

KISII COUNTY

HEALTHCARE INNOVATIONS



OPEN PHENCES



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KISII COUNTY INNOVATIONS REPORT [Innovations in Healthcare: Kisii County]

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FOREWORD

Counties across Kenya are working towards universal healthcare. Increasingly, they are recognizing the value of combining strengths and capacities of both the public and non-public sectors, yet information on the latter is often scanty or missing altogether. At the same time, there is a tendency towards reduced development assistance for health, which means that Kenya (like most other low- and middle-income countries) will need to identify alternative sources of resources (human, financial, technological, and physical). All these factors underscore the importance of encouraging public private sector engagement, collaboration, and partnership.

Effective engagement requires good information on what is happening outside of the formal government systems. It is for these reasons that the Open Phences Hub is undertaking to map tech and non-tech innovations taking place within the counties in Kenya.

Limited resources amidst boundless need create a huge demand for innovation. But these are unlikely to have meaningful impact, if policy leadership fail to appreciate their existence, role and impact, and therefore, consider them as resources during planning and budgeting.

This 'County innovations' report presents a summary of county information (general and healthcare information), selected healthcare indicators and county innovations (description and distribution). It has been prepared for a diverse audience. Anyone working/having interest in healthcare space and related sectors including health management teams, health facility managers, practitioners, health service users, persons working in health financing institutions, innovators, communities and community-based organizations. It was also developed to help healthcare managers appreciate the diversity of ideas and resources available within and outside of their jurisdictions. Finally, it was developed for health providers and investors to understand innovations, who they are targeted at, how they work, and what their (perceived and measured) impacts) for adoption and/or scaling.

The Open Phences team developed this document in recognition (a) the gap in the healthcare system on the low awareness of health system users on existing innovations and their potential impact, excessive fragmentation and duplication of innovations that serves similar functions but don't speak/connect with each other resulting in small scale innovators and ideas which have low probability of scaling (b) county management teams do not have a one resource where they can access information about the available health infrastructure, mortality and morbidity indicators and health service utilization indicators (that is updated on a regular basis).

The document was developed by Paul Waswa, Dan Makuba and Francis Wafula, with input from the broader Open Phences team that includes Noelle Orata, Elizabeth Gitau, Muriithi Njogu, Brenda Bunyasi, Annette Murunga, Cornelius Kiptoo, Irene Khayoni, Eric Tama, Peter Nguhiu and Lyndon Marani. Funding was provided by the Open Phences Hub.

Paul Waswa
Project Lead Analyst

INTRODUCTION

Definition of Terms

Dominant economic activity - This is the economic activity that contributes the highest gross value added to the county GCP

Gini coefficient - The Gini coefficient is a statistical measure of economic inequality in a population. The coefficient measures the dispersion of income or distribution of wealth among the members of a population.

Age dependency ratio- This is the proportion of the population (age 0-14 and 65+ years) that is dependent on the working population (age 15-64 years).

Old-Age Dependency Ratio- This is the population aged 65 years and above relative to the total number of persons aged 15-64 years.

Child Dependency Ratio - This is the number of children aged below 15 years relative to the total number of persons aged 15-64 years.

Total fertility Rates - The average number of children a woman would have throughout her childbearing years (15-49).

Child Immunization (Fully Immunized) - This is the proportion of fully immunized children from 0 to 59 months.

Human Development Index - The human development index (HDI) is a summary measure of assessing progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living.

The Gender Inequality Index (GII) - reflects inequality in achievements between men and women in reproductive health, empowerment and labour market - the higher it is the more severe the inequalities are.

Rural Access Index - Measures the proportion of the rural population that can access an all-weather road within two kilometres.

County Information

Overview

Kisii County is one of the 47 counties in the Republic of Kenya. It shares common borders with Nyamira County to the North East, Narok County to the South and Homabay and Migori Counties to the West. The County lies between latitude 0° 40' 38.4" South, and longitude 34° 34' 46° 61" East and covers an area of 1,317.5 km².

Kisii County is divided into 11 Sub-Counties, 33 Divisions, 103 Locations and 237 SubLocations.

Demographic features

The county has a total population of 1,266,860 persons. Out of which 605,784 are male and 661,038 females. The county has a population density of 957 persons per square kilometre.

OTHER FEATURES

FEATURE	COUNTY ESTIMATE	NATIONAL
Gini coefficient	35.4	40.4
Age dependency ratio	84.7	81.6
Old age dependency ratio	7.0	6.9
Child dependency ratio	77.6	74.7
Rural Access Index - %	87	62.9
Population owning mobile phones (%)	43.8	47.3
Population accessing internet (%)	9.4	22.6

Health Information

Health Infrastructure

The County Health system is organized in accordance with the Kenya Essential package of health (KEPH) level structure from the household level to primary health care level to hospital level offering referral and specialized services. The county has 171 level II facilities, 65 level III facilities and 40 level IV facilities, 2 level V facility and no level VI facilities (KMFL 2022).

The total bed density in the county is 21 per 10,000 of the population.

Health personnel

The doctor to patient ratio stands at 1:7,000 against the recommended World Health Organisation (WHO) of 1:1,100.

The core health worker density per 10000 of the population stands at 14 .

Morbidity

In order of prevalence, the five most common diseases are malaria, diarrhea, skin diseases, pneumonia and respiratory diseases.

HEALTH OUTCOMES

INDICATOR	COUNTY OUTCOME	NATIONAL
Child immunization(%)	96.9	91.2
people living with HIV	34,014	1,717,708
Delivery at health facility(%)	95.2	70
Total fertility rate	3.1	3.4
Infant mortality rate	25.9	35.5
Under-5 mortality rate	41.7	52.0
Maternal mortality rate	325/100,000	355/100,000
Morbidity (%)	15.5	21.5
Households accessing safe drinking water (%)	52.1	58.8
Health insurance coverage(%)	22.1	21.3

Tech-Innovations

Triggerise

The Need

Our health ecosystem is diverse, and there was need to have a platform through which each player within the health ecosystem can be identified with what they do.

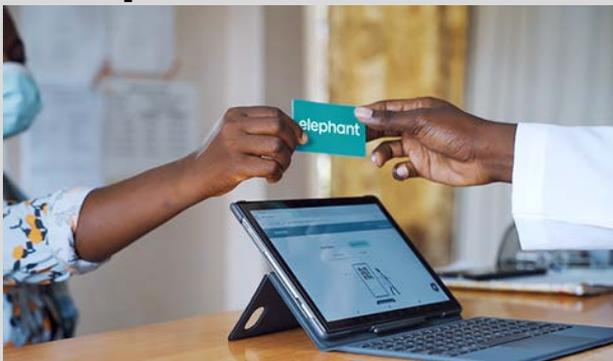
The Innovation

They connect across supply and demand, building an ecosystem of partners, local services and communities to deliver joined-up health services on the ground. The platforms connect the members' needs to existing local providers, by building ecosystems of local health services, community organizations and micro-entrepreneurs using tools such as reminders, follow-ups, subsidies and instant rewards to motivate members.



Currently connection is primarily adolescent girls and young mothers to a variety of sexual and reproductive health services and Antenatal care from local providers.

Elephant



The Elephant system provides a holistic solution for facilities. This is because it:

1. empowers patients with secure access to their eHealth records via elephant card.
2. automates care, reporting, stock and billing management integratable through web API.
3. Analytics dashboard that provide real time actionable data for tracking and decision making.

The patient registers at a facility and receive an Elephant card, a secure, scannable digital health record, which they can access on any device. by scanning the card, clinicians can easily pull up a patient's history.

Non-Tech Innovations

EVERY SECOND MATTERS FOR MOTHERS AND BABIES-UTERINE BALLOON TAMPONADE (ESM-UBT)

Organization: Massachusetts General hospital (MGH)

Partners: Kisumu Medical and Education Trust (KMET), the Center for Maternal Health Innovation (CMHI), and the Kenya Obstetrical and Gynecological society.

The RMNCAH Need

Among the leading and common causes of maternal deaths in Kenya is postpartum hemorrhage (PPH).

The innovative solution

Every Second Matters for Mothers and Babies-Uterine Balloon Tamponade (ESM-UBT) an innovative device to help control postpartum hemorrhage (PPH) especially in resource constrained settings.

