

LAIKIPIA COUNTY

Healthcare Innovations





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LAIKIPIA COUNTY INNOVATIONS REPORT [Innovations in Healthcare: Laikipia 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 'Laikipia 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
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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

Laikipia borders Samburu County to the North, Isiolo County to the North East, Meru County to the East, Nyeri County to the South East, Nyandarua County to the South, Nakuru County to the South West and Baringo County to the West. The County lies between latitudes 0o 18" South and 0 o 51" North and between longitude 36o 11" and 37o 24' East. It covers an area of 9,462 km² and ranks as the 15th largest county in the country by land size.

Laikipia County comprises of five administrative sub counties (formerly districts) namely Laikipia East, Laikipia North, Nyahururu, Laikipia Central and Laikipia West. The sub county headquarters are at Nanyuki, Doldol, Rumuruti, Lamuria and Nyahururu respectively. The county is further subdivided into 16 divisions, 55 locations and 110 sub-locations

Demographic features

Laikipia is cosmopolitan with about 23 communities comprising of Maasai, Samburu, Rendile, Somali, Pokots, Kalenjins, Meru, Kikuyu, and Turkana among others. “Laikipia” is a Maasai word equivalent to trees plain reflecting the large highland plateau.

Baringo county has a total population of 666,763 persons. Out of which 336,322 are male and 330,428 females. The county has a population density of 61 persons per square kilometre.

The county is largely rural in settlement with the main economic activities being crop farming, livestock rearing, tourism, retail and wholesale trade. The county is a member of the Mt. Kenya and Aberdares Counties Economic Bloc, Amaya Triangle Initiative and Frontier Counties Development Council.

OTHER FEATURES

FEATURE	COUNTY ESTIMATE	NATIONAL
Gini coefficient	38.6	40.4
Age dependency ratio	82.6	81.6
Old age dependency ratio	6.6	6.9
Child dependency ratio	76.1	74.7
Human development index	0.574	0.52
Human poverty Index	57.3	29.1
Rural Access Index - %	72	62.9
Population owning mobile phones (%)	51.5	47.3
Population accessing internet (%)	17.9	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 185 level II facilities, 17 level III facilities and 14 level IV facilities and no level V and level VI facilities.

The total bed density per 10000 of the population in the county is at 15.

Health personnel

The core health worker density per 10000 of the population stands at 17.

Morbidity and Mortality

The five most prevalent diseases for under 5 in the county include; Respiratory Tract Infections (RTI), diarrhoea, clinical malaria, eye infections and Pneumonia. The leading diseases for the population of over 5s include; Respiratory Tract Infections (RTI), diseases of the skin, rheumatism and joint pains, diarrhoea and hypertension. The HIV prevalence rate stands at 3.2 per cent.

HEALTH OUTCOMES

INDICATOR	COUNTY OUTCOME	NATIONAL
Child immunization(%)	95.4	91.2
people living with HIV	7,770	1,717,708
Delivery at health facility(%)	76.8	70
Total fertility rate	4.0	3.4
Infant mortality rate	17.3	35.5
Under-5 mortality rate	27.9	52.0
Maternal mortality rate	182/100,000	355/100,000
Morbidity (%)	14	21.5
Households accessing safe drinking water (%)	65.1	58.8
Health insurance coverage(%)	21.5	21.3

Tech-Innovations

The Community Health Engagement Platform – M-Jali

Poor health information systems have been identified as a major challenge in the health-care system in many developing countries including Sub-Saharan African countries. Unlike other developed continents, Africa, and especially the Sub-Saharan region, still endure major problems in the access to essential human needs like shelter, food and healthcare. The system is often challenged by a lack of sustainable funding, poorly-equipped facilities, erratic supply chains, and shortages of healthcare professionals. Timely and accurate data about the health and sanitation status of most inhabitants in Sub-Saharan Africa is scanty and not readily available. Data collection happens manually and it takes three months on average before data collected at the community level is incorporated in the formal system.

M-Jali, Mobile-Jamii Afya Link, is AEL's innovative solution for improving collection, analysis and dissemination of community data. It incorporates a mobile application for capturing data at the household level and transmitting it to a web-based database.



The M-Jali platform presents huge opportunities for the future of healthcare technology through Business and Artificial Intelligence, data integration and analytics as well as monetization of data. M-Jali integrates with District Health Information Software 2 (DHIS2) – a free and open source health management data platform used by Governments worldwide as a reporting tool. DHIS2 is used to aggregate statistical data collection, validation, analysis, management, and presentation.

The M-Jali platform is used by community health workers to register household members onto NHIF to cater for their medical expenses.

Afya Moja – A Digital Health Passport

IntelliSOFT is collaborating with Safaricom, GSMA, Carepay, and Savannah Informatics Limited to develop a mobile-based Digital Health Passport that will enable patients to share real-time medical information with medical practitioners.

IntelliSOFT set up an Unstructured Supplementary Service Data (USSD) Application and a personal health record mobile application that will be available on both Android and iOS platforms to enable patients to access their medical records, share the same with medical practitioners as and when required.

This robust solution empowers and provide consumers of healthcare services and providers of healthcare services, a mechanism to collect, store, own, access, control, and review their health information.

This enables the continuity of care and reduce duplicate and erroneous patient data thereby saving patients unnecessary costs regardless of the providers or facilities they visit.



It also translate to providing medical practitioners with relevant patient information in a timely manner, thus enabling them make evidence-based patient management decisions particularly for continuity of care, and reduce cases of misdiagnosis thus saving patients unnecessary costs.

Non-Tech Innovations

Beyond Zero mobile clinics

Mobile clinics play a critical role in delivery of a wide range of low-cost health care services especially in hard-to-reach areas. Mobile clinics respond to unmet health needs of vulnerable populations and link these populations to the wider health system, therefore strengthening the capacity of existing health systems.

Beyond Zero identified mobile clinics as an innovative approach to reach marginalized communities with maternal and child health services and donated at least one mobile clinic to all the 47 counties in Kenya. The mobile clinics routinely provide a myriad of free services and health education messages.



Hongera MAMA Kit

The Hongera MAMA KIT is an initiative by County Government of Laikipia directed towards providing an incentive for mothers to deliver their babies in health facilities. Therefore ensuring efforts geared towards achieving better health care for the people of Laikipia in line with the Governor's pillar on access to universal health.

MAMA Kits will also lead to more skilled deliveries, reduced infant and maternal mortality as envisioned in the Laikipia County EMTCT Business plan 2018 - 2020. MAMA Kits are designed to help expectant mothers deliver their babies with professional medical assistance before during and after child birth.

The kit includes a washing basin and a bag containing essentials for the mother and her newborn.



Mothers who are eligible for this kit should have registered for Linda Mama card and attend a minimum of four (4) antenatal clinic visits.

Goat initiative

The 'goat-for-delivery' programme, rolled out by Laikipia County First Lady as an incentive to tap more traditional birth attendants as partners in the fight against maternal deaths.

Every woman who gives birth in a Laikipia health facility is rewarded with one goat. Women and traditional midwives also get a goat for taking a woman to a health facility.

