



POLICY BRIEF

Enhancing data management for strategic health purchasing: Lessons from Kenya & Burkina Faso

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Background

Kenya at a glance		Burkina Faso at a glance	
Indicator	Data	Indicator	Data
Population	55,100,586.	Population	23,251,485
GDP per capita	USD 1949.9	GDP per capita	USD 874.1
Poverty headcount at 1.90/day	36.1%	Poverty headcount at 1.90/day	25.3%
Life expectancy	62 years	Life expectancy	60 years
Current health expenditure	USD 94.67	Current health expenditure	USD 56.95
Domestic government expenditure	48.73%	Domestic government expenditure	42.82%
Out-of-pocket expenditure as % of CHE	22.77%	Out-of-pocket expenditure as % of CHE	34.65%
External expenditure as % of CHE	18.43%	External expenditure as % of CHE	18.08%

Source: <https://data.worldbank.org/>

Strategic health purchasing (SHP) is a cornerstone of effective health financing, directly influencing the allocation of pooled funds to health providers. SHP goes beyond passive purchasing, which merely disburses funds without considering performance. Instead, SHP uses data to make informed decisions about what health services to purchase, from whom, and under what conditionsⁱ. This approach aligns incentives with health system goals and population health needs, thus promoting efficiency, equity, and quality in health service deliveryⁱⁱ.

In the drive towards Universal Health Coverage (UHC), countries must maximize the use of available resources. This necessitates robust data systems that can provide timely, accurate, and comprehensive information on health services, population needs, and financial expenditures. The Strategic Purchasing Africa Resource Center (SPARC) has highlighted the importance of data in SHP¹, noting that without high-quality data, the potential of SHP to improve health outcomes and system efficiency is significantly undermined.

This policy brief builds on a SPARC organized webinar that examined the current state of data management for SHP in Kenya and Burkina Faso, two countries at different stages of health system development but facing similar challenges in data governance, integration, and utilization. By exploring these challenges and the reforms being implemented to address them, this brief aims to provide actionable recommendations for policymakers and stakeholders involved in SHP and health data management.

Kenya’s Strategic Health Purchasing Landscape

Kenya’s health system is characterized by a mix of public and private health providers, with the Ministry of Health (MoH), 47 county governments, and the National Health Insurance Fund (NHIF) serving as the primary purchasers of health servicesⁱⁱⁱ. The NHIF, established in 1966, has evolved into a significant player in the Kenyan health sector, covering over 20% of the population. It contracts with more than 8,000 health providers, including both public and private facilities, to deliver a range of inpatient and outpatient services.

ⁱ Cashin, C., & Gatome-Munyua, A. (2022). The Strategic Health Purchasing Progress Tracking Framework: A Practical Approach to Describing, Assessing, and Improving Strategic Purchasing for Universal Health Coverage. *Health systems and reform*, 8(2), e2051794. <https://doi.org/10.1080/23288604.2022.2051794>
ⁱⁱ Kutzin, J. (2013). Health financing for universal coverage and health system performance: concepts and implications for policy. *Bulletin of the World Health Organization*, 91 8, 602-11 .
ⁱⁱⁱ Kazungu, J., Mbithi, L., Onyes, U., Nwaononiwu, E., Mbuthia, B., Marangu, M., Nyalita, A., Musuva, A., Bodunrin, O., & Kwasiga, B. (2021, November). Changing

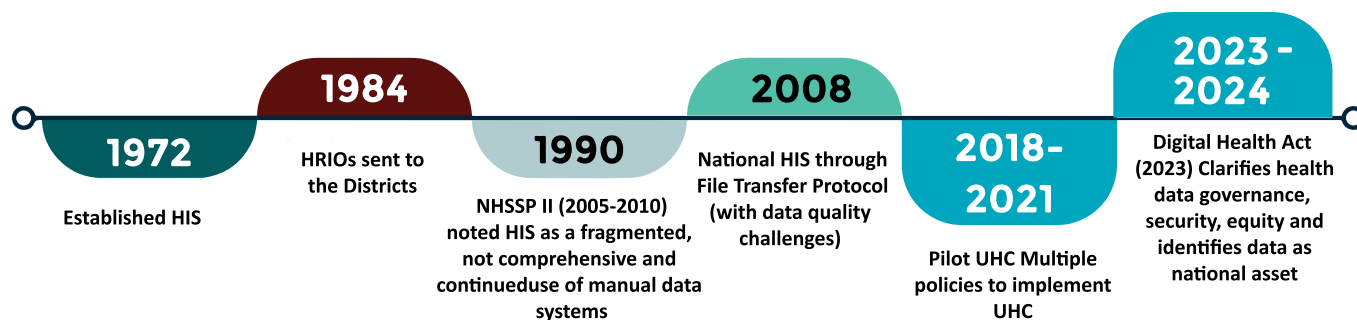


Figure 1. Analysis by Authors

However, Kenya's SHP landscape is hampered by fragmented health information systems. Each purchaser operates its own system, which is often not interoperable with others. This fragmentation creates silos of information, making it difficult to compile a comprehensive picture of health service delivery and financing across the country. For instance, the NHIF has its own claims management system, while the MoH and county departments of health (CDOHs) use different systems for reporting, budgeting, and performance management. This lack of integration not only complicates data collection and analysis but also places an additional burden on health workers who must navigate multiple reporting requirements.

The consequences of this fragmentation are significant. Data quality and accuracy vary widely across the different systems, leading to inconsistencies that undermine the reliability of data for decision-making. Health providers often face delays in reimbursement due to discrepancies between reported and actual service delivery, exacerbating financial pressures on already strained health facilities. The NHIF also faces cases of fraud and low health insurance coverage which undermine its effectiveness. Moreover, the absence of a unified data governance framework hinders efforts to ensure data security, privacy, and standardization across the health sector.

The Digital Health Act and its Implications

Recognizing the critical need for reform, Kenya enacted the Digital Health Act in 2023^{iv}. This landmark legislation aims to overhaul the country's health information systems by introducing a comprehensive digital health framework. The Act establishes a Digital Health Agency, tasked with developing and operationalizing an integrated health information system that connects all levels of care—from community health workers to national referral hospitals.

One of the key features of the Act is the creation of national and county health data banks. These data banks are designed to serve as centralized repositories for health information, ensuring that data from various sources is standardized, secure, and accessible to authorized users. By mandating regular data quality checks and audits, the Act seeks to improve the accuracy and consistency of health data, thereby enhancing its utility for SHP.

The Act emphasizes the importance of interoperability and integration, requiring that all health information systems, whether operated by public or private entities, be compatible with the national system. This is crucial for aggregating and analyzing data from different purchasers and providers to inform strategic health purchasing (SHP) decisions. Additionally, the Act establishes principles for data governance, including data security, privacy, and ethical use.

The reform also provides a legal framework for establishing the Kenya Digital Superhighway, designed to integrate all relevant health information systems nationwide. Key elements of this integration include:

- ▶ **National Health Information Exchange:** This exchange will consolidate existing registers, including patient, health worker, health facility, community health, national terminology, and national shared health records, streamlining data management and improving access to critical health information.
- ▶ **Interoperability of Key Systems:** The Act ensures that various health information systems can communicate and work together seamlessly. This includes integrating claims management systems, telemedicine platforms, and the national logistics and supply chain databases to enhance efficiency and data sharing.
- ▶ **Consolidation of Data Collection Systems:** The Act calls for consolidating key data collection systems, such as the District Health Information System (DHIS2), electronic community health information systems, and health management information systems, ensuring comprehensive and aggregated health data collection for effective SHP decision-making.

the game in purchasing health services: Findings from provider-purchaser engagement in Kenya. Strategic Purchasing Africa Resource Center.

iv National Council for Law Reporting. (2023). Digital Health Act, No. 15 of 2023. Published by the National Council for Law Reporting with the Authority of the Attorney-General. Retrieved from www.kenyalaw.org.

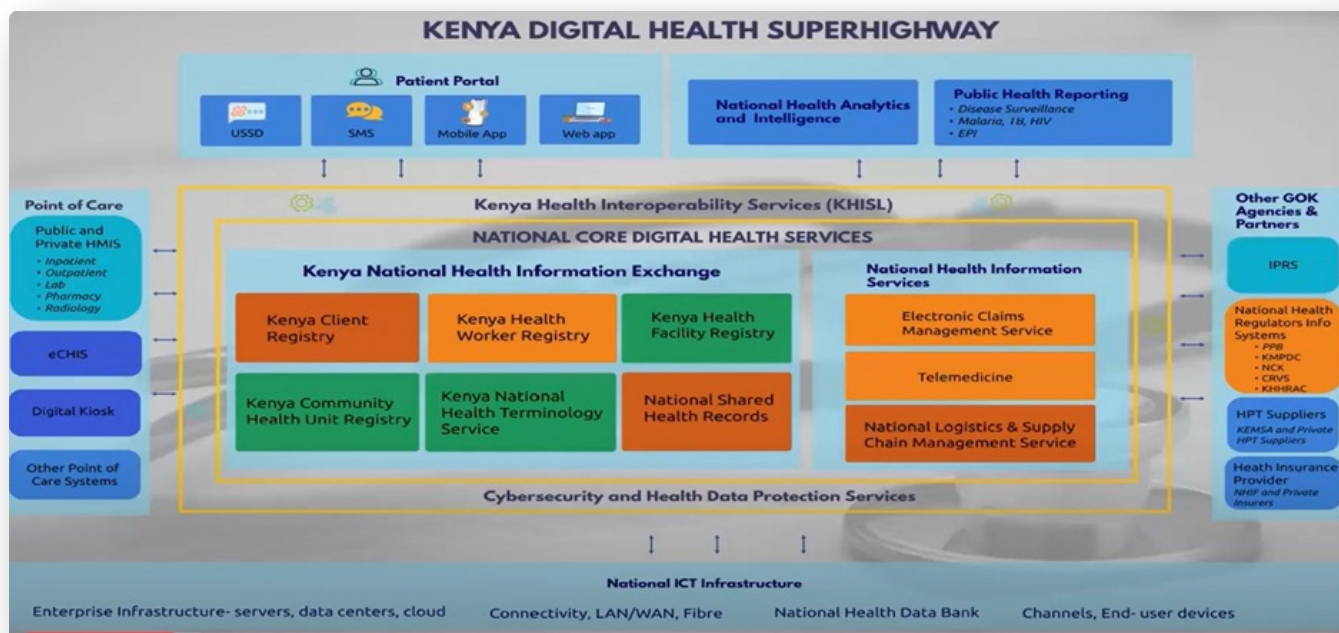


Figure 2. Kenya Digital Superhighway. Source: MoH Kenya

While the Digital Health Act represents a significant step forward, its successful implementation will require substantial investment in infrastructure, capacity building, and stakeholder engagement. Ensuring that all health facilities have the necessary digital tools, reliable internet connectivity, and trained personnel to manage digital health data is essential. Additionally, the involvement of all stakeholders—including government agencies, health providers, and development partners—will be crucial in achieving the Act’s objectives.

Burkina Faso’s Approach to Data Management for SHP

Burkina Faso, like Kenya, faces significant challenges in managing health data for SHP. The country’s health financing system is characterized by a mix of public and private schemes, with the *Gratuité* scheme being the most prominent. This scheme provides free health services to pregnant women and children under five, covering approximately 25% of the population. However, the health information systems that support these schemes are highly fragmented, with over 100 digital tools in use across the country. These tools operate in silos, managed by different organizations, and lack integration, leading to inefficiencies in data collection, reporting, and utilization^v.

The fragmentation of health information systems in Burkina Faso has several adverse effects on SHP. First, data quality and accuracy are often compromised due to inconsistencies in data collection and reporting practices across different regions. This poor-quality data makes it difficult to make informed decisions about health service purchasing and resource allocation. Second, the lack of integration between different data systems increases the administrative burden on health workers, who must navigate multiple, often redundant, data entry processes. This not only reduces efficiency but also increases the likelihood of errors and omissions in data reporting.

Burkina Faso has taken significant steps to improve health data management by adopting a multifaceted approach that integrates various health information systems. Key initiatives include the use of the District Health Information System (DHIS2) to aggregate health service data at the national level, and the implementation of social registers that leverage biometric technology to capture comprehensive population data. Also, the country has recognized the importance of multi-sectoral engagement in data governance, developing a multi-agency approach to ensure effective regulations and guidelines for data management. These efforts aim to enhance the accessibility, accuracy, and utilization of health data, ultimately supporting better decision-making in health service delivery.

Additionally, the Burkina Faso government, in collaboration with development partners, has initiated the Minimal Digital Ecosystem (MDE) project. This two-year pilot project, currently being implemented in two health districts, aims to defragment the country’s health information systems by integrating existing tools and developing new ones that complement and enhance the existing digital infrastructure^{vi}.

v Kiendrébéogo, J. A., Tapsoba, C., Kafando, Y., Kaboré, I., Sory, O., & Yaméogo, S. P. (2022). The Landscape of Strategic Health Purchasing for Universal Health Coverage in Burkina Faso: Insights from Five Major Health Financing Schemes. *Health Systems & Reform*, 8(2). <https://doi.org/10.1080/23288604.2022.2097588>

vi Kiendrébéogo, J. A., Tapsoba, C., Sory, O., Kaboré, I., Kafando, Y., Tiendrébéogo, S., Zombré, D., Kaboré, R., Konsebo, N., Relwendé, N., Ouattara, J. S. D., Foutry, G., Hyde, S., Green, D., Chaitkin, M., Ouédraogo, A. L., & Yaméogo, S. P. (2024). Is it better to bring digital health tools together? Where Burkina Faso is going with a minimal digital ecosystem (MDE). *Oxford Open Digital Health*, 2, oqae013. <https://doi.org/10.1093/oodh/oqae013>

The MDE project is designed to improve the availability and quality of data for SHP by enabling better data collection, reporting, and analysis at the primary healthcare level. By leveraging existing digital tools and introducing new, interoperable solutions, the project seeks to create a more cohesive and efficient health information system. The ultimate goal is to enhance the government's ability to monitor health service delivery, track financial expenditures, and make data-driven decisions that improve the efficiency and quality of primary healthcare services.

Key Challenges and Policy Recommendations in Data Management for SHP

While both Kenya and Burkina Faso are making significant strides in improving data management for SHP, several challenges remain. These challenges must be addressed to ensure that the ongoing reforms achieve their intended outcomes. The following policy recommendations are proposed to enhance data management for SHP:

- ▶ **Training and Capacity Building:** The success of digital health initiatives depends on the ability of health workers and managers to effectively use new digital tools. Both countries require substantial investments in training programs that equip healthcare personnel with the necessary skills to manage digital health data. This includes not only technical training on how to use digital tools but also training on data governance, privacy, and security.
- ▶ **Infrastructure:** The availability of reliable infrastructure is critical for the success of digital health reforms. This includes ensuring that all health facilities have access to consistent electricity, internet connectivity, and the necessary digital tools. In many rural areas, where infrastructure is often lacking, this will require significant investment in both hardware and the supporting infrastructure to maintain these systems.
- ▶ **Data Quality and Standardization:** Ensuring the accuracy, consistency, and completeness of health data is a major challenge in both countries. The fragmentation of health information systems has led to variations in data quality, which undermines the reliability of data for decision-making. Standardizing data collection and reporting processes across different systems is essential to improving data quality and ensuring that it can be used effectively in SHP.
- ▶ **Stakeholder Engagement:** Successful implementation of digital health reforms requires the active participation of all stakeholders, including government agencies, health providers, development partners, and the communities they serve. Engaging stakeholders in the design, implementation, and evaluation of digital health initiatives is critical to ensuring that these reforms are responsive to the needs of all users and are implemented in a way that is both efficient and sustainable.
- ▶ **Data Governance and Security:** As health data becomes increasingly digitized, the importance of robust data governance and security measures cannot be overstated. Both Kenya and Burkina Faso must ensure that their digital health systems are equipped with strong data governance frameworks that protect the privacy and security of health data while enabling its effective use for SHP. This includes establishing clear policies and procedures for data access, sharing, and protection, as well as mechanisms for monitoring and enforcing compliance with these policies.

Conclusion

In conclusion, enhancing data management for strategic health purchasing in Kenya and Burkina Faso is crucial for achieving the goals of efficiency, equity, and quality in health service delivery. The ongoing reforms, including Kenya's Digital Health Act and Burkina Faso's Minimal Digital Ecosystem project, are promising steps forward, but their success will depend on sustained investment in infrastructure, capacity building, and stakeholder engagement. By addressing these challenges, both countries can unlock the full potential of strategic health purchasing to improve health outcomes and drive progress towards Universal Health Coverage.

About SPARC

SPARC is an initiative implemented by Amref Health Africa in partnership with Results for Development (R4D) and more than nine technical partners (Universities & Research organizations), and Amref Country Offices in more than 14 countries in Sub-Saharan Africa and funded by the Bill & Melinda Gates Foundation (BMGF).

SPARC provides opportunities for countries in Sub-Saharan Africa to learn and apply practical solutions that advance reforms on health financing and strategic health purchasing. For more information, please visit our website at <https://sparc.africa>. For questions, please reach out to us at info@sparc.africa