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The transition from the National Health Insurance Fund (NHIF) to the Social Health Insurance Fund (SHIF) presents a policy shift towards realising Universal Health Coverage (UHC) in Kenya. However, this transition has faced significant challenges that impact the right to health, particularly for vulnerable and marginalised groups (VMGs). A major concern within this transformation is the role of digitalisation in health care management and its implications for service delivery. This policy brief highlights the nuances posed by health care digitalisation in the NHIF to SHIF policy and administrative shift.

Human Rights Implications of Health Care Digitalisation in Kenya

The evolution of digital health is largely driven by technological advancements, the quest for more efficient health care, and the growing demand for available, accessible, affordable and quality services. In this regard, the transformative potential of Information and Communications Technology (ICT) in fostering human progress and creating knowledge societies is widely recognised. Despite the advancements in technology, the World Health Organization (WHO) notes that most countries, including Kenya, are yet to fully leverage on digital health for positive outcomes. It is against this background that the Collaboration on International ICT Policy for East and Southern Africa (CIPESA), the Danish Institute for Human Rights and the Kenya National Commission on Human Rights (KNCHR) undertook a human rights impact assessment on digitalisation of the health care sector in Murang'a, Laikipia, Kisii and Homabay counties in Kenya. The assessment included the NHIF to SHIF transition, digitalised solutions in the sector and their potential impacts especially on VMGs to access quality health care.

Notably, Kenya's journey towards a rights-based digital health system requires a coordinated approach that addresses infrastructure, regulatory enforcement, gender equality and resource allocation and management. By adopting the recommendations found in this brief, Kenya can create a digital health environment that not only advances health care service delivery but also protects, promotes and respects the rights of all its citizens, particularly those most at risk of exclusion.

Laws and Policies Governing Health Sector Digitalisation

The Constitution of Kenya (2010) under Article 43(1)(a) guarantees every person the highest attainable standard of health which includes the right to health care services, including reproductive health care. Key legal frameworks include:

1. The Health Act, 2017:

- Integrates digital health solutions with an emphasis on privacy and security.
- Prohibits disclosure of health information without consent, except under specific conditions.
- Supports telemedicine and electronic health records (EHRs).
- Establishes a National Health Information System with strict data protection rules.
- Encourages digital systems to improve health outcomes, ensuring compliance with privacy standards.

2. National eHealth Policy 2016-2030:

- Ensures digital health solutions that comply with data protection standards.
- Promotes encryption, secure storage, and controlled access to health information.
- Requires interoperable health information systems.
- Supports EHR systems and secure patient information.
- Promotes training of health care professionals in managing digital health tools and data responsibly.

3. Data Protection Act, 2019:

- Protects personal data, including health data, with specific security and privacy provisions.
- Classifies health data as "sensitive personal data" with safeguards against unauthorised access.
- Requires lawful and transparent data processing with explicit consent.
- Empowers individuals to access, correct, and delete their health data.
- Requires collection of only necessary data for health care service delivery or insurance purposes.

4. Digital Health Act, 2023:

- Provides a framework for digital health services in Kenya.
- Ensures digital health innovations respect privacy and confidentiality.
- Mandates electronic health systems complying with data protection laws.
- Promotes interoperable health information systems with standardised data sharing protocols.
- Supports telemedicine and mobile health solutions with data security measures.
- Requires licensing for digital health service providers.

5. Social Health Insurance Act, 2023:

- Manages health insurance schemes with digitalisation of health care financing and data management.
- Protects personal data collected for health insurance purposes.
- Treats patient health information confidentially, adhering to data protection regulations.
- Integrates digital systems for efficient and secure claims, payments, and patient records processing.

Impact of Multiple Laws on Health Sector Digitalisation

As observed above, Kenya's health sector is governed by multiple legal and policy frameworks. While these laws provide a strong foundation for digital health, they also introduce complexities that affect the harmonization and implementation of digital health solutions. Regulatory overlap, inconsistent enforcement, and gaps in interoperability among health information systems hinder the seamless transition towards an integrated digital health infrastructure.

A significant challenge is the digital disconnect between the national and county governments. While health care services are devolved, digitalisation efforts have not been uniformly implemented across counties. Some counties have adopted sophisticated digital solutions, while others still rely on manual record-keeping, creating disparities in service delivery and patient data management. Additionally, the lack of a standardized health information exchange framework exacerbates inefficiencies, making it difficult to synchronise data between county and national systems. This fragmented approach limits the effective deployment and use of digital solutions, reducing interoperability, efficiency, and data-driven decision-making, ultimately hindering optimal healthcare delivery.

Key Human Rights Impacts Assessed

1. Data Privacy Breaches

- **Inadequate Data Security Measures:** Gaps in data protection infrastructure, especially in community health units, dispensaries, health centres and sub-county public health facilities. Unauthorized access to medical information that might lead to data misuse due to underinvestment in digital security.
- **Lack of Compliance with Data Protection Standards:** Despite stringent measures in Kenya's Data Protection Act, 2019, compliance remains a challenge due to limited technological expertise and enforcement mechanisms that would lead to data protection lapses.

- **Weak Enforcement Mechanisms:** This is hinged on inadequate resources and training of enforcement agencies to enhance data protection compliance and regulatory oversight.

2. Unequal Access to Digital Health Services

- **Infrastructure Constraints:** Inadequate access to electricity and internet connectivity continue to hinder the expansion of digital health services in rural and underserved areas. The slowed adoption and utilisation of alternative sources of energy e.g. solar, have also compounded the issue.
- **Gender-Based Disparities:** Women, especially in rural and underserved areas, continue to face cultural and financial barriers hindering their access to digital health and information especially in reproductive health services, necessitating gender-sensitive digital policies.
- **Barriers for the Elderly and Persons with Disabilities:** Many elderly persons and Persons with Disabilities face challenges in accessing digital health services due to a lack of digital literacy, assistive technologies, or accessible platforms. Those unable to use digital tools independently often rely on third parties - such as caregivers or family members - to access health services, which raises concerns about data privacy, consent and potential misuse of personal health information. Inclusive design, digital literacy programs and policies that safeguard the autonomy and privacy of these groups are essential in addressing these challenges.

3. Challenges in Data Governance and Consent

- **Inadequate Consent Protocols:** VMGs, including older persons and persons with disabilities, often do not fully understand data-sharing practices. This is compounded by digital literacy challenges with health care providers availing inadequate information on utilization of the health information obtained.
- **Inconsistent Application of Data Protection Principles:** Data privacy awareness is stronger in urban areas. Most health care workers lack prerequisite training in sensitive health information management and protection, leading to inconsistent application of privacy standards.

4. Digital Health Systems Implementation Gaps

- **Limited Health Care Worker Training:** Health care workers have inadequate training, infrastructure, and system support in digital health utilisation and management, affecting data privacy and security of sensitive health information.
- **Infrastructural Challenges:** Health care providers face infrastructural deficiencies like inadequate access to equipment, internet and energy sources, impacting service delivery and secure management of electronic health records.

5. Concerns over privatisation of public health care

- **Corporate control over public health systems:** The Ministry of Health outsourced the development and management of SHA's Integrated Healthcare Information Technology System (IHITS) to a Safaricom-led consortium. This arrangement grants private companies control over critical public health care infrastructure, including data management and system operations, raising concerns about accountability, public interest protections, and long-term government oversight.
- **Exclusion and disruptions in health care access:** The transition from NHIF to SHIF was poorly executed, with NHIF cards deactivated before SHIF systems were fully functional. Technical failures in biometric verification and claims processing have left many patients without access to healthcare. Additionally, the flawed means-testing system disproportionately excludes vulnerable populations, particularly those without national IDs or stable mobile connectivity, undermining the goal of UHC.
- **Lack of transparency and accountability:** The procurement process for the SHA system has been marred by secrecy, with concerns over single-sourcing and limited government oversight. County governments, which play a crucial role in healthcare delivery, were not adequately involved in the process. Further, the absence of clear regulatory mechanisms to safeguard patient data and ensure equitable service provision heightens the risk of commercial exploitation of public health resources.



The transition to SHIF offers Kenya an unprecedented opportunity to deliver its Universal Health Coverage promise. However, systemic gaps risk derailing this vision. KNCHR urges swift, decisive action from the government, healthcare providers, and stakeholders. The cost of inaction is too high for millions relying on affordable, equitable healthcare.

Former KNCHR Chairperson, Roseline Odede, HSC in [Press Statement on the State of Human Rights in Kenya – November 2024](#)



The **UNDP Digital Development Compass** provides a visual representation of Kenya’s digital ecosystem (out of a scale of 5), highlighting strengths and gaps in various sectors. According to the Compass, Kenya demonstrates strong government support for digitalization, with high scores in implementation capacity (4.42), leadership (4.00), and cybersecurity (5.00). The country excels in digital payments (5.00) and data exchange (3.93), supporting financial and public services. However, challenges remain in digital literacy (2.74), usage and adoption (1.77), and cultural norms (1.65), which hinder widespread digital transformation. While cybersecurity and consumer protection (5 and 3.83 respectively) are well-developed, gaps in business support (0.62) and financial services (2.21) limit the growth of digital enterprises. For healthcare digitalization, the disparities highlighted by the Compass mean that despite strong infrastructure for secure digital health records and telemedicine, low digital literacy and adoption could hinder equitable access. Addressing these challenges through inclusive policies and digital skills training for both healthcare workers and the wider community is key to maximizing the benefits of Kenya’s digital transformation.

Enhancing Collaboration between National and County Governments for a Resilient Digital Health Infrastructure

Despite the challenges, there are efforts to create synergies in digital health. The government has initiated the development of a National Health Information System, which aims to standardise health data collection and sharing across counties. The Digital Health Act (2023) also promotes interoperable systems that facilitate seamless data exchange. However, implementation remains inconsistent due to variations in county-level digital infrastructure, workforce training, and resource allocation.

Greater collaboration between national and county governments is needed to bridge these gaps. Establishing a unified health data governance framework, investing in capacity-building for national and county health workers, and leveraging public-private partnerships for infrastructure development can enhance digital integration. Furthermore, aligning digital health policies with human rights principles will ensure equitable access to health care for all Kenyans, particularly marginalised populations.

Recommendations on the NHIF-SHIF Transition

1. **Enhance digital infrastructure:** Fully operationalize the SHA platform and integrate it with existing systems like Kenya Health Information System and Kenya Electronic Medical Records.
2. **Conduct public awareness campaigns:** Educate citizens on SHA benefits and processes to dispel misinformation and encourage enrolment.
3. **Expedite empanelment of facilities:** Increase the accreditation of healthcare providers to ensure uninterrupted access to services.
4. **Strengthen National-County coordination:** Align roles, resources, and responsibilities to streamline service delivery under the devolved healthcare framework as stipulated under the Fourth Schedule of the Constitution.
5. **Review contribution models:** Adjust means-testing mechanisms to ensure affordability, especially for vulnerable and marginalized populations.
6. **Prioritize capacity building:** Train healthcare workers and Community Health Promoters to effectively navigate the transition and support beneficiaries.
7. **Incorporate stakeholder feedback:** Deliberately establish clear communication channels and include healthcare workers, vulnerable and marginalized groups in the design and implementation of SHA systems to promote inclusivity.
8. **Clarify referral pathways:** Define roles for various healthcare levels under the Primary Health Care Act to simplify patient navigation.

9. **Ensure accountability and transparency:** Regularly audit the transition to address and mitigate inefficiencies and restore public trust.



Recommendations for Human Rights-Based Digital Health Implementation

1. **Strengthen enforcement mechanisms:** To ensure robust protection of patient data, Kenya must allocate more resources to regulatory bodies tasked with enforcing the Data Protection Act. Strengthened enforcement mechanisms will enhance compliance and establish accountability for health care providers, with penalties in place for data breaches and unauthorized access.
2. **Expand infrastructure for digital health services:** Equitable access to digital health services requires significant investment in ICT infrastructure, especially in rural and underserved areas. Expanding internet coverage, improving electricity supply, and equipping health care facilities with necessary digital tools will support the integration of digital health solutions across Kenya.
3. **Targeted training for health care workers:** Training health care workers on data protection, digital health systems, and patient privacy is essential. By building capacity among health care staff, Kenya can ensure that data is handled responsibly, and patient rights are upheld. Targeted training also empowers health care workers to effectively manage and operate digital health technologies, reducing the risk of data breaches and misuse.
4. **Promote gender equality in digital health access:** Addressing the digital gender divide is critical for inclusive health care. Policies and programs must work to increase women's access to digital health technologies and provide gender-sensitive training to support their use. Additionally, efforts to dismantle cultural and social barriers that limit women's autonomy in health care decision-making are necessary for true equity in digital health access.
5. **Offline alternatives to ensure inclusivity:** While expanding access to and affordability of internet and digital tools are crucial, not all citizens will be able to access services through digital means. Therefore, feasible and dignified offline alternatives or physical entry point for human assistance should be explored to ensure that no one is left behind in Kenya's digital health evolution.
6. **Prioritise public health investment in line with the Abuja Declaration:** The government must commit to increasing domestic healthcare financing in line with the Abuja Declaration's target of allocating at least 15% of the national budget to

health. Failure to meet this benchmark has left critical health services vulnerable to privatization, undermining equitable access, data sovereignty, and long-term sustainability. Over-reliance on private entities in digital health implementation risks deepening disparities and limiting government oversight. Strengthening public health investment is essential to ensuring that UHC is achievable.

- 7. Institutionalise human rights-based collaboration between National and County Governments:** Effective digital health implementation requires well-coordinated efforts between national and county governments to ensure policy alignment, resource allocation, and infrastructure development to eliminate disparities. A clear governance framework should define roles and responsibilities, preventing duplication of efforts and bridging digital disparities across the counties. Additionally, regular multi-stakeholder engagements, joint planning sessions, and transparent data governance structures must be institutionalized to enhance cooperation. This will ensure that digital health systems are interoperable, patient rights are protected, and all individuals - especially marginalized populations - have equitable access to quality healthcare services.



Research Partners

The research into the human rights impacts of digital health services in Kenya was conducted in a partnership between **the Kenya National Commission on Human Rights** – Kenya’s National Human Rights Institution, **CIPESA - The Collaboration on International ICT Policy for East and Southern Africa** which works to promote effective and inclusive ICT policy, and **the Danish Institute for Human Rights** - Denmark’s national human rights institution which works internationally to address the human rights implications of technology use.