is available, for both public and private sector, to monitor, analyze and shape national markets and understand consumer insights and need.	There is capacity and funding to support routine tools such as demand forecasting as well as specific technical analysis needed to understand specific market barriers.	Government has the capacity to lead and manage market health and there are frameworks, in both public and private sector, for setting market strategy and targets, taking action and monitoring progress.	The policies and institutions necessary for national markets to function well and deliver for consumers are in place. Key market functions such as procurement, supply chain, regulation and product selection are supportive of access.
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Market conditions - finance

Rating Scale	Definition
	There is insufficient financing to meet system demand and financing is subject to frequent shocks and unpredictability
	There is insufficient financing to meet current system demand but projections indicate that financing may be sufficient to meet system demand in the next 3 to 5 years and potentially reach additional consumers/geographies. Financing faces long recovery times to respond to shocks.
	There is currently sufficient financing to meet estimated system demand and future financing is projected to be sufficient to steadily reach additional consumers/geographies. There is evidence of coordination of financing to better respond to unpredictability.
	There is currently sufficient financing to meet estimated system demand and the system is largely meeting consumer demand. But there remains risk of financing gaps in the next 3 to 5 years based on consumer demand forecasts. There is evidence of long-term financing commitment that mitigates uncertainty.
	Financing is adequate to fund the HPTs needed to meet system demand now and is expected to remain so into the future. Financing is long-term, predictable, sustainable and responsive to changes in consumer demand. Mitigation measures are available to help cope with financing shocks.

Market conditions - supply

Rating Scale		Definition
		There are extended gaps in supply availability to meet currently funded demand and national level shortages or stockouts persist, contributing to barriers to access at point of service. National product supply for HPTs is volatile and severely affected by shocks
		There have been recent short-term or sporadic gaps in the supply availability to meet currently funded demand that may persist in the near-term, but changes in future supply may alleviate the shortages. National supply for most HPTs faces long recovery times to respond to shocks

	There is currently sufficient national supply to meet funded demand, but it is not sufficiently broad, robust, diverse and responsive to maintain supply of most HPTs in the face of shocks. Existing investments should improve resilience in 5-10 years
	There is sufficient available national supply to meet funded demand – and it is sufficiently broad, robust, diverse and responsive to maintain supply of most HPTs in the face of shocks. Strategies exist to improve resilience within 5 years but there is some risk of potential shortages based on demand forecasts in optimistic scenarios.
	There is sufficient supply availability through the national supply chain to meet funded demand and allow for adequate product availability and mix at point of service. The national supply of HPTs is broad, robust, diverse, and responsive enough to be maintained in the face of supply and demand-side shocks.

Market conditions - demand

Rating Scale	Definition
	The overall system is far from meeting the needs of consumers across geographies and channels.
	The overall system is not meeting consumer demand. But projections indicate that policy, financing and other conditions may be in place to meet system demand in the next 3 to 5 years and potentially reach additional consumers/geographies.
	Estimated system demand is currently met and conditions are in place to steadily reach additional consumers/geographies, but there remains significant risk of ongoing gaps in the future based on consumer demand forecasts
	Estimated system demand is currently being met and the system is largely meeting consumer demand. But there remains risk of gaps in the next 3 to 5 years based on consumer demand forecasts.
	Estimated system demand is being met now and is expected to remain so into the future. The overall system is able to meet the needs of consumers across geographies and channels and consumer access is not constrained by non-demand factors.

Market conditions - price

Rating Scale	Definition
	Current pricing and/or policies severely limit competitive and sustainable pricing for most HPTs (via public or private channels) AND/OR it creates a severe lack of access and affordability for end users.
	Current pricing and/or policies moderately limit competitive and sustainable pricing for many HPTs (via public or private channels) AND/OR it creates a moderate barrier to access and affordability for end users.
	Current pricing and/or policies limit competitive and sustainable pricing for many HPTs (via public or private channels) lack of access and affordability for end users, but existing policies or projected market growth should reduce limitations in 5-10 years

Current pricing or projected pricing trends promote equitable end user prices and access for most but not all HPTs (via public or private channels) AND/OR manufacturer financial sustainability, and/or existing policies or projected market growth should reduce limitations within 5 years
HPTs are available at the national level to all channels at competitive and affordable prices. End user pricing is equitable across methods, geographical regions, income groups and service channels. Margins through the distribution chain do not undermine affordability at point of service and viability and sustainability of channels is not adversely affected by pricing policies.

Market conditions - quality

Rating Scale	Definition
	A significant share of the HPTs across market channels does not meet quality standards and false or counterfeit products are prevalent (or suspected). Insufficient policies in place to address quality concerns.
	There are moderate concerns about quality of many HPTs in the national market and trends in buying practices could lead to a greater share of non-quality assured products on the market in the future. Limited policy interventions to address concerns.
	There are moderate concerns about quality of HPTs in national market, but they are specific to a known subset of products and ongoing policy efforts may address these. There is risk that trends in buying practices and shifts to direct government or private sector procurement could contribute to an increase in non-quality assured products on the market.
	There is minimal concern about quality standards across market channels currently, and changes in policies and/or trends in product options and buying practices are unlikely to contribute to an increase in quality assured products on the market. The policies of key funders and procurers are mostly supportive of quality.
	Across national market channels, products meet appropriate quality standards and there is a robust framework for quality assurance. The policies of key funders and procurers are supportive of quality and consumers are able to identify and access quality products without additional barriers.

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