

THE KENYA YEARBOOK EDITORIAL BOARD HEALTH SERIES

ROAD TO UNIVERSAL HEALTH COVERAGE

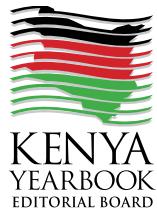
ENSURING THAT ALL PEOPLE HAVE ACCESS TO
SUFFICIENT, AFFORDABLE HEALTH SERVICES



2020
REPORT

UNIVERSAL HEALTH
COVERAGE





ROAD TO UNIVERSAL HEALTH COVERAGE



UNIVERSAL HEALTH COVERAGE
IMPLEMENTATION IN KENYA

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FOREWORD Mutahi Kagwe, Cabinet Secretary, Health

“ If we continue to behave normally, this disease will treat us abnormally. Behaving normal under these circumstances is akin to having a death wish” Those were my words on 22nd March 2020, while giving my regular national update on the COVID-19 pandemic.

We are living in extraordinary times. The novel Coronavirus Disease 2019 (COVID-19) has changed the way we approach simple everyday tasks like taking public transport, greeting one another, eating and drinking.

It has changed how we consume our news and pay for goods and services. More importantly, it has highlighted the importance of ensuring that every Kenyan can access basic healthcare.

Our goal of achieving Universal Health Coverage (UHC) by 2030 is even more important now than it was before the pandemic. It is increasingly obvious that COVID-19 will be with us for some time, but UHC is not just about this terrible disease. It is about reducing the cost of out-of-pocket spending on health services by the poorest Kenyan. It is about targeting

the poor and marginalised with healthcare programmes tailored to their needs, and investing in community and primary healthcare in partnership with civil society and private sector players.

Reforms envisaged under UHC should improve efficiency in spending on public and private healthcare, and lead to better resource mobilisation for health.

By preventing malnutrition and reducing out-of-pocket spending, UHC is contributing to social cohesion and stability, all of which are necessary to sustain economic growth.

For these reasons, this book could not have come out at a better time, when many Kenyans are looking to better understand the Government’s plans to improve public health services and lower the cost of healthcare.

I am happy that our partnership with the Kenya Yearbook Editorial Board (KYEB) has borne fruit and it is my sincere hope that this publications will enrich the public’s knowledge of UHC.



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If we continue to behave normally, this disease will treat us abnormally. Behaving normal under these circumstances is akin to having a death wish - Mutahi Kagwe, Cabinet Secretary, Health

PREFACE Eng. Sammy Tangus, KYEB Board Chairman

One of the most important developments in Africa over the last decade has been the growing political support for Universal Health Coverage (UHC). The task is massive because communicable, maternal, neonatal, and nutritional diseases continue to be the biggest causes of premature deaths on the continent. UHC is now integrated in the national health strategies of most African governments.

Kenya recognises that social health insurance for the poor, which guarantees them access to essential health services, is necessary to safeguard gains made in eliminating deaths from diseases that can be treated.

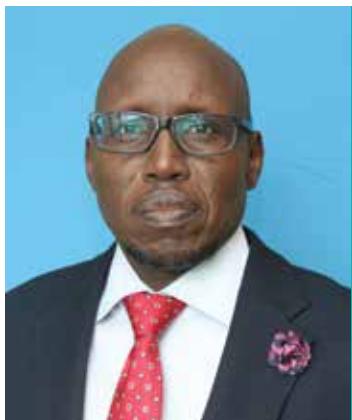
Overall, tuberculosis, diarrhoeal diseases, lower respiratory tract infections, malaria and HIV/AIDS are among the biggest killers in Kenya, yet deaths from all five can be prevented. Our motivation for this book is to spark and sustain important conversations about the journey of UHC in Kenya thus far. There is no magic bullet and no one-size-fits-all prescription, because gains in healthcare must be balanced with social

and economic advancements, as envisioned in the Big 4 Agenda pillars of UHC, Enhancing Manufacturing, Food and Nutrition Security and Affordable Housing.

UHC is a noble goal, premised on the moral obligation to ensure that people do not die because they are too impoverished to afford basic healthcare. A population shielded from malnutrition and ill health is likely to be more productive.

Africa's population, Kenya included, will double by 2050. Before the advent of the novel Coronavirus Disease 2019 (COVID-19), the United Nations Economic Commission for Africa had projected a healthcare-financing shortfall of US\$66 billion annually for the continent.

Although spending on health has increased significantly over the last 20 years in middle-income countries like Kenya, most of the spending is by households supplemented by development aid, thus worsening poverty. With the budgets of most African countries already stretched, a new



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approach to public healthcare is therefore the only option. This book captures tangible efforts by the Government, in partnership with the private sector, to translate the lofty ambitions of the global UHC agenda into a sustainable homegrown alternative for Kenya.

We track the origins of UHC in Kenya and interventions by the Government and its partners in starting the long journey towards achieving a measure of equity in access to primary healthcare for all Kenyans.

The Government's approach includes UHC in an ecosystem that includes investment in access roads to public healthcare facilities; legislative reforms; restructuring of key agencies like the Kenya Medical Supplies Authority (KEMSA) and the National Hospital Insurance Fund (NHIF); adoption of digital technologies that save time and lives; improved access to water and sanitation; and strengthening of primary healthcare systems.

COVID-19 has changed Kenya already, stretching the already limited resources of the health sector at a time when the rest of the world is

also grappling with the negative social and economic impact of the pandemic.

Kenya is not alone. The pandemic created uncharted territory globally and its effects will still be felt long after the crisis is over.

The numbers of confirmed cases have been on an upward trajectory since the first case was reported on 13th March 2020. Measures by the Government to counter the COVID-19 challenge are well summarised in the introduction.

This book would not have been possible without our partnership with the Ministry of Health, whose help proved invaluable with critical insights into the public healthcare system, and how the challenges therein are being dealt with.

Indeed, it is such cooperation that enriches Government communication and empowers the public.

We also wish to thank the Ministry of ICT Innovation and Youth Affairs – our parent ministry – for recognising the importance of educating the public on the Government's UHC programmes.

INTRODUCTION:

Review of Government Response to COVID-19 Pandemic

The novel Corona Virus Disease 2019 (COVID-19) pandemic has had a massive impact on Kenya beyond just healthcare, affecting every social and economic sphere in the country. Like most African countries, the biggest impact of the pandemic on Kenya has been economic shock and disruption of life. According to John Hopkins University statistics, by 23rd June 2020, the pandemic, which started in Wuhan, China, had spread to 188 countries/regions, infecting 9,098,855 people and killing 472,172 people. After a slow start in testing, owing to lack of enough kits, inadequate reagents and machines, the capability has improved.

COVID-19's emergence in Wuhan, China, in December 2019, caught the rest of the world flatfooted. As a result, the initial response by most countries was below the minimum needed to stop its spread. However, after COVID-19 was declared a global pandemic, the Government ordered the completion of a 120-bed capacity national isolation and treatment facility at Mbagathi Hospital, Nairobi, and began working with county governments to identify and prepare similar facilities in hospitals outside Nairobi. The Government also established the National Emergency Response Committee on Coronavirus (NERCC) chaired by Health Cabinet Secretary Mutahi Kagwe.

IMPORTED CASES AND GOVERNMENT RESPONSE

The first imported case of COVID-19 in Kenya was confirmed on 13th March 2020, in a passenger who had travelled from America to Nairobi. The patient was hospitalised at the national isolation facility. Contact tracing yielded 27 people, who were also quarantined for purposes of screening and identification of positive cases for hospitalisation.

Since then, the reality of COVID-19 has truly sunk in for a majority of Kenyans. On 15th March 2020, the President issued a number of directives, including the suspension of land and air travel into the country. However, citizens returning home were allowed entry, subject to observing strict quarantine measures for

14 days. An analysis by the Ministry of Health shows that the majority of Covid-19 cases are asymptomatic, where those infected do not show any symptoms. Only a small percentage of the cases are symptomatic.

Symptomatic transmission is the primary mode of transmission. There are also cases of pre-symptomatic transmission (transmission before symptoms emerge), which usually occur on average between five to six days during incubation period, and may go up to 14 days. For the health sector, the pandemic has confirmed more than ever the importance of a strong public healthcare system that guarantees access to affordable basic health services

and medicine as envisaged in the Government's Universal Health Coverage (UHC) programme.

A strong public healthcare system under UHC would have been a game-changer in the war against the pandemic. However, UHC is still in its embryonic stage – with the first pilot phase involving four counties having been completed in 2019.

The Government revised its economic growth projections from the initial 6.2 percent downwards, but by the time of going to press, it was still too early put a definitive forecast on this as the trajectory of the pandemic indicated that infections were yet to hit their peak by 30th June, 2020, before beginning to flatten.

To protect gains made towards Affordable Healthcare for All under the Big 4 Agenda and Kenya Vision 2030, the Government acted quickly to contain the pandemic's spread by initiating a hatful of measures, economic and social, to slow down infection, manage those already affected and jumpstart stalled economic activities.

In the health sector, immediate interventions were focused on saving lives and protecting the public healthcare system with policy measures such as closure of schools, encouraging most workers to work from home including many public servants, suspending public gatherings, closing bars and imposing travel restrictions and a nightly curfew.

Schools were also closed in March 2020 and national examinations for the year later cancelled. The reduced social interaction and mandatory use of facemasks in public helped slow down the spread of COVID-19 significantly, but could not stop it completely. The biggest impediment to health is poverty. The forced shutdown due

to COVID-19 inevitably led to a contraction of the economy. A weakened economy means lost jobs and businesses. Acting on advice from the National Emergency Response Committee on Coronavirus and partnering with the private sector, the Government initiated economic and social interventions to shield the hardest-hit Kenyans.

Recognising the dangers of handling cash, providers of cashless transactions including Safari-com's money transfer service, M-Pesa, and cards reduced the transaction costs for their users.

The number of people allowed to attend weddings and funerals were also severely limited as part of measures to minimise the spread of the deadly COVID-19. The number of passengers allowed in PSV transport vehicles was also reduced and all such vehicles were required to be equipped with sanitisers and their staff have to wear masks at all times. PSV operators now require mandatory certification from the Ministry of Health, in consultation with Ministry of Transport. Inter-county travel was initially suspended on 6th April, except for essential services providers, but resumed at 4.00AM



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on 7th July 2020 subject to a review after 21 days. However a 9.00PM to 4.00AM curfew was retained.

Having recognised early that the poor were likely to bear a disproportionate impact of the COVID-19 pandemic the Government began interventions targeting informal settlements in the urban areas of Nairobi, Mombasa and Kisumu and other counties. Because most of those leaving in such settlements depend on informal wages to survive and feed their families, they could not afford to work from home.

The Government initiated a cash transfer system to the most vulnerable households in the urban informal settlements to counter the lack of a social safety net. It also scaled up social assistance programmes in concert with community service organisations (CSOs) with food, water and other basic supplies during the initial period of the shutdown.

Interventions by the Government were also designed to take into account local context. Five thousand additional healthcare workers were hired for one year and KShs1.7 billion set aside to expand the capacity of public hospitals.

Rehabilitation of access roads and footbridges was prioritised to ensure easy access to public hospitals and markets. To safeguard jobs in the informal sector, the Government fast tracked payments of outstanding Value Added tax (VAT) refunds to small and medium-sized enterprises (SMEs) amounting to KShs10 billion and allocated KShs3 billion to the SME Credit Guarantee Scheme.

With schools closed until January 2021, the Government allocated KShs6.5 billion to hiring of 10,000 teachers and 1000 information and communication technology (ICT) interns to support digital learning. It also supported local enterprise with the acquisition of 250,000 locally fabricated desks.

The tourism and travel sector is among the worst hit globally following the outbreak of the COVID-19 pandemic, experiencing unprecedented health and socio-economic crises. Global travel restrictions may have devastated tourism as well as the hospitality sector, but Kenya has developed health and safety protocols to mitigate the effects of the disruptions caused by COVID-19 disease in business and people's livelihoods.

The protocols are applicable to all tourism enterprises listed under the ninth schedule (Class A to G) of the Tourism Act, 2011, that encompasses accommodation and catering/eateries establishments, Tours and Travel Operators, tourist transportation services, adventure sports tourism, events and entertainment, meetings and convention/exhibition centers, Amusement parks, tourism attractions sites and related enterprises. The protocols adopt a four-pillar approach as required by the World Tourism and Travel Council. They are:

- i. *Operational and Staff Preparedness*
- ii. *Ensuring a Safe Experience*
- iii. *Rebuilding Trust and Confidence*
- iv. *Implementing Enabling Policies and Integrating Innovation*

The Government directed the Tourism Finance Corporation to give soft loans hotels, and allocated KShs2 billion for the purpose. International air travel into and out of Kenya is scheduled to resume on 1st August, 2020, in strict conformity with all protocols from the Ministry of Health, local and international civil aviation authorities, and any additional requirements applicable at the ports of departure, arrival or transit. Local air travel resumed 15th July 2020. In addition,

KSh1b was set aside to engage 5,500 Community Scouts and another KShs1 billion for 160 to support conservancies in arid and semi-arid areas. The latter programme will ensure the rehabilitation of wells, water pans and underground tanks at a cost of KShs850 million. Clean water is important for proper sanitation to prevent infection by COVID-19. The Government also allocated Kshs.1 billion for flood control, Kshs540 million for the Greening Kenya Campaign and Kshs600 million to support the Buy Kenya Build Kenya Campaign by buying locally assembled vehicles.

|The COVID-19 Response Fund also contracted the local industry to produce personal protective equipment (PPEs) for at-risk healthcare workers. Agriculture and food security being key, KShs3 billion was allocated to farmers to buy farm inputs via e-vouchers, which targeted 200,000 small-scale farmers, while Kshs1.5 billion was earmarked for flower and horticulture producers to help them access international markets.

Places of worship began a phased re-opening for congregational worship in strict conformity with all applicable guidelines and protocols, including the self-regulating guidelines developed by the Inter-Faith Council. Only a maximum of 100 participants are allowed at each worship ceremony, which should not last more than an hour.

Sunday Schools and Madrassas remain suspended until further notice, and in-person worship cannot include children under the age of 13 years or adults than 58 years or older and persons with underlying conditions. Restrictions on the operation of bars to 'take-aways' only, and on the number of persons who can attend weddings and funerals was extended on 6th July 2020 for 30 days.



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CHAPTER 1



EVOLUTION OF UNIVERSAL
HEALTH COVERAGE IN KENYA

FOREWORD

The Kenya health sector has re-aligned its policies and strategic direction in line with the Constitution of Kenya, 2010. The Constitution guarantees the highest attainable standard of health as a right while devolving governance to ensure improved service delivery, greater accountability, improved citizen participation and equity in the distribution of resources.

Additionally, Kenya's Vision 2030 aims at transforming Kenya into a globally competitive and prosperous country with a high quality of life.

The Kenya Health Service Delivery is one of the eight policy orientations specified in the Kenya Health Policy (KHP, 2014-2030), which outlines the direction the sector is taking to ensure significant improvements are made in the overall status of health in line with the Constitution of Kenya 2010, the country's long-term



UHC brings health and development efforts together, contributing to poverty reduction as well as building solidarity and trust financial risk protection prevents people from being pushed into poverty (or being further impoverished) when they have to pay for health services out of pocket..



development agenda, Vision 2030, and global commitments such as Sustainable Development Goals (SDGs). Kenya is a signatory to the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs), and has committed to put in place the appropriate measures and investments needed to realise the targets set under Goal 3: to ‘ensure healthy lives and promote well-being for all at all ages’.

The attainment of SDG3 is underpinned by the achievement of target 3.8 to ‘achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all’.

Universal Health Coverage (UHC) is based on the principle that all individuals and communities should have access to quality essential health services without suffering financial hardship. Access to, and use of, health services enables people to be more productive and active contributors to their families, communities and society at large.

UHC brings health and development efforts together, contributing to poverty reduction as well as building solidarity and trust financial risk protection prevents people from being pushed

into poverty (or being further impoverished) when they have to pay for health services out of pocket. Universal Health Coverage, therefore, calls for a holistic health systems approach to improving performance. Health System Strengthening (HSS) involves investments in inputs in an integrated and systemic way, and reforming the architecture that determines how different parts of the health system operate and interact to meet priority health needs through people-centered integrated services. HSS is, therefore, the key means to achieve UHC.

Prioritisation of HSS actions for UHC will need to vary depending on county contexts and needs, but must be underpinned by a commitment to a human rights-based approach. This is premised on the principle that access to health services is universal, putting a particular emphasis on the poorest, vulnerable and marginalised groups and on the principle of non-discrimination.

This suggests that the promotion of UHC must be supported by a commitment to address inequalities and exclusion. In this way, a human rights-based approach provides not only a framework for accountability, but also for development of inclusive health policies and programmes, and for mobilising civil society to achieve the right to health.

In 2017, the Government of Kenya committed to implementing Universal Health Coverage as one of its Big Four Agenda. This will ensure that all individuals and communities in Kenya have access to quality essential health services without suffering financial hardship.

Laying a firm foundation for UHC under the Big Four Agenda is a progressive programme that runs between 2018-2022. UHC is defined as the desired outcome of health system per-



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formance whereby all people who need health services (health promotion, prevention, treatment, rehabilitation and palliative care) receive them without undue financial hardship. UHC has interrelated, equally important dimensions, which need to be attained for its progress to be real and sustained.

A key goal of UHC is to provide healthcare and financial protection to all people in the country, with three related objectives:

- i. **Equity in access:** everyone who needs health services should get them;
- ii. **Quality of health services:** good enough to improve the health of those receiving the services;
- iii. **Financial-risk protection:** ensuring that the cost of healthcare does not push people into poverty.

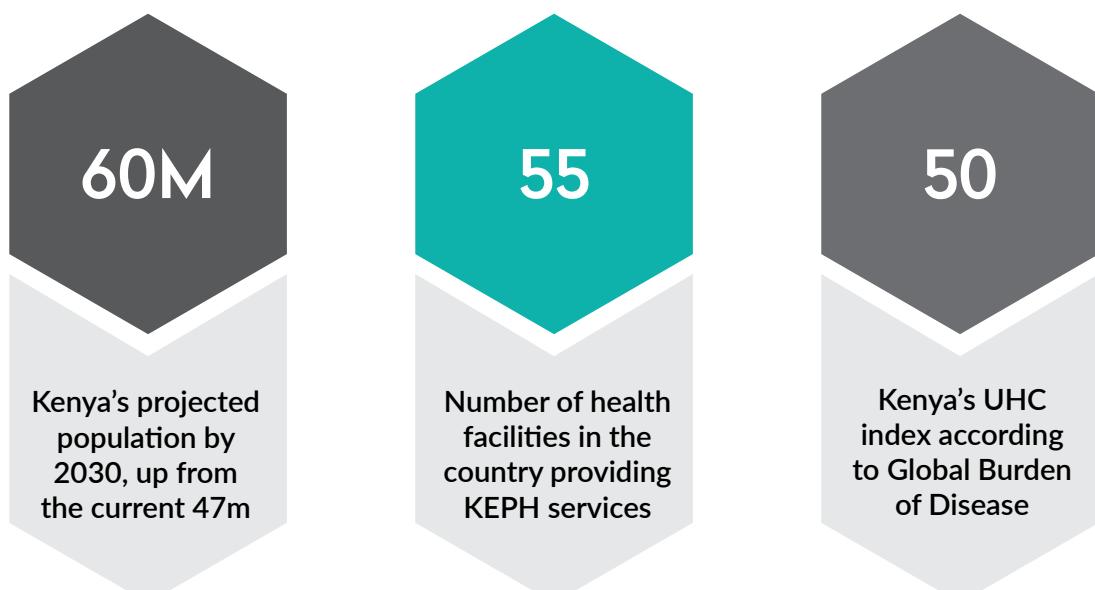
Attainment of UHC has remained elusive due to many challenges, which include the following: Unequal access to different healthcare services due to poor distribution and use of resources.

Many interventions are not reaching the people that need them most due to geographical and social-cultural barriers. High costs associated with accessing and using available services. These tend to drive households into poverty and limit their ability to use health services.

The Government is committed to UHC as part of a socio-economic transformation. It will do this by providing equitable, affordable and quality healthcare. UHC will ensure that Kenyans receive quality preventive, curative and rehabilitative health services without the usual financial strain.

Kenya has drawn the roadmap towards accelerating implementation of the UHC agenda, determining the level of service availability, readiness, and quality of care across the sector.

The following programmes are in place to enhance the achievement of UHC: free maternity where one million women are covered annually; abolition of user fees in primary health facil-



ties; introduction of health insurance subsidy programmes for the elderly, very poor and persons with severe disability; introduction of EDU Afya for all students; and launch of UHC pilot programmes in four counties.

UNIVERSAL HEALTH COVERAGE (UHC)

Universal Health Coverage is firmly based on the World Health Organisation (WHO) constitution of 1948 declaring health a fundamental human right, and on the Health for All agenda set by the Alma-Ata Declaration of 1978. UHC cuts across all the health-related Sustainable Development Goals (SDGs) and brings hope for better health and protection for the world's most vulnerable.

WHO has defined UHC as ensuring that all people have access to needed health services (including prevention, promotion, treatment, rehabilitation and palliation) of sufficient quality to be effective while also ensuring that the use of these services does not expose the user to financial strain.

Kenya's population is expanding and is projected to hit 60 million people by 2030, up from the current 47.5 million (as per the 2019 Kenya National Bureau of Statistics, Housing and Population Census).

This growing population raises the critical challenge of providing the foundations for long-term inclusive growth. This is as witnessed by the fact that today, less than 20 percent of Kenyan households have any form of health insurance (KHHEUS, 2018).

The fact that the rest of the population is largely dependent on donor aid, government relief and

out-of-pocket spending to access healthcare is of grave concern to the government. Hence the decision to make provision of quality and affordable healthcare a non-negotiable priority is vital. Kenya's health system struggles to manage the triple burdens of communicable diseases (with frequent epidemics), road traffic injuries, and non-communicable diseases (NCDs), which are on the rise.

An interesting statistic from the National Aids Control Council shows that while HIV contribution to the burden of disease has fallen by 61 percent in the period 2005-2016, the combined contribution of ischemic heart disease (where an organ is not getting enough blood and oxygen) and cerebrovascular disease has increased by 57 percent in the same period.

KEY PLAYERS

To deliver UHC, key stakeholders must be engaged with players from the Ministry of Health, National Hospital Insurance Fund (NHIF), faith-based health service organisations, the private sector, non-governmental organisations and international development partners with clear roles and responsibilities.



For Kenya to achieve close to 100 percent UHC, several strategic initiatives have to be put in place to progressively enable everyone to access the services that address the most important causes of disease and death

UHC has been adopted as Target 3.8 of the Sustainable Development Goals (SDGs), with a clear aim of ensuring that individuals and communities receive the health services they need without suffering financial hardship.

UHC AND THE CONCEPT OF SOCIAL HEALTH INSURANCE

It is important to note that there is no Free Health Care (FHC) in the universe. If one accesses health services free, someone else somewhere is paying for it, or must pay for it in the future. The government has been providing funding in-kind for free services offered or supplemented through conditional grants, user fee foregone, output based financing as well as providing funding in-kind through supplies of medicines, vaccines, and medical equipment.

The Government often provides policy directions through a policy paper that eliminates formal user fees at the point of service; this can be for all services, for primary health care, for selected population groups, for selected services for everyone or for selected services for specific population groups, usually characterised by medical or economic vulnerability.

Examples of services that are provided under free healthcare policy include antenatal care, skilled deliveries in Government health facilities, health services for children below a defined age (often below five years), services for elderly people above a certain age (often 65 years), services for persons living with severe disabilities and health services for orphans.

These services are chosen to protect population groups deemed to be poor and vulnerable. Easy-to-observe criteria such as age, pregnancy or defined geographical areas are used to deter-

mine whether a person is eligible for free health services at the point of use. This is in contrast to relying on income or other means of assessment to determine whether an individual is entitled to exemption from paying user fees.

By introducing access to FHC, the government is explicitly showing its intention to make progress towards UHC by:

- i. *Increasing service utilisation for specific services, in line with people's health needs.*
- ii. *Improving financial risk protection.*

Implicitly, FHC also aims to enhance the quality of health services guaranteed through this policy. Transparency and accountability are key aspects as eligible people need to know they are entitled to FHC.

With few budget resources to fund FHC as a way to make progress towards UHC, there are inevitable trade-offs, which lead to decisions about prioritising particular services or population groups. This requires decisions about who should receive financial protection at a particular time. In Africa, Kenya stands high as one of the few nations that have sustained

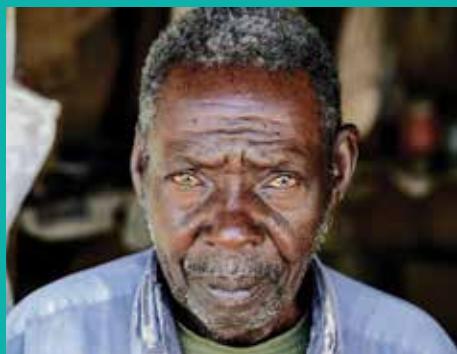


Kenya stands high as one of the few nations that have sustained a national hospital insurance scheme for over 50 years, and to which every employed Kenyan is required by law to join, but is open to voluntary contributions from citizens in the informal sector



a national hospital insurance scheme for over 50 years, and to which every employed Kenyan is required by law to join, but is open to voluntary contributions from citizens in the informal sector. Upon attaining independence in 1963, the Government of Kenya (GoK) recognised the pivotal role of health towards socio-economic development, and embarked on wider policy reforms aimed at enhancing access to quality care.

These policy documents and various development plans led to the formation of the National Hospital Insurance Fund (NHIF). NHIF was established based on the recommendation of Sessional Paper No. 10 of 1965, titled, “African Socialism and its Application to Planning in Kenya” that operationalised a centralised health system. The Fund was originally set up under the NHIF Act of 1966 as a department under the Ministry of Health. Its core mandate



TIDBITS

In Africa, Kenya stands high as one of the few nations that have sustained a national hospital insurance scheme for over 50 years, and to which every employed Kenyan is required by law to join, but is open to voluntary contributions from citizens in the informal sector. Upon attaining independence in 1963, the Government of Kenya recognised the pivotal role of health towards socio-economic development, and embarked on wider policy reforms aimed at enhancing access to quality care.

was to provide medical insurance cover (hospitalisation cover) to all its members and their declared dependents (spouse and children). As the main type of health insurance at that time, NHIF's monthly contributions were Ksh5 per month.

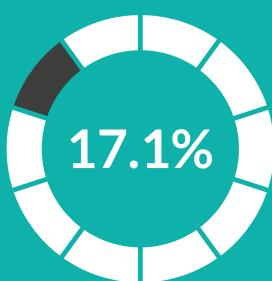
In 1988, the government introduced guidelines for Primary Healthcare (PHC) implementation and user fees (cost sharing) in an endeavour to raise funds, meet the cost of maintaining healthcare facilities and increase community participation in PHC. This was implemented from 1989.

The policy of cost sharing was mainly to bridge the gap between actual budgets and the level of resources needed to fund public health sector activities. In 2003/4, cost sharing contributed over 8 percent of the recurrent budget of the MOH. The government introduced 10/20 policy for PHC facilities by removing user fees

of Ksh10 and Ksh20 in primary care facilities (dispensaries and health centres) to reduce the barriers of access to health services in 2004.

Despite the increase in funding from cost sharing, the MOH expenditure as a share of the total budget, which stood at 8 percent, was far below the Abuja Declaration target of 15 percent. User fees were temporarily suspended by an Executive Order in 1990, but reintroduced in 1992. It's important to note that in 1994, for the first time since independence, the first health policy framework 1994–2010 was developed to provide direction for the sector.

This was delivered through various five-year strategic plans. Evaluation of the first strategic plan 1994- 1999 demonstrated a worsening trend in health indices. This informed the Second Health Sector Strategic Plan 2005-2010 with the theme: "Reversing the National Trend". In this strategy, a critical focus on use of com-



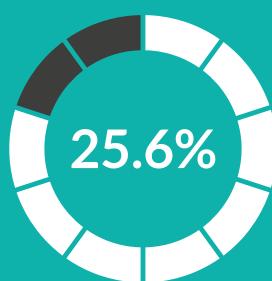
UHC

Percentage of health insurance coverage in Kenya in 2013, up from 10% in 2007



NHIF

Percentage of Kenyans under cover covered by the National Hospital Insurance Fund



FINANCING

Donor financing to the Kenyan healthcare system in 2013, down from 34.5% in 2009

Private financing for health increased from 36.7 % to 39.8 % between 2009-2013. This is worrying because a huge proportion of private funding is in the form of out-of-pocket (OOP) payment, which rose as a proportion of total health spending from 25% in 2009 to 29 % in 2013

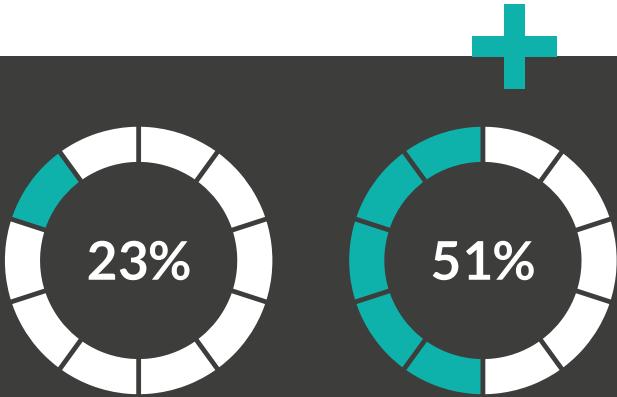
munity health workers in service delivery was introduced, with a community strategy implemented across the country, which is the current focus of UHC.

The year 2010 is remembered for inauguration of Kenya's Constitution with devolved functions. Indeed, a significant number of health functions were devolved to the 47 newly-formed counties. As part of reducing financial barriers to access to health services, the Government removed user fees in all primary care facilities in 2013.

Also waived were user fees in government health facilities for delivery services, famously called Free Maternity Services (FMS), in the same year. FMS has since transformed to the "Linda Mama" programme, with reimbursements from NHIF for antenatal services, delivery and postnatal services across all government health facilities.

The Constitution of Kenya, under the Bill of Rights, gives citizens the right to the highest attainable standards of health in line with the WHO Constitution, which declares health a fundamental human right, thereby committing to ensuring the highest attainable level of health for all.

This includes provision of essential, quality health services, from health promotion to prevention, treatment, rehabilitation, and palliative care. Progress towards UHC will ensure advancement towards other health related targets, and towards equity and social inclusion. The Global Burden of Disease ranks Kenya at an approximate UHC index of 55 percent and predicts that by 2030, the UHC index will be at 60 percent. Several strategic initiatives have to be put in place to progressively enable everyone to access the services that address the most



DEMOCRATICS

Percentage of sick people who don't seek medical care, according to the 2003 Kenya Demographic Survey

HEALTHCARE

Contribution of households, which remain a major financier, to total health care expenditure in Kenya

TIDBITS



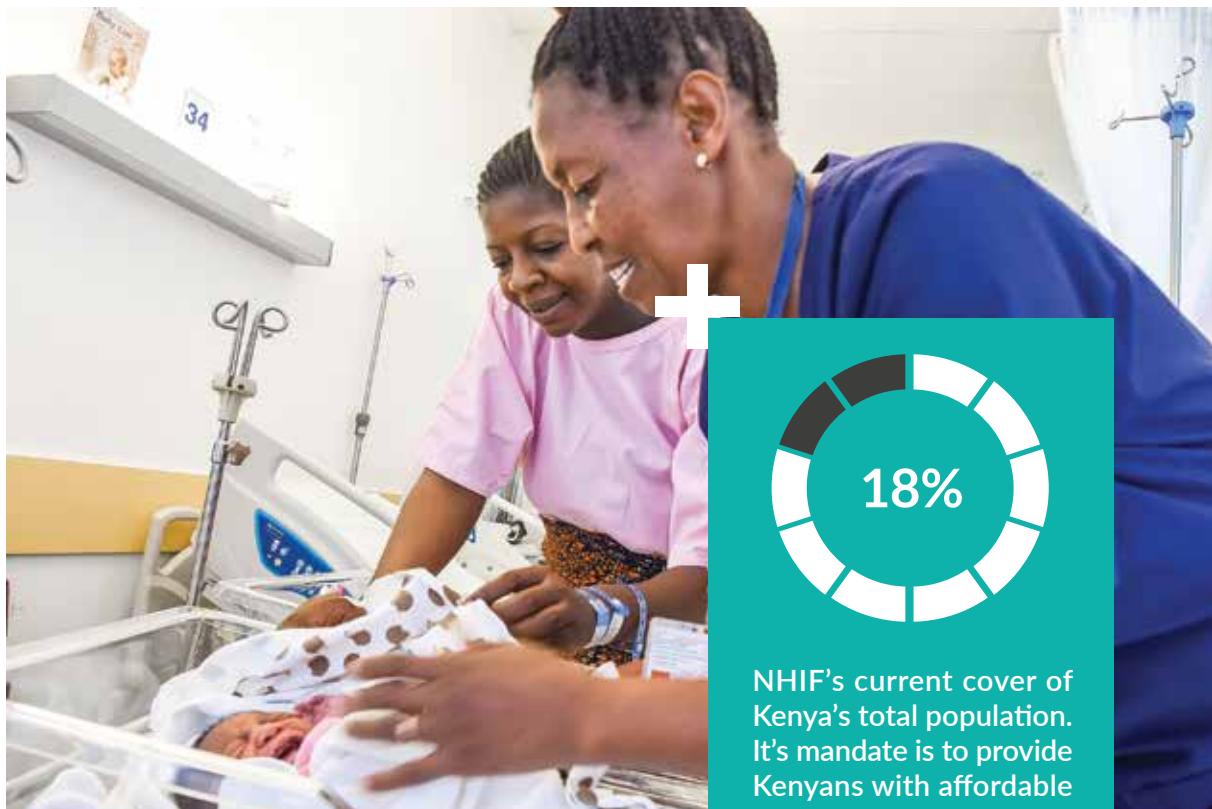
Despite the increase in funding from cost sharing, the MOH expenditure as a share of the total budget, which stood at 8 percent, was far below the Abuja Declaration target of 15 percent. User fees were temporarily suspended by an Executive Order in 1990, but reintroduced in 1992. It's important to note that in 1994, for the first time since independence, the first health policy framework 1994–2010 was developed to provide direction for the sector.

important causes of disease and death, and ensure that the quality of these services is good enough to improve the health of Kenyans for the country to achieve close to 100 percent UHC.

Numerous efforts have been made to ensure a steady progression towards UHC by designing and implementing healthcare policy reforms. To increase access and demand for services, initiatives like the provision of free PHC services for all; free maternity services at all public health facilities; health insurance subsidies for the poor, vulnerable and the old; development of a health financing strategy that will ensure that the entire population is covered with some form of insurance; increase in staff and equipment through the managed equipment service at all levels; and expansion of maternity wings have

been done. This has resulted in an increase in the number of health facilities providing KEPH services from 41 percent to 55 percent and to 57 percent in 2013, 2016 and 2018, respectively (SARAM, 2013, SARA, 2016 and KHFA, 2018). However, with this increase in demand for services, the quality of services is still a major challenge.

Access to healthcare services in Kenya is improving, but there are still substantial differences within the country, with an increased per capita outpatient utilisation rate from 1.8 in 2012/2013 to 2.2 in 2018. The number of admissions per year also indicates a decline, from 38 per 1,000 population in 2013 to 35 per 1,000 population in 2018, with an average length of stay (ALOS) of 7.8 days (KHHEUS, 2018).



TIDBITS

The principle of SHI is solidarity and risk pooling whereby members make contributions to the scheme and access benefits according to need. Although SHI has not been implemented on a large scale globally the fact that WHO has called all member states to consider it in order to achieve universal coverage shows its importance as a healthcare financing mechanism.



There has been an increase in facilities that provide high level, specialised care in the counties. To ensure national wide hospital access, the national community health strategy has been revised and updated. The country has also developed a national referral strategy that provides clear guidelines on referral processes.

NHIF USHERS IN VOLUNTARY CONTRIBUTIONS

Currently, the Fund derives its mandate from the NHIF Act (Act No.9 of 1998). Amendment of the National Hospital Insurance Fund Act in 1998 introduced profound changes on health insurance. For instance, the Act allowed the scheme to introduce cost-related payments instead of the hitherto daily bed rate only while maintaining the principle of mandatory insurance for the wage-earning workforce.

The changes allowed the extension of the health package to include outpatient health costs, doctor's fees and laboratory investigations. Additionally, they allowed the extension of health insurance to health centres and other lower facilities, leading to better access and higher standards of healthcare services.

Despite criticism of the Fund, largely due to perceived weak governance, dependence on tax funding and lack of quality healthcare in many of its accredited hospitals, NHIF remains the largest social health insurer (18 percent out of 20 percent) with about 4 million principal members and 7.5 million estimated beneficiaries.

This is primarily because of the high cost of privately funded healthcare. There had been efforts to lower the cost of healthcare, but it remained prohibitive for the majority poor in Kenya. Failure to lower the cost of healthcare was largely because the policy tended to flip-flop.

In 2013, after the election of a new government, user fees were abolished in public health centres and dispensaries. Despite this, out-of-pocket payments continue to be a problem, with 31.5 percent share of total health expenditure. A couple of factors could explain this. First, services at public hospitals (which still operate under the cost-sharing policy) as well as all levels of private healthcare facilities, are still paid out-of-pocket. Secondly, health insurance coverage in Kenya remains low, although it has increased from 10 to 18 percent between 2007 and 2018 [17], (KHHEUS, 2018).

Of the citizens covered by health insurance, 89 percent are under NHIF, the State entity with the mandate to provide social health insurance. An additional 5 percent are covered by private insurances while a further 4 percent are covered by employer institutions. Some 1 percent are covered by county schemes and 1 percent by community-based health insurance (KHHEUS, 2018).

However, health insurance mobilises only 5 percent of the current health expenditure in Kenya, implying that the depth of cover is low, hence necessitating out-of-pocket payments (Table 1).

These concerns have necessitated the proposal that financing of healthcare gradually shift from predominantly out-of-pocket and tax funding to more sustainable pre-payment schemes in which the government will increase its attention to the most vulnerable.

Membership to NHIF is mandatory to those working in the formal sector (both public and private) and voluntary for those in the informal sector. Contribution to the Fund for those in the informal sector ranges from Ksh30 for the lowest income groups to Ksh300 for individuals earning above Ksh15,000 per month. Voluntary contributions to NHIF are monthly and average Ksh160 per month. Among the key changes that laid the ground for UHC was the 2003 amend-

ment by Parliament of the National Hospital Insurance Fund Act 1998. The changes to the NHIF (voluntary contributions) Regulations opened the door for membership to all Kenyans who wanted to contribute but were not employed or earning a salary. A subsequent amendment to the same regulations in 2010 removed limitations to voluntary membership based on health and proof of financial capacity to maintain contributions, but retained the minimum contribution at Ksh300.

HIGH COST OF HEALTHCARE

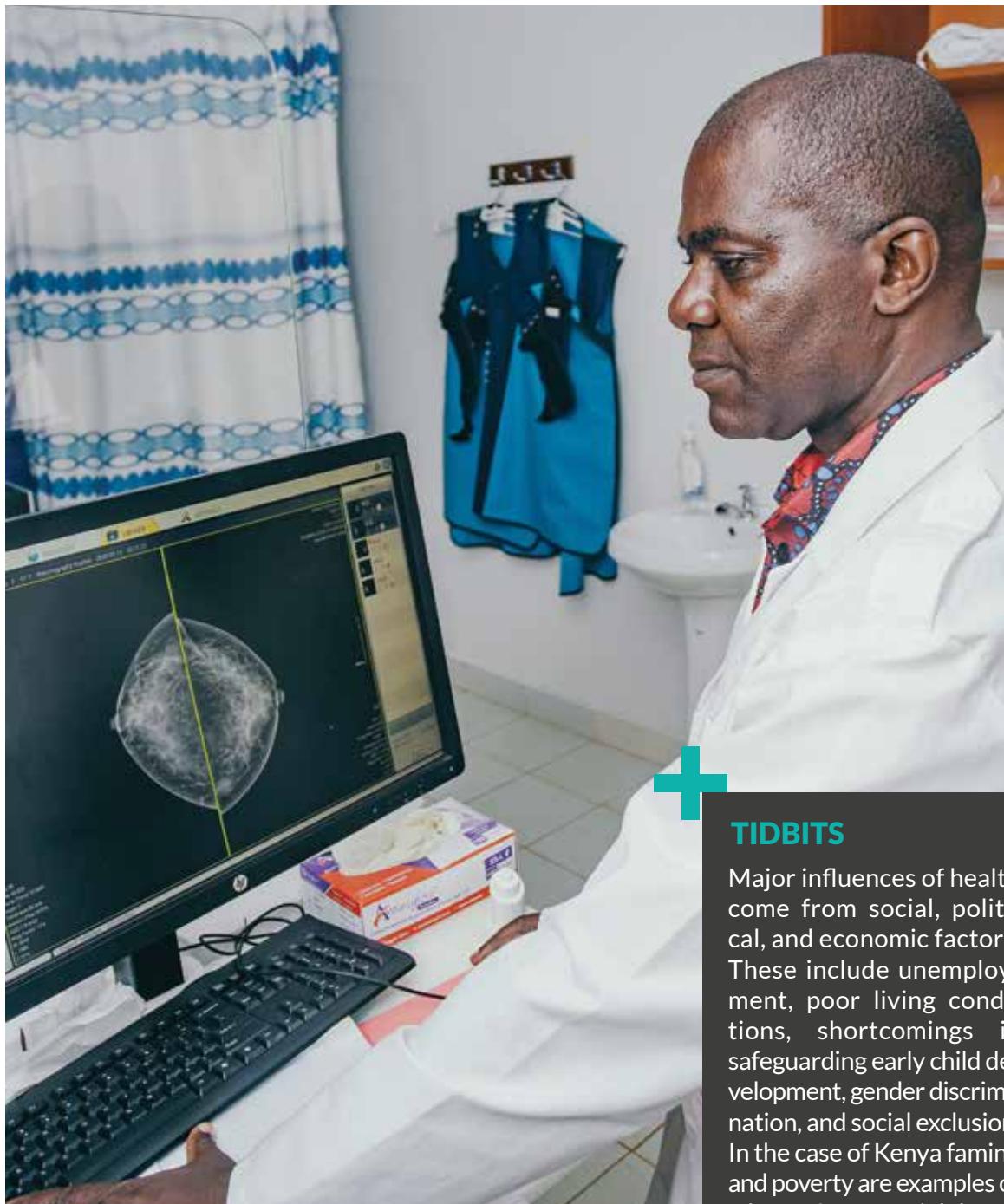
Financial barriers are the biggest obstacles to quality healthcare. A mix of public, private, and donor resources support Kenya's health sector. Between 2009 and 2013, donor financing fell from 34.5 percent to 25.6 percent, while financing from public sources rose from 28.8 to 33.5 percent.

Conversely, private financing for health increased from 36.7 percent to 39.8 percent over the same period. This is worrying because a huge part of private funding is in the form of out-of-pocket payment, which rose as a proportion of total health spending from 25 percent in 2009 to 29 percent in 2013 and 32 percent in 2018 (KHHEUS, 2018). The MOH had identified several factors contributing to the declining health status. They were:

- i. *Lack of access to basic, quality healthcare, primarily due to poverty;*
- ii. *Long distance to public health facilities providers;*
- iii. *Fear of medical diagnoses;*
- iv. *Cultural and religious reasons;*
- v. *Low funding, forcing public health facilities to operate without essential commodities such as drugs and basic equipment.*



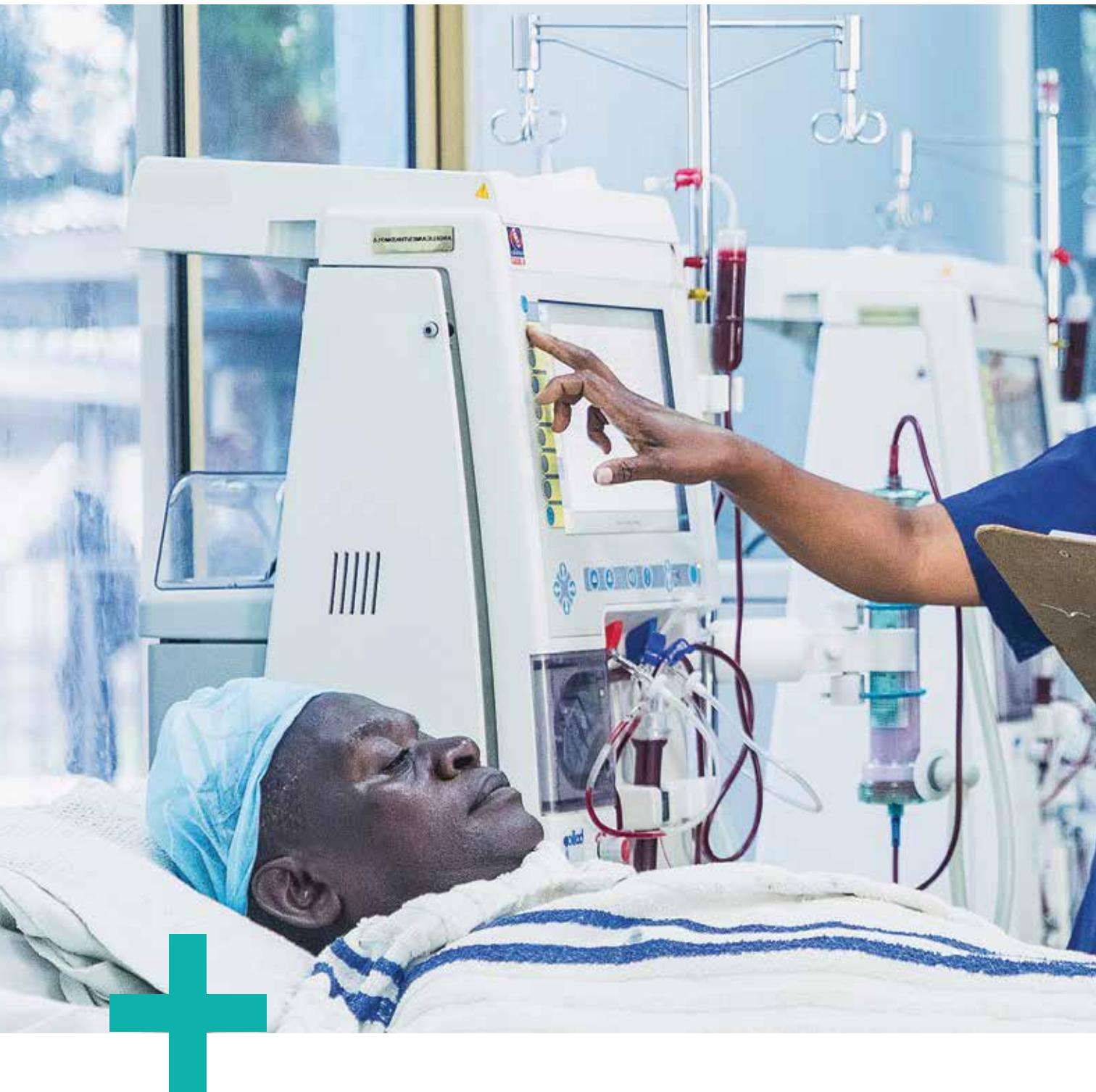
Membership to NHIF is mandatory to those working in the formal sector (both public and private) and voluntary for those in the informal sector



More health facilities now offer high level, specialised care in the counties. To support UHC, the National Community Health Strategy has been revised and updated.

TIDBITS

Major influences of health come from social, political, and economic factors. These include unemployment, poor living conditions, shortcomings in safeguarding early child development, gender discrimination, and social exclusion. In the case of Kenya famine and poverty are examples of what refer as social determinants of health - the living and working conditions that have a negative impact on health. all people.





TIDBITS

The high out-of-pocket expenditure denies the vulnerable access to healthcare, while many are forced to sell their valuable assets to offset hospital bills, thereby impoverishing them further. It is estimated that healthcare puts 1.5 percent of households in Kenya below the poverty line every year. Interestingly, when user fees (cost sharing) were reduced to affordable levels in rural health facilities and slums, utilisation of health services increased by 50 percent.

The 2003 Kenya Demographic Health Survey showed that 23 percent of sick people don't seek medical care, with financial barriers holding back over 40 percent of this number. The 2018 Kenya Household Health Expenditure Survey (KHHEUS) suggests that 28 percent of the households (males, 30 percent and females, 26.4 percent) were sick and never sought healthcare. The three major reasons mentioned for not seeking care were "self-medication", "illness not considered serious enough" and "high cost of care" at 45 percent, 25 percent and 19 percent, respectively. At the time, only 9 percent of the central government's expenditure was allocated to the public health sector. Today, households remain a major financier of health, contributing 51 percent of the total healthcare expenditure.

The high out-of-pocket expenditure denies the vulnerable access to healthcare, while many are forced to sell their valuable assets to offset hospital bills, thereby impoverishing them further. It is estimated that healthcare puts 1.5 percent of households in Kenya below the poverty line every year.

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THE NATIONAL SOCIAL HEALTH INSURANCE FUND (NSHIF) BILL

Public healthcare financing is currently influenced by two main legal and regulatory frameworks: the NHIF Act of 1998, from which NHIF's mandate and functions derive, and the Insurance Regulatory Agency (IRA) Act (2006) which looks after the private sector in insurance matters.

The need to ensure that every citizen has access to healthcare services without getting into financial difficulties led Kenya to prioritise UHC. Established as a State corporation in 1966, NHIF's mandate is to provide affordable access to health services, and currently covers 18 percent of Kenya's total population.

WHO had in December 2004 urged all member countries to consider mechanisms for pooling financing for healthcare, including Social Health Insurance (SHI) in order to achieve UHC. The principle of SHI is solidarity and risk pooling, whereby members make contributions to the scheme and access benefits according to need, or at the time illness occurs.

Although SHI has not been implemented on a large scale globally, the fact that WHO has asked all member states to consider it in order to achieve universal coverage shows its importance as a healthcare financing mechanism..

Indeed, even as WHO came up with SHI, it was not possible to roll it out in Kenya due to the Structural Adjustment Programmes. The Structural Adjustment Programmes advocated capping ceilings on health and freezing employment in the public sector. It was imposed on Kenya by the World Bank and the International Monetary Fund, and had a negative impact on healthcare. This implied that no additional funds would be used to expand the health facility network or to employ more health workers to manage increased workload due to HIV/Aids, TB and malaria. In some cases, one nurse would take care of more than 60 people.

In 2003, the Government's five-year blueprint for social and economic growth, known as the Economic Recovery Strategy (ERS) for Wealth and Employment Creation 2003-2007, set out measures to improve affordability and access

to better healthcare, particularly for the most vulnerable. Among these measures was the proposed enactment of legislation converting the NHIF into a National Social Health Insurance Fund (NSHIF) that would cover both inpatient and outpatient medical needs.

This was to be carried out through reallocation of resources towards preventive and basic health services. The ERS envisaged an increase in Government funding of the health sector from the 2003 level of 5.6 percent of total expenditure to 12 percent by the end of the ERS period (2007).

When Mr Mwai Kibaki was elected president in 2002, the manifesto of his NARC party promised the introduction of a National Social Health Insurance Scheme.

In May 2002, Mrs Charity Ngilu, then Minister for Health, established a sector-wide task force to prepare a national strategy paper and legislation that envisioned total transformation of NHIF into the National Social Health Insurance Fund (NSHIF).

The 2003 Kenya Demographic Health Survey revealed that health indicators were on the decline and that drastic action was necessary for the country to achieve the UN Millennium Development Goals. Mrs Ngilu argued that if the Government's interventions and policies were to be pro-poor, then they must be geared to reducing the household burden caused by expensive healthcare.

Health involves more than medical care. Major influences come from social, political and economic factors. These include unemployment, poor living conditions, shortcomings in safeguarding early child development, gender discrimination and social exclusion.

In Kenya, famine and poverty are key examples of social determinants of health. Arguably, action on the social determinants of health is the fairest and most effective way to improve health for all people and reduce health inequities. Unless the social causes that undermine people's health are addressed, the goal of public wellbeing will be hard to achieve.

It was against this background that Kenya decided to propose a Bill for the introduction of a National Social Health Insurance Fund. The primary focus of the Bill was to increase access to health by the poor while at the same time mobilising resources for curative health.

The Social Paper No.2 of 2004 on NSHIS was tabled in Parliament for debate on 13th May 2004, and was unanimously approved and adopted on 19th May 2004. The National Social Health Insurance Fund Bill 2004 was then published on May 28, 2004.

It provided for payment of benefits out of the Fund contributions and set up the organs of the Fund. It was agreed that the NSHIF would be the successor of the NHIF, established under the NHIF Act, which would be repealed.

The Act would apply to all Kenyans, including beneficiaries of private health insurance schemes. The private sector, through the Kenya Private Sector Alliance (KEPSA), opposed the Bill on grounds that it would push private insurance companies out of business.

Despite this, the NSHIF Bill was passed by Parliament in November 2004 and thereafter presented to President Kibaki for assent. But the President declined to assent to the Bill and instead submitted a memorandum to the Speaker indicating specific provisions to be considered by Parliament.

In March 2005, the Bill was tabled in Parliament for reconsideration but, to date, it is still pending before the National Assembly. This led to shelving of the proposed Act and return to the status quo with regard to the challenges and shortfalls that the health sector experiences in financing.

Thus, access to healthcare, particularly for the poor, has remained an unattainable goal unless the Government introduces new strategies on cost containment vis-à-vis the tax wage bill.

CHANGE OF STRATEGY

After efforts to push the Bill through Parliament using another committee failed, a change of tack was necessary because the issue had polarised relations between various stakeholders. The government chose to tackle the problem by embedding social health insurance in the Vision 2030 development blueprint that anchors the national development agenda. This was boosted by the fact that in 2005, during the World Health Assembly, member-states passed a resolution on financing UHC.

Since then, Kenya has committed to allocating a minimum 15 percent of its national budget to health spending as stated in the Abuja Declaration, and has made good progress towards achieving Millennium Development Goals (MDGs).

In 2009, the World Bank Group (WBG) began working with NHIF on an independent review of the Fund through Deloitte Consulting and the drafting of a health financing strategy to guide the country towards UHC. Importantly, the 2010 Constitution obligates the Government to undertake certain policies to ensure social security and the right to emergency healthcare.

DEVELOPMENT OF A PUBLIC HEALTH FINANCING STRATEGY

By the year 2000, there were 4,355 health institutions that had NHIF services. The number increased to 4,557 in 2003. However, only 25 percent of the population had access to health facilities within an eight-kilometre radius from their homes.

Both distance to health facilities and general poverty contributed to low uptake of healthcare services in the country. Kenya's Poverty Reduction Strategy Paper (PRSP) 2001-2004 states that high cost of healthcare is one of the leading causes of poverty. Almost 60 percent of Kenyans live below the poverty line. There was, thus, a need to reduce the healthcare expenditure of households.

However, since 2003, following significant public sector reforms, particularly those aimed at ensuring that State corporations actively execute their mandates, NHIF has recorded tremendous growth in corporate governance, medical insurance market access and increased benefit payout ratio.

STRATEGIC REVIEW OF NHIF COMMISSIONED

Development of a broad strategy on sustainable financing of healthcare in Kenya has been of concern because of the high cost of health services. Direct payment for health services accounts for roughly 40 percent of total health spending in the country. To position the NHIF for its enhanced role, it became necessary to carry out a strategic review of the Fund and a market assessment of its prepaid schemes to

develop alternatives that would expand social health insurance. In August 2010, the Ministry of Medical Services (MOMS), the International Finance Corporation (IFC) and NHIF commissioned Deloitte Consulting Limited (Deloitte) to carry out a comprehensive strategic review of NHIF and conduct a market assessment of prepaid health schemes/health maintenance organisations.

The focus of the review was the adequacy, or otherwise, of the Fund and its systems, including identification of gaps that could be addressed to meet the larger expectations of the people.

The market assessment of prepaid schemes focused on reviewing all previous work commissioned by the Government, donor groups and others, as well as relevant data that could allow for recommendations that could be implemented to strengthen the role of private health insurance players.

The outputs of this assignment were summarised in two reports:

- i. *Strategic review of NHIF and options for the revised future mandate of the Fund.*
- ii. *Market assessment of pre-paid schemes.*

When the Government first introduced the graduated scale contributor rates in 1990, NHIF contributions were capped at salaries of Ksh15,000, with monthly contributions ranging from Ksh30 to Ksh1,000. Unchanged rates since 1990 have impacted on the Fund's ability to expand the depth of cover to meet the growing population.

Since June 2010, NHIF has been able to reach 7.5 million beneficiaries, with 3.8 million principal members. The Fund's membership has grown during the five-year review period (from

FY2006 to FY2010). Additionally, NHIF has increased coverage of the informal sector from less than 200,000 in 2005 to 531,388 as at June 2010. The Fund has also increased the level of benefit payout to members and their beneficiaries.

The payout ratio (proportion of contributions received paid out for provision of benefits) has increased to 54 percent in FY2010 from 32 percent in FY2006. This growth in the payout ratio is driven by rapid increase in claims, which have grown from Ksh1.1 billion in FY2005 to Ksh3.1 billion in FY2010.

Over the past five years, the Fund has increasingly invested in information technology to reach members and support the delivery of its mandate. This includes introduction of tools such as electronic funds transfer (e.g. M-Pesa and Airtel Money), swipe cards, point of sales systems and other innovations that have increased the efficiency of the Fund.

Additionally, NHIF has improved its payment periods for undisputed claims, comparing favourably with private insurers. On average, the Fund pays claims between 14 to 21 days, compared with the best paying private insurers who pay at least within 30 days.

Over the years, NHIF has progressively been increasing the rebates on its in-patient package and increasing the number of hospitals in its network.

The Fund has contracts with 645 hospitals, accounting for 44,299 beds in Kenya against a total of 49,000 beds. It covers close to 100 percent of all hospitals in Kenya among the various categories from public hospitals to faith-based and private hospitals. This is by far the largest coverage of all insurers in the country. To add

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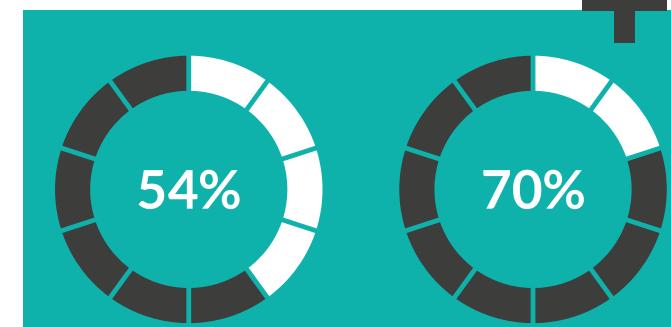
to the existing in-patient services, the imminent full-scale implementation of out-patient services will be a major improvement on the level of service offered to members. Importantly, the NHIF, covers approximately 18 percent of Kenyans. This is the largest number of members of any health insurer in the country as the private sector health insurers cover 700,000 people. Countries with a long history of social health insurance, such as Germany (127 years), took decades to achieve universal coverage.

However, countries such as Thailand and South Korea, which started SHI more recently, have taken a shorter time: 10 years and 35 years, respectively. In Africa, countries with relatively impressive coverage rates include Ghana (56 percent) and Rwanda (70 percent). These have been achieved. In all cases, strong government stewardship and contribution have been necessary to achieve high coverage.

The Strategic Review of NHIF Report came up with the following recommendations:

- i. NHIF should expand membership through targeting existing groups of informal sector members to ensure risk pooling and reduce adverse selection. This will involve partnerships with existing institutions, e.g informal sector Saccos. The Fund's management could also consider incentives to attract contributors. Some incentives include making NHIF contributions tax deductible for members and possible discounts for prepayments.
- ii. Target strategies that reduce inactive members and ensure consistent flow of collections. These include partnerships with other government agencies such as Kenya Revenue Authority (KRA) to target compliance.
- iii. NHIF's Board to restructure the Fund's balance sheet by disposing fixed assets based on a solid business case, including sale of silo car parks at NHIF Building and Contract House, among other noncore assets.
- iv. Optimise investment portfolio to rates above the current return of 3.7 percent using the short-term Treasury (90-day) Bill rate as a guide.
- v. NHIF to improve return on investments by divesting from large fixed asset portfolio and develop and implement an appropriate investment policy that ensures appropriate returns and supports liquidity and solvency of the Fund. The focus should be on safety, better yields and liquidity, with a minimum return equal to or higher than the Treasury Bill rate.
- vi. Target a two to three-month surplus to boost its benefits payout ratio. This target should be based on a detailed actuarial and financial study and be invested based on more efficiency and pursuit of strategies to increase membership. NHIF has been paying out most of its contribution revenue towards benefits and minimising the accumulated profits of prior years.
- vii. Targeting the excluded section of the informal sector via aggregate groups such as matatu drivers to reduce adverse selection, and partnerships to increase membership with financial service intermediaries such as savings and credit cooperative societies (Saccos).
- viii. Reform the NHIF 1998 Act and develop an operational strategy to cover indigents. Indigent cover will require additional funding from the Government.
- ix. Increase the depth of cover by reviewing the current benefits package and expand into outpatient coverage.
- x. Raise the number of providers under Contract A and B to expand the availability of comprehensive cover to more facilities.
- xi. Strategic purchase of healthcare: move away from rebates to more innovative and cost-ef-

- fective payment modalities for providers (fixed reimbursement, capitation, etc).
- xii. Review payment modalities for each category of contract. Drive incentive programmes with facilities to partner in attracting and retaining members.
 - xiii. Publish ratings of facilities to encourage high quality treatment of NHIF members.
 - xiv. Utilise costing data to inform purchasing decisions and negotiations.
 - xv. NHIF's Board and management to increase efficiency, and target to reduce the proportion of administrative costs to at least 22 percent (current internal target) and ultimately to 7 to 10 percent, in line with other SHIs. This can be achieved through implementation of financial management activity-based costing framework based on SHI functions. In turn, this will allow NHIF to track and manage costs related to registration, collections, payment, and customer service.
 - xvi. The Fund should be in a position to know the cost of acquiring each member/beneficiary, and the cost of serving members.
 - xvii. Optimal use of office space by consolidating allocation at the head office from an average of 438 square meters per staff to 90 square meters per staff, and leasing out excess space to raise revenues of between Ksh80 million and Ksh102 million per annum from the rent.
 - xviii. Align business processes to technology and human resource capacity. NHIF's personnel expenses account for 71 percent of total administrative costs. To reduce the proportion of administrative expenses, a thorough review of HR expenditure/staffing numbers will be required. This will need review of all business processes to eliminate redundant manual processing where possible. For example, the claims payment process could potentially be paper-less, based on NHIF's current technology capabilities. This would



OUT OF POCKET

Percentage by which UHC targets to reduce medical out-of-pocket expenses as a percentage of household expenditure and ensure that essential medical services in public health institutions are 100 percent subsidized.

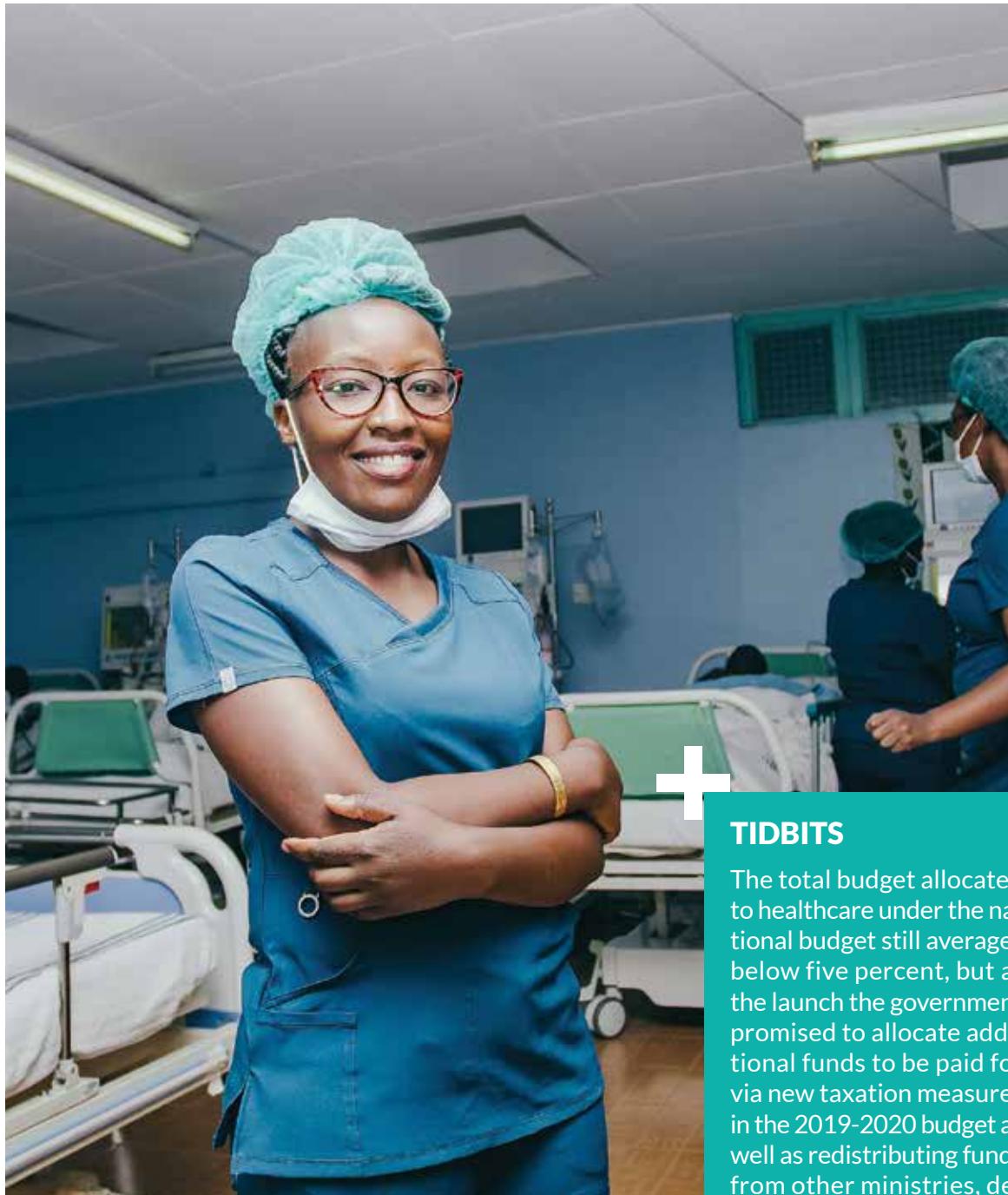
HEALTHCARE

Constitution of salaries alone to public spending on the health sector in 2015-16 and could now be closer to 80 percent. For UHC to succeed, both national and county governments must address the issue of wages

TIDBITS



There is an urgent need to change the role and 'operating philosophy' of the NHIF. NHIF continues to operate with a market -oriented approach similar to a private insurer. It offers differentiated packages that reflect an approach based on segmentation.



Universal Health Coverage requires all 47 counties to prioritise spending on health and address the issues of wages and productivity of workers in public health facilities.

TIDBITS

The total budget allocated to healthcare under the national budget still averages below five percent, but at the launch the government promised to allocate additional funds to be paid for via new taxation measures in the 2019-2020 budget as well as redistributing funds from other ministries, departments and agencies and external donors.

- result in reduction of staffing. The affected staff could be redeployed to other areas, as necessary.
- xix. NHIF should also determine areas in which outsourcing can be utilised. This will require the development of business cases to support the economic case for outsourcing. The Fund should look at some of its transactional processing areas and determine which ones make economic and strategic sense, to outsource. These include claims processing and membership registration.
- xx. Performance management and monitoring of efficiency in the organisation as a core priority of the senior management and the Board, by embedding efficiency targets in senior management contracts, ensuring efficiency targets are part of NHIF's performance contracts, and cascading and harmonising efficiency strategies across all functions.
- In a 2018 paper titled "Domestic Resource Mobilisation for Health: National Health Financing Dialogue for Implementation of the Health Sector Domestic Financing Sustainability Plan" the National Aids Control Council (NACC) identified the following as key to delivery of UHC:
- i. Ensuring that all 47 counties prioritise health spending, because healthcare is now a devolved service under the Constitution. Counties to bottle corruption and tailor their healthcare services to tackle primary health challenges in their jurisdiction.
 - ii. The government to invest more in basic or essential health services rather than on specialised facilities so that more funds are available for preventive programmes and treatment. Investments in new facilities and services have longer-term recurrent cost implications that put a strain on future capacity to sustain improved performance in health.
 - iii. Health professionals to change the perception of the general public that with the rebasing of the Kenyan economy to a low middle-income country, primary care or basic services are for low-income countries.
 - iv. Management of HIV and TB conditions must be included in a National Hospital Insurance Scheme, mainly because the main source of funding for the same is off-budget donor support despite the high annual and lifetime cost liability of antiretroviral therapy. For example, leaving HIV interventions outside the essential benefits package will leave 1.5 million people living with HIV outside Universal Health Coverage, challenging the universality principle and affecting the government's ability to reach its UHC coverage targets.
 - v. For UHC to succeed, both National and County governments must address the issue of wages in conjunction with productivity, absenteeism and doctors on public sector salaries operating their own clinics. For instance, in 2015-2016, salaries alone constituted 70 percent of public spending on the health sector and could now be closer to 80 percent. There is an urgent need to change the role and operating philosophy of the NHIF. NHIF continues to operate with a market-oriented approach similar to a private insurer. It offers differentiated packages that reflect an approach based on segmentation. In addition, there are many administrative barriers that insured persons have to navigate, casting doubt as to whether NHIF is ready, willing and able to play the role that it needs to in the context of UHC.
 - vi. Coverage with private voluntary health insurance is only about one percent, but it accounts for 10 percent of total health spending. This means that a lot of money is serving a small number of people. The Kenya health-financing model needs to carve space for the private sector in a way that limits this
 - vii.



- potentially harmful impact.*
- viii. *Initiate development of longer-term institutional arrangements for package refinement over time, including the function of health technology assessment, budget impact analysis and citizen participation.*
 - ix. *Include health indicators in the new formula for the Commission for Revenue Allocation (CRA) that is being developed for implementation in 2019-2020, as well as use the processes of CRA to incentivise efficiency and monitor performance in the health sector at county level, including working on PFM issues.*
 - x. *Develop 'matching conditional grants' for counties to invest in prevention, promotion and 'health enabling' interventions. Funding from the central government would be triggered to 'match' and reinforce these investments. This approach will be complimented with a strong moni-*

toring framework to minimise gaming and ensure that the intent of the UHC policy is realised in practice.

- xii. *Have a single pooled grant in place, rather than various programmes such as sanitation, nutrition and immunisation, to encourage inter-sectoral dialogue at county level, while enabling counties to develop tailored solutions to their particular UHC*

“

The Constitution provides for the right to access healthcare including emergency health services by all including children and persons living with disabilities as key areas of focus in health services delivery

- implementation challenges.
- xii. There is a need for institutional setup at county level (a county platform) that is resourced and staffed to analyse and tailor service delivery arrangements that adapt to local needs while ensuring adherence to national standards and performance criteria.
 - xiii. Production of a multi-year ‘county health access plan’ with annual adjustments and with technical assistance support from the MOH as needed. This is a valuable instrument for strengthening the reach of health services in the country.
 - xiv. Create an improved and unified universal data platform on patient activity and beyond, while ensuring that the MOH has full access to the database. A unified national provider payment database can allow analyses to inform policy and not just purchasing decisions.
 - xv. Harmonise the plans for a patient activity database with other ongoing developments in information systems, notably DHIS-2. Getting the data platforms ‘right’ and developing the skills to ask policy relevant questions of the data and feed this back into decision making, can be the make-or-break element in delivery of UHC.
 - xvi. Recognising that NHIF has been in existence for more than 50 years, a conceptual approach is needed that divides the package rather than the population. A universal, budget-funded entitlement for the entire county population and a complimentary benefit based on contributory entitlement. The space for private financing to be mainly outside of this publicly defined service package, apart from possible co-payments for complimentary benefits for those who do not have complimentary insurance coverage.

UHC PILOT AND THE BIG FOUR AGENDA

When he unveiled the Big Four Agenda on December 12, 2017, President Uhuru Kenyatta declared UHC as the third pillar of the five-year social and economic development strategy under part of the Vision 2030.

Earlier in the year, on June 21, 2017, President Kenyatta had signed the Health Bill (2015) into law, providing legal backing for the health sector and the rollout of the UHC Pilot. The Act made possible the establishment of a unified health system to oversee the complex relationship between the National and County government health systems, with the goal being seamless coordination between the two.

It also prioritised investment in public health infrastructure through provision of equipment, improvement of health service delivery, adoption of risk pooling financing systems and making aid more effective. The target of UHC is to reduce medical out-of-pocket expenses by 54 percent as a percentage of household expenditure, and ensure that essential medical services in public health institutions are 100 percent subsidised.

The focus of UHC is on primary healthcare and the pilot phase in four counties of Kisumu, Nyeri, Machakos and Isiolo, dubbed “Afya Care – Wema wa Mkenya”, was launched on 13th December 2018 by President Kenyatta.

In his address, the President said: “We are embarking on this journey in a phased manner, starting with a pilot phase in the counties of Kisumu, Nyeri, Isiolo and Machakos, and we expect to learn critical lessons that shall inform the rapid scale-up to the rest of the country”. He



said this at the launch of the project in Kisumu County – one of the four counties chosen to pilot the programme.”

Governors of all four counties in the Afya Care programme (Kisumu, Isiolo, Machakos and Nyeri) signed the UHC Service Charter at the launch ceremony. The counties were selected based on the unique health challenges prevalent in each, ranging from a high incidence of communicable and non-communicable diseases, maternal mortality to road traffic injuries.

The total budget allocated to healthcare under the national budget still averages below five percent, but at the launch, the government promised to allocate additional funds to be paid via new taxation measures in the 2019-2020 budget as well as redistributing funds from other ministries, departments and agencies, and external donors. Importantly, the remaining 43 counties not in the pilot phase were earmarked for strengthening of their health systems. Some Ksh3.1 billion was allocated to delivery of primary public healthcare in government hospitals

and dispensaries. In addition to restructuring NHIF, the Kenya Medical Supplies Authority (KEMSA) will also be reformed to end the persistent shortage of essential medicine and other critical supplies.

“To boost efficiency, all publicly-financed insurance pools should be collapsed into a single pool,” said the President. The four counties in the pilot phase have already seen a boost in public healthcare prevention and monitoring, including drainage of stagnant water to reduce breeding sites for malaria-carrying mosquitoes, provision of mosquito nets, and more regular inspection of markets, abattoirs and eating places



100 healthcare workers in different cadres drawn from all the departments at the facility have been trained on quality improvement through a cascade process

to reduce disease outbreaks. Other activities include community health education in partnership with community-based organisations, screening for non-communicable diseases like diabetes, hypertension, mental illnesses and various forms of cancer to allow early diagnosis and treatment, as well as immunisation and antenatal services.

Also provided are rehabilitation and pain relief (palliative) services. Key to the pilot programme is registration of households and provision of a UHC card to each member, including children below 18 years, as well as access to essential medical services.

Documents needed for UHC registration are a national identity card, children's birth certificates and/or a letter from the local chief.

"Universal health coverage is essential in addressing our national challenges and will go a long way in achieving the core principle of the Vision 2030 Agenda; that is, the realisation of a society where "no one is left behind," then Cabinet Secretary for Health Sicily Kariuki noted at the launch ceremony for UHC in Kisumu.

The launch of Afya Care was the culmination of several years of focused planning and collaboration with various partners. Milestones included the Health Financing Strategy of 2010 and the 2010 Constitution, where the government provided the necessary legal framework for comprehensive and people-driven healthcare delivery.

The Constitution introduced a devolved system of governance with two-tier government systems, namely the County and National governments, with the goal of enhancing utilisation and geographical access to quality care by all Kenyans.

QUALITY CARE AS THE KEY TO UHC DELIVERY

As important as a reformed NHIF and KEMSA are to achieving UHC, the quality of care being provided cannot be overlooked. In order to ensure that quality services are offered, Kenya has adopted a national quality assurance framework – the Kenya Quality Model for Health (KQMH) – which provides a pathway to optimal levels of patient safety, and introduction of joint health inspection checklists that emphasise on risk-based ranking of facilities, and enforcement of appropriate follow-up action.

This will lead to a locally driven quality assurance framework on which a regulation and accreditation system can be developed to incentivise facilities towards accreditation and total quality management. This will create a level playing field for competition and attainment of quality care as stipulated in the Constitution. The Ministry of Health has identified the following modalities for quality assurance:



The launch of Afya Care was the culmination of several years of focused planning and collaboration with various partners. Milestones included the Health Financing Strategy of 2010 and the 2010 Constitution, where the government provided the necessary legal framework for comprehensive and people-driven healthcare delivery

- i. Accreditation of public health facilities by the National Hospital Insurance Fund in relation to awarding of rebates to health facilities. This applies – on a voluntary basis – to facilities from the sub-county level upwards but excludes health centres and dispensaries.
- ii. Activities of the Kenya National Accreditation Service (KENAS) in relation to accreditation of certifiers and laboratories, are also voluntary processes.
- iii. Other private standards such as ISO and Safe Care are also used in certification/accreditation of mainly private health facilities.
- iv. Regulation by professional bodies and government agencies who have traditionally played their role in enforcing compliance to minimum statutory requirements. However, comprehensive coverage and capacity to implement enforcement remains a big challenge.
- v. Enhanced citizen accountability through community involvement in planning, budgeting and accountability, regular inspections by the boards and councils using the joint inspection checklist.
- vi. Most facilities display their Service Charter at the entrance for purposes of accountability.

Amref Health Africa, a key partner in the government's UHC journey, notes that while financial protection for Kenyans seeking access to essential health services is important, so is the need to ensure that the services being offered are:

- i. Safe – avoiding injuries to people for whom the care is intended;
- ii. Effective – providing evidence-based healthcare services to those who need them;
- iii. People-centred – providing care that responds to individual preferences, needs and values;
- iv. Timely – reducing waiting time or harmful delays.

Amref in partnership with the German Government, is helping Kenya roll out KQMH across 39 facilities in the four counties under the UHC Pilot scheme.

A baseline survey of 12 facilities in Kisumu County by the non-government organisation in 2018 saw up to 30 county and health facility staff trained as Quality Improvement Master Trainers.

Amref Health Africa noted: “100 healthcare workers in different cadres drawn from all departments at the facility have been trained on quality improvement through a cascade process.”

Under UHC, NHIF has been tasked with rolling out the Linda Mama, Boresha Jamii programme offering a package of basic health services based on need and not on ability to pay. Linda Mama is a public-funded health scheme that will ensure that pregnant women and infants have access to quality and affordable health services.

The goal of Linda Mama, Boresha Jamii is to “achieve universal access to maternal and child health services and contribute to the country’s progress towards UHC.”

Under it, all pregnant women who are Kenyan citizens are eligible to be members of free maternal services. Benefits include:

- i. Antenatal care package;
- ii. Delivery;
- iii. Neo-natal care;
- iv. Post-natal care;
- v. Diagnosis and treatment of conditions and complications during pregnancy via outpatient and inpatient services.
- vi. Care for infants.

CHAPTER 2



KEY LEGISLATIVE AND
INSTITUTIONAL PILLARS OF UHC



INTRODUCTION

To actualise the delivery of affordable healthcare for all through Universal Health Coverage (UHC), legislative reform is vital. The agency leading this key task is the Kenya Law Reform Commission (KLRC). Its work involves reviewing “current legal frameworks and systematic development of legislation through integration, unification of the law, elimination of anomalies, repeal of obsolete and unnecessary laws and generally simplification and modernisation of the law to achieve this agenda,” as per its online blog <http://www.klrc.go.ke/index.php/klrc-blog/637-legislative-initiatives-to-support-the-big-four>).

The right to health is guaranteed in the Constitution of Kenya and is the pillar for laws supporting UHC. References include the Bill of Rights and Articles 19, 20 (5) 21(1), 26, and 43(1), 46, 56(1) and 70.

The Constitution has devolved health services to the 47 county governments. These services include primary healthcare, health facilities, pharmacies, funeral parlours, emergency services, veterinary services, waste disposal and

licensing of hotels. The national government oversees the national referral health facilities. Provisions in the Bill of Rights, especially the right to life and the right to the highest attainable standard of health, including reproductive health and emergency treatment, have raised the expectations of citizens regarding public health.

Article 43(2) provides further that a person shall not be denied emergency medical treatment.



LEGISLATIVE INITIATIVES TO SUPPORT UHC AND THE BIG FOUR AGENDA

A solid legislative framework is necessary to anchor UHC. A number of initiatives by KLRC, as outlined in the table below, are underway to achieve this.

LEGISLATIVE ACTION	OBJECTIVE
1. Develop regulations under the Health Act, 2017	
2. Review the National Health Insurance Fund Act, 1998.	<ul style="list-style-type: none">• Establish health insurance as primary and NHIF as secondary insurer for the formal sector.• Align NHIF Act to UHC, group insurance, multi-tier benefit package• Introduce new governance structures• Provide for employer contributions• Bring on board pensioners• Provide for mandatory coverage for informal sector
3. Review the Insurance Act	<ul style="list-style-type: none">• Increase uptake of private health insurance to cushion NHIF
4. Review the Kenya Medical Training College Act	<ul style="list-style-type: none">• Streamline governance structures
5. Develop the National Public Health Institute (NPHI) Bill	<ul style="list-style-type: none">• Establish institutional framework for promotion of national public health
6. Review the Retirement Benefits Act	<ul style="list-style-type: none">• Support the health sector
7. Finalise the Environmental Health and Sanitation Bill, 2017	<ul style="list-style-type: none">• To promote safe environment and sanitation
8. Develop the National Research for Health Bill	<ul style="list-style-type: none">• Legal framework for continuous health research
9. The Older Persons Bill, 2017	<ul style="list-style-type: none">• To provide for the welfare of older persons
10. Develop the Food and Nutrition Security Bill	<ul style="list-style-type: none">• To implement government policy on food security
11. Develop Food and Drug Authority Bill	<ul style="list-style-type: none">• Provide for institutional framework on food and drugs

THE HEALTH ACT, 2017

Kenya's Health Act, 2017, published in July of the same year, is the biggest legislative change yet, because of its potential impact on the success of UHC. The Act provides legal teeth to the Health Sector Inter-governmental Consultative Forum (HSICF) that allows the various government agencies in the health sector to meet and plan together, making it possible for the National and County governments to work as one, a role it has played since the onset of devolution.

This is critical for the provision of primary healthcare in county hospitals. The Act formalises consultation between the National and County governments and represents a positive step in the country's continued devolution.

The Act safeguards access to healthcare services for vulnerable groups by making clear the State's obligation to provide these for women, the aged, persons with disabilities, children, youth, and members of minority or marginalised communities. This is one of the pillars of UHC globally.

Under the Health Act, the National Government is required to establish a national referral hospital in each of the 47 counties to increase access to specialised care and ease the pressure on Kenyatta National Hospital in Nairobi and Moi Teaching and Referral Hospital in Eldoret. The National Government is expected to increase access to free maternity care and childhood immunisations by allocating more funds to these services.

Employers and all formal workplaces are now required by law to provide spaces for mothers to breastfeed their infants. They are also supposed to offer emergency care to staff. Free

maternal and child healthcare services in all public hospitals are now grounded in law, thanks to the Act, as is the right to reproductive health, including information about and access to safe reproductive health services. This also includes safe motherhood for expectant women.

As per the law, everyone now has the right to emergency medical treatment, while healthcare providers have to inform patients of their health status (except in therapeutic cases), treatment options and risks. Patients can also reject treatment, but must be made aware of the implications of this choice.

Protection of healthcare providers is also covered by the Act, which also guarantees their right to a safe working environment and employment in both the public and private sectors.

To protect patients, the law gives them the right to file complaints about the quality of care offered by health facilities. National and County governments are required to facilitate this. The Health Act 2017 created the human resources for Health Advisory Council (HAC) and the Kenya Health Professions Oversight Authority (HPOA).

The council's mandate is to safeguard health workers' welfare, by reviewing policies, norms, and standards for deployment of healthcare staff and advising the government on the same. In effect, the Council is the primary human resource policy development instrument for the health sector.

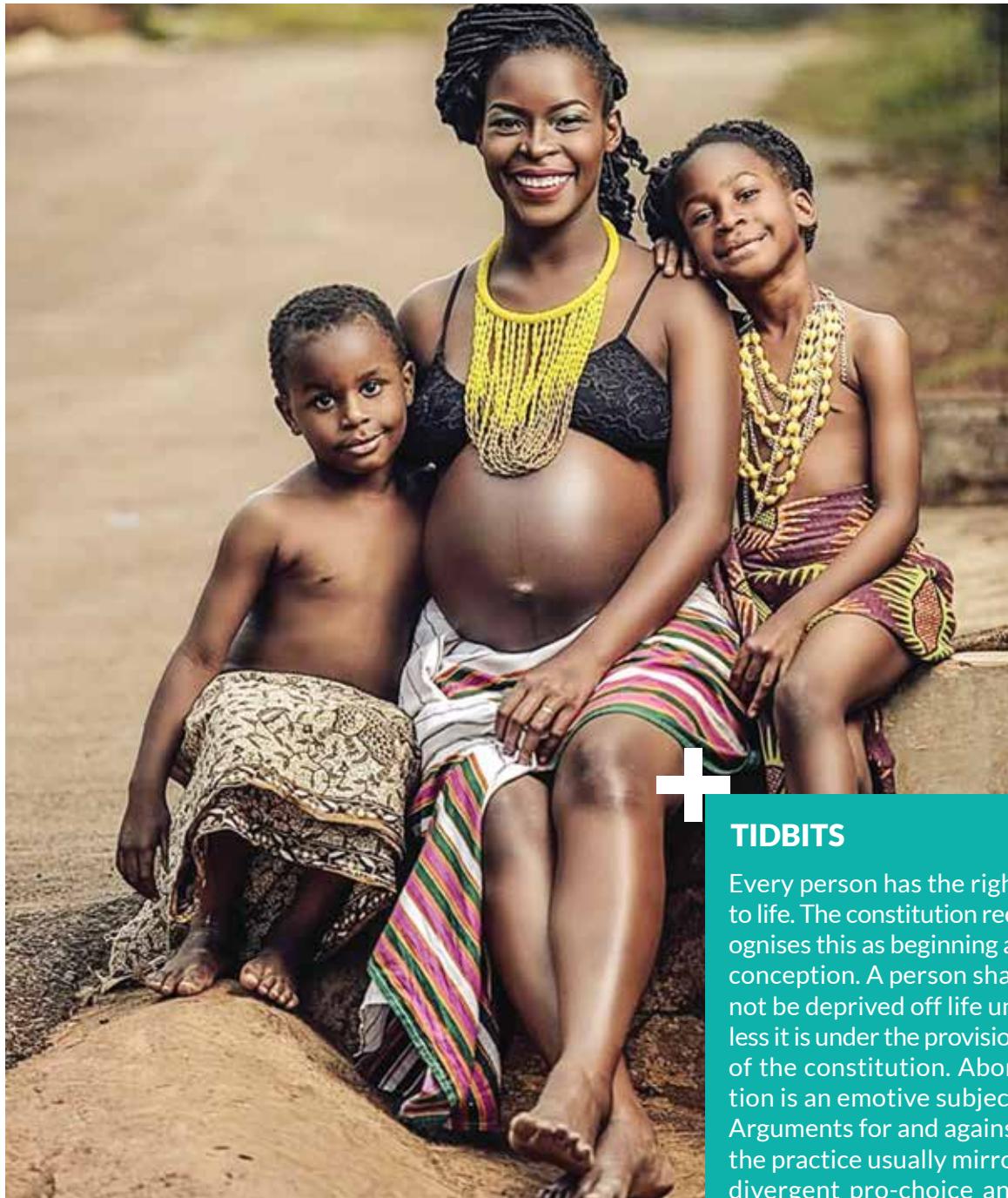
The authority, meanwhile, has regulatory oversight over healthcare professionals and agencies, promoting relationships, leading joint inspections by regulatory agencies and acting as the final arbiter in disputes among them. The Constitution transferred the bulk of health



Everyone has a right to emergency medical treatment and vulnerable groups are protected under the Health Act.

TIDBITS

To protect patients, the law gives them the right to file complaints about the quality of care offered by health facilities. National and County governments are required to facilitate this. The Health Act 2017 created the Kenya Health Professions Oversight Authority and the Human resources for Health Advisory Council, whose mandate is to safeguard health workers' welfare.



The components that make up reproductive health include access to information on reproductive health services.

TIDBITS

Every person has the right to life. The constitution recognises this as beginning at conception. A person shall not be deprived off life unless it is under the provision of the constitution. Abortion is an emotive subject. Arguments for and against the practice usually mirror divergent pro-choice and pro-life ideas. Many developing countries have strict laws that criminalise abortion.

functions to the county governments. These include public health facilities and pharmacies; ambulance services; primary healthcare; licensing and control of eateries; veterinary services (excluding regulation of the profession); cemeteries, funeral parlours and crematoria, among others.

The objective of the Health Act, 2017 is a unified health system based on the rationale that it is difficult, if not impossible, to have a 'clean' separation of health sector functions between the National and County governments, as both levels are interdependent despite the occasional jurisdictional conflicts.

Many counties were initially ill-prepared to take up their expanded roles in healthcare provision. There are also many grey areas in law with regard to policy formulation, setting of standards, supervision of health facilities and resolution of labour disputes between both levels of government that will require more consultations through the HSICF to resolve.

Among them will be resolving duplications between the Health Act and the Public Health Act – which has not yet been repealed. Work is already ongoing via KLRC to harmonise all laws touching on health and develop rules and regulations for the Health Act and any additional legislation.

The Kenya National Patients' Rights Charter
This charter entrenches palliative care as a basic health right. Palliative care is assistance given to patients facing life-threatening illness. This is through prevention and relief of suffering by means of early identification, assessment and treatment of pain and other problems, physical, psychosocial and spiritual. The charter is in line with the Bill of Rights in the Constitution and

explains the rights of patients and how they can register complaints or compliments about any health professional or facility. It defines and explains the patients' rights, responsibilities and dispute resolution mechanisms.

The first right as stipulated in the charter is access to healthcare; where healthcare shall include promotive, preventive, curative, reproductive, rehabilitative and palliative care. Public and private hospitals are required by law to prominently display patients' bill of rights at their reception sections or at any other areas they deem fit.

The aim of the charter is threefold:

- i. *To empower health consumers to demand high quality palliative care;*
- ii. *To promote the rights of patients; and*
- iii. *To attain the highest standard of health for all Kenyans.*

VISION 2030 AND UHC

Kenya is a signatory to the UN 2030 Sustainable Development Goals (SDGs), which provide time-bounded goals and targets in key sectors like health, education, agriculture, energy, infrastructure and the environment – for all nations to achieve. At the continental level, Kenya



Every person has the right to social security: Article 43 (1) (e). Persons who are unable to support themselves and their dependants will be provided with appropriate social security

adopted Agenda 2063, the 50-year Transformative Agenda for Africa, and its First Ten-Year Implementation Plan. Kenya's involvement in these global initiatives is anchored in its long-term blueprint, the Kenya Vision 2030, which aims to transform Kenya into a newly-industrialising, middle-income country providing high quality of life to all its citizens by 2030.

Achieving UHC is at the heart of Vision 2030, and the impact will be increasingly felt alongside progress in implementation. Health is at the centre of the 'social' pillar of the 2030 vision. Good health is acknowledged as essential for human welfare and sustained economic and social development. When people have poor health, with lack of decent services being one of the contributing factors, they often are vulnerable to poverty.

The Government's policies under Vision 2030 seek to achieve equitable and affordable healthcare to boost the productive capacity of citizens so that they can contribute effectively to the growth of the economy. As the saying goes, a healthy nation is a wealthy nation.

This includes families getting the proper nutrition they need and reducing deaths among children under the age of five. Flagship programmes for the health sector include:

- i. *Community-based information and communication systems;*
- ii. *Health products and technologies;*
- iii. *Health tourism;*
- iv. *Establishing e-Health hubs in 58 health facilities;*
- v. *Re-engineering human resources for health;*
- vi. *Healthcare subsidies for social health protection;*
- vii. *Construction of model Level 4 hospitals;*

- viii. *Improved access to referral systems;*
- ix. *Development of equitable financing systems;*
- x. *Strengthening of the Kenya Medical Supplies Authority (KEMSA);*
- xi. *Rehabilitation of health facilities.*

Under Vision 2030, information and communication technology (ICT) is playing a key role in promoting UHC. Programmes by the Ministry of ICT, Innovation and Youth Affairs to deepen access to ICT services and internet connectivity will make the work of health professionals easier and faster and lower the costs of important health services.

As more young people acquire the relevant ICT skills, systems redesigning, improvising data generation and management and capacity building for healthcare workers are areas that will promote social development and help achieve UHC.

Implementing UHC will not only increase job opportunities as the right people acquire relevant skills, but will also boost research, development and innovation to support UHC. Kenya will be able to unlock intellectual and financial resources, and develop technological solutions to ease access to health services and health practitioners. Linked to this is the development of health tourism as one of Vision 2030's flagship projects that focuses on specialised medical services.



Abortion is prohibited under the Constitution of Kenya 2010 but there is clearly spelt out exceptional circumstances under which an abortion can be carried out

As Kenya positions herself as a destination for specialised health and medical services, a lot will go into providing this opportunity, from education to research and job opportunities in specialised healthcare.

Giving Kenyans access to specialised medical services will also improve healthcare and help achieve UHC and increase the country's economic development.

The Government's blueprint for development programmes regards UHC as a guarantor of financial protection, by providing a shield against catastrophic and impoverishing consequences of out-of-pocket expenditure, through implementation of pooled prepaid financing systems. Ill-health affects productivity and diverts households' income to meeting the cost of health care. If UHC is achieved, it means that funds set aside for basic needs will be left intact, therefore alleviating poverty and contributing to sustainable development.

Under Vision 2030, Kenya has already undertaken the following key reforms via various ministries, departments and agencies (MDAs) towards achieving UHC:

- i. *Free maternity services in all public health facilities since 2013;*
- ii. *Free primary healthcare in all public primary health facilities - about 3,300 facilities;*
- iii. *A major programme to equip public hospitals across the country with modern diagnostic equipment (94 facilities) where contracts have already been signed with suppliers;*
- iv. *A National Referral Strategy has been developed and piloted;*
- v. *Health insurance subsidies through NHIF targeting disadvantaged groups continue to be implemented; and,*
- vi. *Provision of infrastructure and equipment to*

health facilities across county governments (new wards, ambulances and additional health workers); among other initiatives.

Several of these initiatives are being implemented in the counties of Kisumu, Isiolo, Nyeri and Machakos, which were chosen to pilot the UHC programme before its national rollout. The four counties were the first beneficiaries of a new health package developed by the Government. The counties were chosen through evidence-based research on disease burdens in significant areas, as follows:

- i. *Kisumu leads in the number of infectious diseases like HIV/Aids and tuberculosis;*
- ii. *Machakos leads in hospital visits related to accidents and injuries;*
- iii. *Nyeri leads in cases of non-communicable diseases, particularly diabetes;*
- iv. *Isiolo was picked to assess how the package will work among the nomadic population.*

Piloting the health coverage programme is key because the health sector is working on identifying an operational approach that enables rapid expansion of coverage. The objective is to deliver an essential package of quality basic health services that is both fiscally sustainable and consistent with Kenya's governance structure.



Safe abortion is a reproductive rights element of the right to reproductive health, making it imperative that the implementation of Article 26 (4) must enable the optimal enjoyment of Article 43 (1) (a)





TIDBITS

The Bill of right rights is meant to protect against infringement. In Kenya, bill of right for patients is usually written at the reception point in many hospitals in Kenya so that the patient can see them. Other hospital ensure that they are put in every unit within the hospital such as maternity unit, medical and surgical wards including psychiatry, out-patient unit and maternal and child health (MCH) unit.

The Government's focus is on mobilising adequate resources, increasing investments in primary health care, and reforming key institutions such as the National Hospital Insurance Fund (NHIF) to align them to the UHC agenda.

The increase in funding for the health sector, especially primary healthcare, shows the commitment by the government to roll out UHC countrywide by 2022 to guarantee access to quality and affordable healthcare.

Government healthcare financing and social health protection approaches, such as the elimination of user fees, Linda Mama project, subsidies for the poor and Health Insurance Subsidy Programmes, have been successful towards helping Kenya achieve UHC.

Financial resources will have to be increased through the Government, donors and private sector, while minimising fragmentation of financing pools – insurance and general tax revenue. NHIF is being strengthened to expand coverage and build quality assurance and accreditation systems.

Towards domestication and localisation of SDGs, in addition to the SDGs roadmap, Kenya has undertaken a number of initiatives. These include mapping the SDGs with Vision 2030, capacity building, advocacy and awareness creation. Other important initiatives are: the mainstreaming of SDGs in policy and planning, including performance contracts and strategic plans on MDAS; as well as indicator mapping.

Vision 2030 is implemented at both the national and sub-national levels through the five-year Medium Term Plans (MTPs) and the County Integrated Development Plans (CIDPs), respectively.

The first MTP was implemented between 2008

and 2012 and the second is from 2013 to 2017. The two plans mainstreamed the Millennium Development Goals (MDGs). The third and fourth MTPs will be implemented from 2018 to 2022 and 2023 to 2028, respectively.

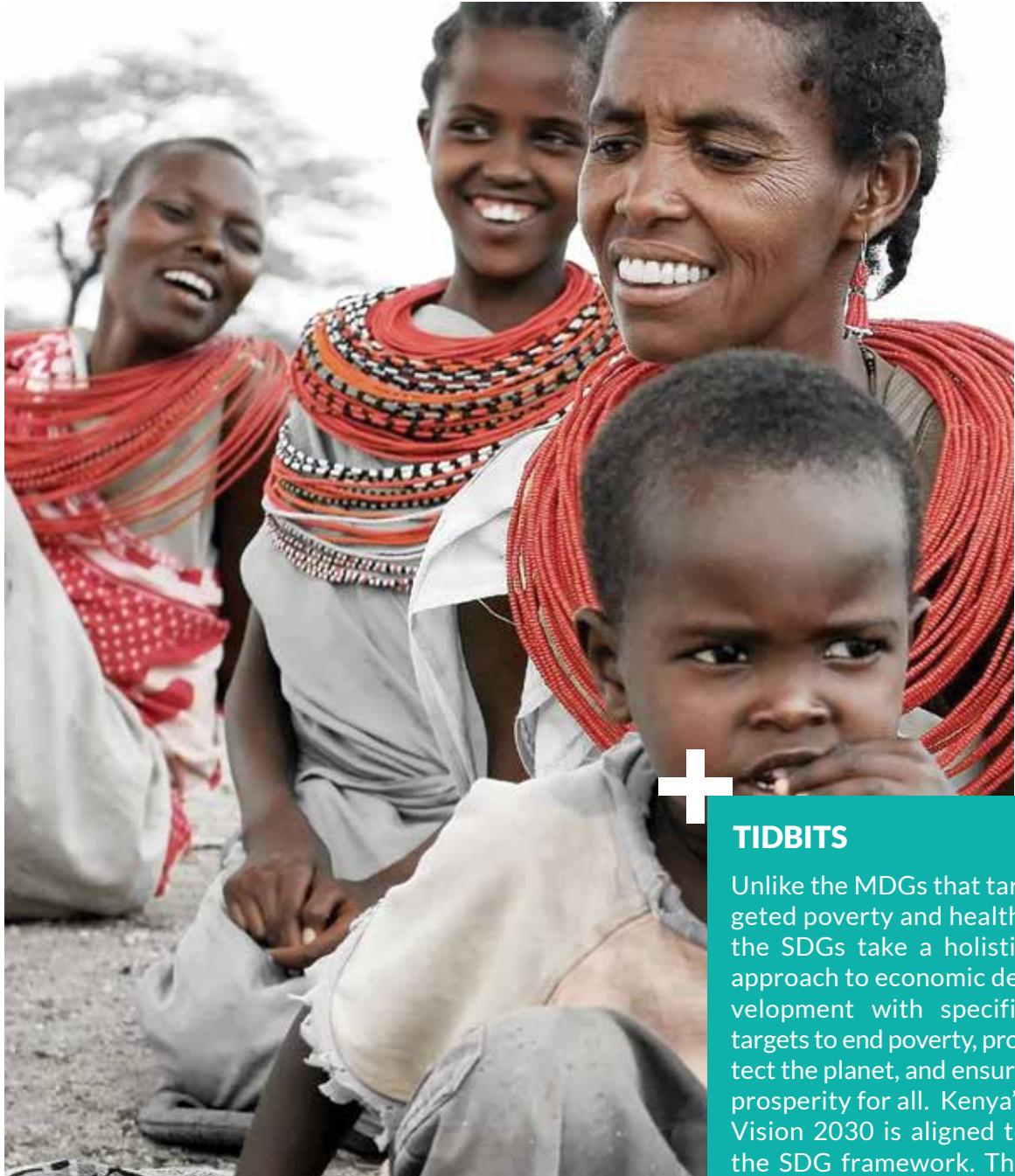
The MTPs identify priority projects and programmes to be implemented in each five-year cycle, and each is expected to incorporate new and emerging issues. MTP III is well underway. The National Government, through consultations with the Council of Governors (CoG), prepares and disseminates the guidelines for preparation of the CIDPs to ensure policy and developmental coherence. Therefore, they generally mirror the priorities of the MTPs.

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

In 2015, the UN adopted 17 Sustainable Development Goals (SDGs) as the organising principle for development policy and cooperation up to 2030, replacing the Millennium Development Goals (MDGs).

Unlike the MDGs that targeted poverty and health, the SDGs take a holistic approach to economic development with specific targets to end poverty, protect the planet, and ensure prosperity for all. Kenya's Vision 2030 is aligned to the SDG framework. The Government developed a roadmap for SDGs covering seven broad areas. These are:

- i. *Mapping of stakeholders;*
- ii. *Establishing partnerships;*
- iii. *Advocacy and sensitisation domestication/localisation;*
- iv. *Mainstreaming and accelerating implementation;*
- v. *Resource mobilisation;*



Social health protection approaches such as removing user fees and the Linda Mama programme have been successful.

TIDBITS

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- vi. *Tracking and reporting; and,*
- vii. *Capacity building.*

It was developed through a consultative process with inputs from National and County governments, civil society and development organisations. Ensuring healthy lives and wellbeing for all at all ages is one of the aims of the SDGs. Although significant progress has been made, indicators such as maternal mortality rate, under-five mortality rate and neonatal mortality rate, and HIV incidence are key challenges. A wide range of initiatives are strengthening service delivery and improving health outcomes, such as enhanced investments in human resource for health, equipment leasing strategy, HIV-related stigma reduction initiative and expanded treatment coverage.

One of the key programmes is expanding health insurance cover to allow access to comprehensive healthcare for all, including vulnerable people, orphans and the elderly. The government has been expanding the benefit package of the National Health Insurance Scheme to include in-patient and out-patient cover, major and mi-

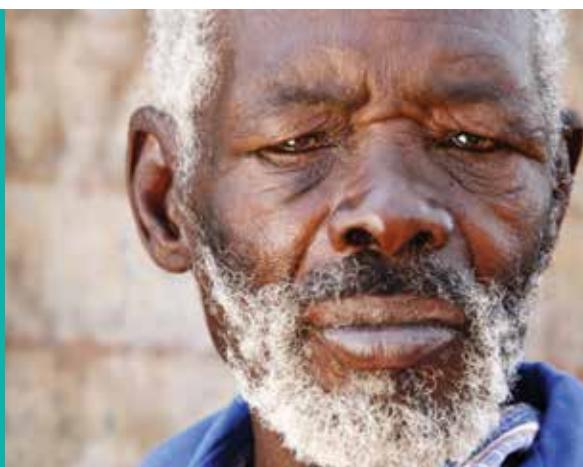
nor surgeries, cardiac conditions and chronic illness. The scheme is also being expanded to include comprehensive cover for civil servants and disciplined forces and new packages related to addressing non-communicable conditions, and instituting strategies to enroll more members.

This has resulted in improved access to high quality comprehensive healthcare at subsidised costs and enhanced access to healthcare by Kenyans, particularly the vulnerable segments of the society. To address maternal and child health, a number of innovative interventions are being implemented.

An example is the Beyond Zero campaign championed by the First Lady, Mrs Margaret Kenyatta, which aims to end preventable deaths among women and children, and give new impetus to the fight against HIV through policy prioritisation, resource allocation and improved service delivery. The campaign seeks to strengthen existing health and community systems and mobilise contributions from private and public sectors and development partners.

TIDBITS

A wide range of initiatives are strengthening service delivery and improving health outcomes, such as enhanced investments in human resource for health, equipment leasing strategy, HIV-related stigma reduction initiative and expanded treatment coverage. One of the key programmes is expanding health insurance cover to allow access to comprehensive healthcare for all



CHAPTER 3



NHIF AND FINANCING OF UHC

INTRODUCTION

The National Hospital Insurance Fund (NHIF) is a State corporation whose primary mandate is to secure all Kenyans from financial risk occasioned by the high cost of healthcare services. This makes it a primary enabler of the government's Universal Health Coverage (UHC) programme. According to its 2018–2022 Strategic Plan, it should do this by pooling funds for affordable, accessible, sustainable and quality health insurance.

UHC envisages that all people and communities will access preventive, curative, rehabilitative and palliative quality health services without suffering financial hardship due to catastrophic medical expenditure. The government has chosen the NHIF as the channel to finance UHC and cushion Kenyans against the high cost of healthcare.

The current economic environment characterised by high inflation rates and medical fees has brought to the fore the need for a social insurance scheme to cushion Kenya's majority poor. The government recognises that UHC faces key challenges in financing that include:

- i. *Low total funding of healthcare in the country (7 percent of total Government Budget against the Abuja Declaration target of 15 percent);*
- ii. *Inefficiencies in the use of available funds;*
- iii. *Weak benefit utilisation management of insurance schemes;*
- iv. *Leakages in the flow of healthcare funds – at over 30 percent (as per various public expenditure tracking surveys);*
- v. *Multiple fragmented health insurance pools, both at National, County, donor and private sector levels;*
- vi. *Low levels of health insurance coverage (about 17 percent), meaning that a significant proportion of Kenya's population is not contributing towards the insurance fund.*

At the top is strengthening the health financing system to underpin UHC efforts, as articulated

in the draft Kenya Health Financing Strategy (KHFS) 2016-2030. Expanding health insurance through NHIF is central to the UHC strategy and is in line with government research, including a Kenya Institute for Public Policy Analysis and Research (KIPPRA) discussion paper in 2004, which noted that NHIF was focusing too much effort on formal sector employees while excluding hundreds in the informal sector, including farmers and pastoralists.

At its core, NHIF is a social health insurance (SHI) institution, financing health insurance coverage for formal sector employees through payroll deductions.



A health insurance scheme is social when it subsidises the poor, the elderly and the sick, and when it promotes equity and access to everyone and not for profit

Kenya envisions expanding from this foundation and achieving universal insurance coverage across formal and informal sectors, with formal sector employers and employees sharing in the contribution amounts.

In this vision, different levels of government will participate in subsidising membership for the poor and vulnerable.

“A health insurance scheme is social when it subsidises the poor, the elderly and the sick, and when it promotes equity and access to everyone and not for profit,” wrote the authors of the KIPPRA paper. A social insurance scheme usually has the following:

- i. *Compulsory coverage;*
- ii. *All contributors are eligible for benefits;*
- iii. *The benefits are not directly related to contributions but seek to redistribute income between different groups – from the rich to the lower income groups;*
- iv. *All revenues are directed solely to health.*

Achieving high insurance coverage alone, however, will not be sufficient for UHC in Kenya. Covered benefits need to be more clearly defined, meet emerging population needs given Kenya’s epidemiological transition, and be purchased more efficiently and equitably. Kenya has made major investments in its public health workforce, supplies, and infrastructure, as well as removing user fees for primary care. These continue to be primarily resourced through tax-based funds.

The success of the programme depends on improvement of health facilities in the counties and employment of more health workers, though this has been hampered by a poor performing economy and ravaged by a new global challenge, the Covid-19 pandemic.

GOVERNANCE CHALLENGES

The NHIF continues to face its fair share of governance challenges, with a perception that it is too politicised for an institution not funded by the Exchequer (it relies wholly on contributions from members).

As per its legal structure, accountability of the management and of the board is to the Government and not directly to members. Operational information is provided to the Ministry and not directly to members, while financial and operational information is shared with the Board during its meetings.

Of the 14 members of the Board, five are Government officials. The reputation of NHIF has in the past been tainted by corruption allegations. The Fund deals with mandatory contributions from the public, which have been increasing. In 2018, a probe by the National Assembly revealed that the NHIF could have lost more than Ksh10 billion in false medical claims. Auditors had flagged the figure as fraudulent and said it was part of about Ksh50 billion paid to NHIF by the Treasury as capitation premiums for medical



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cover for civil servants, Kenya Police Service, National Youth Service, and Kenya Prisons Service since 2013. In late 2019, NHIF was linked to corruption in county governments where healthcare providers falsely billed the Fund for non-existent surgical procedures.

An internal assessment by the Fund revealed the insurer was paying up to five times the medical premiums it received from subscribers, wiping out its revenues. Currently, informal sector workers pay Ksh500 per month per household. The Fund's projections for revenues and expenses for the national scheme show that it is likely to start running into deficit by 2020.

In January 2019, 18 suspects were charged over alleged loss of Ksh1.5 billion at the Fund. Appearing before Anti-Corruption Court Chief Magistrate Douglas Ogoti, the accused were charged with 17 counts, among them abuse of office and wilful failure to comply with the law relating to management of public funds, among other counts.

In early 2020, the Fund drew up rules requiring individuals who voluntarily join the scheme to wait for three months before accessing benefits, a decision that could hamper their access to healthcare under UHC. An independent mechanism for contributors to address grievances has not been set up and, indeed, is not envisaged in the NHIF Act.

The NHIF will require an overhaul of its legal and governance structure to tame corruption and become an effective enabler of UHC. Making NHIF an effective social insurance fund International experience suggests that effective health financing reforms can advance UHC by mobilising sufficient resources to provide the services necessary for good health and by ensuring that these resources are pooled and

spent equitably, protecting citizens from financial burden when seeking healthcare. These joint goals include increasing insurance coverage, strengthening the financing of primary care, increasing domestic spending for essential programmes, and improving the efficiency of budget allocation while engaging the private sector to enhance supply and choice.

Kenya is one of the few countries whose public health insurance scheme relies solely on funding from members' contributions. Other schemes, such as in Germany, Chile, and Philippines, have contributions from employers and Government.

Others rely on additional income from tax contributions, including Ghana's National Health Insurance Scheme, Britain's National Health Service (NHS) and Sri Lanka's National Insurance Scheme.

Social health insurance functions on a pay-as-you-go premise and NHIF's financial sustainability is dependent on prudent matching of receipts (collections) to expenditures. Longer term financial sustainability will depend on several factors, including sufficient revenues, expenditures, assets and liability management. Payment of out-of-pocket expenditures for health services has become a major barrier to access – currently estimated at about 40 percent of total health expenditure.



Social health insurance functions on a pay-as-you-go premise and NHIF's financial sustainability is dependent on prudent matching of receipts to expenditures



Efforts by the government and development partners to progressively increase funding to the health sector has not led to drastic improvement of health outcomes because of the way the funds are channelled.

However, through various reforms and discussions, contributory health insurance has gained popularity as a health financing mechanism worldwide. Abundant evidence shows that raising funds through required prepayment is the most efficient and equitable base for increasing population coverage.

In effect, such mechanisms mean that the rich subsidise the poor, and the healthy subsidise the sick. However, to achieve UHC, Kenya must expand the range of services it provides. Experience shows this approach works best when prepayment comes from a large number of people.

TIDBITS

Social health insurance functions on a pay-as-you-go premise and NHIF's financial sustainability is dependent on prudent matching of receipts to expenditures. Longer term financial sustainability will depend on several factors, including sufficient revenues, expenditures, assets and liability management. Payment of out-of-pocket expenditures for health services has become a major barrier to access – currently estimated at about 40 percent of total health expenditure. Efforts by the government and development partners to progressively increase funding to the health sector has not led to drastic improvement of health outcomes because of the way the funds are channelled.

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ple, with subsequent pooling of funds to cover everyone's healthcare costs. No one in need of healthcare, whether curative or preventive, should risk financial ruin as a result.

It is imperative to note that no single mix of policy options will work well in every setting. As a WHO report cautions, any effective strategy for health financing needs to be homegrown. Kenya's healthcare financing is a mixed model, with both public and private sector elements. In summary, the main components of this system include:

- i. *General tax financing: This consists mainly of 'free' services in public health facilities.*
- ii. *National Hospital Insurance Fund (NHIF): The Fund collects revenue, pools funds and purchases care on behalf of its members. It is also*

TIDBITS



Social health insurance functions on a pay-as-you-go premise and NHIF's financial sustainability is dependent on prudent matching of receipts (collections) to expenditures. Longer term financial sustainability will depend on several factors, including sufficient revenues, expenditures, assets and liability management.



- responsible for determining the contribution (premium) rates and benefit packages.
- iii. **Private health insurance (voluntary):** Currently, private health insurance is provided through insurance companies and Medical Insurance Providers (MIPs, formerly HMOs). Insurance companies and MIPs are regulated by the Insurance Regulatory Authority (IRA), based on the Insurance Act Cap 487.
 - iv. **Employer self-funded schemes:** These are financed by annual budgets and are either managed in-house or through third party administrators (TPA). A number of employers run their own healthcare facilities for both outpatient and inpatient care. Such self-funded schemes, though contributing to healthcare financing, are seen as part of employee benefits and there is no specific documentation and regulation.
 - v. **Community based health-financing (CBHF) schemes:** A number of these schemes have emerged over time to meet the healthcare financing needs of low-income earners, who have traditionally been left out of private insurance and NHIF. CBHFs vary greatly in type and scope, and range from small funds run by community welfare groups to large NGO-based schemes. The schemes often finance other needs outside healthcare. In Kenya, information is only beginning to be gathered on their size, capacity, performance and roles in healthcare financing and vulnerability reduction. There is no specific regulation for CBHF but the schemes are currently registered under the Ministry of Gender and Youth and have formed an umbrella association (KCBHFA).
 - vi. **Out of pocket (OOP) health spending:** Like in most developing countries, OOP has been very high in Kenya. This spending is a major barrier to accessing healthcare services and drives households into poverty through sale of assets and diversion of meagre income into healthcare. However, it also reflects a good opportunity to develop risk-pooling mechanisms



EFFECTIVE UNIVERSAL HEALTH FINANCING REFORMS

International experience suggests that effective health financing reforms can advance UHC by mobilising sufficient resources to provide the services necessary for good health and by ensuring that these resources are pooled and spent equitably, protecting citizens from financial burden when seeking healthcare.

These joint goals include increasing insurance coverage, strengthening the financing of primary care, increasing domestic spending for essential programmes, and improving the efficiency of budget allocation while engaging the private sector to enhance supply and choice. Kenya is one of the few countries whose public health insurance scheme relies solely on funding from members' contributions.

Other schemes, such as in Germany, Chile, and Philippines, have contributions from employers and Government.

that provide better access to healthcare and reduce the vulnerability of households to uncertain financial shocks arising from healthcare expenditure.

- vii. **Donors and Non-Governmental Organisations (NGOs):** Various donors and NGOs have traditionally contributed significantly to healthcare financing and provision. In the past 10 years, the proportion of healthcare expenditure contribution by donors has more than doubled (2005/6 NHA), raising concerns on the sustainability of the health system. Some of the major current donor commitments to the health sector include PEPFAR (\$607 million, most of it for HIV/Aids), Global Fund for HIV/Aids, TB and malaria (\$378 million) and the World Bank (over \$100 million).
- viii. **Health Sector Services Fund (HSSF):** It was launched in 2010. This is a form of supply side financing to Level Two and Three health facilities (mainly health centres in the public sector, but will in future cover FBO/NGO providers). It is aimed at improving service availability and quality, particularly for low income earners and the poor who are served by this level of facilities. HSSF is governed by Gazette Notice 401 of 2007, which was amended in 2009, and is mainly funded by the World Bank, Danida and the Government of Kenya.
- ix. **Output Based Approach Reproductive Health Voucher (OBA):** This is a form of demand side financing that targets the poor, who in most cases – except for family planning services – have to meet a specific criteria. The poor buy the health vouchers at a token price and redeem them within a specific provider network for certain health services. The current vouchers cover maternal health, family planning and gender-based violence. The OBA programme is managed by NCAPD under the Ministry of Planning, administered by a private firm and funded largely by donors, key among them KfW (German Development Bank) and to a

small extent by the Government of Kenya. The first phase in four districts ran from 2005 to 2008 (6.58 million Euro) and the second phase started in 2008 and ran up to 2011 (10 million Euro).

Despite this array of options, the coverage of healthcare financing remains very low – covering only 20 percent of the population.

CHALLENGES FACING HEALTHCARE FINANCING IN KENYA

The overall healthcare system in Kenya is characterised by weak sub-systems (stewardship, policy and regulatory framework, human resources, health infrastructure, health commodities and technologies, health management capacity and health financing).

Some of the key challenges include:

- i. High levels of poverty among the population. About 46 percent of Kenyans are poor and nearly half of this group is considered absolutely poor/indigent. Poverty is a major driver of poor health status while at the same time low health status drives the poor deeper into poverty. In terms of healthcare financing, this group faces major financial barriers to accessing healthcare.
- ii. High burden of preventable infectious diseases and an emerging scenario of non-communicable diseases.
- iii. Inadequate funding of the health system (6.3 percent of total government expenditure). According to the Annual Operating Plan Six (AOP 6), the estimated total funds needed to deliver the Kenya Essential Package for Health (KEPH) is about Ksh143 billion, with an estimated funding gap of Ksh31 billion.
- iv. Inefficient allocation and use of scarce resources.



- es. Most of the healthcare expenditure is used for curative services in urban health facilities.
- v. High out-of-pocket expenditure in the context of a weak, risk pooling system.
 - vi. Significant inequalities in access to healthcare services largely due to financial barriers.
 - vii. Poor health infrastructure and unreliable supply of health commodities and medicines.
 - viii. Shortage and poor distribution of health workers.
 - ix. Poor management of health quality and productivity.
 - x. Dysfunctional referral systems leading to wastage of resources.
 - xi. High dependence on donors.

SOCIAL INSURANCE SCHEME AS A FINANCING OPTION FOR UHC

To achieve UHC, Kenya needs a financing system that enables people to use all types of health services – promotion, prevention, treatment and rehabilitation – without incurring

financial hardship. The obligation to pay directly for services at the moment of need is a challenge for those who seek treatment, and can result in severe financial distress, even impoverishment. A WHO report has outlined how countries like Kenya can raise funds for social health insurance to support UHC. These include:

- i. Increasing the efficiency of revenue collection:
 - This will increase the funds that can be used to provide services or buy them on behalf of the population.
- ii. Re-prioritising government budgets: - Governments sometimes give health a relatively low priority when allocating their budgets. For example, few African countries reach the target agreed on by their Heads of State in the 2001 Abuja Declaration, to spend 15 percent of their government budget on health (19 of the countries in the region who signed the declaration now allocate less than they did in 2001).
- iii. Innovative financing: - Attention has until now focused largely on helping rich countries raise more funds for health in poor settings. The



THE NATIONAL HOSPITAL INSURANCE FUND (NHIF)

NHIF is the only social health insurance scheme which all people earning more than Ksh1,000 per month have a statutory requirement to contribute funds to. As at the end of the FY 2017/18, the total NHIF membership stood at 7.6 million, an overall coverage of 27.2 million Kenyans (principal contributors and their dependents).

The target during the Third Medium Term Plan (2018-2022) period is to achieve over 70 percent health insurance coverage. The Fund has contracts with 645 hospitals in all parts of the country for provision of inpatient services to members and their beneficiaries. Currently, NHIF has the most expansive network of hospitals of any health insurer in the country. It covers all public hospitals, mission or faith-based hospitals and private hospitals, with a coverage of 98 percent of the hospital beds in the country.

NHIF provides services through contracts, specifying the coverage rates or rebates depending on the contractual agreement with the providers.

high-level Taskforce on Innovative International Financing for Health Systems included increasing taxes on air tickets, foreign exchange transactions and tobacco in its list of ways to raise an additional US\$ 10 billion annually for global health. A levy on foreign exchange transactions could raise substantial sums in some countries. India, for example, has a significant foreign exchange market, with a daily turnover of US\$ 34 billion.

- iv. *Diaspora bonds (sold to expatriates) and solidarity levies on a range of products and services, such as mobile phone calls.*
- v. *Development assistance for health: While all countries, rich or poor, could do more to increase health funding or diversify their funding sources, only eight of the 49 low-income countries had any chance of generating from domestic sources alone, the funds required to achieve the MDGs by 2015.*

The National Hospital Insurance Fund (NHIF) is playing a major role in the pooling of resources for social health insurance for the population. Currently, the NHIF covers close to 20 percent of Kenyans. Since 2003, some of the reforms undertaken within NHIF to make it more effective for financing UHC include:

- i. *Restructuring its governance pillars, with the Board of Management playing a keener role in protecting the interests of contributors.*
- ii. *Expansion of coverage through rollout of additional branches, innovative technology, targeting the informal sector, and launch of new products.*
- iii. *An increased focus on transparency, accountability and efficiency, on the back of corruption allegations, leading to adoption of a zero-tolerance-for-graft policy.*
- iv. *Ongoing restructuring to reduce the previously bloated workforce and improve productivity and efficiency.*



TIDBITS

President Uhuru Kenyatta indicated in his inauguration speech that this would be achieved by expanding coverage under NHIF.

The World Bank estimates that only a fifth of Kenyans have any sort of medical cover, which means that as many as 35 million Kenyans are vulnerable to financial devastation occasioned by a medical emergency.

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- v. Aggressive recovery of lost assets through litigation.
- vi. Enforcement of compliance by employers on statutory deductions to ensure timely contributions and remittance of workers' dues.

Key strategic successes of the Fund include:

- i. Higher membership over the past five years.
- ii. Increased payout of benefits to members and their beneficiaries. The payout ratio grew from 62 percent in 2014 to 85 percent in 2018.
- iii. Investment in information technology to reach members and support the delivery of its mandate. This includes the introduction of tools such as electronic funds transfer (e.g. M-Pesa), swipe cards, point-of-sales systems and other innovations that have increased the efficiency of the Fund.
- iv. Improved payment periods for undisputed claims, comparing favourably with private insurers. On average, NHIF pays claims within 14 to 21 days compared to the best paying private insurers who average 30 days.
- v. Increase in rebates on its inpatient package and the number of hospitals in its network. By the end of 2018, the Fund had contracts with 645 hospitals, accounting for 44,299 beds in Kenya against a total of 49,000 beds.
- vi. The Fund has injected over Ksh33 billion into the health sector, with projections to reach over Ksh100 billion by the end of the current Third Medium Term Plan (MTP 3) period.
- vii. In the FY 2016/17, NHIF, with the support of the National Government, provided insurance cover to 160,422 households under the Health Insurance Subsidy Programme (HISP) and 41,666 Older Persons and Persons with Severe Disabilities (OP&PWD).
- viii. Revenue grew from Ksh15 billion in 2014 to Ksh47 billion in 2018.
- ix. Enhanced customer relationships through the rollout of HISP and OP&PWD insurance sub-

sidy programmes, as well as the development of micro-sector strategies.

- x. Enhanced corporate governance framework through development of key policies, including performance contracts.

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lic health hospitals and faith-based hospitals. These hospitals account for over 60 percent of facilities in the country. Contractual terms are agreed with the various hospitals depending on the contract category. NHIF's rebates have been improving and have increased by an average of 71 percent in the past five years. The Fund has made a strategic decision to focus on public hospitals, mission or faith-based hospitals, and smaller private hospitals, as these are more cost efficient, widespread and accessible

to members. Currently, NHIF covers in-patient services at its accredited hospitals. The depth of coverage depends on the contract that a hospital has with NHIF. The deepest, comprehensive cover is achieved at public hospitals, with 100 percent coverage for NHIF members in these facilities.

In Contract B, which covers faith-based hospitals and smaller private hospitals, the Fund provides comprehensive cover, with co-pay required for surgical procedures. Rollout of outpatient services in October 2010 stalled because of legal action.

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With UHC key to the Big 4 Agenda, the Cabinet Secretary formed the UHC Health Benefits Package Advisory Panel on 8th June 2018 through a notice in the Kenya Gazette (No.5627).

To achieve UHC, Kenya needs to work within its current resource basket and progressively move towards the UHC target as more resources become available, and the use of such resources becomes more efficient.



ACHIEVEMENTS	CHALLENGES	LESSONS LEARNT AND THE WAY FORWARD
Revenue growth from 15B in 2014 to 47B in 2018	Resistance to the review of contribution rates by stakeholders	Stakeholder involvement is critical
Increase in payout ratio from 62 percent in 2014 to 85 percent in 2018	Portability of benefits	When designing prepayment mechanisms, it is important to consider portability of benefits
Improved access to healthcare services; number of accredited HCPs increased from 2,800 in 2014 to 7,584 in 2018		

Enhancement of customer relationships through the roll out of HISP and OP&PWD insurance subsidy programmes, as well as development of micro sector strategies	Lengthy claim process; this was addressed through initiating review and re-engineering of the claims process	Involvement of Health Care Providers in development of policies that are expected to be implemented
Development of key policies like corporate governance and performance contracts that enhanced corporate governance framework	Inadequate ICT system controls; this was addressed through development of an ICT strategy	There is a need to design facility-specific communication on contracts, benefits and implementation of policies
Restructuring of the organisation, which enhanced synergy in operations	Incidents of fraud; this was addressed through strengthening controls: one among them was introduction of pre-authorisation of some benefits	The Fund requires more consultative stakeholder engagements to ensure continuous flow of information
Maintaining ISO 9001:2008 QMS certifications	Insufficient review of institutional framework on granting pre-authorisation letters; the framework was reviewed and decentralised	The informal sector is not fully exploited and there is a need for more focused strategies for the sector.
Improved brand index	Inadequate internal communication; the Fund has enhanced the internal channels of communication	There were concerns by stakeholders on the criteria used to determine indigents in the HISP schemes. The Fund is working closely with the county governments
Enhanced staff training	System breakdown at the HCPs level; this has been addressed through enhancement of the bandwidth	Enhancement of the HISP
Cascading of the National Performance Contracting (PC).	Inadequate staff orientation; currently there is a robust induction programme in place	Performance contracts need to be cascaded earlier in the year and the staff well sensitised.

Summary of the 2014-2018 NHIF Strategic Plan Achievements



THE CASE FOR SOCIAL HEALTH INSURANCE FOR ACHIEVING UNIVERSAL HEALTH COVERAGE

Social health insurance is a key pillar for achieving UHC in Kenya. Ongoing reforms at NHIF are designed to make it more effective and responsive. These include restructuring the management structure, constantly reviewing member contributions, extending the benefit package to outpatients, and adopting new strategies to increase membership. But NHIF cannot do it alone.

Private health insurance companies will still be important in financing the health system through supplementary insurance. UHC still faces big challenges, not least of which is the continued growth of an informal economy where most players remain out of reach of NHIF and the goal of a more equitable universal system of health coverage in Kenya. Experience in countries like South Korea have shown that formalisation of the labour force greatly increases the chances of equitable and sustainable social health insurance coverage.

Global evidence shows that countries that made progress towards UHC began by defining a Health Benefits Package (HBP). This is a group of health services including medicines, procedures and health technologies that are guaranteed to those who are eligible to receive them.

The package would be accessed by all Kenyans at service delivery points and paid for in a variety of ways, including through an insurance scheme or public finances. Its success also depends on the resources available, i.e. money, health workers, health facilities and medical equipment. This is where the Health Benefits Package Advisory Panel (HBAP) comes in.

The Panel is working on the following deliverables:

- i. *Standard criteria for assessing inclusion and exclusion of services, procedures, drugs, medical supplies and technologies in UHC-EBP.*
- ii. *A portfolio of services and procedures that are properly costed using the best quality evidence, including actuarial estimates of supply and demand, based on realistic projections of current and future utilisation:*
- iii. *A list of medical products and health technologies that are properly costed, based on realistic projections of current and future supply and demand: emerging technologies should be considered for inclusion provided that their cost-effectiveness and benefits to the people are justified.*
- iv. *A periodic work plan of activities based on assignments issued by the Cabinet Secretary for Health.*

The panel reviewed the contents of benefit packages and service entitlement in KEPH and NHIF that were delivered through vertical programmes and county governments as per the



KEPH criteria. It also reviewed the foundation of vertical programmes and other services offered, including the NHIF's national scheme known as Supa Cover. KEPH has more services that target preventive and promotive care, an aspiration Kenya is striving towards.

RESOURCE POOLING THROUGH HEALTH INSURANCE SCHEMES

President Uhuru Kenyatta has made achieving Universal Health Coverage by 2022 a major part of his second term agenda. He indicated in his inauguration speech that this would be achieved by expanding coverage under NHIF.

The World Bank estimates that only a fifth of Kenyans have any sort of medical cover, which means that as many as 35 million Kenyans are vulnerable to financial devastation occasioned by a medical emergency. Illness takes a huge

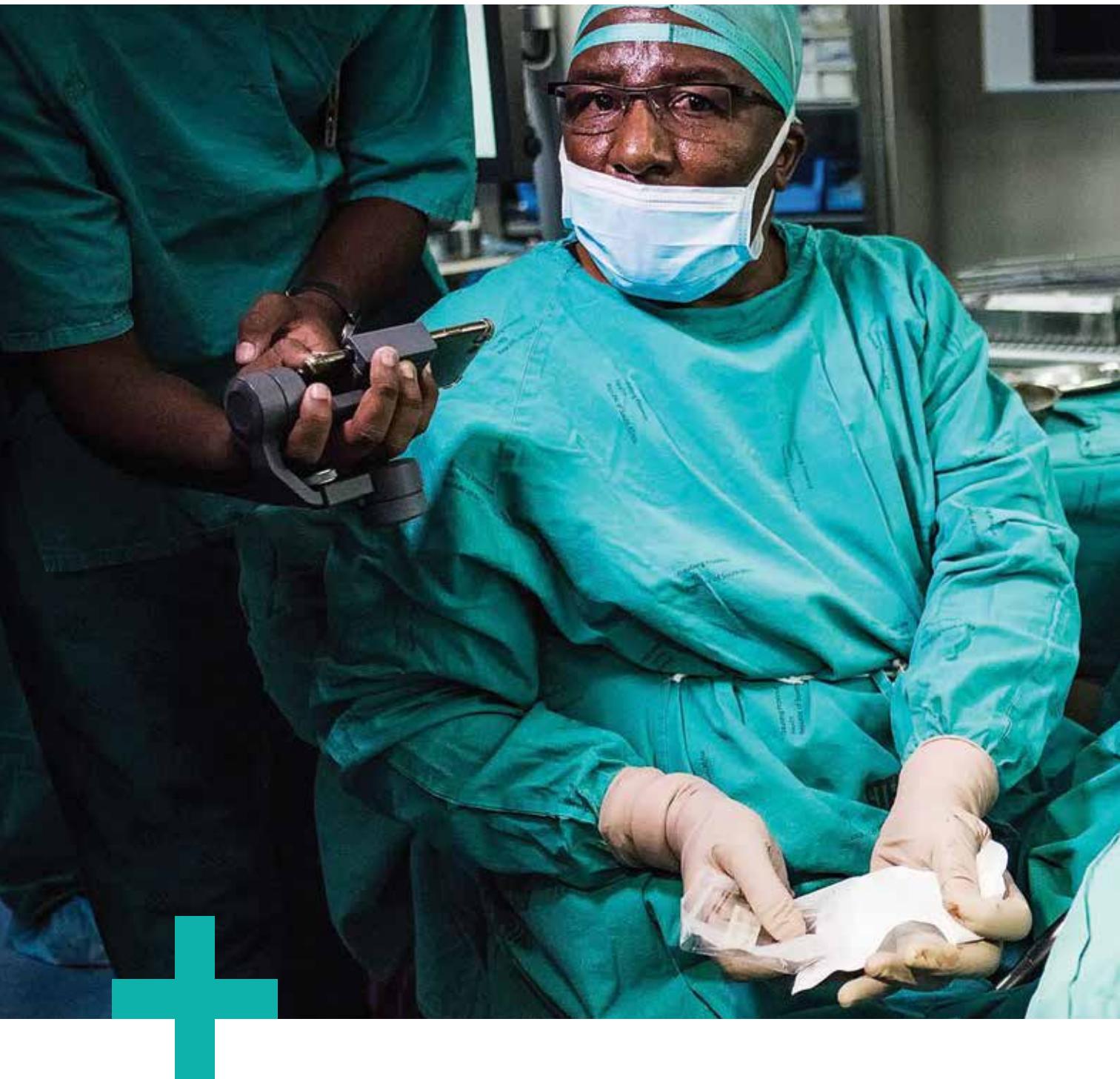
financial toll. As a result, many Kenyans are forced to sell off property, rely on networks of relatives and friends, or even make desperate appeals on social media, to raise the necessary funds.

Kenya's network of public healthcare facilities is organised on six levels, with the lowest unit being community health workers embedded within communities.

At Level Two, dispensaries and clinics provide the link between community-based healthcare and the formal health system.

Together with Level Three facilities – health centres, maternity clinics and nursing homes – these make up the primary healthcare units. Levels Four to Six are sub-county, county and national referral hospitals.

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TIDBITS

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ple interact with the healthcare system and it is especially at these facilities that national government interventions on cost mitigation have been most consequential. According to policy briefs from the Kemri Wellcome Trust Research Programme that examines multiple funding flows to public healthcare facilities in Kenya, the National and County governments need to:

- i. Improve the infrastructural capacity of public healthcare facilities and human resource for health, medicines and medical equipment.
- ii. Find innovative ways of financing premiums for the poor, elderly, people with disabilities, unemployed and those in the informal sector.

The policy briefs also recommend that NHIF:

- i. Re-orient its facility selection to create a balance between public and private facilities, and between urban and rural facilities to improve geographical access.
- ii. Engages healthcare providers in determining provider payment rates and makes available information on how the rates are developed. This will improve provider acceptance.
- iii. Educates health workers on the services offered in the benefit package, as they are the gatekeepers of health services.
- iv. Ensures timely reimbursements to healthcare facilities to send the correct incentives for service delivery.
- v. Invests in fraud minimisation strategies such as verification of provider self-assessment reports, claims and membership. A risk-based approach to sample facilities for physical verification of self-assessment reports and imposition of tough sanctions on providers guilty of fraudulent self-assessment reports, are the best options.
- vi. Harmonises the benefit packages into one package for all members to reduce inequities

in access to needed services.

- vii. Simplifies the language used in communication of the benefit packages and adopts communication strategies that reach low-income, less educated, rural population groups, such as visits to homes and public places like markets and places of worship.
- viii. Strengthens monitoring and supervision of healthcare providers and imposes sanctions and rewards for the quality of care provided.
- ix. Reviews its communication and awareness creation strategies to identify mechanisms that are effective in reaching the informal sector, drawing from local immunisation programmes which combine local media messages with community outreach by community health workers.
- x. Considers introducing partial subsidies that are tax funded to reduce the financial burden imposed by high premium contribution rates on the informal sector.
- xi. Reviews its registration requirements and procedures to reduce the complexity of registration, and the burden of registration rules. In a context where a significant proportion of the informal sector do not have national identity cards and birth certificates, the NHIF could consider using alternative forms of identification, such as referrals from local leaders and local community based organisations.
- xii. Ends delays and unpredictability of claims processing and payments to healthcare facil-



When we took over in 2013, we realised that 40 percent of the people of Makueni would sell land and exhaust family income to pay medical bills for relatives



TIDBITS

For the first time since independence, residents of historically marginalised counties, such as Lamu and Mandera, now have access to Caesarean section procedures within their counties. But it is Makueni that stands out as a model to other county governments on how to implement a working public healthcare system.

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- ties, and incorporates client feedback into a quality assessment linked to NHIF provider payment rates. This will encourage healthcare facilities to stop discriminating against NHIF members.
- xiii. Aligns its members' formal benefit package to services available in healthcare facilities by making explicit the benefit package, and implementing a system for monitoring healthcare facilities to ensure that they deliver the formal benefits package.

In 2013, the government abolished all user fees in public dispensaries and health centres and allocated Ksh700 million to the HSSF. Health is one of the services devolved by the Constitution. This means that while the national government is still responsible for policy and management of Level Five referral facilities, namely the Kenyatta National Hospital and the Moi Teaching and Referral Hospital, the bulk of

TIDBITS



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THE MAKUENI COUNTY MODEL

Makueni is a mainly rural county in southeast Kenya, with a population of approximately a million people. It borders Kajiado, Machakos, Kitui and Taita-Taveta counties. From May to September 2016, the county initiated a pilot programme titled MakueniCare. The focus of MakueniCare was senior citizens over 65 years of age for whom it reimbursed expenses incurred on healthcare at county hospitals. Since 2018, the county expanded this to cover all residents and adopted a target of spending 30 percent of its budget on health, which allows for financing of the scheme.

Allocations increased from Ksh200 million in FY 2016/17 to Ksh300 million in FY 2018/19 (Kibwana, 2018). MakueniCare aims at addressing financial barriers to healthcare. Under this model, the county government guarantees and provides a set of essential curative, promotive and rehabilitative services within county facilities free of charge.

A resident must register as a principal beneficiary or as a spouse or dependent (below 18 years, except if school-going, then up to 24 years), and pay Ksh500 per household annually as registration fee. Since October 2014, Makueni has been offering its one million residents free healthcare across all its public

facilities. "When we took over in 2013, we realised that 40 percent of the people of Makueni would sell land and exhaust family income to pay medical bills for relatives," says the Makueni Governor, Prof Kivutha Kibwana.

Given that medical services in dispensaries and health centres were already paid for by the national government, the county government figured that if it doubled the Ksh100 million that its Level Four sub-county hospitals were collecting in user fees, it could offer free healthcare. Thus MakueniCare was conceived. It piggy-backs on the national government's free primary healthcare policy and the national coverage provided by NHIF to plug financial gaps with the aim of providing seamless cover.

Services offered include primary healthcare, inpatient care and ambulatory services. If the residents are also subscribed to NHIF, they can access free care at referral facilities outside the county. The Level Four hospitals provide free care and bill the county government, which also supplies them, as well as the primary healthcare facilities, with drugs, equipment and medical staff. The county government also invested in expanding facilities, including an additional 113 dispensaries and health centres, and has more than doubled the number of health facilities.



Experience in countries like South Korea have shown that formalisation of the labour force greatly increases the chances of equitable and sustainable social health insurance coverage



Dr Cyrus Matheka, head of the county's Health Promotion Services, said MakueniCare took two years to plan and was preceded by a programme offering free care to those over 65 years without a requirement for registration.

Within that time, the county government invested in expanding facilities, from dispensaries and health centres to sub-county hospitals, and has continued to do so. In less than five years, it has more than doubled the number of health facilities built over the past 50 years. This has reduced the average distance to a health facility from 9km to 5km. The county also boasts 13 Level Four hospitals and has employed 160 doctors, compared with just 38 doctors and three hospitals in 2013. At Ksh2.3 billion, health is the county's single largest budget item. Other free services offered include hospital admission, surgical procedures, X-ray imaging, laboratory testing, dental and counselling. Even in death, members benefit from 10 days of free mortuary services. However, the cover does not apply to

specialised care and equipment that are not available at the hospitals, including dialysis for patients suffering from kidney problems, intensive care units, implants, and auxiliary devices such as wheelchairs. Also, the county government is at risk of diverting resources from primary and preventive care, as individuals seek services for minor complaints. In addition,



Kakamega County also provides useful lessons in addressing high maternal and child mortality rates, while moving towards UHC. The county rolled out its Imarisha Afya ya Mama na Mtoto programme in the face of one of the highest maternal mortality rates in Kenya



Kenya needs a reliable and sustainable safety net for its poor.

TIDBITS

Kenya's majority poor is another obstacle facing NHIF. While the proportion of Kenyans living in poverty fell by 10.5 percentage points in the decade since 2008, to 36.1 percent in 2018, according to the Kenya National Bureau of Statistics (KNBS), poverty rates are still very high when compared with other lower middle-income countries.

an influx of people from neighbouring counties could strain the county resources.

CONCLUSION: LOOKING AHEAD

Social health insurance is a key pillar for achieving UHC in Kenya. Ongoing reforms at NHIF are designed to make it more effective and responsive. These include restructuring the management structure, constantly reviewing member contributions, extending the benefit package to outpatients, and adopting new strategies to increase membership.

But NHIF cannot do it alone. Private health insurance companies will still be important in financing the health system through supplementary insurance.

UHC still faces big challenges, not least of which is the continued growth of an informal economy where most players remain out of reach of NHIF and the goal of a more equitable universal system of health coverage in Kenya. Experience in countries like South Korea have shown that formalisation of the labour force greatly increases the chances of equitable and sustainable social health insurance coverage.

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According to the World Bank, gains in poverty reduction are vulnerable to agro-climatic shocks such as drought. This means that GDP growth does not necessarily translate to higher

consumption at household level, leading to the saying that "people cannot eat GDP."

Scaling up and geographic targeting of anti-poverty and social protection programmes are important instruments to target the neediest households and reduce regional disparities, notes the World Bank.

With a high poverty level, Kenya needs to develop a reliable and sustainable safety net for the poor. One way of doing so is to subsidise the NHIF to lower premiums for the poor, and help the self-employed and informal sector workers to join the Fund. For now, this is difficult because the Government's resources are strained. Another option is to expand private health insurance schemes through investment forums, community groups and families. This would reduce administrative costs, mitigate adverse selection, and provide uniform premiums to members.

Kakamega County also provides useful lessons in addressing high maternal and child mortality rates, while moving towards UHC. The county rolled out its Imarisha Afya ya Mama na Mtoto programme in the face of one of the highest maternal mortality rates in Kenya.

This was done collaboratively with Unicef, Amref and the Swedish government. Enrolled women deliver free of charge in health facilities (rather than at home) and receive a full vaccination cycle.

Mothers also get a grant to take care of themselves and their babies. Initial results indicate improvement in skilled deliveries from 33 percent to 56 percent and a reduction in maternal mortality from 800 to 460 per 100,000 mothers in the programme's three-year cycle.

CHAPTER 4



STATE OF INFRASTRUCTURE AND
SERVICES KEY TO ACHIEVING UHC

INTRODUCTION

Health infrastructure is critical for achieving Universal Health Coverage (UHC). According to the Ministry of Health, health infrastructure is defined as 'all the physical infrastructure, inpatient beds, equipment, transport and technology (including ICT) required for effective delivery of services at the National Government and County Government level.'

The World Health Organisation (WHO) on the other hand defines UHC as a health system where all people can access necessary health services; for example, prevention, promotion and treatment, rehabilitative and palliative care without the risk of financial problems. The right to use of health facilities, therefore, goes hand-in-hand with not only adequate availability of health infrastructure but also the requisite provision of high quality health service.

The state of health infrastructure in Kenya is not that rosy, considering the significantly low bed density of 14 beds per 10,000 population, compared with the global average of 27 beds per 10,000 population. Physical health infrastructure, especially buildings, are in a dilapidated state, have inadequate space and are not prioritised by both National and County governments as areas of critical investment.

The situation is made worse by political interference where local politicians want to dictate where health facilities should be constructed or determine their distribution. However, it is worth noting that a number of counties have also procured state-of-the art ambulances, with Machakos leading with 70 followed by Meru with 24.

Some counties have also modernised some of their health facilities to facilitate provision of quality service delivery and referral services. On the other hand, a policy brief by the Ministry

of Health titled 'Pathways to Optimal Health Infrastructure in Kenya' highlights not only the infrastructural gap, but also inadequate technical personnel to operate fixed equipment and machines, where they are available. An analysis of statistical information in the Kenya Economic Survey 2019 on health infrastructure is discussed based on trends in medical clinics, dispensaries, health centres, health facilities and hospitals as follows.

MEDICAL CLINICS

Statistical information from the Kenya National Bureau of Statistics (KNBS) Economic Survey 2019 indicates that between 2014 and 2018, the overall number of medical clinics (Level 2) owned by public, private, faith-based organisations (FBOs) and non-governmental organisations (NGOs) grew from 2,575 to 3,646, respectively. Majority of them were privately-owned medical clinics, whose number increased from 2,427 to 3,437 between 2014 and 2018, respec-



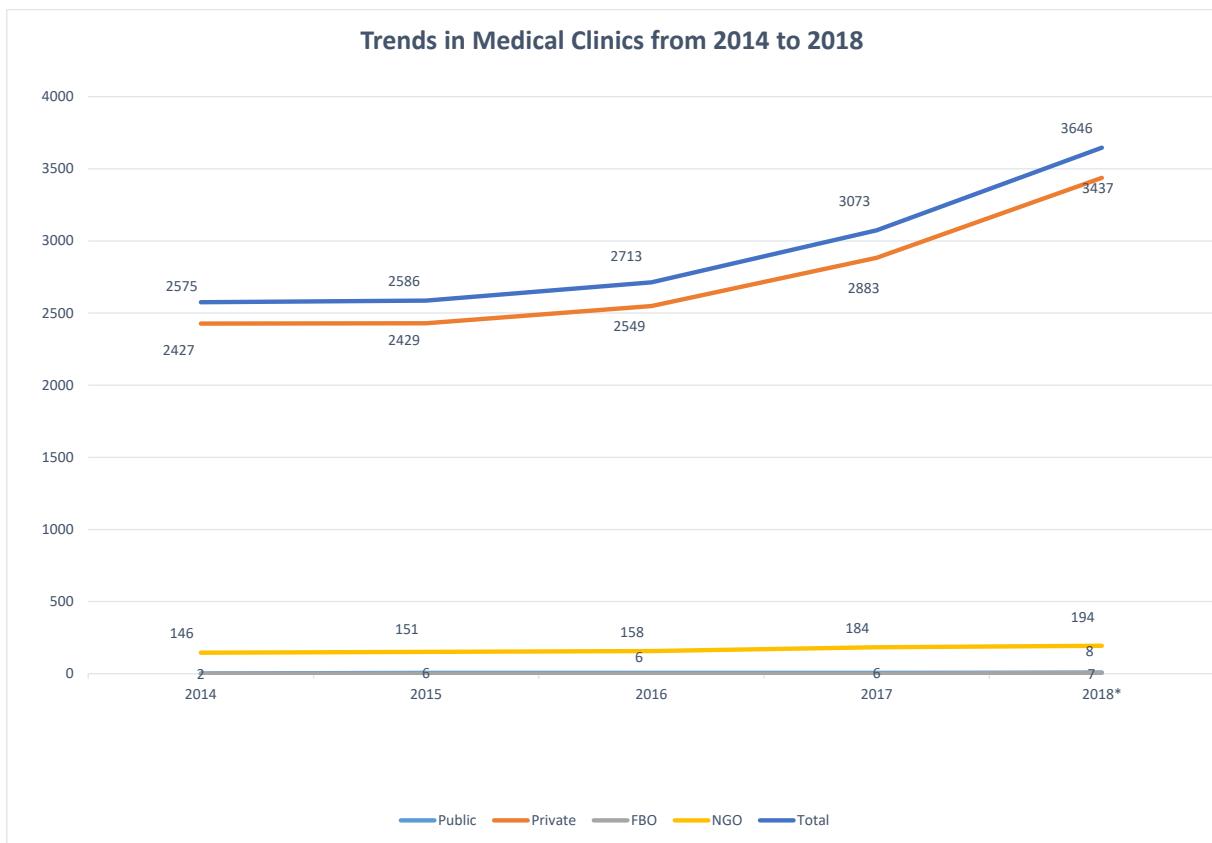
MoH facility for COVID-19 laboratory testing

tively. In 2014, private medical clinics accounted for 94.25 percent of the overall medical clinics compared with 94.26 percent in 2018. NGO-owned clinics increased from 146 to 194 in the same period. Publicly-owned medical clinics grew from two in 2014 to eight in 2018. There were no FBO medical clinics between 2014 and 2017. However, provisional statistics for 2018 put the figure of FBO medical clinics at seven. Figure 1 below provides a more detailed illustration of trends in medical clinics from 2014 to 2018.

The low number of publicly-owned medical clinics is a matter of grave concern, especially with regard to the low level of access to affordable and high quality UHC at the grassroots level.

The significantly predominant number of privately-owned medical clinics means that many poor and indigent people who are not covered by any health insurance, suffer financial hardship in trying to access health services and/or are forced to use alternative and often unsafe traditional healers.

Source: Kenya Economic Survey, 2019



Medical Clinics (level 2)

DISPENSARIES (LEVEL TWO)

Unlike in medical facilities where private facilities were in the majority, the number of dispensaries were mostly publicly owned, having increased from 3,225 in 2014 to 3,646 in 2018. Publicly owned dispensaries accounted for 84.1 percent of the total. Dispensaries owned by faith-based organisations increased from 656 in 2014 to 683 in 2018, respectively (Figure 2). There were no privately and NGO-owned dispensaries for the period 2014 to 2017.

However, it was projected that there would be three of each in 2018. The high number of publicly owned dispensaries is a boon to UHC as they can help implement it. However, majority of dispensaries and health centres do not provide comprehensive basic healthcare as many of them were elevated to Level 4 facilities without the resources to offer basic healthcare.



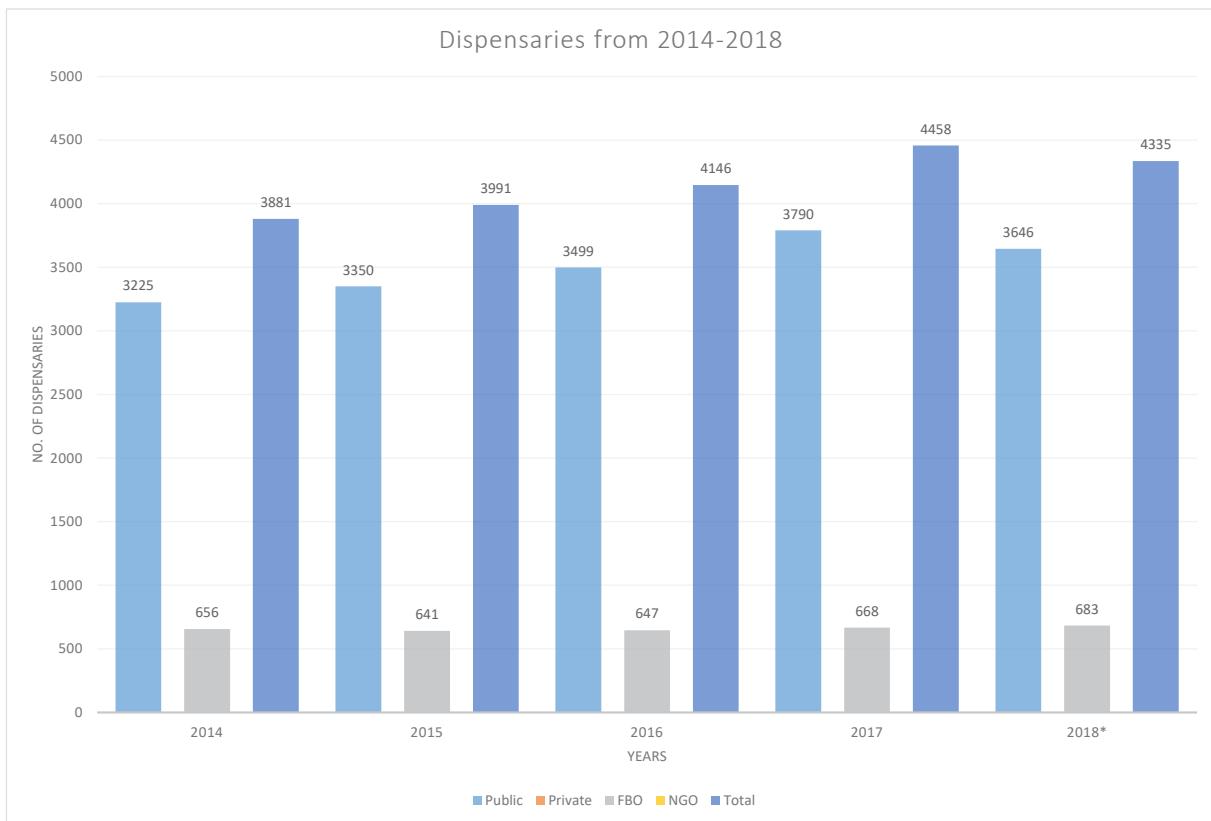
Nakuru Level 5 hospital. The high number of publicly owned dispensaries is a boon to UHC.

TIDBITS

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Source: Kenya Economic Survey, 2019



Trends in Dispensaries, 2014-2018

LEVEL 4 AND 5 HOSPITALS

Health centres increased by 3.1 percent to 1,806 in 2018 and most of them were publicly-owned. On the other hand, Level 4 and 5 hospitals grew from 668 in 2014 to 771 in 2018. Despite this scenario, there is still a critical need to upgrade, expand health infrastructure and adequately equip them to support UHC



TRANSPORT

In terms of transport infrastructure, most of the counties have purchased ambulances but others have a huge deficit. Ambulances are supposed to reach the scene within 15-20 minutes after an emergency call and move the patient to a health facility within the next 20 minutes – a rare occurrence in Kenya.

The World Health Organisation (WHO) requires at least one ambulance to serve 70,000 people. The transport infrastructure should also consider the state of roads, which in some counties are still almost impassable, especially during the rainy season.

This can frustrate accessibility to quality health care and may lead to financial hardships, especially in counties with a shortage of ambulances. In this scenario, patients have no choice but to use private transport, which is unaffordable to many. This is coupled with a lack of emergency call centres for coordination of transport, and proper management of intra and extra county emergency services – to benefit from pooled inter-county resources. The Ministry of Health Policy Brief 2018 on Infrastructure also acknowledges the limited access to communication equipment and technologies among health



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service providers throughout the country. National and County governments, therefore, need to invest in communication technologies that ease access and use of health services in Kenya.

MINISTRY OF HEALTH FINDINGS (2017/2018)

These findings are based on the Kenya Harmonized Health Facilities Assessment (KHHFA) 2018, which was carried out by the Ministry of Health (MOH), working together with development partners such as the WHO, Japan International Cooperation Agency (JICA), United Nations Children's Fund (Unicef), United Nations Populations Fund (UNFPA), among others, who provided funding and technical support.

The assessment aimed to provide external validation of information on availability of health service and readiness; and offer baseline information to facilitate health investments in Kenya through the implementation of UHC.

According to the WHO, general service readiness refers to overall capacity of health facilities to provide general health service . On the other hand, readiness is defined as the availability of components required such as basic amenities, basic equipment, standard precautions, laboratory test and medicines and commodities.

THE MODULES ASSESSED IN KHHFA INCLUDED:

Availability: collected information relating to physical presence of facilities, resources, and services;

Readiness: covered capacity of a health facility to provide specific services, such as presence of drugs, supplies, diagnostics and equipment;

Management and finance: collected data on practices to support continuous services availability and quality (e.g. management practices and supervisory practices);

Quality and safety of healthcare: Indicators of receipt of appropriate, effective and timely care by patients under safe conditions; and,

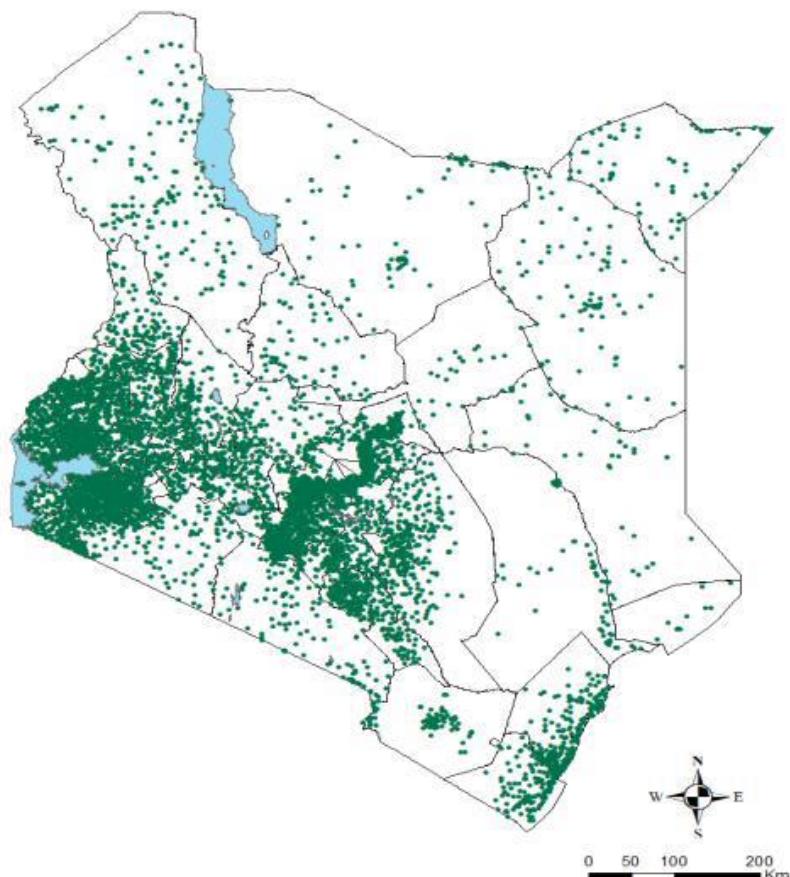
Community unit: Methods utilised to collect relevant data were key informant interviews with community health workers in all 47 counties and focus group discussions. The survey

randomly sampled 2,980 health facilities out of a total 10,535 from the Kenya Health Master Facility List that was used as the sampling frame for the survey.

Key findings of the KHHFA survey 2018 were:

HEALTH FACILITIES

Based on KMHFL, the national health facilities density in Kenya was 2.2 per 10,000 population, slightly surpassing the WHO target of 2 per 10,000. However, the report notes that 14



Source: Kenya Harmonised Health Facilities Assessment, 2018

counties (accounting for 30 percent of the total number of counties) had health facilities density below the WHO target of 2 per 10,000 population. There is a tendency of high concentration of facilities in the western part of the country, central region, Nairobi, Mombasa and south coast region.

HEALTHCARE WORKERS

The national healthcare workforce density is estimated at 15.6/10,000 compared with the WHO target of 23 per 10,000, highlighting a clear gap of 7.4. The health workers density is the number of health workers per 10,000 population by cadre and is an indicator of health workforce density. The report reveals that only four counties out of 47 have achieved well above WHO targets, as follows: Tharaka Nithi (33.8), Nyeri (31.0), Uasin Gishu (28.2) and Nairobi (26.3). This means that majority of the counties are understaffed and struggle to provide quality health care.

Dispensaries are critically important at the grassroots level in supporting delivery of UHC. The average number of all categories of nurses in dispensaries was one, compared with the national norm for dispensaries of four, showing a 25 percent gap in the staffing level of nurses in dispensaries.

On the other hand, the average number of registered nurses was 0.69, compared with a norm of one, indicating a gap of 31 for every 100 dispensaries. The average number of enrolled nurses was 0.16, compared with a norm of two, while the registered midwives averaged 0.13 against a norm of one per dispensary, showing a gap of 87 midwives per 100 dispensaries. Clearly, midwifery is understaffed and can gravely hamper the provision of free maternity services.

MEDICINES

According to the WHO, essential medicines are those that satisfy priority health care needs. On the other hand, tracer medicines are used to examine access in terms of availability of essential medicines. Tracer items of assessment of general service readiness are:

- *Haemoglobin;*
- *Whole blood glucose by glucometer;*
- *HIV rapid test;*
- *Malaria rapid test or smear;*
- *Rapid syphilis test;*
- *TB microscopy (by AFT light microscopy);*
- *General microscopy (wet mounts);*
- *Urine pregnancy rapid test; and,*
- *Urine dipstick.*

The KHHFA 2018 report revealed that tracer medicine for infectious diseases had the highest availability at 70 percent of the 2,927 health facilities, while medicines for mental health and neurological disorders scored the lowest in terms of availability at 21 percent. Medicine for non-communicable diseases was available in 42 percent of health facilities. Notably,



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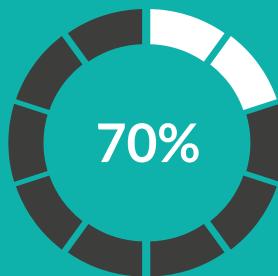
Marsabit County had the highest availability of essential medicines with 59 percent against a mean availability of 25 percent. This portrays a state of ill-preparedness in terms of provision of essential medicines for infectious diseases at county government level – a dangerous situation should there be a disease outbreak.

Infectious disease medicines: Dewormers (mebendazole or albendazole) capsules and tablets were found to be the most available, with a mean of 85 percent, closely followed by co-trimoxazole capsules and tablets at 78 percent. Ciprofloxacin capsules and tablets were at 75 percent and amoxicillin capsules and tablets were at 72 percent.

Others were: Ceftriaxone injection at 66 percent, metronidazole capsules and tablets at 65 percent, and fluconazole (antifungal) capsules and tablets at 45 percent. The national mean for availability of seven infectious diseases medicines was 70 percent.

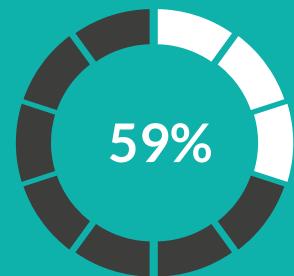
Non-communicable disease medicines: The average availability of 23 non-communicable disease was paracetamol at 77 percent, followed by epinephrine injectable at 76 percent, hydrocortisone injection at 75 percent, and meprazole tablet at 68 percent. Others were Ibuprofen tablet and Prednisolone (63 percent), Flurosemide capsules and tablets at 59 percent, with the least available being Isosorbide dinitrate tablets (2 percent) and Gliclazide (8 percent). Overall, the national mean availability was below average, at 42.1 percent.

Mental health and neurological medicines: Countrywide, phenobarbital tablets were the highest available of the 14 mental health and neurological tracer medicines, with an average of 58 percent, followed by diazepam injection at 47 percent, Diazepam tablet at 41 percent



TRACER MEDICINE

Availability of tracer medicine for infectious diseases according to the KHHFA 2018 report. Non-communicable diseases medicine availability was reported in 42% of health facilities assessed in regard to drugs in question.



ESSENTIAL MEDS

Availability of essential medicines in Marsabit. Mean availability of medicines by county was 25%. This portrays a state of ill-preparedness in terms of provision of essential medicines for infectious diseases at county levels

TIDBITS



Marsabit County had the highest availability of essential medicines with 59 percent against a mean availability of 25 percent. This portrays a state of ill-preparedness in terms of provision of essential medicines for infectious diseases at county government level – a dangerous situation should there be a disease outbreak.



The mean availability of 25 essential medicines by county show that only 10 out 47 counties scored above 50% with the highest – Marsabit county scoring 59%.

TIDBITS

According to WHO, palliative care is “an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychological and spiritual”.

and Amitriptyline at 38 percent. The least was Lithium tablet (1 percent), lorazepam injection at 1 percent, levodopa+carbidopa at 5 percent, and Valproate sodium tablet at 8 percent. The mean availability for the medicines survey nationally was a mere 21 percent.

Palliative care medicines: According to the WHO, palliative care is “an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychological and spiritual”.

Paracetamol was the highest available tracer item for palliative care, with 77 percent of the 2,927 facilities assessed having the drug, followed by ibuprofen at 63 percent, hyoscinebutylbromide injection at 58 percent, and loperamide at 48 percent.

Other palliative care medicines were as follows: metoclopramide injection (43 percent); dexamethasone injection (39 percent); senna preparation (laxative) at 20 percent; morphine granule injectable (10 percent); haloperidol injection (4 percent). The least was Lorazepam tablet at only 2 percent. Nationally, the mean availability of palliative care medicine was only 36 percent for the 10 palliative care medicines assessed. Essential medicines are those that satisfy the priority healthcare needs of the population.

Essential medicines: The WHO defines essential medicines as those that satisfy the priority healthcare needs of the population. They are selected based on the prevalence and public health relevance, evidence of clinical efficacy and safety, and comparative costs and cost-ef-

fectiveness. On average, the availability of essential medicines was 44 percent. However, none of the health facilities had essential medicines on the day of the KHHFA 2018 survey. In terms of the general service readiness index, Kenyan health facilities had an index of 59 percent, translating to nearly 6 in 10 facilities being well prepared to provide health services.

The highest domain score was that of basic equipment, with a mean score of 77 percent, followed by standard precaution with a mean score of 65 percent, diagnostics at 56 percent, basic amenities at 55 percent, and the lowest for essential medicines (44 percent).

The mean availability of 25 percent essential medicines by county show that only 10 out 47 counties scored above 50 percent, with the highest – Marsabit County -- scoring 59 percent.

The low availability of essential medicines is a cause for concern. The WHO framework for health systems observes that a well-functioning health system ensures equitable access to essential medical products, high quality vaccines, safety, and efficacy and cost effectiveness.

Essential medicines for mothers: Nationally, availability of essential medicines for mothers was quite low at only 40 percent, with sodium chloride injectable solution being the highest at 78 percent, followed by Gentamicin injectable at 71 percent, and Benzathine benzylpenillin powder for injections at 60 percent. Availability of Oxytocin injectable was at 55 percent, azithromycin capsules, tablets or oral liquid was at 49 percent, Metronidazole injectable at 47 percent, and Betamethasone or Dexamethasone injectable at 45 percent. Others were Methylsulphate tablet (40 percent); Magnesium sulphate injectable (31 percent), Misoprostol

capsules and tablets at 15 percent, with the least being Ampicillin powder for injection at 11 percent.

Essential medicines for children: According to the KHHFA 2018 Assessment Survey Report, the average availability of essential medicines for children countrywide was 56 percent. Paracetamol syrup/suspension had the highest availability at 85 percent; ORS sachets was at 82 percent, Zinc sulphate tablets or syrup at 81 percent, Artemisinin combination therapy (ACT) at 73 percent and Gentamicin injectable at 71 percent. Others which were the least available included morphine granules/injection/capsule/tablet at 19 percent, Ampicillin powder (11 percent) and procaine penicillin at 27 percent.

Medicine pricing: The price data was analysed for eight commodities out of 32 assessed, such as an antibiotic, an antifungal cream, a tocolytic, an inhaler and an injectable antibiotic. Patient procurement prices ranged from 0.6 to 3.15 for Level 5 and 6 hospitals, meaning clients paid lower prices for some medicines than the procurement prices, while for other commodities such as Amoxicillin 500mg capsule, clients paid three times more.

In Level 4 hospitals, the patient price to procurement price ratio was 0.22 to 4.00, meaning clients for Ibuprofen were paying four times the procurement price. In health centres and dispensaries, the median price was Ksh 0, and this was because the government abolished user fees in government Level 2 and 3 facilities.

LABORATORY

The KHHFA 2018 Assessment Report presents findings on laboratories based on diagnostic capacity, advanced diagnostic services, and diagnostic equipment availability as follows:

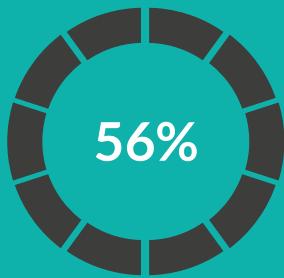
Diagnostic capacity: The average availability of diagnostic tests was 56 percent countrywide. However, it was revealed that 84 percent of health facilities had HIV diagnostic capacity, while 74 percent had malaria diagnostic capacity, followed by syphilis rapid test at 62 percent and urine test for pregnancy at 60 percent.

Others were blood glucose tests at 54 percent, urine dipstick glucose and urine dipstick protein tests, both at 43 percent. Only 17 percent of health facilities had all the diagnostic items. Clearly, these findings point to poor diagnostic capacity in most health facilities across the country.

Advanced diagnostic services and diagnostic equipment: Availability of urine dipstick tests was generally high in the counties, with 10 scoring 100 percent, while the performance of two counties was below 30 percent. Data from hospitals that offer advanced diagnostic services reveal that the mean availability of tracer items was 40 percent. Urine dipstick with microscopy was the highest at 68 percent, followed by full blood count with differential at 65 percent and gram stain at 55 percent.

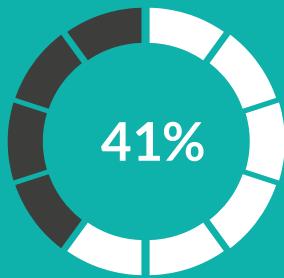
Others included; liver function test (54 percent), renal function test (54 percent), and serum electrolytes (51 percent). The least available was HIV antibody testing (ELISA) at 3 percent, syphilis serology (6 percent), and CD4 count and percentage at 26 percent.

On the other hand, the mean availability of high-level diagnostic equipment countrywide was 41 percent. Ultrasound was the highest available diagnostic equipment at 62 percent, followed by X-ray equipment at 53 percent and electrocardiogram (ECG) at 34 percent. The least available equipment was CT scan, at just 13 percent.



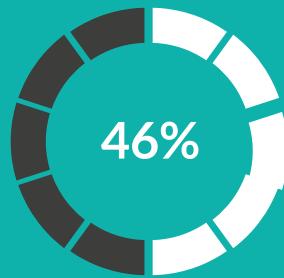
DIPSTICK TESTS

Average availability of diagnostic tests countrywide. 84 percent of health facilities had HIV diagnostic capacity.



DIAGNOSTICS

Mean availability of high-level diagnostic equipment countrywide. Ultrasound was the highest available.



BED OCCUPANCY

National average inpatient bed occupancy rate is 46%, which falls way below the set target of 80%.

The KHHFA assessment report notes that the national average inpatient bed density is 13.5, which is way below the WHO target of 27 beds per 1000 people. According to WHO, bed density is defined as total number of hospital beds per 1000 population.

BEDS

The KHHFA Assessment Report notes that the national average inpatient bed density is 13.5, which is way below the WHO target of 27 beds per 1,000 people. According to WHO, bed density is defined as the total number of hospital beds per 1,000 population. Additionally, the national average inpatient bed occupancy rate is 46 percent, way below the set target of 80 percent. Bed occupancy rate is defined as the ratio between inpatient beds occupied and beds available out of those provided. On the other hand, the national maternity bed density is 13.8/1,000, which is above the WHO set target of 10/1000.

SPECIALIST CARE

Palliative care: Palliative care service availability was poor in Kenya, with just 3 percent



MEDICINE PRICING

The price data was analysed for 8 commodities out of 32 commodities assessed such as antibiotic, an antifungal cream, a tocolytic, an inhaler and an injectable antibiotic. Patient procurement prices ranged from 0.6 to 3.15 for level 5 and 6 hospitals meaning clients paid lower price for some of the medicines than procurement price, while other commodity such as Amoxicillin 500mg capsule clients paid 3 times more. In level 4 hospitals, patient price to procurement price ratio was 0.22 to 4.00 meaning clients for Ibuprofen were paying 4 times the procurement price.

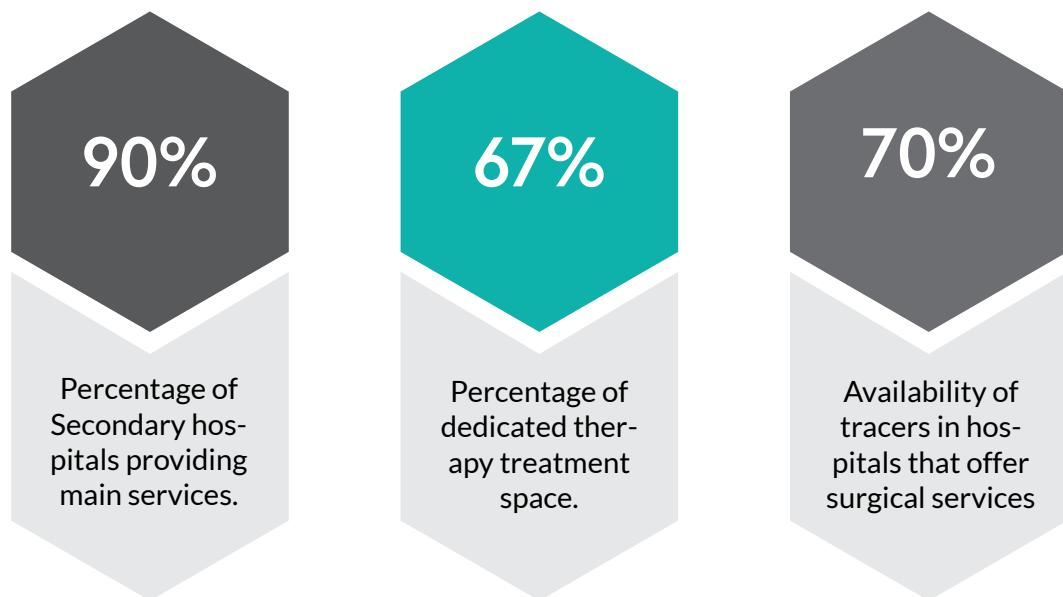


of health facilities providing the service at the time of the survey. Nationally, just 1 percent of health facilities offer home-based care. In terms of service readiness, the mean availability of tracer items for palliative care was 59 percent of the 140 health facilities providing the service. Countrywide, a dismal 7 percent of facilities had all tracer items. Iron or iron folic acid was the highest tracer item at 95 percent, followed by Acetaminophen or Ibuprofen tablets, capsules and intravenous for rehydration, both scored 89 percent, with vitamin A at 73 percent. The least available tracer item was intravenous nutritional supplement which scored 17 percent, and Buprenorphine or naloxone at 22 percent.

Rehabilitative Medical Care: According to the WHO, rehabilitation is defined as 'a set of measures that assist individuals who experience or are likely to experience disability, to achieve and maintain optimum functioning in interaction with the environment'. Rehabilitation measures

TIDBITS

According to the World Health Organisation, rehabilitation is defined as 'a set of measures that assist individuals, who experience or are likely to experience disability, to achieve and maintain optimum functioning in interaction with the environment'. Rehabilitation measures aim to: prevention of the loss of function; slowing the rate of loss of function; improvement of restoration of function; and compensation for the lost function and maintenance of current lost function.



aim at: prevention of the loss of function; slowing the rate of loss of function; improvement or restoration of function; and compensation for the lost function and maintenance of current lost function. Rehabilitation includes activities such as rehabilitative medical care, physical, psychological, speech, and occupational therapy, and support services.

The KHHFA report focused on the availability of relevant equipment and service readiness. The service availability of rehabilitative care services in health facilities with all items nationally was dismally low at just 4 percent. Secondary hospitals emerged as main providers of the services at 90 percent, with dispensaries coming at the tail end with 1 percent.

Countrywide, the mean availability of tracer items for rehabilitative care service readiness was 36 percent. The national outlook in terms of service availability and readiness for rehabilitative care does not paint a rosy picture. Performance of individual tracer items assessed

was generally below average, with dedicated therapy treatment space at 67 percent, measuring tape/goniometer (52 percent) and walking frames/crutches /walking sticks (51 percent), barely scoring above average. The least available tracer items were automatic equipment and booths (9 percent), parallel bars (23 percent), and equipment for paediatric rehabilitation (mats/toys/walking frames/standing frames) at 26 percent.

Comprehensive surgery: Availability of comprehensive surgical services among the hospitals assessed was 68 percent, while only 50 percent of public primary hospitals offered these services. Other services that scored 68 percent in terms of availability in hospitals were congenital hernia repair, club foot repair and cleft palate services. Others were episiotomy (64 percent), dilatation and curettage (57 percent), hernia repair (elective) (56 percent), obstetric fistula repair (36 percent), and vasectomy (29 percent). The least available comprehensive surgical services were cataract surgery (24 per-

cent). The performance of service readiness was not better either. The mean availability of tracer items in the hospitals that offer comprehensive surgical services was 70 percent. Health facilities with all the tracer items were at just 7 percent. The mean availability of tracer items for government-managed health facilities was 67 percent, out of which only 6 percent had all tracer items – unveiling a huge gap.

General emergency care: The KHHFA analysis of the general service availability of emergency service was restricted to 140 hospitals providing the service. The findings reveal that 24-hour pharmacy service was available in 71 percent of hospitals, 67 percent had 24-hour laboratory services, while a mere 8 percent of hospitals provided 24-hour surgical services with a surgeon and anaesthetist.

Other emergency services available in hospitals were: 24-hour radiological services at 44 percent, medical and nursing staff assigned to remain on duty was at 36 percent, and core non-rotating providers attached to Emergency Rooms (ERs) at 28 percent. Only 21 percent of hospitals used a formal triage system.

In terms of provision of special services, just 25 percent of hospitals had a special emergency unit, while only 20 percent of hospitals had a 24-hour emergency unit. Basically, this means that access to emergency services is still wanting. In terms of service readiness, only 20 percent of health facilities had all items, while the mean availability was at 68 percent.

Adrenalin and atropine were found to be the most available medicines and commodities at above 80 percent, compared to sodium bicarbonate which was at 62 percent availability in all facilities. Availability of equipment was rather low, with the adult oropharyngeal airway set

being at only 50 percent of the facilities. The least available – paediatric intubation set – was at just 27 percent of the facilities.

Emergency care: Quality services: In terms of service availability, 55 percent of facilities had the capability to measure vital signs in Emergency Room (ER) units, carry out emergency vaginal delivery (53 percent) and administer uterotonic drugs (49 percent). Only 43 of the facilities could perform neonatal resuscitation. The service readiness score was high, with the mean availability of tracer items for emergency quality support services at 93 percent, while 85 percent of facilities had all tracer items. On the other hand, availability of equipment for emergency quality support services was better, with both stethoscope and blood pressure apparatus standing at 94 percent, and thermometers at 91 percent.

Emergency care: Airway interventions: Findings on service availability in hospitals that offered emergency airway interventions through suction was 77 percent. Sixty eight percent of facilities used manual maneuverers (e.g. jaw thrust and chin lift). Other airway interventions were the use of oral-or naso-pharyngeal airway devices in 52 percent of hospitals, while placement of supraglottic devices was in just 40 percent of the facilities.



Just 25 percent of hospitals had a special emergency unit, while only 20 percent of hospitals had a 24-hour emergency unit. Basically, this means that access to emergency services is still wanting



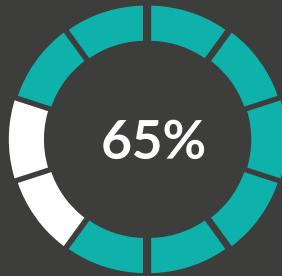
A patient interacts with a healthcare worker at the Kenyatta National Hospital IDU facility

The least available intervention service was endotracheal intubation at 39 percent and creation of surgical airways at 28 percent. On the other hand, service readiness was poor as only 17 percent of facilities had all the items needed for airway interventions, with a mean availability of 50 percent. Availability of suction apparatus with a suction catheter was highest at 68 percent, while the least available were cricothyroidotomy or tracheostomy sets at 24 percent. Availability of medicines and commodities was above average, with oropharyngeal airway for adults at 61 percent and oropharyngeal airway (paediatric) scoring 54 percent.

Emergency care: Breathing: Administration of oxygen was the highest intervention measure in emergency breathing interventions at 78 percent. This was closely followed by critical

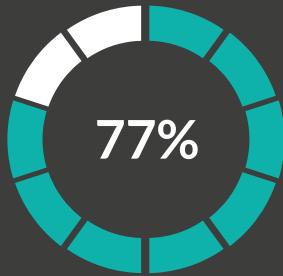
therapies for reactive airway disease, scoring 76 percent, and bag-valve-mask ventilation at 70 percent. Other emergency intervention measures were measurement of pulse oximetry at triage and measurement of pulse oximetry in emergency units, both scoring 58 percent. Some 37 percent of hospitals used placement of chest tubes. The least breathing intervention services were: non-invasive mechanical ventilation at 20 percent, invasive mechanical ventilation at 23 percent and use of needle decompression of tension pneumothorax, 33 percent.

In terms of readiness, the mean availability was below average, standing at 45 percent of facilities surveyed, while the facilities that had all items were a mere six percent. On the other hand, the availability of medicines and commodities, for example; micronebulizer, beclomethasone and salbutamol inhaler was just



RESUSCITATION

Availability of administration of oral rehydration, closely followed by central venous access at 64%



WATER AMENITIES

Percentage of basic equipment that was available countrywide on the day of the survey

TIDBITS



Service readiness was good with oral salt topping in availability at 85%, while the lowest was the device for intravenous injection at 3%. For service readiness by facility type, secondary and tertiary facilities scored a mean availability of 70%. On the other hand, dispensaries scored a mean availability of just 40%, while medical clinics had only 41%. The mean availability of items was 44%, with just 1% of facilities having all the items for emergency volume resuscitation services among facilities that provide this service.

33 percent in all facilities. Furthermore, availability of equipment for emergency breathing interventions among hospitals that provide this service was not good. The findings show that availability of resuscitation bag masks (adult) in hospitals was at 62 percent, pulse oximeters at 56 percent, chest tubes with insertion sets at just 44 percent and paediatric intubation (endotracheal tubes) at 36 percent.

Emergency care: Cardiac Interventions: The most available medicines administered as a cardiac intervention measure were adrenaline at 88 percent of 411 facilities assessed, aspirin (for ischemia) at 67 percent and thrombolytics scoring just 32 percent. Other intervention measures reported were: Electrocardiograms (ECGs) at 32 percent, external defibrillation and/or cardioversion (20 percent), external cardiac pacing (16 percent) and pericardiocentesis (12 percent).

Facilities that had tracer items for emergency cardiac intervention services were assessed and the findings revealed that the mean availability of tracer items was well below average at just 40 percent. Facilities that had all tracer items were a meagre 1 percent, while availability of adrenaline was the highest at 96 percent, followed by external cardiac pacers at 90 percent.

Emergency care: control of bleeding interventions: The KHHFA found that availability of services to control bleeding were relatively low, with only 58 percent of facilities sampled having the ability to perform packing and/or suture to control bleeding. Some 55 percent of facilities used external control of haemorrhage, while 32 percent of the facilities had the ability to apply arterial tourniquets. Just 9 percent could perform and interpret point of care ultrasound. The least available services were safe transfusion (including protocol for appropriate ratios for



massive transfusion) at only 7 percent, while a mere 6 percent could apply pelvic binding or sheering. Out of the facilities that offered emergency services, only 12 percent reported having the ability to apply a tourniquet as a bleeding control intervention measure.

Emergency care: Volume resuscitation intervention: The assessment report highlights that of the facilities that offer emergency interventions, the administration of oral rehydration was 65 percent, closely followed by establishing central venous access at 64 percent, and adjusting fluid resuscitation for malnutrition or severe anaemia at 53 percent. Others were: placing a urinary catheter (46 percent), administration for intravenous (IV) fluids (34 percent), placement of peripheral IV access at 9 percent, and performing venous cut-down at 6 percent. The least available was establishing intraosseous access at 5 percent.

Service readiness was good, with oral salt topping in availability at 85 percent, while the lowest was the device for intravenous injection at 3 percent. For service readiness by facility type, secondary and tertiary facilities scored a mean availability of 70 percent. On the other hand, dispensaries scored a mean availability of just 40 percent, while medical clinics had only 41 percent. The mean availability of items was 44 percent, with just 1 percent of facilities having all the items for emergency volume resuscitation services among the facilities that provide this service.

Emergency care: Unconscious patient interventions: Service availability in all facilities assessed showed that only 50 percent of them had the ability to check blood glucose level, with just 52 percent capable of administering glucose for hypoglycaemia. On the other hand, the least service available was the ability to per-



MAINTAINING A HEALTHY DIET

- i. **Eat a variety of food, including fruits and vegetables**
 - a) Every day, eat a mix of wholegrains like wheat, maize and rice, legumes like lentils and beans, plenty of fresh fruit and vegetables , with some foods from animal sources (e.g. meat, fish, eggs and milk).
 - b) Choose wholegrain foods like unprocessed maize, millet, oats, wheat and brown rice when you can; they are rich in valuable fibre and can help you feel full for longer.
 - c) For snacks, choose raw vegetables, fresh fruit, and unsalted nuts.
- ii. **Cut back on salt**
 - a) Limit salt intake to 5 grams (equivalent to a teaspoon) a day.
 - b) When cooking and preparing foods, use salt sparingly and reduce use of salty sauces and condiments (like soy sauce, stock or fish sauce).
 - c) If using canned or dried food, choose varieties of vegetables, nuts and fruit, without added salt and sugars.
 - d) Remove the salt shaker from the table, and experiment with fresh or dried herbs and spices for added flavor instead.

“

In terms of provision of special services, just 25 percent of hospitals had a special emergency unit, while only 20 percent of hospitals had a 24-hour emergency unit. Basically, this means that access to emergency services is still wanting



form lumber puncture, at 7 percent, compared to administering of insulin for hypoglycaemia which scored 27 percent. For service readiness, findings show that the mean availability of items was at a meagre 3 percent, while facilities with all items were just 1 percent of the total facilities assessed. The most available was glucose, while the antidote for opiate overdose was the least available.

BASIC WATER AND ELECTRICITY

The assessment report discusses water and electricity under basic amenities. The report defines basic amenities as those facilities that comprise sanitation facilities; communication equipment; consultation rooms; improved water sources; power supply (grid or generator); emergency transportation; and computers with internet access. The assessment revealed that health facilities had a mean of 55 percent of basic amenities available during the day of the survey. It was also found that only 6 percent of the facilities had all the basic amenities during the day of the survey. Countrywide, 77 percent of the basic equipment was available, while only 24 percent of health facilities had all the basic equipment.

MANAGEMENT CAPACITY AND RECORD KEEPING

The assessment also covered management and finance variables, whose findings were:

Management systems to support facility functionality, efficiency and accountability: The KHHFA report revealed that 67 percent of facilities reported existence of a core management team responsible for oversight of operations, while 52 percent of facilities had a core management team structure based on

established norms and standards. Other findings revealed that 48 percent of facilities had formal systems for linking with community health centres. Furthermore, only 37 percent of facilities reported having put in place a routine system for including community representation for some aspects of management teamwork. Only 21 percent of the facilities had in place a functional community unit. This shows that not enough facilities have management systems to support functionality, efficiency and accountability.

Implementation of systems to improve accountability: The percentage of health facilities with systems to improve accountability was found to be generally low. Only 53 percent of health facilities had a system of determining clients' opinions, while just 41 percent of facilities collected feedback from clients (patients) and discussed it with a view to improving management strategic decisions and policies. It was also found that only 18 percent of facilities had routine procedures for reviewing or reporting on client opinions.

Facility-level external supervision for management: Most facilities (94 percent) reported receiving external supervision from sub-county, county or national levels. However, only 59 percent of facilities had documentation from external supervisory visits received in the past three months before the assessment survey. There is a need for this gap in documentation of external supervision visits to be addressed through proper record keeping to facilitate evidence-based management.

Drug management systems: Drug management system was assessed in terms of the main source of pharmaceutical commodity supplies. It was revealed that 52 percent of health facilities reported that Kenya Medical Supplies Authority

(KEMSA) was the routine pharmaceutical supplier. Other sources of pharmaceutical commodities were: private sources (25 percent), Mission for Essential Drugs and Supplies (MEDS) at 10 percent, local suppliers (9 percent), NGOs/donors (1 percent) and others (4 percent). Secondary and tertiary hospitals, as well as public primary hospitals, reported KEMSA to be their main source of pharmaceutical supplies at 58 percent and 89 percent, respectively.

On pharmaceutical commodity reporting systems, it was revealed that 73 percent of facilities kept records showing pharmacy commodities received, disbursed, and the balance brought forward. On the other hand, only 54 percent of facilities kept records indicating expired/unused drugs, and those removed from inventory. This low level of critical record keeping is a cause for concern as there is a high probability of mix-ups, leading to expired drugs being dispensed.

Additionally, only 33 percent of facilities kept pink Pharmacy and Poisons Board (PPB) forms for recording substandard quality stock, while just 32 percent of facilities kept the yellow PPB form, where adverse reactions are recorded. This low number of facilities that keep such important records points to a danger of substandard drugs getting into the system, as well as the fact that failing to monitor adverse reactions of drugs endangers clients' health and safety.

Infection prevention and control (IPC) monitoring systems: According to the WHO, infection prevention and control is a scientific approach designed to prevent harm caused by infection to patients and health workers. It is anchored in infectious diseases, epidemiology, social science and health system strengthening. It is against this background that IPC has a unique role to play in the field of patient safety

and quality universal health coverage. No country, regardless of the level of social economic development, can claim to be free from issues of healthcare-associated infections, hence the need for IPC programmes.

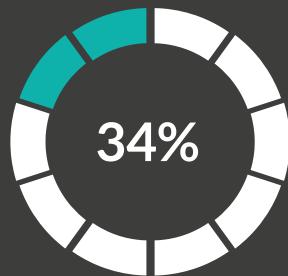
Countrywide, only 38 percent of health facilities had IPC guidelines. It was found that just 15 percent of facilities had guidelines for cleaning floors, counters and beds; as well as personnel trained in certified infection prevention and control courses. However, secondary and tertiary facilities had a remarkable 85 percent availability of IPC guidelines compared to dispensaries and medical clinics, which had 39 percent and 31 percent, respectively.

Furthermore, 42 percent of facilities held multidisciplinary meetings, where IPC results were reviewed and only 24 percent of facilities had technical IPC committees. Clearly, health facilities with infection prevention and control monitoring indicators scored below average.

Systems for maintenance and repair: Health facilities which reported to undertake preventive and corrective maintenance for systems for maintenance and repair were below average

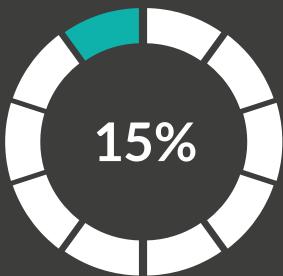


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REVIEW

Facilities with a routine process for performance review grounded on data or patient feedback



SURVEY DATA

Health facilities that used patient survey data, while just 14% had evidence of use of mortality data

TIDBITS



Facilities that monitored cases of fatality rates for any specific diagnoses were just 28%, while performance by type of facility was between 48% in secondary hospitals and tertiary facilities and 17% in public primary hospitals. Performance of hospitals monitoring cases of fatality rates for every specific diagnoses was quite low at just 28%

at 43 percent, compared to only 10 percent of facilities that had corrective maintenance systems of medical equipment. The situation was rather grim at county level where only 13 out 47 counties, equivalent to 28 percent, reported having facilities with preventive and corrective maintenance for any system.

Facility use of information for management

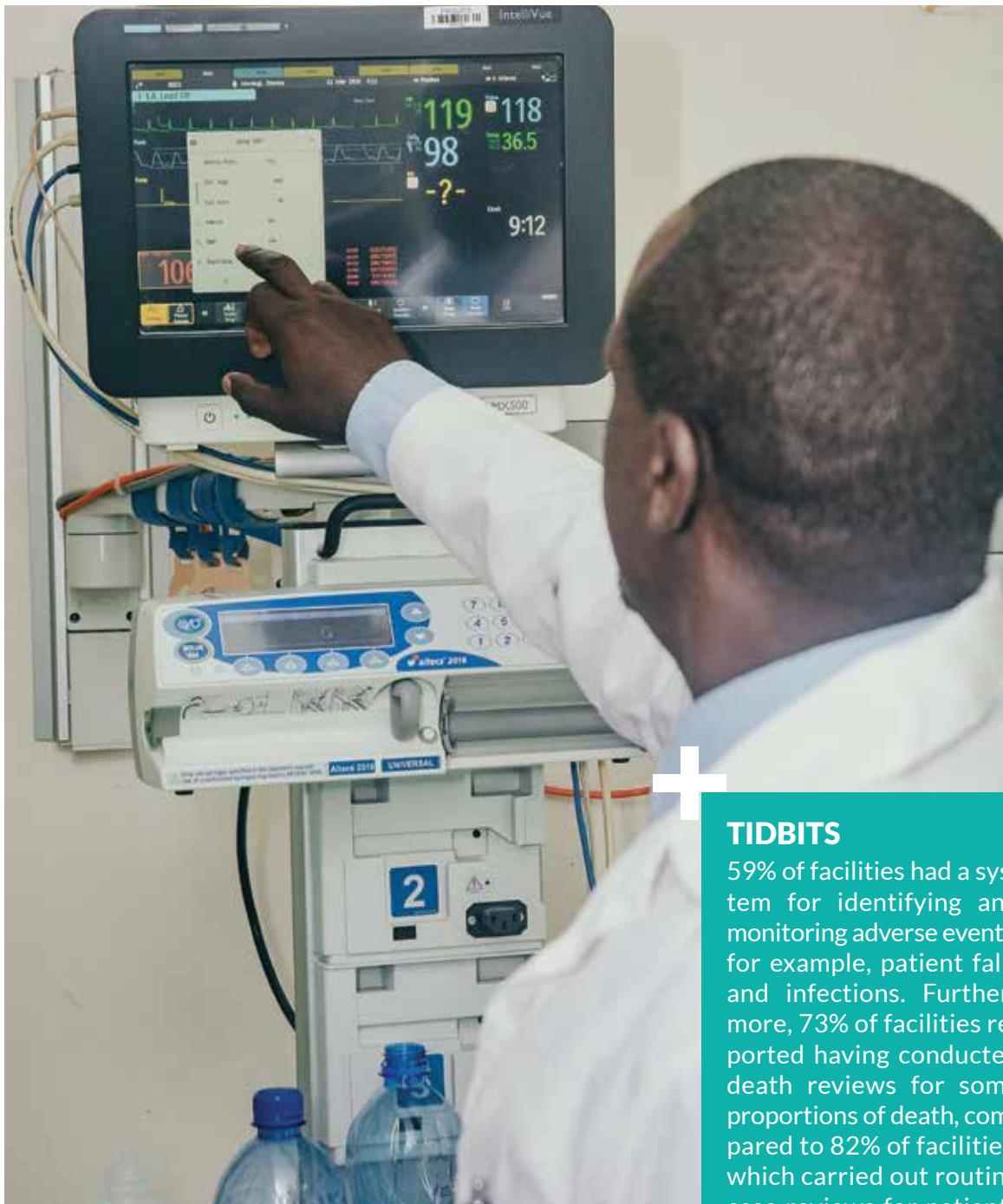
The KHHFA assessed facilities' use of information to enhance management, as follows:

a) Systems for ensuring quality of routine data:

data: Most facilities scored below average (47 percent) in having routine and systematic processes in place for checking the quality of data used for reports. It was also revealed that just 10 percent of health facilities had developed policy guidelines for checking the quality of data utilised in official reports. Furthermore, health facilities with data improvement plans and teams were at a dismal 26 percent and 23 percent, respectively. Clearly, the country is not doing well to this end and requires a strategic approach to improve this system.

b) Evidence of use of service information and data for planning and management:

The number of health facilities with a routine process for performance review grounded on data on facilities, outcomes, or patient feedback was low – at just 34 percent. Only 15 percent of health facilities in Kenya had evidence of using patient survey data, while just 14 percent had evidence of use of mortality data. While there was evidence of employee satisfaction survey, its implementation was poor, – with only 11 percent of facilities doing so. Utilisation of Health Management Information Systems (HMIS) reports by health facilities stood at 28 percent. It is noteworthy that facilities with evidence



A monitoring report found that 59 percent of facilities had a system for identifying adverse events.

TIDBITS

59% of facilities had a system for identifying and monitoring adverse events, for example, patient falls and infections. Furthermore, 73% of facilities reported having conducted death reviews for some proportions of death, compared to 82% of facilities, which carried out routine case reviews for patients who were still alive for quality and potential for improvement purposes.



of use of workload data and special reports such as quality indicators was dismally low, at 26 percent and 24 percent, respectively.

Systems for monitoring indicators of the quality of inpatient care: Systems for monitoring indicators of the quality of inpatient care were assessed and it was found that 59 percent of facilities had a system for identifying and monitoring adverse events, for example, patient falls and infections. Furthermore, 73 percent of facilities reported having conducted reviews for some proportions of deaths, compared to 82 percent of facilities, which carried out routine case reviews for patients who were still alive for quality, and the possibility of improved services.

Additionally, facilities that monitored cases of fatality rates for any specific diagnoses were just 28 percent, while performance by type of facility was between 48 percent in secondary

TIDBITS



Health facilities that utilised standardised set of forms or electronic data entry screens to comprise a complete medical record for each patient was average at 50% of the total assessed facilities. 33% of facilities used same unique patient ID used for the same patient over multiple year, while only 7% stocked out official patient medical records in the past 6 months before the date of the assessment survey.

hospitals and tertiary facilities, and 17 percent in public primary hospitals. Performance of hospitals monitoring cases of fatality rates for every specific diagnoses was quite low at just 28 percent. Hospitals that monitored fatality rates for cancer were worryingly the least, at 5 percent, Tuberculosis was at 14 percent, HIV infected patients at 20 percent, lower respiratory tract infections at 21 percent and malaria at 22 percent. These findings call for an urgent national and county strategic approach to strive to achieve higher and acceptable levels of compliance.

Early warning management systems: Use of unique identifiers (patient IDs) was also assessed and it was revealed that nationally, 90 percent of hospitals were compliant. On the other hand, health facilities that utilised standardised forms or electronic data entry screens to comprise a complete medical record for each patient averaged 50 percent of the total assessed facilities. Some 33 percent of facilities used the same unique patient ID for the same patient over multiple years, while only 7 percent stocked out official patient medical records in the past six months before the date of the survey.

Accountability for user fees: A number of facilities reported charging user fees for any outpatient service (40 percent) compared with 16 percent charged for any inpatient service. It was also revealed that 35 percent of facilities posted outpatient services user fees anywhere within the facility to enable patients to see them, compared with 34 percent of inpatient facilities. Communication is critically important to inform clients of what service is payable and what is not as a way of facilitating UHC.

Financial accountability: Financial accountability was not good, with just 47 percent of

facilities reporting having received an annual external audit of facility accounts, while 52 percent of facilities had a budgeted annual work plan for 2018/19. More than half of the health facilities did not have a facility to externally audit their accounts and this may expose such facilities to the risk of financial mismanagement.

QUALITY CARE AND SAFETY

Assessment of systems for quality of care was carried out based on a number of variables:

- i. **Quality Improvement (QI) teams:** The assessment revealed that nationally, only 53 percent of health facilities had QI teams. Higher levels of health facilities were found to have more QI teams compared to lower level facilities. The report indicates that 95 percent of all secondary and tertiary hospitals had QI teams compared to 43 percent of both dispensaries and medical clinics. Some 86 percent of private/ NGO/FBO primary hospitals and 66 percent of health centres had QI teams. The lower national average of facilities with QI teams (53 percent), as well as at dispensaries and medical clinics (43 percent), is a matter that needs to be addressed, if health quality care and safety has to be improved.
- ii. **Budget for QI activities:** The assessment found that countrywide, a dedicated budget line for QI activities was set aside in 42 percent of health facilities assessed. The assessment report also highlighted facilities with dedicated budget lines for QI, namely; 80 percent secondary and tertiary hospitals, 54 percent public primary hospitals, and 69 percent private/NGO/FBO primary hospitals. The low number of health facilities countrywide with a dedicated budget line of QI activities can hamper the operationalisation of QI teams, thus compromising provision of quality care and service.

iii. Health workers continued professional development (CPD) system: It was found that 44 percent of all health facilities nationally had a system for regular (at least quarterly) committees on medical education to support professional career development of medical officers, nurses and clinical officers. Higher levels of facilities tended to have CPD systems in place. For example, CPD systems were available at 80 percent of all secondary and tertiary hospitals, 81 percent of public primary hospitals and 80 percent of private/NGO/FBO primary hospitals. At lower level facilities, 61 percent of health centres, 39 percent of dispensaries, and only 36 percent of medical clinics had CPD systems.

iv. Adverse event reporting systems (AERS): These systems are important in identifying and monitoring adverse events such as patient falls and hospital-acquired infections. The systems were found in 40 percent of all health facilities with inpatient services countrywide. An analysis of the availability of the systems by the managing authority showed that 90 percent of secondary and tertiary hospitals had AERS systems in place, while only 34 percent of dispensaries and 24 percent of medical clinics had them. In addition, 54 percent of public primary hospitals and 78 percent of private/NGO/FBO primary hospitals had AERS systems. Notably, only 38 percent of government facilities, 57 percent of NGO/FBO facilities and a paltry 36 percent of private facilities had AERS in place.

v. Infection control monitoring systems: These are designed in adherence to the WHO's Infection Prevention Control (IPC) guidelines. Through integrated strategies, IPC can stop the spread of antimicrobial resistance and outbreaks, thus enhancing quality of care in the context of UHC. The WHO estimates that 1 out of 10 patients get an infection while receiving

healthcare, translating into millions of people around the world getting infected as they receive healthcare.

vi. The KHHFA report 2018 revealed that only 30 percent of all health facilities countywide had infection control monitoring systems and that the tendency by health facilities to monitor adherence to IPC guidelines improved with the level of the health facility. Health facilities with infection control monitoring systems were as follows; 80 percent of secondary and tertiary hospitals, 61 percent of both public primary hospitals and private/NGO/FBO/primary hospitals, 37 percent of health centres and 23 percent of dispensaries. Notably, only 28 percent of government health facilities, 33 percent of NGO/FBO owned hospitals and 31 percent of privately-managed health facilities had infection monitoring systems in place.

vii. Monitoring of quality of care at facility levels: This was assessed through an analysis of data from a number of variables, whose findings are presented as follows:

System for verification of health worker licences Nationally, only 39 percent of all health facilities in Kenya reported that they routinely verified their health professionals' licences and registration status. In secondary and tertiary hospitals and public primary hospitals, 70 percent and 43 percent, respectively, had a system of verification of health workers' licences in place. Furthermore, 93 percent of private/NGO/FBO primary hospitals had this system in place.

The public/government health facilities did not fare well in this regard, with only 23 percent of such facilities having a system of verification of health workers' licences. Some 58 percent of NGO/FBO-owned facilities and 53 percent of private facilities reported having this system.



Process for performance review - based on data on facility services, outcomes, or patient feedback

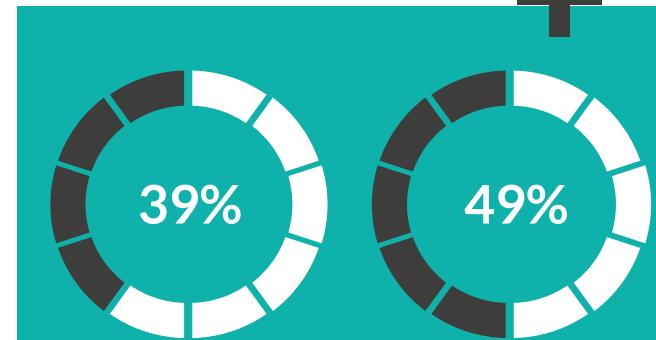
Nationally, 49 percent of health facilities reviewed their performance based on feedback data or patient feedback. Majority of hospitals reported having a system in place, with 90 percent of secondary and tertiary hospitals, 74 percent of public primary hospitals, and 79 percent of private/NGO/FBO primary hospitals reporting.

Only 58 percent of health centres, 47 percent of dispensaries and 42 percent of medical clinics had complied. Furthermore, just 51 percent of government/public health facilities and 53 percent of NGO/FBO-owned facilities reported having this system.

Supportive supervision system for health workers:

The assessment revealed that 71 percent of health facilities countywide had received a supportive supervision visit in the past three months from the date of the assessment survey. Other facilities that received supervision visits were as follows; secondary and tertiary hospitals (85 percent), public primary hospitals (90 percent), private/NGO/FBO primary hospitals (83 percent), health centres (83 percent), dispensaries (82 percent) and medical clinics (49 percent).

Public facilities appear to have received the highest number of visits at 85 percent), with NGO/FBO-based facilities at 76 percent, and private at 53 percent. There is room for improvement towards achieving close to 100 percent supportive supervision visits. The low percentages in private and NGO/FBO health facilities is a cause for concern and calls for improvement if quality healthcare is to be achieved.



VERIFICATION

Health facilities in Kenya that reported routinely verifying their health professionals' license and registration status. In secondary and tertiary hospitals, 70% and 43% respectively had a workers licence verification system in place

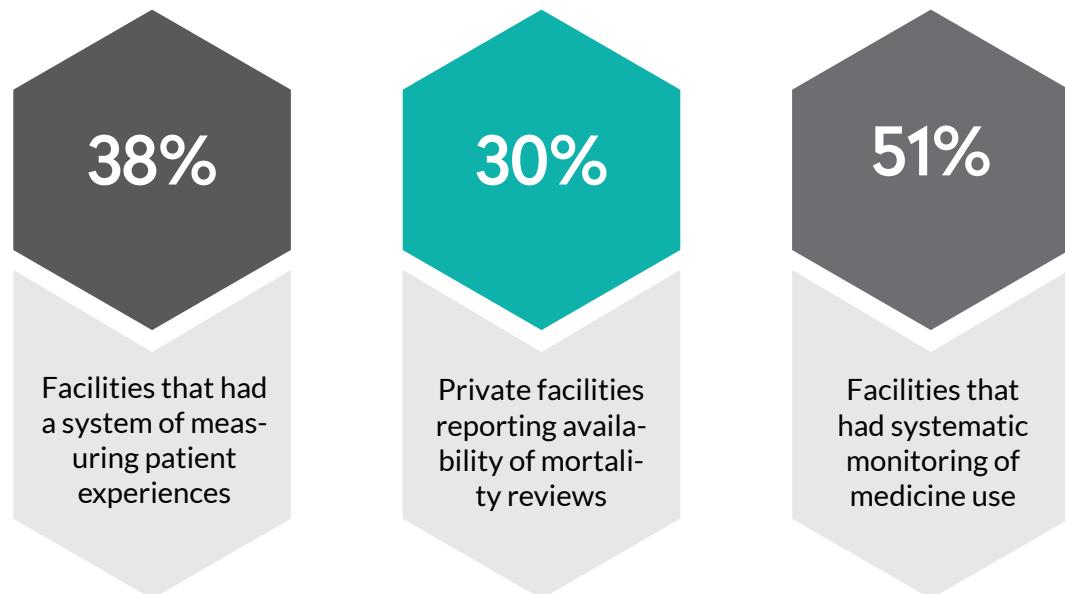
ESSENTIAL MEDS

Percentage of health facilities that had a system of community representation on management committees. This means that community voice is not heard in 51% of the health facilities, which did not have this system in place

TIDBITS



Public facilities appear to have received the highest number of visits (85%), NGO/FBO based facilities (76%) and private (53%). There is room for improve and move towards achieving close to 100% supportive supervision visits. The low percentages in private and NGO/FBO health facilities is a cause for concern and calls for improvement if quality health care has to be achieved.



Systems for including community representation on management committees: A system for inclusion of community representation on management committees was not widely practiced or implemented in Kenya. It was revealed that only 49 percent of health facilities had a system of community representation on management committees.

This means that the community voice is not heard in 51 percent of the health facilities which did not have this system in place countrywide. This exclusion not only locks them out of decision-making processes but also from expressing their grievances and suggestions on the facilities.

A closer analysis of the findings on community representation further revealed that 78 percent of public primary hospitals had some level of community representation, followed by secondary and tertiary hospitals at 60 percent,

and private/NGO/FBO primary hospitals at 46 percent. Community representation systems for health centres was at 62 percent, dispensaries at 67 percent, with the lowest being medical clinics at only 16 percent.

System for measuring patient experience of care
Overall, the survey revealed that 38 percent of facilities countrywide had a system of measuring patient experiences. Higher levels of health facilities had the system in place, with 90 percent of secondary and tertiary, 62 percent of public primary hospitals, 78 percent of private /NGO/FBO primary hospitals, and 51 percent of health centres reporting that they measured patient experiences.

Dispensaries and medical clinics had 30 percent and 37 percent, respectively. Only 33 percent of public/government facilities had a system for measuring patient experience of care in place, while NGO and FBO owned, and privately

YOUTH ADVOCATE IN KENYA'S TOBACCO CONTROL DRIVE

Much earlier in her life, Martha Kombe, now 24, watched someone close to her fight lung cancer and lose. Since then she has made a vow to help people avoid the agony that comes with such a painful disease. The pledge has greatly influenced Ms Kombe's path. She singles out Kenya's recent ratification of the protocol to eliminate illicit trade in tobacco products as a key moment.

Although not directly involved in her country's latest achievement, her Den of Hope Youth Group has steadfastly campaigned against tobacco use. "I am grateful to be associated with stakeholders in this outstanding milestone," she says.

In a recent YouTube video, the youth and tobacco control advocate, wearing a baseball cap and maroon-rimmed glasses outlines in 50 seconds why people should quit smoking. Her delivery is clear and deliberate: "You might be wondering, 'why are we advocating for tobacco control?'" she asks before explaining the tobacco's effect on lungs, also pointing out the additional risks smoking poses given the COVID-19 pandemic.

The Den of Hope Youth Group is closely involved in anti-tobacco campaigns targeting young people. "They are the most vulnerable and, sadly, the targets of the tobacco industries," she explains. The group uses a variety of methods to spread the message, from social media campaigns, participating in public forums and talks, signing open letters to policy makers, and peer-to-peer counselling.



"One way I believe we can never go wrong is by meaningfully involving the youth through innovative channels," says Ms Kombe. "We know our own problems. If we are involved and shown direction then we can find our solutions..."

Funding is limited, coming mostly from occasional donations and local resource mobilization. The youth group amplifies its message with support from the Kenya Tobacco Control Alliance, which brings together civil society organizations advocating tobacco control and allows the organizations to speak with one voice.

At local fairs, antismoking advocates educate the public. Detailed posters and pictures show the consequences of prolonged tobacco use on different parts of the body. Despite limited funding, the 20-strong youth group has made remarkable contribution to anti-tobacco campaign in Kenya. With the Kenya Tobacco Control Alliance, their advocacy extends past the community level, at times playing a role in notable policy changes and court decisions influencing tobacco consumption in Kenya.

owned facilities, had achieved just 48 percent and 42 percent, respectively, in implementing the system.

Inpatient mortality reviews: The assessment survey established that there was a marked disparity by the managing authorities in terms of inpatient mortality reviews, with 30 percent of private health facilities reporting availability of mortality and morbidity reviews against government facilities, which were at 43 percent, and NGO/FBO-owned facilities at 52 percent.

While secondary and tertiary hospitals had fully conducted mortality reviews (100 percent), the proportion among primary hospitals and health centres with inpatient capacity was much lower at 69 percent and 34 percent, respectively.

Systematic monitoring on the use of medicine According to the KHHFA report 2018, 51 percent of health facilities had put in place systematic monitoring of the use of medicine.

Some 52 percent of government/public facilities, 54 percent of NGO/FBO-owned facilities and just 49 percent of privately owned health facilities systematically monitored the use of medicine.

This low level of monitoring on the use of medicine is a safety concern that needs to be addressed to reduce the probability of Kenyans being exposed to otherwise avoidable health dangers. The findings also revealed that public hospitals tended to have a higher availability of systematic monitoring of use of medicine compared with primary healthcare facilities.

Facility adherence to standards: The survey sought to assess facility adherence to standards by considering various variables whose findings are:

Facility participation in external accreditation

Licensing: Only 24 percent of all health facilities countywide participated in an external accreditation licensing process, with government facilities being less likely to have done so. Just 17 percent of government facilities, compared to 30 percent of NGO/FBO facilities and 31 percent of private facilities, participated in external accreditation licensing. Overall, 80 percent of secondary and tertiary hospitals compared to 30 percent of health centres participated in external accreditation – pointing to the fact that higher level hospital facilities were more likely to participate in the process.

Proper disposal of sharps waste: Proper disposal of sharps waste is critically important because improper management of such materials can have a negative impact, either directly or indirectly, on medical staff, waste handlers, the community and the environment. The KHHFA report highlights that 70 percent of health facilities nationally had proper disposal of sharps waste. However, there were variations depending on the type of the facility (64 percent to 76 percent) and managing authority (65 percent to 77 percent). For example, 65 percent of government managed facilities, 72 percent of FBO/NGO facilities and 77 percent of private facilities had proper disposal of sharps waste. Despite this achievement, there is a need to put



Some 52 percent of government/public facilities, 54 percent of NGO/FBO-owned facilities and just 49 percent of privately owned health facilities systematically monitored the use of medicine

in place measures to move towards 100 percent proper disposal of such materials. According to the WHO, children playing with used syringes and needles can get needle-stick injuries and become infected; stick injury of medical staff can be a source of infection; and stick injury can also lead to Hepatitis B and C, HIV and sepsis infections..

Pharmaceutical commodity storage conditions:

The assessment report revealed that only 22 percent of health facilities country-wide had adequate pharmaceutical commodity storage conditions. There was widespread inadequate storage of pharmaceutical commodities at government facilities (31 percent). FBO/NGO-owned facilities had only 28 percent, while privately managed health facilities had just 10 percent adequacy levels. This scenario attests to the need for adequate pharmaceutical commodities storage conditions to ensure high quality up to expiration dates.

Vaccine storage conditions: Health facilities with adequate vaccine storage conditions were found to be 77 percent of the facilities assessed. Some 79 percent of government-owned facilities and 69 percent of FBO/NGO-owned facilities had adequate storage for vaccines. On the other hand, 69 percent of privately-owned facilities had adequate storage. Higher level hospitals were found to have more adequate storage of vaccines, with 100 percent of secondary and tertiary hospitals, and 93 percent of public primary hospitals having adequate conditions. While 83 percent of health centres and 76 per cent of dispensaries had adequate storage, only 68 percent of medical clinics were reported to have this capability.

Outbreak preparedness plans: The majority of health facilities did not have disease outbreak preparedness plans. Nationally, only 39 percent

of health facilities had outbreak preparedness plans. At hospital facilities, only 45 percent of secondary and tertiary hospitals, 11 percent of public primary hospitals, and 32 percent of private/FBO/NGO primary hospitals had such plans.

This finding paints a grave state of preparedness in Kenya should there be a serious disease outbreak or epidemic.

Guidelines on identifying and managing drug use problems:

Availability of guidelines for identifying and managing drug use problems were common among hospitals, with secondary and tertiary hospitals having scored 80 percent, public primary hospitals 70 percent, while private FBO/NGO hospitals scored 67 percent. However, only 39 percent of all health facilities had such guidelines.

Countrywide, lower level health facilities were found to have scored below average, with health centres scoring 47 percent, dispensaries getting 41 percent and medical clinics scoring only 27 percent. Government, NGO/FBO managed, and privately managed facilities all scored below 50 percent.



Provision of UHC is part of the country's efforts to attain the highest standard of desired status of health. It aims at ensuring all Kenyans quality, promotive, preventive, and curative and rehabilitation health services without suffering financial hardship





TIDBITS

Whilst there is evidence of skewed health distribution of health infrastructure and human capital with a bias for urban areas, rural – urban migration threatens to turn tables against this advantage in urban areas. There has been a marked rural-urban migration of people between age 20-34 contributing to unparalleled growth in urban population and putting pressure on facilities, especially in informal settlements which ordinarily are their first point of 'landing'.

CHALLENGES IN UHC PROVISION

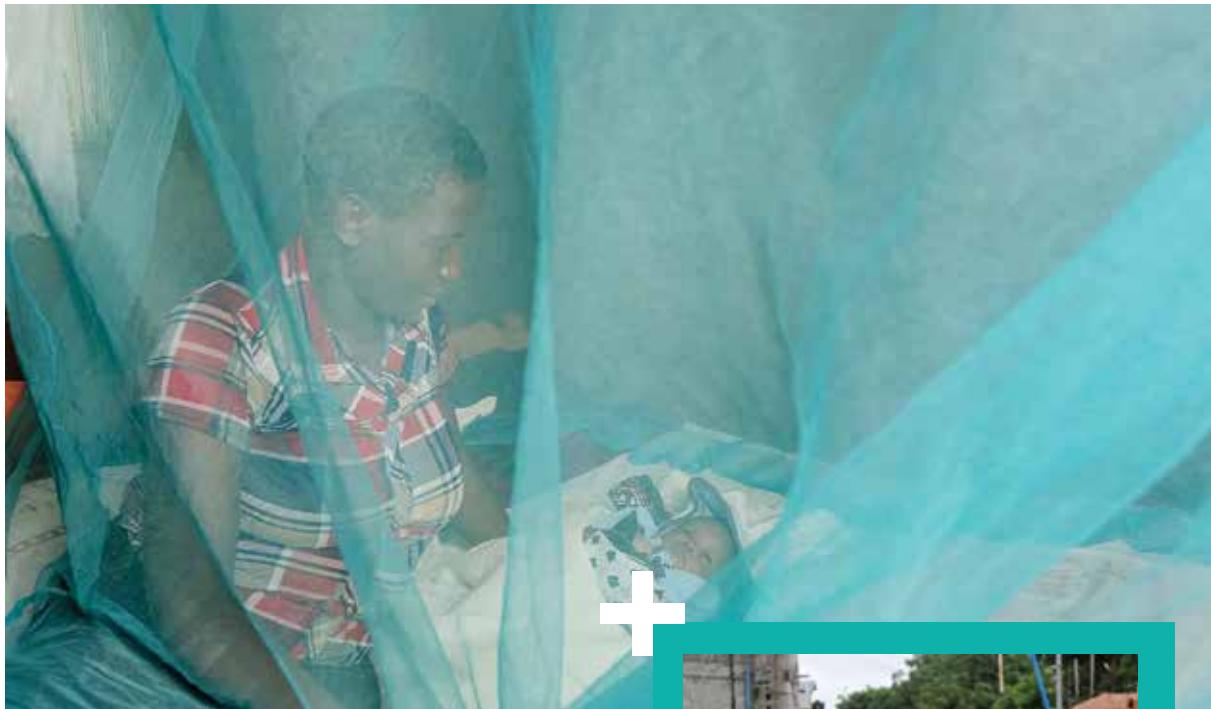
Provision of UHC is part of the Kenya's efforts to attain the highest standard of the desired status of health. It aims at ensuring all Kenyans quality, promotive, preventive, curative, and rehabilitation health services without suffering financial hardship.

UHC lowers the healthcare cost in the economy; forces doctors to offer the same standards of services in the country; and eliminates administrative costs by reducing the need to deal with private insurance firms. However, the implementation of UHC in Kenya is faced with myriad challenges:

- i. **Healthcare financing:** is a critical challenge in implementing UHC. According to the NHIF Strategic Plan 2018-2022, healthcare funding challenges include low total funding of healthcare, which is just 7 percent of the total Government Budget compared to the Abuja Declaration target of 15 percent and inefficient use of available funds (both technical and allocative inefficiencies). For example, in health insurance schemes, there has been weak management of benefit utilisation; existence of multiple fragmented health insurance pools at national, county, donor, and private sector levels; leakages in the flow of healthcare funds of over 30 percent; low health insurance coverage (about 17 percent coverage) meaning 85 percent of the population does not contribute towards insurance; and inadequate funding for research and development for the health sector in the country (Government of Kenya, 2018). The WHO (2017) also argues that healthcare financing is one of the key challenges to implementing UHC. The health sector in Kenya is hugely financed by the private sector, including households' out-of-pocket (OOP) expenditure (Government of Kenya 2014).

ii. **Service delivery:** The high incidence of communicable diseases accounts for the highest proportion of disease burden in the sector. Together with the increase in the prevalence of non-communicable diseases (NCDs) – hypertension, heart disease, diabetes, cancer and substance abuse – this is putting pressure on the health sector (Government of Kenya, 2018; Government of Kenya, 2014). Poor service delivery in maternal and child health nutrition, exacerbated by inadequate emergency services for delivery, underutilisation of antenatal services and inadequate skills and competencies of health workers, were noted. While there is evidence of skewed distribution of health infrastructure and human capital with a bias for urban areas, migration threatens to turn the tables on this advantage. There has been a marked rural-urban migration of people between 20-34 years, contributing to unparalleled growth of urban populations, thus putting pressure on health facilities, especially in informal/slum settlements, which ordinarily are their first point of residence. This skewedness in the distribution of health infrastructure and health workers is also evident in urban areas – perhaps mirroring the core-periphery theory. This theory is based on the notion that as one region becomes economically prosperous, it grows and spreads, and as the former peripheral areas grow and become prosperous, they push the underdeveloped and marginalised areas further out. Instability in the region is also a big challenge – with Kenya hosting many refugees.

- iii. **Human resources challenges:** This is characterised by skewed distribution of skilled health workers, with rural and peripheral or marginalised areas facing huge gaps, while some urban areas have surplus personnel. Yet in Kenya, about 70 percent of the population lives in these rural and remote areas (Government



of Kenya, 2014). The human capital deficit in the sector is felt at both National and Country government levels.

- iv. Industrial action among various health cadres demanding better working conditions and terms of service has occasionally presented serious challenges to service delivery in the sector. Therefore, there is a need to enhance human resources in the health sector (WHO, 2017; Government of Kenya 2018, and Government of Kenya, 2014). The Economic Survey report 2019 indicates that the number of health personnel increased from 165,333 in 2017 to 175,681 in 2018 (Government of Kenya, 2019). The report further shows that registered nurses accounted for the highest proportion of personnel at 29.9 percent, with enrolled nurses taking the second slot at 13.3 per cent in 2018. The proportion of registered personnel per 100,000 population increased to 368 in 2018 from 355 in 2017. Despite



Unpredictable weather patterns are affecting human health through increased disease vectors, waterborne diseases and under nutrition caused by flooding and droughts. A study by UNDP (2019:186) revealed that in Kenya, Ethiopia, and Niger 'children born during droughts are likely to suffer from malnutrition. At the global scale, the problem of climate is no-longer a hoax.



these improvements, there is more to be done to address human resource gaps.

- v. **Health products and technologies:** Inadequate budget for procurement of health products and related modern technologies and distribution of the same to health facilities are a challenge. Health information systems need to be addressed (WHO, 2017). Lack of data is a big issue in most LMICs, and it points to a disconnect in the flow and sharing of data between the client and the health service provider. Kenya, Malawi, Peru and Haiti are among the early adopters of electronic medical records, which demonstrates 'how an information system can help with micro-targeting those furthest' from healthcare (UNDP, 2019:69).
- vi. **Health infrastructure:** Skewed distribution of available health infrastructure with a bias to-

wards urban areas. This is compounded by the existence of obsolete equipment that requires replacement. The number of health facilities have grown in recent times. According to the Government of Kenya (2019), medical clinics rose by 18.6 per cent to 3,646 in 2018, out of which 94.2 percent were private clinics. This points to the extent to which people are likely to suffer financial risk, considering that those seeking services from most private clinics will have to pay out-of-pocket.

The number of dispensaries and health centres increased in 2018 by 11.6 percent and 3.1 percent to 4,597 and 1,806, respectively, most of which were publicly owned. Health facilities increased by 9.7 per cent to 10,820 in 2018. Overall, public facilities increased by 2.5 percent to 5,246, equivalent to 48.5 per cent of total health facilities, while private hospitals increased by 22.3 percent to 4,327



in 2018. Faith-based organisations (FBOs) and non-governmental organisations (NGOs) accounted for 11.5 per cent of the total health facilities.

- vii. **Leadership and governance:** Weak multi-sectoral coordination, especially in the devolution of human resources management, and lack of decentralised trade unions to engage and agree on comprehensive bargaining agreements (CBAs) with county governments. There is also weak regulation and coordination of conventional and traditional medicine; and lack of adherence to set standards and regulations, leading to an influx of counterfeit drugs.
- viii. The re-emergence of diseases such as TB is a major health problem. Although there has been a decline in HIV prevalence, the number of infections has been increasing.
- ix. **Climate change:** Unpredictable weather patterns are affecting human health through increased disease vectors, waterborne diseases and under nutrition caused by floods and droughts. A study by the United Nations Development Programme (UNDP) (2019:186) revealed that in Kenya, Ethiopia, and Niger, 'children born during droughts are likely to suffer from malnutrition. At the global scale, the issue of climate change is no longer a hoax.'
- x. A high dependency ratio of 5.4 (UNDP, 2019) means that there is a huge financial burden on individuals who have to shoulder the burden of care. According to UNDP (2019), globally there were 18.8 million internal displacements associated with disasters in 135 countries. Disasters caused by floods displaced 8.6 million, storms – including cyclones, hurricanes and typhoons – accounted for 7.5 million, and there were 2.7 million others.



RESTORING DIGNITY: A FISTULA SURGEON'S PERSPECTIVE

Dr Anthony Wanjala is an Obstetrician-Gynaecologist, Fistula Surgeon and Head of the Department of Reproductive Health at Kapenguria County Teaching and Referral Hospital, in West Pokot County.

He describes himself as a medical doctor with immense passion for maternal health and seeks to have women's reproductive health rights prioritised and promoted. Having served as a practicing surgeon for seven years now, his motivation and mentorship was drawn from gynaecologists Dr Sarah Cichowski and Dr Kays Muruka as well as expert Fistula Surgeon, Dr Mabeya.

"My most fulfilling moments in my work as a Fistula Surgeon are when patients fully recover post-repair and I see their tears of joy, as well as those of their families and friends." Courtesy of his work as Fistula surgeon, Dr Wanjala has traversed the world and had opportunities to build his experience by interacting with top experts.

- xi. Another concern is that, given limited resources, many countries have over time adopted a selective approach which prioritises certain areas over others. The WHO is working with countries to move back to a primary healthcare model which aims at addressing all of a person's health needs, as opposed to just treating specific diseases (WHO, 2019).
- xii. Rapid population growth: The population of Kenya was 47.6 million during the 2019 census, up from 38.6 million in the 2010 population census. One of the strategies, therefore, is to revisit the healthcare system and related human resources if the country is to access good quality and affordable healthcare and cope with the growing population.

HOW TO BRIDGE GAPS IN PROVISION OF UHC

- i. **Healthcare financing gaps:** Many shortfalls exist in the provision of UHC in Kenya. Apart from the government coming up with innovative ways to increase the national health budget, it can also tap into other sources of funding for the health sector in order to bridge these gaps. The government can introduce special taxes such as Sin Tax (on alcohol and tobacco), Airtime Tax, and improve tax revenue collection. Sin Tax is levied on goods that are detrimental to human health. Debt swaps for health and guarantees can also be negotiated by governments (UNDP, 2019b).

A debt swap is 'a method of transforming debt into resources for development work. Debt swaps are a type of debt relief, often as part of official development assistance (ODA) funding: instead of paying back the debt to creditor countries, debtor countries use the debt money for their social development, such as education and health care' (UNDP, 2019).

This means that money meant for debt repayment can be redirected to social development, including health financing for UHC. However, debt swaps depend on the donors' willingness to cancel the debt. The government can also continue seeking donor funding for the health sector. It can also work towards the removal of user fees for the poor, indigent and marginalised groups in society through provision of subsidies (HISP) and introduction of social protection insurance. The government can also gradually increase its budget allocation to the health sector from the current 7 percent of the total Government Budget towards the Abuja Declaration target of 15 per cent. This is, however, dependent on the level of economic growth of a country.

- ii. **Infrastructure gap:** This is made worse by skewed distribution of health infrastructure with a bias to urban areas. There is also obsolete equipment that urgently needs replacement. The government should create an enabling infrastructure for quality service delivery by promoting public private partnerships (PPPs). Also, the model of lease financing can be explored further as it reduces the need for upfront capital, and monthly rentals are paid for from the use of the assets. Kenya Managed Equipment Service is a good example of the foregoing, where the owner of the assets gives the right of use to the government and then receives periodic payments (UNDP, 2019). Another option is to rationalise hospital infrastructure and create a network of hospitals within counties and inter-counties to optimise efficiency, like in the case of Brazil and Central Asia (Kimathi, 2017).
- iii. Corruption in the health sector in Kenya has been highlighted in various literature as being an eyesore and one of the biggest impediments to implementing UHC. Among the funding

sources plundered are donor agencies' funds. This leads to inefficiency, shortage of human resources and inadequate supply of other HPTs at public health facilities. Combating corruption, and prudence in management of public and donor funds, should be strengthened.

- iv. **Human capital deficit:** The Kenya Health Policy 2014-2030 aims at 'achieving adequate and equitable distribution of a productive health workforce'. This can be done through identifying training needs and training those identified. Also, postgraduate training and internship programmes should be promoted as part of capacity building in the health sector. Faith-based health facilities can also work out arrangements/agreements with county governments where some of their workers can be deployed to support those in public facilities, especially where there is an acute medical personnel shortage. Putting in place mechanisms that ensure attraction, retention and motivation of workers, especially in marginalised areas, should also be an area of focus.

- v. **Health Product and Technologies (HPT):** Kenya, Malawi, Peru and Haiti are among early adopters of electronic medical records. Kenya should strengthen its Health Information System (HIS) to facilitate procurement of health products and related modern technologies and timely distribution of the same to health facilities. The system can also help in 'micro-targeting those furthest' (UNDP, 2019), hence improving access to quality UHC. The system should also have the capacity to trace drugs and equipment to ensure monitoring of quality and facilitate recall in the event of dangerous products entering the supply chain. In January 2020, KEMSA signed a contract with the Postal Corporation of Kenya for use of their wide transport network to distribute

HPT. It is important to put in place an effective and reliable procurement and supply system. The Kenya Health Policy 2014-2030 categorises HPTs as: Strategic (vaccines and drugs for TB, HIV/Aids and epidemics); special and expensive (cancer drugs, immunosuppressive agents); and essentials/basic products.

- vi. **Strengthen research and development:** KEMRI should boost its research and development component on public health and health systems, traditional medicine and drug development; biotechnology; infectious parasitic diseases; non-communicable diseases; and sexual, reproductive, adolescent and child health. The agency, working with international partners should also re-energise research on how best to implement UHC, deal with emerging challenges, and how they can be addressed.
- vii. Strengthen the capacity of the PPB to ensure that only legally registered pharmacies operate and that the drugs they procure and sell are of unquestionable quality. They should increase monitoring and evaluation of pharmaceutical companies to guarantee high standards of the HPTs they produce. The PPB should monitor and ensure adherence to set standards and regulations in order to eliminate influx of counterfeit drugs.



Policy principles and orientations have been formulated to facilitate the development of comprehensive health investments, health plans, and service provision within the devolved healthcare system

“

UHC lowers the healthcare cost in the economy; forces doctors to offer the same standards of services in the country; and eliminates administrative costs by reducing the need to deal with private insurance firms



ROLES OF MINISTRIES, DEPARTMENTS AND AGENCIES IN SUPPORTING UNIVERSAL HEALTH COVERAGE

MINISTRY OF HEALTH

The Ministry of Health is charged with formulation and implementation of health policy, sanitation policy, preventive and promotive health services, HIV/Aids and sexually transmitted infections (STIs) programmes, treatment and management, health education, family planning, food and food handling, and health inspections.

Its vision is to have 'a healthy, productive and globally competitive nation'. This is driven by the mission: to build a progressive, responsive and sustainable healthcare system for accelerated attainment of the highest standard of health to all Kenyans' (Government of Kenya, 2014).

The Ministry formulated the Kenya Health Policy 2014-2030 whose goal is attainment of the highest standard of health in a manner responsive to the needs of the population. In addition, policy principles and orientations have been formulated to facilitate the development of comprehensive health investments, health plans, and service provision within the devolved healthcare system.

The policy aims to achieve the following:

- *Eliminate communicable conditions;*
- *Halt and reverse the rising burden of non-communicable conditions;*
- *Reduce the burden of violence and injury;*
- *Minimise exposure to risk factors;*
- *Strengthen collaboration with private and other health-related sectors; and,*
- *Provide essential healthcare.*

Role of Kenya Pharmacy and Poisons Board

(PPB): The Kenya Pharmacy and Poisons Board (PPB) plays a pivotal role in promoting UHC. Essential medicines, equipment and supplies are critical for the implementation of UHC. The PPB endeavours to enhance access to affordable and quality medicine. To achieve this, it has been working on developing a framework for regulation of parallel imported drugs (Pharmacy and Poisons Board, 2018). The board says the justification for the parallel importation doctrine is to ensure the poor can access affordable and high quality medicines.

The PPB is the Drug Regulatory Authority established under the Pharmacy and Poisons Act with the following mandate:

- *Regulation of the practice of pharmacy and manufacture and trade in drugs and poisons;*
- *Implementation of relevant regulatory measures to achieve the highest standards of safety, efficacy and quality for all drugs, chemical substances and medical devices, locally manufactured, imported, exported, distributed, sold, or used, to ensure protection of the consumer as envisaged by the laws regulating drugs in Kenya.*

According to the Pharmacy and Poisons Board, pharmacists play a critical role in the implementation of universal healthcare policy, mainly in medicines supply chain management, including procurement, distribution, quality assurance, dispensing and monitoring.

However, despite the existence of PPB, there have been private market quality concerns about the medicines and supplies (Mackintosh et al., 2018). A study (Mackintosh et al., 2018) revealed that medicines procured from public wholesalers were found to be of good quality, apart from some equipment and supplies such as gloves, whose quality was wanting. The government has, however, committed to addressing



the issue of substandard medicines through calibrating the existing regulatory system and holding criminals who engage in such business to account.

The pharmaceutical industry and stakeholders can work with the government to achieve UHC, through providing access to affordable and high quality medicines and other medical commodities. To achieve this, the PPB has enhanced its market surveillance to ensure only legitimate outlets are allowed to sell medicines and health-related commodities in the country.

This has been done through setting up a Health Safety Code, which is accessed via a free SMS code (21031) that can be used by customers to ascertain legitimate pharmacies or chemists validly licensed by the Board (Pharmacy and Poisons Board, 2018). This has helped reduce cases of quacks running illegal pharmacies and chemists, thus endangering lives. The PPB, in delivering its mandate, has cracked down on illegal pharmaceutical businesses.

Since 2016, it has closed down 994 illegal pharmaceutical outlets countrywide and arrested 881 suspected offenders (Pharmacy and Poisons Board, 2018). However, the challenge is that the low number of Kenyans going out of their way to confirm that the medicine they are purchasing is from legitimate pharmacies, is low.

There have been cases of people falsifying medicine by replacing originals with fakes, which are then repackaged and sold as genuine. Kenya has a Pharmaceutical Sector Development Strategy and support for local pharmaceutical manufacturers to embrace Good Manufacturing Practices (GMP) through the GMP Kenya roadmap initiative, which has 35 participating members. If well implemented, the strategy is expected to promote best practice in the local

ROLE OF THE PHARMACY AND POISONS BOARD

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pharmaceutical manufacturing industry and improve quality healthcare.

KENYA MEDICAL SUPPLIES AUTHORITY (KEMSA)

The Kenya Medical Supplies Authority (KEMSA) is a State corporation under the Ministry of Health established under the KEMSA Act. The agency was established in February 2000 following the recommendations of a health stakeholder's forum on strategies for reforming the drug and medical supplies systems, (Amemba, 2013). It is a specialised medical logistics provider for the Ministry of Health, public health facilities, and programmes.

The KEMSA Act in section 4 (1) outlines the functions of the Authority as follows:

- *Procure, warehouse and distribute drugs and medical supplies for prescribed public health programmes, the national strategic stock reserve, prescribed essential health packages and national referral hospitals.*
- *Establish a network of storage, packaging and distribution facilities for provision of drugs and medical supplies to health institutions.*
- *Enter into partnership with or establish frameworks with county governments for purposes of providing services in procurement, warehousing, distribution of drugs and medical supplies.*
- *Collect information and provide regular reports to the national and county governments on the status and cost effectiveness of procurement, the distribution and value of prescribed essential medical supplies delivered to health facilities, stock status and on any other aspect of supply system status and performance which may be required by stakeholders.*
- *Support county governments to establish and maintain appropriate supply chain systems for*

drugs and medical supplies.

KEMSA is driven by the mission to provide reliable, affordable and quality health products and supply chain solutions to improve healthcare in Kenya and beyond. Section 4 (2) of the KEMSA Act vests powers of determining the requirement of drugs and medical supplies in public health facilities in the Cabinet Secretary in consultation with KEMSA and county governments (Government of Kenya, 2013).

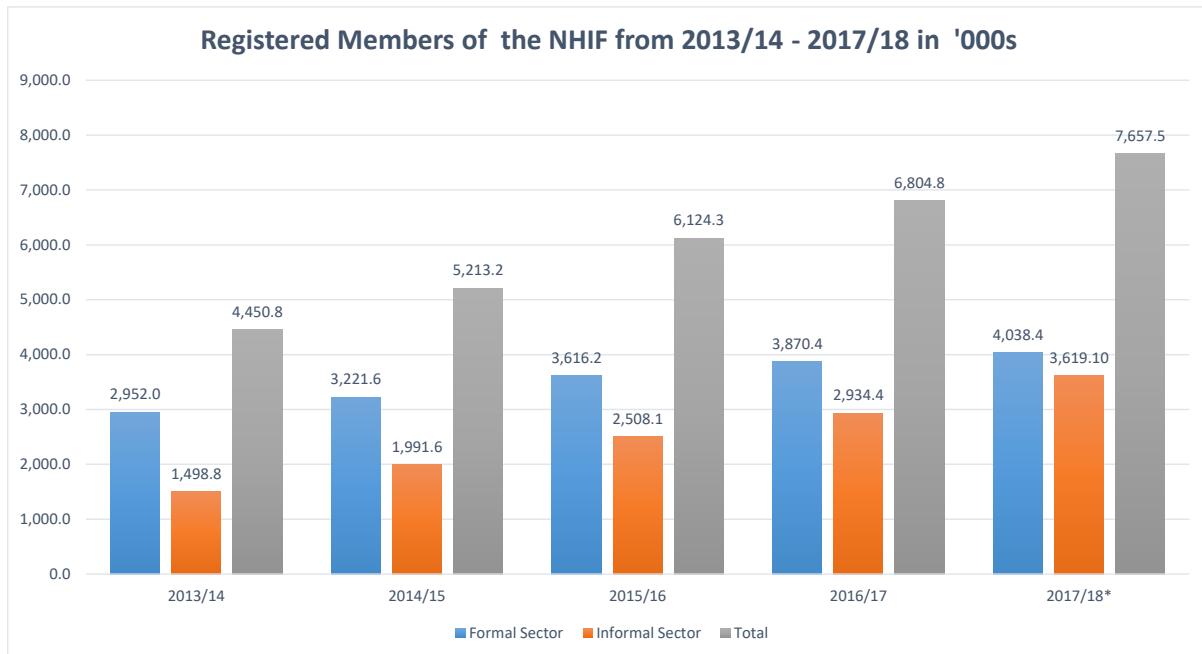
The agency plays a big role in implementation of UHC through procuring and supplying medical products and technologies countrywide. In January 2020, KEMSA signed a partnership deal worth Ksh120 million per year based on performance with the Postal Corporation of Kenya (PCK) to use their networks to deliver products and technologies.

PCK has countrywide networks with a fleet of vehicles, motorcycles and strategic warehouses in each region and therefore has the capacity to deliver Health Products and Technologies (HPTs) to the last mile. This is part of the agency's preparedness to take UHC to all counties. However, despite these efforts, KEMSA is also faced with inadequate pre-procurement planning issues, which have occasionally led to non-payment of suppliers. According to Amemba (2013), the agency needs to develop a risk management strategy to address any loophole in the supply chain.

KENYA MEDICAL RESEARCH INSTITUTE (KEMRI)

The Kenya Medical Research Institute (KEMRI) is a State corporation established under the Science and Technology (Amendment) Act 1979. In addition to the institute being a State agency,

Source: Government of Kenya, 2019



Registered Members of NHIF from 2013/14/2017/18

it maintains strong collaborations with related regional and international organisations. The Science and Technology Act 1979 was amended to the Science, Technology and Innovation Act 2013, making KEMRI a national body mandated to carry out health research that can be applied towards policy change in the management of health delivery systems.

KEMRI's mission is: to be a leading centre of excellence in human health research. The specific programme areas KEMRI focuses on include research development on public health and health systems, traditional medicine and drug development; biotechnology; infectious parasitic diseases; non-communicable diseases; and sexual, reproductive, adolescent and child health. The institute also specialises in policy analysis, research foundation and advocacy; and

training in health policy issues. The institute also conducts research on how best to implement UHC, assess emerging challenges, and find ways that they can be addressed. Such research can be instrumental in guiding policy-makers on how best to implement UHC.

NATIONAL HOSPITAL INSURANCE FUND (NHIF)

Prior to the establishment of the NHIF through the National Hospital Insurance Act, the Fund had been under the Ministry of Health. The NHIF's mandate is to 'facilitate access to quality healthcare through strategic resources pooling and healthcare purchasing in collaboration with stakeholders' (Government of Kenya, 2018:1). One of the roles of NHIF is to provide social



health insurance to its members. Provision of social health insurance is also highlighted in Kenya's Vision 2030 as one of the requisites for achieving UHC. To do this, the government has been reforming the NHIF to make it one of the key drivers of UHC. These reforms are spelt out in the NHIF Strategic Plan 2018-2022 as follows:

- *Structural changes aimed at making the Fund more effective and responsive to its clientele's needs;*
- *Reviewing contribution rates;*
- *Introduction of outpatient and non-communicable diseases (NCDs) in the health cover package;*

- *Developing strategies to increase enrolment of members from both formal and informal sectors of the economy.*
- *Sustained reforms and realignment of the NHIF strategy to enhance efficiency.*

The NHIF's estimated principal membership in the financial year 2017/2018 was 7.65 million people, up from 4.45 million in 2013/2014, which translates to 27.5 million principal contributors and their dependents. This is equivalent to over 50 percent of health coverage (Government of Kenya, 2019; NHIF, 2018). However, Kenya is still far from the main goal of UHC, which is to achieve 100 percent health

coverage. The Fund aims to achieve over 70 percent coverage by the end of the Medium-Term Plan 3 period.

This growth in membership has enabled the Fund to inject Ksh33 billion into the health sector, with the amount expected to hit over Ksh100 billion by 2022.

Within the sub-Saharan Africa region (SSA), Rwanda leads in enrolment in health insurance, with a community-based health insurance cover of over 75 percent of the population, according to a UNDP report published in 2019.

The Fund also plays a key role in social health protection, assisting poor and vulnerable people by implementing a Health Insurance Subsidy for the Poor (HISP), Older Persons, and Persons with Severe Disabilities Programmes (OP&PWD).

In the financial year 2016/2017, 160,422 households benefited from HISP, along with 41,666 older persons and persons with severe disabilities (Government of Kenya, 2018). Further, the NHIF launched the Linda Mama, Boresha Jamii Programme (free maternity) aimed at ensuring safe delivery for pregnant women in October 2016. The Fund entered



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into an MOU with the National Government in February 2017 and started implementing the programme to registered mothers in May 2017. The programme covers all registered mothers (395,918 registered, with 223,459 deliveries by 2018) who are not covered by the Fund's Supacover insurance.

The benefit package includes antenatal and postnatal services at all contracted healthcare providers (NHIF, 2018). The Fund also provides health insurance to secondary school students through the Edu-Afya Programme. The Fund faces the following challenges, as outlined in its strategic plan 2018-2022:

- *Inadequate legal framework;*
- *Inadequate organisational capacity;*
- *Inadequate stakeholder engagement;*
- *Inadequate coverage of certain demographic groups;*
- *Resistance to change/reforms; and,*
- *Inadequate provider accreditation and payment systems.*

WAY FORWARD

- i. *Expand physical health infrastructure, rehabilitate existing ones and adequately procure medical equipment to conform to the current norms and standards for health sector infrastructure. In addition, procure adequate ambulances to ensure timely and efficient transfer of patients within the WHO-set standard.*
- ii. *Ensure provision of basic water and electricity (grid or generator) services.*
- iii. *Build more health facilities at all levels, e.g. medical clinics, dispensaries, health centres and hospitals. This will assist lower level facilities to implement KEPH and UHC.*
- iv. *Develop technical capacity for human resources in the health sector, both at national and county levels, to support MES and health*





TIDBITS

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services delivery.

- v. Train an adequate workforce in all cadres to conform to the current norms and standards, and ensure equitable distribution across the country to enhance UHC and guarantee high quality of service.
- vi. Procure adequate ambulances at national and county levels to facilitate emergency evacuation of patients.
- vii. Ensure availability of guidelines on identifying and managing drug use problems at all health facility levels, especially at lower institutions.
- viii. Build diagnostic capacity through training of relevant staff and procurement of modern diagnostic equipment at both national and county levels.
- ix. Develop disease outbreak preparedness plans in all health facilities at both national and county level.
- x. Put in place adequate and proper pharmaceutical commodity storage facilities to guarantee high quality of these commodities up to the set expiration date.
- xi. Ensure proper disposal of sharps and medical waste to minimise infections among health workers, patients, the general public and children.
- xii. Establish systems to monitor the quality of care at health facilities and include patient feedback, supportive supervision systems for health workers, and verification of health workers' licences.
- xiii. Encourage and support health facilities to establish quality improvement teams.

CHAPTER 5



PRIMARY HEALTH CARE KEY TO
ACHIEVEMENT OF UHC IN KENYA

INTRODUCTION AND HISTORICAL BACKGROUND

"As a person who has worked in public health for years, for me it is very important that we elevate the importance of preventive and promotive health, and look at the importance of community health workers on the ground while making sure Kenyans understand that taking preventive health more seriously is important. We should not invest most resources in curative but rather in promotive health,"

- Joyce Wanderi, CEO Population Services Kenya

Over 40 years ago in 1978, the world was still as unequal as it is today. There was a huge gap between the haves and the have-nots, and the majority could not access basic services including in health. On September 6-12 of that year, the World Health Organisation and the United Nations Children's Fund, (UNICEF) organised a global conference which would attempt to give people the power, dignity and the right to make decisions about their own health.

This was the first International Conference on Primary Health Care, attended by delegates from 134 governments, representatives of 67 United Nations organisations, specialised agencies and non-governmental organisations.

Held in Kazakhstan, then Kazakh Soviet Socialist Republic, Capital, Alma-Ata (today Almaty) the conference led to what came to be known as the Declaration of the Alma-Ata. It was a forward-thinking declaration of which Kenya was one of the first nations to sign. It expressed the need for urgent action by all governments, health and development workers, and the world community to protect and promote the health of all people.

From the onset, the conference recognised and reaffirmed that health is not merely the absence

of disease or infirmity, but a state of complete physical, mental and social well-being.

As is espoused in Kenya's 2010 Constitution, the Astana declaration recognised that health is a fundamental human right whose attainment calls for involvement from all sectors of society and not only the health sector. The delegates declared that it was unacceptable that there was gross inequality between the health status of people within the countries and also between the developed and the developing worlds.

This, the declaration noted, can be rectified by a new 'economic world order'. They called upon the governments to invest in adequate health and social measures. In retrospect, the Alma-Ata was very ambitious in its call to the governments and the international community for an attainment of health for all by the year



Primary Health Care's main attribute is prevention. When you walk to many health centres, you will be tested and treated for the specific disease that took you there

2000. But the delegates did not think this was unattainable. They strongly believed that Primary Health Care was the vehicle that would lead people to well-being, and thus economic freedom and world peace, especially in the then Cold War era.

They thus described Primary Health Care, PHC, as essential healthcare based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country could afford to maintain at every stage of their development, in the spirit of self-reliance and self-determination.

It forms an integral part, both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. PHC is the first level of contact of individuals, the family and community with the national health system, bringing healthcare as close as possible to where people live and work, and constitutes the first element of a continuing healthcare process. In a nutshell, Primary Health Care is not treating of diseases or conditions, but its main attribute is prevention. It is personal, that is individual, but also community oriented.

Today, when you walk to many health centres or hospitals, you will be tested and treated for the specific disease that took you there. But PHC envisions an integrated and comprehensive system, which is promotive, preventive, then curative with time, and rehabilitative.

The services are closer to the people, that is Level One (Kenya has six levels – Level One; community services, Level Two, dispensaries and clinics; Level Three, health centres, mater-

nity and nursing homes; Level Four, sub-county hospitals and medium-sized private hospitals; Level Five, county referral hospitals and large private hospitals; and Level Six, national referral hospitals and large private teaching hospitals) of quality and which emphasis on early diagnosis. In Kenya today, most people suffering from, say cancer, get diagnosed at the late stages, which call for expensive specialised care.

The Alma-Ata, even 40 years ago, realised the inequity in health care, but in PHC it envisioned a scenario where everyone has access to quality health services, where the providers are efficient and motivated and working in a supportive environment. It also called for the empowerment of communities in all areas, from food supply to nutrition to access to clean drinking water, education on family planning, immunisation, and access to safe maternal and child healthcare.

FAST FORWARD TO 2018

In the following decades, countries launched their versions of Primary Health Care, with 191 then UN member states committing to the UN Millennium Development Goals in 2000, to run until 2015. Though the MDGs did not explicitly define PHC, three of the eight goals touched on health as envisioned in the Alma-Ata Dec-



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laration, with goals 3: Focusing to reducing child mortality; 4: To improve maternal health and 5: To combat HIV/Aids, malaria and other diseases. In fact, goals 7 and 8 are also in a way related, as 7 was designed to ensure environmental sustainability while 8 called for partnerships and collaborations.

Primary health is preventive and promotive, so a clean environment keeps off diseases like malaria, typhoid and bilharzia. Goal one called for elimination of extreme poverty and hunger. Hunger causes malnutrition, which can lead to death. Hungry people feel undignified and thus are not mentally healthy or fit.

Between 1978 and 2015, the world made great strides against several leading causes of disease and death, increased life expectancy while reducing infant and maternal deaths. Though the



TIDBITS

Between 1978 and 2015 the world has made great strides against several leading causes of disease and death, increased life expectancy while reducing infant and maternal deaths. Though the cure or the ultimate vaccine against HIV is yet to be discovered, the world has turned the tide against this dangerous virus, mostly through biomedical preventive measures. In this time, the world has halved malaria deaths.



cure or the ultimate vaccine against HIV is yet to be discovered, the world has turned the tide against this dangerous virus, mostly through biomedical preventive measures. In this period, the world has halved malaria deaths.

Unfortunately, health inequalities still persist. In 2015, at the cusp of MDGs, the world again went to the drawing board after reviewing the MDGs. On seeing that much remained to be done, it redesigned the goals to the current 2030 Agenda, the Sustainable Development Goals. Of this, Goal 3 captures health and well-being, with the UN member states agreeing that Universal Health Coverage is key to achieving this. Led by the World Health Organisation, most countries have committed to UHC by 2030.

At the heart of this, the nations agree that Primary Health Care must be the driving force towards achieving Universal Health Coverage. This was the reason the world again met in Kazakhstan, 40 years after the Alma-Ata Conference, this time in Astana the capital of this transcontinental country straddling Asia and Europe.

Held on October 25-26, 2018, and bringing together UN member states, health ministers and the international community, the Global Conference on Primary Health Care discussed the achievements made and renewed its commitments to primary healthcare for the 21st century, geared to achieve Universal Health Coverage by 2030.

The Alma-Ata conference gave birth to the Astana Declaration which pledged to make bold political choices for health across all sectors, build sustainable primary healthcare, empower individuals and align stakeholder support to national policies, strategies and plans. So,



PRIMARY HEALTHCARE DELIVERY IN MAKUENI COUNTY

According to the County Health Director Medical Services Dr. Stephen Ndolo, plans are underway to connect the Makueni County Referral and Kambu Sub-County Hospitals to the digital care platform.

The parties are working to scaling up the programme to reach out to more people and reduce on the hospital deaths caused by NCDs. In the same financial year, Governor Kivutha Kibwana signed a cancer management deal with two international cancer organizations which will position the county as a centre of excellence in cancer care.

The deal brought together the International Cancer Institute (ICI) and Roche Kenya Limited (a leading pharmaceuticals and tissue-based cancer diagnostics company) to partner with Makueni on cancer and other Non-Communicable Diseases management. The deal seeks to undertake an integrated care model in the county for breast cancer; cervical cancer; prostate cancer; lymphomas; hypertension; diabetes; and mental health at the primary health care level through the referral system to the Makueni County Referral Hospital.

had the world achieved the Alma-Ata goals on PHC and what is the difference or similarity with the Astana Declaration? Tedros Adhanom Ghebreyesus, the director-general of the World Health Organisation, speaking to the East African during the conference, better espoused this question. He said the Alma-Ata Declaration lacked in some areas as it came to life when the world was divided, thus some nations adopted it while others didn't.

"Its implementation was uneven... the Alma-Ata Declaration was not "health for all" but it was "health for some". People are saying, let us move away from that." He added that there is confusion that primary healthcare is only for poor countries.

"Not at all; it is actually important for high income and middle-income countries as well. It is for all, for the whole world. The best and smartest investment is in Primary Health Care. Its capital investment is low and the return on investment is high."

Later, at the WHO World Health Assembly, held in May in Geneva 2019, with the theme: Primary Healthcare as the tool for achieving #HealthForAll, Dr Tedros re-emphasised the importance of the Astana Declaration: "The world has made great progress towards Universal Health Coverage. The Declaration of Astana, endorsed by all 194 member states last year, was a vital affirmation that there will be no UHC without primary healthcare."

PRIMARY HEALTH CARE: THE KENYAN CONTEXT

As already seen, Kenya is a signatory to the Alma-Ata Declaration of 1978 and several others, including the Bamako Initiative of 1988, and the Millennium Development Goals of 2000,

and now the SDGs and the Astana Declaration. It is in 2005 that Kenya moved from a concentration on the disease burden to the promotion of individual and community health. This was defined in the second National Health Sector Strategic Plan (NHSSP II: 2005-2010).

Around that time, the Ministry of Health introduced the Kenya Essential Package for Health, KEPH, whose primary component was level one service; having individuals, households and communities take charge of their own health. Under KEPH, the Ministry launched the community health strategy, complete with a training guide for community health extension workers.

Launched on June 22, 2007, the Community Health Strategy identified community health extension workers (CHEWs) as key in achieving level one health services. Having been trained, the CHEWs would then be able to empower community health workers who live within the communities and families. Since they are respected, they are bound to be listened to.

Indeed, (PHC) provides a policy basis for community health. As a human right envisioned in



(PHC) provides a policy basis for community health. The Ministry of Health says that as a signatory of the Alma Ata Declaration, Kenya always adheres to commitments and the principles and it sites significant progress made in strengthening health systems to align with primary health care



the 2010 Constitution, health also features prominently in the Vision 2030 under the Social Pillar, thus the Ministry of Health says that as a signatory to the Alma-Ata Declaration, Kenya always adheres to commitments and principles and it cites significant progress made in strengthening health systems to align with primary healthcare.

These include increased financing for health and improved quality, efficiency and responsiveness of health services, along with fostering partnerships and establishing strong health systems. Since the last conference, Kenya has increased the number of health facilities, both public and private, from 808 in 1978 to more than 6,000 today and the number of human resources from 16,384 to more than 65,000.

This has seen an improvement in life expectancy from an average 48 years in 1978 to 65 years



Primary Health Care for the attainment of Universal Health Coverage, the Kenyan context. As we have already seen, Kenya is a signatory to the Alma Ata declaration of 1978 and others including, the Bamako Initiative of 1988, and the Millennium Development Goals of 2000 and now the SDGs and the Astana Declaration.



PHC envisions integrated and comprehensive health services.

TIDBITS

As a human right envisioned in the 2010 Constitution, health features prominently in the Vision 2030 under the Social Pillar, thus the Ministry of Health says that as a signatory to the Alma-Ata Declaration, Kenya always adheres to commitments and principles and it cites significant progress made in strengthening health systems to align with primary healthcare.

today. An older generation in any country is an indication of healthy living and well-being.

During the same period, according to the Ministry of Health, the under-five mortality in Kenya has reduced from 175 deaths per 1,000 live births to 54 deaths per 1,000 live births, and maternal mortality ratio from more than 800 deaths per 100,000 deliveries in 1978 to 362 deaths per 100,000 deliveries. There has been increased use of modern contraceptives, from 7 percent to 52 percent while the fertility rate reduced from 8.1 percent to the current 3.8 percent per woman.

During the same period, the proportion of deliveries by skilled personnel increased to 62 percent, and the proportion of fully immunised under-one-year children also increased to 80 percent, while reducing the proportion of malaria fatalities and TB infections.

In 1978, when the declaration was being signed, a strange virus had just started wreaking havoc. First identified in the US among gay men, it was diagnosed in Kenya in 1984. Since then and through to the 1990s, HIV ravaged the nation at an alarming rate, upwards of 14 percent. In 1999, then President Daniel arap Moi declared it a national disaster.

This prompted the country to change tack and, after concerted efforts including establishment of the National Aids Control Council soon after Moi's declaration, the prevalence has reduced to 5.6 percent, with most people well informed about the causes and prevention of HIV. In the same period, diseases like smallpox have been eradicated, as has the guinea worm threat and maternal and neonatal tetanus. Former Health Cabinet Secretary Sicily Kariuki believes that these achievements are due to investments in PHC, although, in an opinion article published in

October 2018 when Kenya hosted the African Union Maternal and Child Health Conference in Nairobi, she said more still needs to be done:

"...we need to ensure that healthcare services are available in communities through recruitment and training of community health workers who would ensure that every child is immunised, every mother receives antenatal care and postnatal care and that every family has access to information on how they can live healthier lives."

She added, "let us continue to invest in education, particularly of young girls. We know that keeping girls in school longer not only protects them from unplanned pregnancies and HIV infections but also has long-term benefits. We know that women with a higher level of education are more likely to maintain hygiene, breastfeed their children and use family planning methods, hence improve their personal health and that of their children.

"Lastly, we must intensify interventions against diseases that kill children and women. Kenya was certified free of maternal and neonatal tetanus early this year (2018) and we look forward to being a polio free country in the next few years."

FAMILY PLANNING AND MATERNAL



Women with a higher level of education are more likely to maintain hygiene, breastfeed their children and use family planning methods, hence improve their personal health and that of their children



PROTECTING YOURSELF AND OTHERS FROM COVID-19

You can reduce your chances of being infected or spreading COVID-19 by taking some simple precautions:

- i. Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water. Why? Washing your hands with soap and water or using alcohol-based hand rub kills viruses that may be on your hands.
- ii. Maintain at least 1 metre (3 feet) distance between yourself and others. Why? When someone coughs, sneezes, or speaks they spray small liquid droplets from their nose or mouth, which may contain virus. If you are too close, you can breathe in the droplets, including the COVID-19 virus if the person has the disease.
- iii. Avoid going to crowded places. Why? Where people come together in crowds, you are more likely to come into close contact with someone that has COVID-19 and it is more difficult to maintain physical distance of 1 metre (3 feet).
- iv. Avoid touching eyes, nose and mouth. Why? Hands touch many surfaces and can pick up viruses. Once contaminated, hands can transfer the virus to your eyes, nose or mouth. From there, the virus can enter your body and infect you.
- v. Make sure you, and the people around you, follow good respiratory hygiene. This means covering your mouth and nose with your bent elbow or tissue when you cough or sneeze.

HEALTH FOR THE ATTAINMENT OF UNIVERSAL HEALTH COVERAGE

"How do we ensure that Universal Health Coverage is possible in Kenya by 2022? The answer is simple," so wrote Dr Werner Schultink, the UNICEF Representative to Kenya, Dr Rudi Eggers, WHO Representative to Kenya, and Mr Siddharth Chatterjee, the UN Resident Coordinator to Kenya. "The focus has to be on preventable and primary healthcare as emphasised in the Alma-Ata principles. The centrality of reproductive, maternal, neonatal, child and adolescent health will be critical to achieving UHC," they stated.

Writing in an opinion article that was widely distributed in several publications, the career development workers gave two reasons why maternal and child health is a forerunner of UHC:

"First, it is clear that the mother's overall state of health has a lifetime impact on an individual child's health. Second, there is now evidence that households with maternal health complications spend considerably more of their savings to cover medical expenses. This is particularly key in rural settings where women play major economic roles."

Indeed, Kenya loses about 20 women every day while giving birth, majority from preventable causes. This means 20 families and households are left without their primary caregiver and, in many instances, sole breadwinner. The death of a mother is not only a loss to that household, but also to the whole country, both socially and economically. It is for this reason that reproductive and maternal, newborn and child health is rated high in the global health card. In its 16 essential health services, the World Health Organisation puts reproductive, maternal, newborn and child

health in its first four categories: family planning, antenatal care and delivery care, full child immunisation and health seeking behaviour for pneumonia. In October 2018, Kenya hosted the African Union Conference on Maternal Health. In her speech, and in an opinion article published in local newspapers, CS Kariuki expounded on the relationship between universal health coverage, family planning and maternal health.

She said that through Universal Health Coverage, Kenya's goal is to ensure that every mother and child has access to free quality health services and that mothers continue to have access to skilled delivery. Around the world, mothers and children continue to die needlessly of preventable causes. The global community and specifically the African Union have prioritised maternal, adolescent and child health as an urgent area of focus.

"We have eliminated financial barriers to skilled delivery through the Linda Mama programme (formerly free maternal healthcare programme)," said the CS, "but we need to improve on geographical accessibility. I urge the county governments and the private sector to invest towards Primary Health Care in line with our reaffirmation in Astana, in the just-concluded Global Primary Health Care Conference."

Connected to this are diseases that kill women and children. Kenya stands proud that it was certified free of maternal and neonatal ill-health early in 2018. It was set to be free of polio, but experienced shocks when a strain of polio was recently discovered in Nairobi's Eastleigh area. The government has since intensified immunisation, including reaching under-five children who might have missed immunisation during the nurses and doctors strikes in 2017. On immunisation, Kenya has expanded the programme

by introducing two new vaccines, Rota virus vaccine against diarrhoea, and Inactivated Polio Vaccine (IPV) to accelerate efforts towards polio eradication.

In 2019, Kenya introduced the Human Papilloma Virus (HPV) vaccine that is expected to reduce cervical cancer cases. Cervical cancer is one of the leading causes of death in women.

FAMILY PLANNING

In 2012, countries gathered at the London Summit on Family Planning where they made commitments that came to be known as FP2020 to address the policy, financing, delivery and socio-cultural barriers to women accessing contraceptive information, services and supplies. Since then, Kenya has made great progress towards increased uptake of family planning, having recently exceeded its 2020 target of 58 percent modern contraceptive use by married women. With this achievement, the government has focused its attention on the counties, where budget allocations for family planning have increased.

According to the Ministry of Health, women living in rural areas have higher levels of unmet needs for family planning, at 27 percent, compared with those living in urban areas, at 20 percent. Higher unmet needs in rural areas reflect the more limited availability and acceptability of family planning among women.

In relation to the Universal Health Coverage, access to family planning is key because, when women are allowed to plan when and the number of children to have, there are better health outcomes. In the counties for instance, where most women, due to culture and lack of access, do not access FP services, the fertility



Pregnant mothers get advice on malaria prevention.

TIDBITS

Through Universal Health Coverage, Kenya's goal is to ensure that every mother and child has access to free quality health services and that mothers continue to have access to skilled delivery. Around the world, mothers and children continue to die needlessly of preventable causes. The global community and specifically the African Union have prioritised maternal, adolescent and child health as an urgent area of focus.

rate is high, from nine children per woman compared with three in the towns and cities. Also, adolescents and teenage pregnancies in Kenya are high at 18 percent, which is estimated as nine under-age girls getting pregnant every day.

Access to comprehensive sex education, including contraception, is seen as key in reducing teenage pregnancy and, subsequently, maternal deaths as young girls' bodies are not yet well formed to sustain giving birth. Many die during childbirth, contributing to the high cases of maternal deaths.

Indeed, the figures by the Ministry of Health show that there is a high unmet need for family planning among young women aged 15-29 years, and who are in the more fertile age group and have high levels of unintended pregnancies. Unmarried, sexually active adolescents in particular have difficulties in accessing contraceptives.

Nearly half, 47 percent of births, among Kenyan adolescents aged 15-19 are unintended – wanted later or not at all. Younger women are also more likely than older women to have an unmet need for spacing because they are more apt to want more children.

The World Health Organisation recommends that adolescent girls and young women are medically eligible to use any contraceptive method. However, most young women are not able to access contraceptive services, largely due to societal stigma and perception.

This is the reason the Ministry of Health is keen on the community-based distribution model for FP commodities. In this regard, community health volunteers or workers are seen as key in circumventing such challenges. Community volunteers go from door to door, are respected

in the communities (we will see this in a subsequent subtopic), thus increasing uptake and ensuring continuation.

The CBD model sits well with the Primary Health Care goal of Universal Health Coverage. Currently, the MOH is working on a curriculum for community health workers. The draft is comprehensive – training the CBDs on what family planning is, reproductive health, communication skills and contraceptive methods.

FREE MATERNITY CARE (LINDA MAMA)

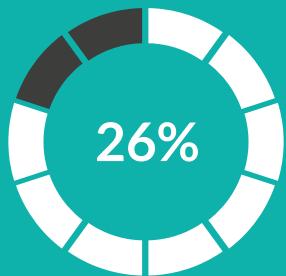
In one of his earliest commitments, President Uhuru Kenyatta during the Madaraka Day celebrations of June 1, 2013, abolished maternity fees for mothers delivering at public facilities in Kenya.

There was a sigh of relief from across the country, and immediately health centres experienced an influx of women seeking to deliver. In an opinion article, Health Cabinet Secretary Sicily Kariuki said that, as a result, skilled hospital-based deliveries increased by over 20 percent and more than two thirds of all deliveries were conducted by skilled healthcare workers.

Deliveries in health facilities increased from



Using the CBD model sits well with the Primary Health Care goal of Universal Health Coverage and currently, the MOH is working on a curriculum for community health workers distributors



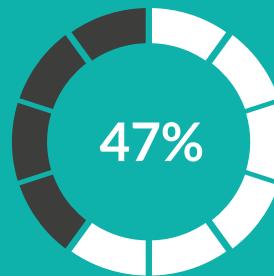
NUTRITION

Reduction of stunting in 2016, down from 35 % in 2013, favoring WHO nutritional goals



BREASTFEEDING

Exclusive breastfeeding in 2016, up from 32% in 2013, favoring WHO nutritional goals



BED OCCUPANCY

Births among Kenyan adolescents aged 15–19 that are unintended – wanted later or not at all

The postnatal care is given in four scheduled visits where the mother again will get iron and folate, get treatment for HIV if positive and also advice on family planning to allow for enough time to care for the new born and spacing before the next birth if at all.

600,323 in 2013 to 1.2 million in 2016, while use of primary healthcare services rose from 69 per cent in the financial year 2013/2014 to 77 per cent in 2015/2016 as a result. According to Lancet, this is proof that hospital cost was a barrier to maternal healthcare, with many women giving birth at home at increased risk.

A month after the President's declaration, the government committed Ksh3.8 billion to the programme, with an additional Ksh700 million for free access to health centres and dispensaries.

With the increased uptake of these services, there was a need for more investment in human resource and infrastructure. Thus the government added Ksh3.1 billion for recruitment of 30 community nurses per constituency, Ksh522 million for recruitment of community health workers per constituency and Ksh1.2 billion for housing of the workers.

The funds would initially be reimbursed to the

county governments, depending on the claims they forwarded to the national government showing the number of women who had given birth in their facilities.

But this changed on October 18, 2016, when the Ministry of Health shifted the programme from direct reimbursement to an insurance-based plan to be administered by NHIF. Now branded Linda Mama, Boresha Jamii, the programme expanded from public hospitals to include private and faith-based providers. The programme officially transitioned to NHIF on April 1, 2017.

The benefit package also expanded from free deliveries to include other aspects of pregnancy, including covering the recommended four antenatal care visits, delivery (normal and caesarian section) as well as four post-natal services. Eligibility was simple; all pregnant women in Kenya simply register through the USSD code *263# with minors registering under their parents' or guardians' names. What this means is that

women seeking medical care while pregnant get far-reaching and life-saving benefits for free. Besides blood group and rhesus tests, these services include screening for tuberculosis, testing for HIV, and counselling.

Women who test HIV positive are immediately put on the Prevention of Mother-to-Child Transmission, PMTCT programme, and are administered with ARVs. Women are also given iron and folate, which boost the health of infants.

Additionally, women in malaria endemic areas are treated for malaria and issued with treated mosquito nets. Postnatal care is given in four scheduled visits, where the mother again gets iron and folate, treatment for HIV if positive, and receives advice on family planning, care for the new-born and on the need for spacing the next birth. Infants get vital immunisation, including 'birth polio', and, if born with HIV, are treated. However, critics of the Linda Mama programme say that since health is a devolved function, free maternity care should be managed by counties. The Ministry of Health, meanwhile, is upbeat that the programme has been a success so far.

During the launch of the Linda Mama programme, the Cabinet Secretary said Kenya is the only country that has met four out five WHO nutritional goals in the period 2013 to 2016. Stunting reduced from 35 percent to 26 percent, while exclusive breastfeeding improved from 32 percent to 61 percent. Under-five mortality declined from 115 to 52, translating to 30,000 lives saved.

Neonatal mortality also declined from 33 to 22 per 1,000 live births over the same period. Vaccination coverage for fully immunised children went up to 76 percent from 68 percent in

2013/14. In the same period, maternal mortality dropped from 488 per 100,000 births to 362 per 100,000 births. This represents 2,000 mothers' lives saved. Primary healthcare utilisation increased from 69 percent in the financial year 2013 to 77 percent in 2016 following waiver of user fees.

The NHIF has also cited challenges caused by the programme, including delays and defaults in payment of insurance premiums due to the free service, mainly by people in the informal sector. Private and faith-based facilities have recorded slow uptake of the programme, citing low reimbursement rates compared with the national maternity programme. Some counties have also shown resistance to NHIF. Surprisingly, in media stories following the launch of Linda Mama, most mothers quoted said they did not know about the programme.

This is a wake-up call to NHIF, and indeed the government, to invest more in communicating its initiatives through the media and other forums like this Yearbook. Role of practical and efficient sanitation in underpinning proper



While speaking at a stakeholder's health forum in Nairobi, Regina Ombam, the Deputy Director, HIV Investments at the National AIDS Control Council said while all the above is true to some extent, Universal Health Coverage could be achieved without big investments, and by people themselves

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Women seeking medical care while pregnant get far-reaching and life-saving benefits for free. Besides blood group and rhesus tests, these services include screening for tuberculosis, testing for HIV, and counselling



hygiene. Shortly after President Kenyatta announced his Big Four Agenda, with an emphasis on UHC, many people were unsure about it. Some thought UHC meant free medical services regardless of one's background, status, education or place of residence. Others thought it meant every Kenyan must be insured, while others interpreted UHC to mean well-equipped hospitals, with enough doctors and medications.

While speaking at a stakeholders' health forum in Nairobi, Regina Ombam, the Deputy Director, HIV Investments, at National Aids Control Council, said that while all of the above are true to some extent, Universal Health Coverage could be achieved without big investments, and by people themselves.

She recalled that in the 1970s to 1990s, when she was growing up: "We did not have these huge private hospitals you see today. People went to Level One facilities, government dispensaries and clinics in the villages."

Ms Ombam added that the most visible and memorable phenomena at that time were health extension officers, who walked around homes making sure people were adhering to sanitation



The UN puts loss of productivity to water and sanitation related diseases costs many countries up to 5 percent of GDP. Sanitation and hygiene includes simple individual and community-based interventions as envisioned by primary health care

and hygiene.

"The extension officers would come to make sure that people were clearing bushes, that there was no stagnant water, and that water was boiled before drinking."

This helped prevent diseases, rather than waiting until one fell sick, like many Kenyans are wont to do today, then rush to the hospital. This is the spirit of primary healthcare, which focuses on promotive and preventive aspects. Indeed, PHC would keep diseases like malaria and diarrhea in check. Diarrhoea is a serious health risk.

The UN says that inadequate sanitation is estimated to cause 432,000 diarrhoeal deaths every year and is a major factor in diseases like intestinal worms, trachoma and schistomiasis. Each year, 297,000 children under five years are estimated to die from diarrhoea as a result of unsafe drinking water, sanitation and hand hygiene.

In a study by Martin Gamril published in Nairobi in February 2018, and titled Introduction to a Comprehensive Countrywide Approach to Sanitation, inadequate sanitation is shown to have 'tremendous costs' including economic impact on households, diarrhea and other water-borne diseases, time spent looking for a safe space to defecate or while queuing at public toilets, impact on productivity due to sickness, time missed at work, school, physical stunting, and huge implications on biodiversity, rivers, coastal environment, and many more.

The UN says loss of productivity due to water and sanitation related diseases may cost many countries up to 5 percent of GDP. The loss is hard to bear since sanitation and hygiene involve simple individual and community-based



interventions as envisioned by Primary Health Care. Here are a few interventions:

One, handwashing by soap and water, including before eating, after visiting the toilet and after handling soiled nappies or diapers. Two, eschewing open defecation, which is still common in some communities. It could be solved through construction of pit latrines and provision of public toilets in rural areas and informal settlements.

Handwashing and open defecation are important to health outcomes and have been dedicated with commemorative days. For the former, it is Global Handwashing Day, marked every year on October 15, and dedicated to advocating for handwashing with soap as an easy, effective and affordable way to prevent diseases and save lives.

The day is for highlighting creative ways to wash hands, noting that not every school or home can afford a sink. People are advised to use locally available materials like plastic containers or discarded water bottles than can be hung strategically on poles and walls at schools and other public institutions. A few weeks later, the globe marks the World Toilet Day on November 19. According to the UN, the day is meant to in-



COMMUNITY PROJECT TO END OPEN DEFECATION

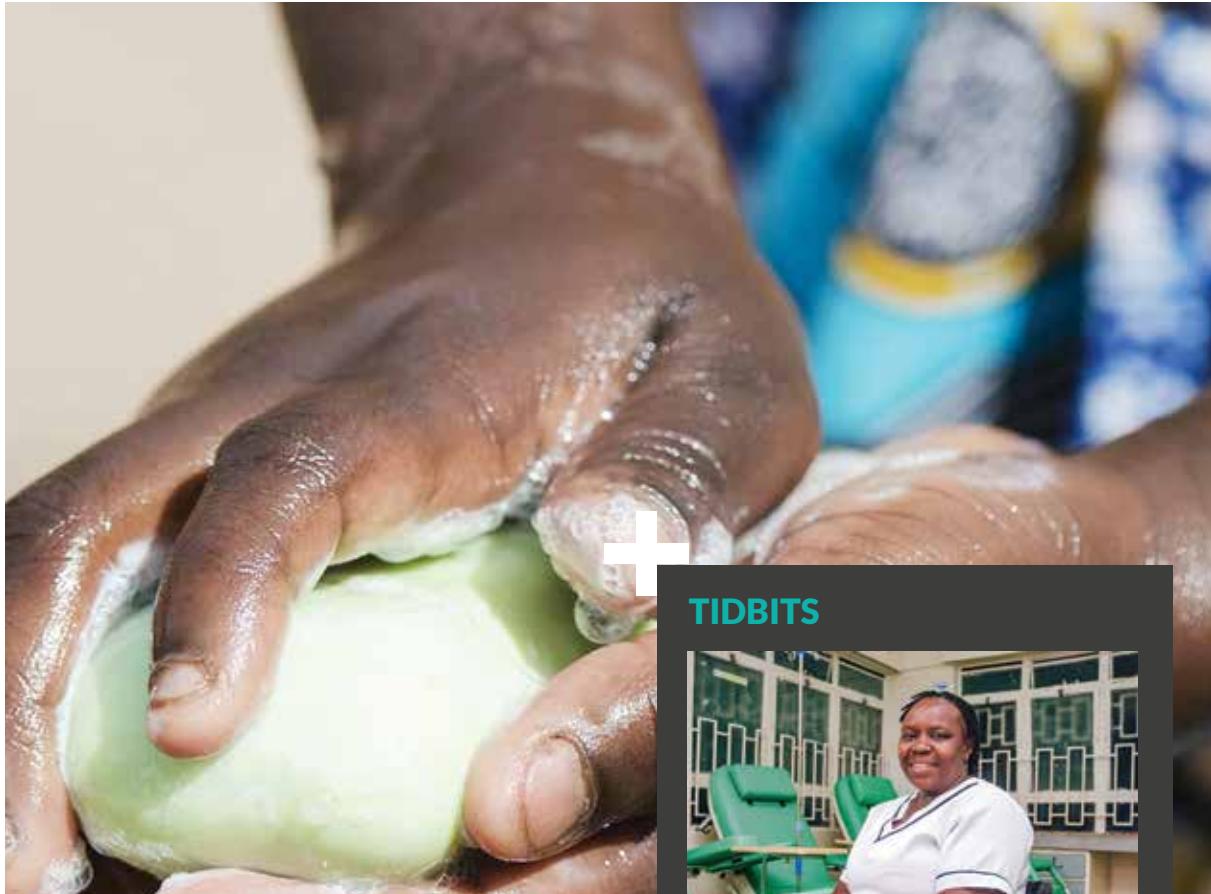
Kenya initiated the Open Defecation Free (ODF) Rural Kenya Campaign in May 2011, adopting Community Led Sanitation (CLTS) as the core strategy to achieve the objective.

Community Led Total Sanitation (CLTS) is an innovative methodology for mobilising communities to completely eliminate open defecation (OD). Communities are facilitated to conduct their own appraisal and analysis of open defecation (OD) and take their own action to become ODF (open defecation free).

At the heart of CLTS lies the recognition that merely providing toilets does not guarantee their use, nor result in improved sanitation and hygiene. Earlier approaches to sanitation prescribed high initial standards and offered subsidies as an incentive. But this often led to uneven adoption, problems with long-term sustainability and only partial use. It also created a culture of dependence on subsidies. Open defecation and the cycle of fecal-oral contamination continued to spread disease.



Inadequate sanitation is estimated to cause 432,000 diarrhoeal deaths every year and is a major factor in diseases like intestinal worms, trachoma and schistomiasis



spire action on the global sanitation crisis and help achieve Sustainable Development Goal 6 – sanitation for all by 2030. In cognisant of this, and the fact that countries have not achieved health gains from sanitation while there is lack of a sanitation policy, the World Health Organisation in October 2018 released the first-ever Guidelines on Sanitation and Health. The guidelines' recommendations include:

Sanitation interventions should ensure entire communities have access to toilets that safely contain excreta. The full sanitation system should undergo local health risk assessments to protect individuals and communities from exposure to excreta – whether from unsafe toi-

TIDBITS



A CHV acts as a catalyst and a change agent to enable people take control and responsibility of their own health matters. Speaking at the same venue, Daniel Kavoo, Head, Community health and development at the Ministry of Health said that communities hold CHVs who provide preventive, promotive and basic curative services in high esteem because they understand them better and they are one of their own.

lets, leaking storage or inadequate treatment. Sanitation should be integrated into regular, local, government-led planning and service provision to avert the higher costs associated with retrofitting sanitation, and to ensure sustainability. The health sector should invest more and play a coordinating role in sanitation planning.

COMMUNITY HEALTH WORKERS, THE KEY TO ACHIEVING UHC

In rural areas and informal settlements – mainly slums in cities and towns – people hardly seek health services. There are myriad reasons for this, including long distances to health centres, indifference to health-seeking behaviour and cost factors. But most of these places are served by community members known as Community Health Volunteers (CHVs), intertwined with Community Health Workers.

These are basically the same, although the former implies that they volunteer without getting payment. We will discuss this shortly. In a roundtable meeting held in Nairobi in 2018 by a media development NGO, a Community Health Worker, Mr Patrick Malachi from Kibra, narrated his story. He said he was born and brought up in Kibra and he has been volunteering as a health worker since 2009. Though he has no medical training, the people refer to him as ‘doctor’.

He earned this respected moniker from his act of walking through the garbage strewn, narrow streets of Kibra villages, from house to house, door to door, urging the people to live healthily by observing basic hygiene. If need be, he connects them to the formal health system. He also encourages women to seek antenatal care, deliver at health facilities, take their children for immunisation, and observe hygiene. Community

Health Volunteers (CHV) are identified by local communities countrywide and trained by the government or non-governmental organisations to address basic primary health services. A CHV acts as a catalyst and agent of change to enable people take control and responsibility for their health matters.

Speaking at the same venue, Mr Daniel Kavoo, Head Programme Officer at the Division of Community Health Services, Ministry of Health, said communities hold in high esteem CHVs who provide preventive, promotive and basic curative services because they understand them better and they are one of their own.

Unfortunately, CHVs are usually not paid for their work. Dr Githinji Gitahi, the CEO of Amref Health Africa and co-chairman of UHC2030 Steering Committee, while acknowledging that the government recognises the important work CHVs do, added that to achieve UHC, the government must integrate CHVs to the healthcare workforce. “They (CHVs),” he said, “are hardly recognised in the formal sector, though they are critical in expanding access to primary healthcare. They either work on voluntary basis, or with little pay; this is not acceptable.”

Kenya has had a Community Health Strategy



Diarrhoea is a serious health risk. The UN says that inadequate sanitation is estimated to cause 432,000 diarrhoeal deaths every year and is a major factor in diseases like intestinal worms, trachoma and schistomiasis



HOPE TO YOUTH IN INFORMAL SETTLEMENTS

As part of efforts to kick-start economic recovery in the midst of the COVID-19 pandemic, the Government introduced the Kazi Mtaani National Hygiene Programme (NHP) to help clean informal settlements and put food on the table of Kenyans.

The labour-intensive public works programme is designed to provide immediate job opportunities across the country and spearheaded by the State Department of Housing and Urban Development. The first phase of the NHP program is informal settlements in the counties of Nairobi, Mombasa, Kiambu, Nakuru, Kisumu, Kilifi, Kwale, and Mandera where the first instances of COVID-19 led to the cessation of movement policy to contain its spread.

NHP's focus is on putting people back to work in the short-term to alleviate the economic impact of the pandemic within informal settlements. It integrates jobless Kenyans in urban hygiene and sanitation works. The first phase of the initiative saw the enlisting of 26,148 Kenyans living in the informal settlements to undertake rapid environment improvements and sanitation management.

since 2006, which was revised in 2014 to respond to the devolved governments. Its main aim is to empower individuals, households and communities to demand services from all providers and to know and progressively realise their rights to equitable, high quality healthcare as provided for in the Constitution.

In a speech by then Health Cabinet Secretary Sicily Kariuki, during a WHO gathering, she said that in order to achieve UHC the country needs to tackle major barriers that include inadequate trained healthcare workers, including the community health workforce. She added that the country is making progress to address the shortage of community health personnel through rolling out Community Health Extension Workers Curriculum at Kenya Medical Training College (KMTC). The curriculum has been developed, pre-tested and adopted by KMTC.

Community Health Extension Workers are the supervisors of Community Health Volunteers. Unlike the latter, they are paid salaries. The government says the training will borrow from the Cuban model of training Family Health Medicine Clinical Officers and Nurses. By 2018, 800 Community Nurses had been enrolled. After the training, they will be put on government payroll and sent to the communities they come from to serve households. The ministry says that by 2018, Kenya had established 5,309 Community Health Units, which is 55 percent of the total population coverage, with a workforce of 97,335 community health personnel and with plans to establish more community health units (4,261) and recruit a workforce of 100,000.

There are also plans to provide each Community Health Volunteer with a yearly stipend of Ksh24,000, a work kit which contains both basic medical equipment, stationery for data



collection, and basic preventive and curative drugs. Non-Communicable Diseases threaten achievement of Universal Health Coverage. In the past couple of years, Kenya has seen a U-turn – from people suffering and losing life to communicable diseases to an increase in non-communicable diseases. Dubbed lifestyle diseases and stereotypically seen as ailments of the poor and the old, NCDs include diabetes, cancers, cardiovascular (including heart diseases and stroke) and respiratory infections.

The NCDS are preventable and arise from major risk factors such as tobacco use and exposure, unhealthy diets, sedentary lifestyles and alcohol abuse. Improved living standards in some cases involve binge drinking, long hours in the office and use of personal cars.

Of all the NCD-related diseases, cancer is a major cause for alarm due to the havoc it is causing, claiming the lives of people from all walks of life. In 2018, Globocan, the Global Cancer Observatory under the World Health Organisation, put the number of all new cancer cases in Kenya at 47,888, leading to 32,987 deaths. With the documented laxity in seeking healthcare, this number is feared to be higher. Aware of this, the government came up with its first plan to tackle the menace, the Kenya National NCD Strategic Plan 2015-2020. It

aims to inform national, county, sub-county and community-level stakeholders on strategic directions to be taken into consideration when developing implementation plans on prevention and control of NCDs.

Development partners and stakeholders will also use this document to align their priorities and to support the country in its efforts to lower the burden of NCD. Through the Kenya Essential Package for Health (KEPH), screening for and treating of NCDs is the main focus of management.

The KEPH focuses on control of mental health, diabetes, cardiovascular diseases, chronic obstructive airway conditions, blood disorders such as sickle cell conditions, and cancers,

“

Sanitation should be integrated into regular, local, government-led planning and service provision to avert the higher costs associated with retrofitting sanitation, and to ensure sustainability

among other ailments. In addition, the sector is tasked to provide prevention activities addressing the major non-communicable conditions through establishment of screening programmes in health facilities and other institutions, provision of health promotion and education for NCDs, rehabilitation, workplace health and safety, and food quality.

NON-COMMUNICABLE DISEASES AND UHC

Perhaps the most visible of the government's commitment to preventing and managing NCDs is its inclusion of the Universal Health Coverage plan. During the launch of the UHC commitment and pilot programme in four counties – Isiolo, Machakos, Kisumu and Nyeri – in December 2018, full coverage of NCDs including asthma, cancer, diabetes, hypertension, stroke and anaemia were included.

During the launch, President Kenyatta said the UHC programme would adopt a Primary Health Care approach that would entail scaling up immunisation services and maternal and child health services – including family planning, skilled delivery and antenatal and postnatal care services. It will also focus on greater prevention of waterborne and vector-borne diseases, TB,



CHVs are hardly recognised in the formal sector, though they are critical in expanding access to primary healthcare. They either work on voluntary basis, or with little pay

HIV and STIs; improving nutrition of women who conceive; and early screening and treatment for non-communicable diseases such as diabetes, hypertension, mental illnesses and cancers. This will help identify early treatment initiation, rehabilitation and palliative care, and treatment of common outpatient and inpatient medical and surgical conditions in public hospitals.

CONCLUSION

From the foregoing, it is apparent that, as the opening quote by Ms Joyce Wanderi, CEO of Population Services Kenya, states, to achieve Universal Health Coverage, the country needs to go back to basics. Primary Health Care can be provided at all medical facilities, from Level 1 to 6. People require the services next to them to be functional. This is one of the approaches that UHC has taken.

Also, people must take charge of their health, including in sanitation and hygiene matters, and on safe drinking water. They should go to hospitals and health centres for regular check-ups, but not solely to seek treatment when it is too late. Most ailments can be prevented with early diagnosis. Kenyans need to adopt healthy lifestyles, especially those in the former sector. They should embrace physical activity, including walking, riding bicycles and working-out in gymnasiums or at home.

As we will see in a subsequent chapter, the government also needs to invest in pedestrian walkways and biking lanes, including managing the existing ones which have been taken over by hawkers and other activities. Finally, the country must work together as a whole to care for the environment in the wake of climate change, land degradation, misuse of plastics and detrimental human activity.

CHAPTER 6



UHC FOR KENYA: CHALLENGES
AND THE WAY FORWARD

INTRODUCTION

Universal Health Coverage (UHC) has gained traction globally, regionally and nationally in line with United Nations Sustainable Development Goals (SDGs) number 3, which aims to ensure 'everyone has health coverage and access to safe and effective medicines and vaccines' by 2030 (UNDP, 2015).

The World Health Organisation (WHO) defines UHC as a health system where all people have access to the requisite health services such as prevention, promotion, treatment, rehabilitative and palliative care without the risk of financial hardship when paying for them. It is a comprehensive and efficient health system providing a wide range of health services with access to good quality services, medicines, technologies and health workers (Ranabhat, et al, 2018; World Health Organisation, 2019).

It is important that the available services are communicated and promoted to the general public together with clear information on healthful lifestyles to aid people in making educated choices.

UHC therefore does not mean free healthcare, as people will have to pay for it somehow through taxes and mandatory contributory schemes. The programme puts emphasis on ensuring social protection and cushioning the poorest populations from high health risks as a result of financial hardships.

The Government of Kenya guarantees UHC in the Constitution of 2010 under the Bill of Rights and the Kenya Vision 2030. The Constitution of Kenya 2010 provides in Chapter 4 Article 43 (10) that: every person has the right (a) to the highest attainable standard of health, which includes the right to healthcare services, including reproductive health care. Subsection (2) underlines the right to emergency medical treatment. Therefore there is clear evidence that UHC is anchored in law. Through both in the Kenya Health Policy 2014-2030, and the

Kenya National eHealth Policy 2016-2030, the government is committed to putting in place strategic interventions aimed at accelerating, achieving and maintaining UHC through increased and diversified financing options.

It is also worth noting that UHC has been adopted in the President's Big Four Agenda, which include achieving: food security, affordable housing, manufacturing, and affordable healthcare for all by 2022. According to the UNDP Human Development Report 2019, Kenya is ranked 147 with a Human Development Index (HDI) of 0.579. The HDI measures achievements in three



Life expectancy in Kenya is still low and it is anticipated that rehabilitation and expansion of healthcare facilities will positively improve the health outcomes

dimensions of human development: a long and healthy life; education (being knowledgeable) and decent standard of living. The health dimension is measured by life expectancy at birth (in years), education dimension is assessed by mean expected years of schooling, and the standard of living is measured by the Gross National Income (GNI) per capita (2011PPP US\$).

Kenya scored 66.3 years, 11.1 years and 3052 US\$ in health, education and standard of living dimensions, respectively, (HDR, 2019). Life expectancy in Kenya is still low and it is anticipated that rehabilitation and expansion of healthcare facilities, coupled with provision of accessible and affordable health services, will positively improve the health outcomes. According to Ranabhat, et al, (2018), UHC can significantly improve life expectancy at birth (LEAB and health life expectancy).

In 2018, President Uhuru Kenyatta launched the pilot UHC programme to be implemented in four counties: Kisumu, Nyeri, Machakos and Isiolo. These counties were selected based on high prevalence of communicable and non-communicable diseases, high population density, high maternity mortality, and high incidence of road traffic injuries.

The government also set aside Ksh3.9 billion for the four counties in the UHC pilot phase. Following the successful implementation of the one-year pilot UHC programme, governors of 45 counties, except for Nairobi and Mombasa, have signed a similar inter-governmental partnership between January 2020 and March 2020, which will be rolled out bearing in mind the lessons learnt from the pilot project.

This chapter analyses the present quality of healthcare in Kenya; role of relevant Ministerial Departments and Agencies (MDAs) in providing

the enabling environment for achieving UHC; elimination of fees in primary healthcare facilities; challenges of providing healthcare; and subsidised schemes for the poor and the elderly.

IMPLEMENTATION PROGRESS OF UHC NATIONAL ROLLOUT, TARGETS AND WAY FORWARD

POLICY, LEGAL AND STRATEGIC GROUNDING

Through the Kenya Health Policy 2014-2030, Kenya Health Sector Strategic Investment Plan 2013-2017, and Kenya National eHealth Policy 2016-2030, the Government is committed to putting in place strategic interventions aimed at accelerating, achieving and maintaining UHC through increased and diversified financing options. It is also worth noting that UHC has been adopted in the President's 'Big Four Agenda', which include achieving food security, providing affordable housing, manufacturing, and provision of UHC and guaranteeing quality and affordable health care for all by 2022 .

The Parliamentary Budget Office (PBO) notes that the 'Big Four Agenda' is not necessarily 'a silver bullet that will propel the economy to higher growth and development'. The PBO also underlines that the success of the 'Big Four Agenda', especially on health, is dependent on partnerships between the National Government and County governments as health is a devolved function.

MORE COUNTIES EMBRACE UHC

Key specific government initiatives towards the implementation of UHC include elimination of user fees in primary healthcare facilities,

Linda Mama, Boresha Maisha (free maternal health programme), the voluntary National Hospital Insurance Fund, and Health Insurance Subsidy Programme (HISP).

PRESENT QUALITY OF HEALTHCARE IN KENYA

Devolution has two main structures, the National Government and the County Governments, as provided for in Article 6 (2) of the Constitution of Kenya 2010. The country has 47 County Governments with distinct health functions devolved to them by the National Government. According to the Kenya Health Policy 2014-2030, the National Government's mandate on health is as follows:

- i. *Leadership of Kenya Health Policy Development;*
- ii. *Management of national referral health facilities;*
- iii. *Capacity building and technical assistance to counties; and*
- iv. *Consumer protection (including the development of norms, standards and guidelines).*

On the other hand, the same policy document outlines County Government health functions as follows:

- i. *Responsible for county health services, including county health facilities and pharmacies;*
- ii. *Ambulance services;*
- iii. *Promotion of primary healthcare (PHC);*
- iv. *Licensing and control of undertakings that sell food to the public;*
- v. *Cemeteries, funeral parlours and crematoria; and,*
- vi. *Refuse removal, refuse dumps, and solid waste disposal.*

According to the Kenya Health Policy 2014-

2020, the healthcare service delivery system in Kenya takes a hierarchical structure. It begins with primary healthcare, graduating to higher levels of healthcare, where complicated cases are referred to. Primary care units include dispensaries and health centres. The current structures consist of the following six levels:

- i. **Level 1: Community**
- ii. **Level 2: Dispensaries**
- iii. **Level 3: Health centres**
- iv. **Level 4: Primary referral facilities (sub-county hospitals)**
- v. **Level 5: Secondary referral facilities (county hospitals)**
- vi. **Level 6: Tertiary referral facilities**

A number of policy guidelines have been developed at national level to ensure provision of quality healthcare, namely: non-communicable diseases (NCDs), cancers, and infection control policy, among others. In addition, Kenya has also adopted a national quality assurance framework – the Kenya Quality Model for Health (KQMH), which provides ways to attain optimal levels of patient safety and high quality health service.

The quality assurance framework also provides for the introduction of joint health inspection checklists (Wangia and Kandie, nd). These checklists emphasise on risk-based ranking of facilities and enforcement follow-ups. A quality assurance framework, grounded on local and international stakeholder's input, is a good step towards accreditation and total quality management – which are necessary for achieving the highest standard of quality healthcare as envisaged in the Kenya Constitution 2010.

Health financing is a crucial element of providing quality health service and pushing forward the UHC agenda. The World Health Organisation (2010) points out that for a country to



achieve UHC, it should make adequate provisions for resources. In addition, prudent utilisation of available resources is critical in order to enhance efficiency.

Njuguna and Pepela (2019) argue that in order to cushion people from financial risk, healthcare should be funded mainly through pre-payment mechanisms (such as NHIF schemes), while reducing Out-Of-Pocket (OOP) payments to a bare minimum. According to WHO (2010) report on financing health systems, many countries are faced with the following three fundamental questions:

- i. *Where and how they can find the financial resources they need;*
- ii. *How can they protect people from financial consequences of health;*
- iii. *How they can make optimum use of resources.*

The National Government is committed to implementing UHC, and has increased the budgetary allocation to health services by 57.8 percent, from Ksh61.8 billion in the financial year 2017-18 to Ksh97.5 billion in 2018-2019. Development expenditure on health services increased by 77.7 per cent to Ksh59 billion, equivalent to 60.5 percent of total expenditure in 2018-19. The recurrent expenditure expanded by 34.6 per cent to Ksh38.5 billion in 2018-19.

County Government health services expenditure was projected to grow by 28.7 per cent from Ksh84 billion in 2017-18 to Ksh108.1 billion in 2018-19, out of which Ksh77.5 per cent was to fund recurrent expenditure, while spending on development activities almost doubled to Ksh24.5 billion. The share of the total government expenditure on health to total government expenditure grew from 5.8 per cent in 2017-18 to 6.8 per cent in 2018-19.



REPRODUCTIVE HEALTH VOUCHER BOOSTS HEALTH FOR MOTHERS

Addressing challenges of poverty, inequality and low investment are a major goal for Kenya to achieve rapid, sustained growth rates that will transform the lives of its 45 million citizens. Almost 8,000 women die during pregnancy and childbirth in Kenya each year. Another 160,000 are either injured or disabled because they are unable to access quality healthcare. Access to reproductive healthcare for women in rural areas is a significant challenge, and solving it is a high priority for the Kenyan government. In 2006, the Kenyan authorities introduced the Output Based Approach (OBA) to distribute vouchers for reproductive health services to poor mothers.

Each voucher entitles the mother to obtain pre-natal surveys, medical support and delivery and post-natal treatment from a health service provider of her choice.

The Kenyan government engaged PwC Kenya to be the Voucher Management Agency for this breakthrough scheme. In this role, the PwC Kenya team was responsible for contracting Voucher Service Providers (VSPs) from the public, private and NGO sectors.



A sample is collected for covid testing

TIDBITS

Kenya's devolved system of government, namely the national and county government has 47 County Government with distinct health functions donated to them by the national government. However, the health sector in Kenya is dogged with corruption and mismanagement of the little funds set aside for provision of medical services with county health department cited as most corrupt

While setting aside financial resources for UHC is a good step, political commitment is equally important. In Kenya, UHC is at the centre of the President's 'Big four Agenda' and most County Governments are supporting it (see section 6.2 on case study). According to UNDP (2019), different countries take different approaches in mobilising funds for UHC.

France, for example, uses earmarked taxes (first a payroll tax and later an earmarked income and capital tax), while Brazil and Ghana earmark part of their social security contributions and value added tax.

In a number of countries, UHC systems are funded mainly by tax revenue, namely; Spain, Portugal, Denmark and Sweden (WHO, 2010). Other countries such as Japan, Thailand, Turkey and Vietnam do not have specific amounts earmarked but use budget priority. It is pertinent to note that some countries such as Kenya and Laos People's Democratic Republic (PDR) rely on a relatively high percentage of total health expenditure funded from external assistance sources (WHO, 2017).

According to the World Health Report (2010), countries whose population have 100 per cent access to a set of health services usually have relatively high levels of mandatory, prepaid or pooled funds – ranging between 5 to 6 per cent of their respective gross domestic product (GDP).

Therefore, no government can achieve UHC without the use of compulsory contribution schemes, pre-paid and pooled public resources, hence the way these funds are mobilised, allocated and spent is at the core of sustainable health financing agenda (WHO, 2017). There are three key factors that influence a country's capacity to set aside financial resources for

supporting UHC (World Health Organisation, 2017). These factors are:

- i. **Affordability:** this is partly linked to the level of income per capita or GDP per capita (level of economic growth) and the flow of funds from external partners/funding agencies.
- ii. **The level of political and public commitment to health:** this has to do with the government's willingness to invest in health as opposed to other sectors of the economy and how much the public is willing to pay to access high quality healthcare. Engagement with the political process to understand the politics of enhancing UHC is a critical component to enable implementation of health financing reforms.
- iii. **Prevailing attitudes towards concepts such as solidarity:** the willingness of the well-off population to subsidise the costs of providing health services to other people, poor or ill.

FEES IN PRIMARY HEALTHCARE FACILITIES

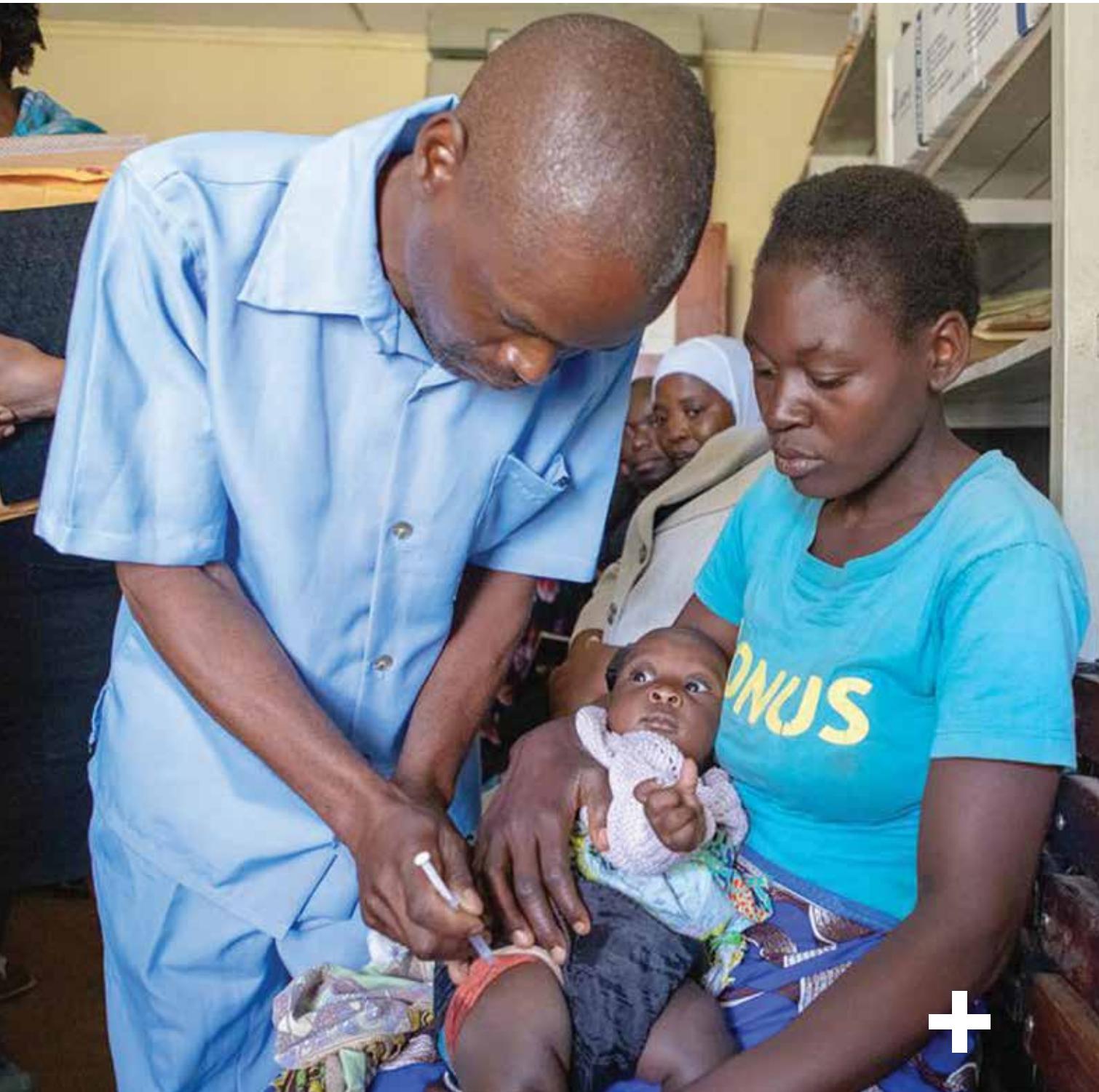
Elimination of user fees in primary healthcare facilities is one of the key policy considerations to address the critical issue of equity access to healthcare by the poor and vulnerable groups. According to Maina and Kirigia (2015), user fees

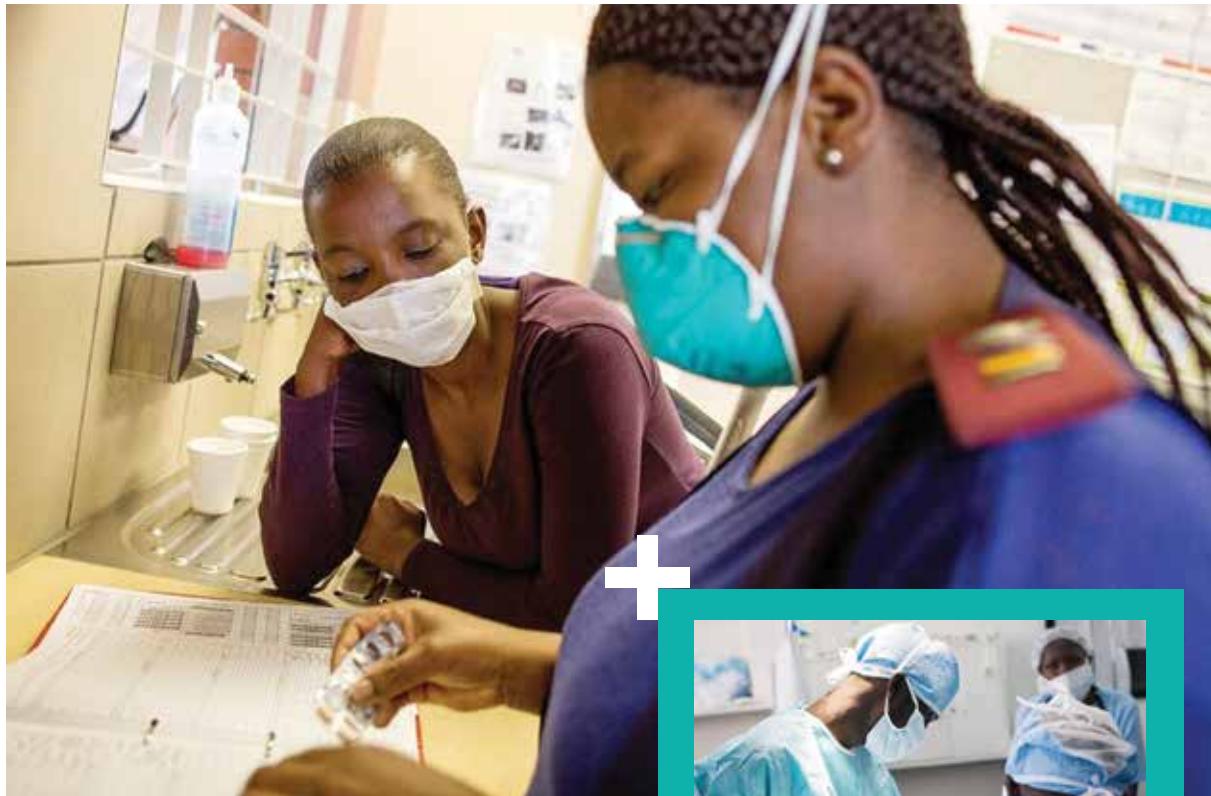


In Kenya, UHC is at the centre of the President's 'Big four Agenda' and most County Governments are supporting it (see section 6.2 on case study)

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The quality assurance framework also provides for the introduction of joint health inspections checklists (Wangia and Kandie, nd). These checklists emphasize on risk-based ranking of facilities and enforcement follow-ups.





introduced in many LMICs, Kenya included, in the 1980s have failed to achieve the objective of improving access to quality healthcare, especially by the poor and the vulnerable. The health sector in Kenya is mainly funded by the government through budgetary allocations and contributions from members of NHIF, the private sector and out-of-pocket (OOP), which enhance financial hardship (Government of Kenya, 2015).

Policymakers and other health experts should consider elimination of user fees for Public Health Care (PHC) services, especially during humanitarian crises, as a human rights issue (Inter-Agency Standing Committee, 2010). This is aimed at reducing the financial barrier to access to PHC services, especially for the most vulnerable and excluded groups in society.



TIDBITS

A number of policy guidelines have been developed at national level to ensure provision of quality healthcare, namely: Non-communicable diseases (NCDs), cancers, and infection control policy among others. In addition, Kenya has also adopted a national quality assurance framework – the Kenya Quality Model for Health (KPMH), which provides a way through which optimal levels of patient safety and high quality health service can be attained.



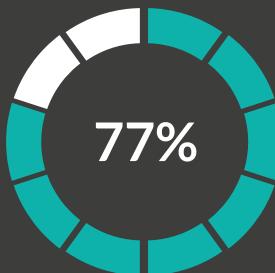
There is an emerging international consensus that access to PHC services is a critical element of any humanitarian health response for people affected by crises. User fees impede this access and cause suffering to the poor and vulnerable.

Abolition of user fees was announced by the President in 2013 and the Ministry of Health communicated the information downward through a circular. Despite this, a study by Maina and Kirigia (2015) revealed that at least 14 percent of people seeking healthcare at public health centres and dispensaries and 80 percent of those seeking care at faith-based facilities paid for some services received.

The study also revealed that many public facilities charged patients Ksh10 or Ksh20 for registration/card books or were requested to buy the same from elsewhere before being provided with free health services. In addition, patients were sometimes asked to pay for some services, such as drugs for some illnesses, laboratory and injections to fill the gap caused by insufficient reimbursement of funds by the Ministry of Health. Some of the government's initiatives to eliminate user fees in public healthcare facilities are discussed below:

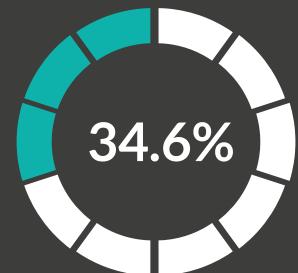
LINDA MAMA, BORESHA JAMII (FREE MATERNAL CARE PROGRAMME)

This programme was announced by President Uhuru Kenyatta in 2013 with the aim of removing maternity fees in public health facilities countrywide and ensuring pregnant women and their new-borns access quality and affordable healthcare. The programme was then launched in October 2016 followed by the signing of a Memorandum of Understanding (MoU) between the Government and the NHIF in Feb-



DEVELOPMENT

Increase in development expenditure on health service during the financial year 2018/19



EXPENDITURE

Recurrent expenditure expansion to KSh. 38.5 billion during the financial year 2018/19

TIDBITS



According to UNDP (2019), different countries take different approaches in mobilizing funds for UHC. France, for example, uses earmarked taxes (first a payroll tax and later an earmarked income and capital tax), while Brazil and Ghana on their part earmark part of their social security contributions and value added tax.



ruary 2017. The Linda Mama programme is managed by NHIF. In a span of three years after the programme was launched, the number of women who delivered in public health facilities increased by over 400,000 as a result of making maternity services accessible by removing financial barriers (Government of Kenya, 2016b), reducing home deliveries.

A study by Calhoun et al, (2018) on 'The effect of the policy to remove user fees on institutional delivery in population-based samples of women from urban Kenya', found that the government's move led to increased use of facilities by poor inhabitants.

According to the Government of Kenya (2019), normal deliveries in health facilities for the period 2014-2018 increased from 768,600 in 2014 to 938,900 in 2018. The second important mode

of delivery was Caesarean section, which increased from 110,900 in 2014 to 155,100 cases in 2018, followed by assisted vaginal delivery which declined from 7,000 in 2014 to 4,000 in 2018.

Breech delivery had a marginal increase from 8,900 in 2014 to 9,200 in 2018. Overall, the total deliveries increased from 895,900 in 2014 to 1,107,200 in 2018. Normal delivery was the leading mode of delivery, followed by Caesarean section and, lastly, breech delivery. The dominance of normal delivery may be attributed to the success of the Linda Mama Free Maternity programme.

While these statistics look promising, it is important to note that about 14 women die daily in Kenya from pregnancy-related causes, such as severe bleeding, infection, hypertensive

disorders, malaria, obstructed labour, diabetes, hepatitis and anaemia (Oketch, Angela et al., 2020:4-5). The beneficiaries of the Linda Mama programme are pregnant women and new-borns for about one year. Both public and private health providers are contracted to provide services.

The package includes services such as antenatal care (ANC), maternity deliveries and postnatal care (PNC), based on national guidelines (Government of Kenya, 2016b). In addition, the package includes both outpatient and inpatient treatment for conditions and complications during pregnancy, delivery or postnatal as well as treatment of the new-born within the stipulated one-year period.

These benefits are only available to registered mothers. All mothers who have not registered for NHIF Supacover are eligible. Once they register, they will have to wait for six months before accessing free maternity services – an avenue for delayed access to benefits of the programme and clearly exacerbates financial hardship.

Under-18 pregnant girls can register using their guardians' identification documents. Mothers registered under the programme are issued with a Linda Mama Card. According to an investigative study by Oketch et al. (2020), issuance of this card has delayed in most county hospitals visited while services were not being offered optimally due to lack of adequate funds.

There appears to be a trend of budget reductions; for example, in 2016-17 financial year, the government had set aside Ksh6 billion for the Linda Mama programme but the National Treasury later reduced it to Ksh4.5 billion. Budget allocation for the programme has since dropped to Ksh3.5 billion, further putting hos-

pitals in a financial crisis that requires urgent intervention.

Although there have been gains attributed to Linda Mama programme, such as an increased number of registered women seeking delivery services, and reduction of maternal and child mortality rates, the management and implementation of the programme has been faced with challenges, as highlighted below:

- i. **Lack of awareness among potential women members.** A countrywide awareness campaign is required to sensitise both health workers and potential beneficiaries of the programme.
- ii. **Lack of funds.** Public hospitals experience late disbursement of funds and lower rate of reimbursement for deliveries from NHIF (Oketch et al., 2020). This has forced many hospitals to charge maternity patients for postnatal care – further diminishing the gains of the programme. Under the programme, normal delivery reimbursement rate for public health and primary health facilities is Ksh2,500. In other hospitals, the rate is Ksh5,000. Late reimbursement has, however, been blamed on the institutional framework where money is disbursed early by NHIF but delayed at the county appropriation level.
- iii. **Inadequate infrastructure.** Linda Mama programme attracted many women who were previously excluded from maternity health services by high user fees, thus putting a strain on available equipment and infrastructure. In some hospitals, the situation is so bad that up to three mothers share a bed (Oketch et al., 2020). This not only exposes beneficiaries of the Linda Mama programme, and the health workers, to communicable disease (CDs) and other health risks, but also compromises the quality of services provided.



PROTECTING MENTAL HEALTH OF TEENS DURING COVID-19

Being a teenager is difficult no matter what, and the coronavirus disease (COVID-19) is making it even harder. With school closures and cancelled events, many teens are missing out on some of the biggest moments of their young lives — as well as everyday moments like chatting with friends and participating in class. Unicef Kenya spoke with expert adolescent psychologist, best-selling author and monthly New York Times columnist Dr. Lisa Damour about what you can do to practice self-care and look after your mental health.

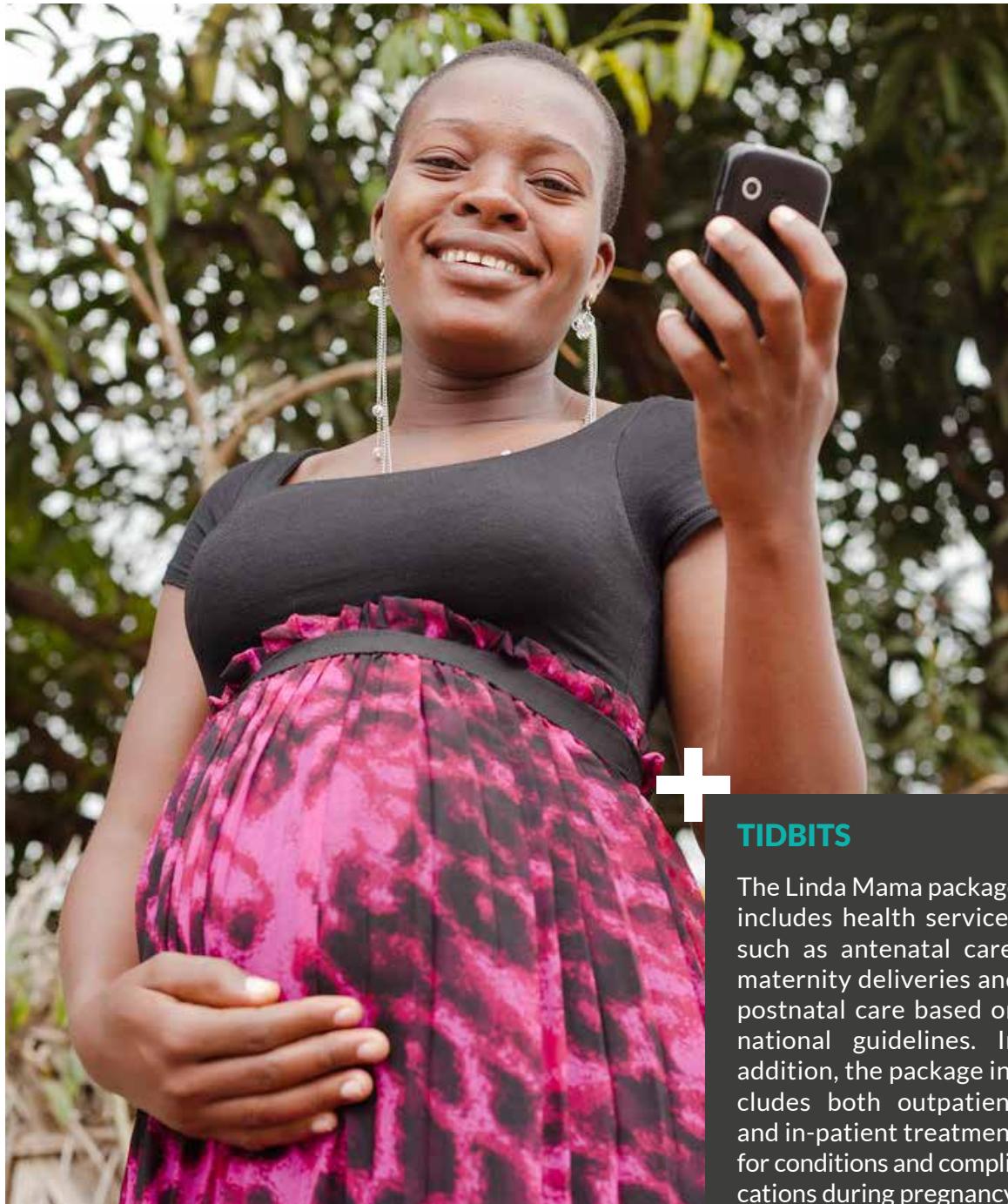
If school closures and alarming headlines are making you feel anxious, you are not the only one. In fact, that's how you're supposed to feel. "Psychologists have long recognized that anxiety is a normal and healthy function that alerts us to threats and helps us take measures to protect ourselves," says Dr. Damour. "Your anxiety is going to help you make the decisions that you need to be making right now — not spending time with other people or in large groups, washing your hands and not touching your face." Those feelings are helping to keep not only you safe, but others too. This is "also how we take care of members of our community.

THE WAY FORWARD

Provision of UHC is part of the country's efforts to attain the highest standard of the desired status of health. It aims at ensuring all Kenyans quality, promotive, preventive, curative and rehabilitative health services without suffering financial hardship.

Some of the benefits of UHC are: it lowers the healthcare cost in the economy; forces doctors to offer similar standards of services; and eliminates administrative costs by reducing the need for private insurance firms. Implementation of UHC in Kenya is faced with the following challenges:

- i. **Healthcare financing:** *This is a critical challenge in implementing UHC. According to the NHIF Strategic Plan 2018-2022, healthcare funding challenges include low total funding for healthcare, which is just 7 percent of the Total Government Budget, compared to the Abuja Declaration target of 15 percent; inefficient use of available funds (both technical and allocative inefficiencies). For example, in health insurance schemes there has been weak management of benefit utilisation; existence of multiple fragmented health insurance pools at national, county, donor and private sector levels; leakages in the flow of healthcare funds of over 30 percent; low health insurance coverage (about 17 percent coverage), meaning 85 percent of the population does not contribute towards insurance; and inadequate funding for research and development for the health sector in the country (Government of Kenya, 2018). WHO (2017) also argues that healthcare financing is one of the key challenges to implementing UHC. The health sector in Kenya is hugely financed by the private sector, including households' out-of-pocket (OOP)*



TIDBITS

The Linda Mama package includes health services such as antenatal care, maternity deliveries and postnatal care based on national guidelines. In addition, the package includes both outpatient and in-patient treatment for conditions and complications during pregnancy, delivery or postnatal as well as treatment of the new born within the stipulated one year period.

The dominance of normal delivery may be attributed to the success of the Linda Mama Free Maternity programme. About 14 women die daily in Kenya from pregnancy-related causes



expenditure (Government of Kenya 2014).

- ii. **Service delivery:** High incidence of communicable diseases accounting for the highest proportion of the disease burden in the sector, and increase in non-communicable diseases (NCDs) – hypertension, heart disease, diabetes, cancer and substance abuse. These are putting pressure on the health sector (Government of Kenya, 2018; Government of Kenya, 2014). Poor service delivery in maternal and child health nutrition, exacerbated by inadequate emergency services for delivery, underutilisation of antenatal services and inadequate skills and competencies of health workers. There has also been a marked rural-urban migration of people between age 20-34 years, putting pressure on health facilities. Instability in East Africa is also a big challenge – with Kenya taking in most of the refugees.
- iii. **Human resources:** this is characterised by skewed distribution of skilled health workers,



TIDBITS

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with rural and peripheral or marginalised areas facing huge gaps, while some urban areas have surplus personnel. Yet in Kenya, about 70 percent of the population lives in rural and remote areas (Government of Kenya, 2014). The human capital deficit in the sector is felt at both National and Country Government levels.

Industrial action among various health cadres seeking better working conditions and terms of service have occasionally presented serious challenges to service delivery. Therefore, there is a need to enhance human resources (WHO, 2017; Government of Kenya 2018, and Government of Kenya, 2014). The Economic Survey report 2019 indicates that the number of health personnel increased from 165,333 in 2017 to 175,681 in 2018 (Government of Kenya, 2019). The report further shows that registered nurses accounted for the highest proportion of personnel at 29.9 per cent with enrolled nurses taking the second slot at 13.3 per cent in 2018. The proportion of registered personnel per 100,000 population increased to 368 in 2018 from 355 in 2017. But more needs to be done to address the human resource gaps.

- iv. **Health products as technologies** – inadequate budget for procurement of health products and related modern technologies and distribution to health facilities. Strengthening health information systems is another challenge that needs to be addressed (WHO, 2017). Lack of data is a big issue in most LMICs. Kenya, Malawi, Peru and Haiti are among the early adopters of electronic medical records, which demonstrates ‘how an information system can help with micro-targeting those furthest’ (UNDP, 2019:69).
- v. **Health Infrastructure:** skewed distribution of available infrastructure with a bias to urban

areas. This is compounded by the existence of obsolete equipment that require replacement. The number of health facilities has been growing in recent times. According to Government of Kenya (2019), medical clinics rose by 18.6 per cent to 3,646 in 2018, out of which 94.2 per cent were private clinics. This points to the extent to which people are likely to suffer financial risk, considering that those seeking services from private clinics pay out-of-pocket.

The number of dispensaries and health centres increased in 2018 by 11.6 per cent and 3.1 percent to 4,597 and 1,806, respectively, most of which were publicly owned. Health facilities increased by 9.7 per cent to 10,820 in 2018. Overall, public facilities increased by 2.5 per cent, to 5,246, equivalent to 48.5 per cent of total health facilities, while private hospitals increased by 22.3 per cent to 4,327 in 2018. Faith-based organisations FBOs) and non-governmental organisations (NGOs) together accounted for 11.5 per cent of the total health facilities

- vi. **Leadership and governance:** Weak multi-sectoral coordination, especially on devolution of Human Resources Management. Lack of decentralised trade unions to agree on Comprehensive Bargaining Agreements (CBA) with county governments. There is also weak regulation and coordination of conventional and traditional medicine; and lack of adherence to set standards and regulations, leading to counterfeit drugs.
- vii. **Emergence and re-emergence of diseases such as TB is a major problem.** Although there has been a decline in HIV prevalence, the number of infections has been increasing.
- viii. **Climate change:** Unpredictable weather patterns are affecting human health through

increased disease vectors, waterborne diseases and under nutrition caused by floods and droughts. A study by UNDP (2019:186) revealed that in Kenya, Ethiopia, and Niger 'children born during droughts are likely to suffer from malnutrition'.

- ix. High dependency ratio of 5.4 (UNDP, 2019), means that there is a high financial burden on individuals who have to shoulder the burden of healthcare. According to UNDP (2019), globally there were 18.8 million internal displacements associated with disasters in 135 countries. Disasters caused by floods displaced 8.6 million, while storms – including cyclones, hurricanes and typhoons – accounted for 7.5 million.
- x. Another concern is that, given limited resources, many countries have adopted a selective approach which prioritises certain areas. WHO is working with countries to move back to a primary healthcare model which aims at addressing all of a person's health needs, as opposed to just treating specific diseases (World Health Organisation, 2019).
- xi. **Rapid population growth** – the population of Kenya was 47.6 million during the 2019 census, from 38.6 million in the 2010 population census. One of the strategies, therefore, is to revisit healthcare systems and related human resources if the country is to access good quality and affordable health.

GAPS IN FUNDING

- i. **Healthcare financing gaps:** Financing gaps exist in the provision of UHC in Kenya. Apart from the government coming up with innovative ways to increase the national health budget, it can also tap into other sources of

funding to bridge these gaps. The government can introduce special taxes such as Sin Tax (on alcohol and tobacco), airtime tax, and improve tax avenue collection.

Sin Tax is levied on goods that are detrimental to human health. Debt swaps for health and guarantees can also be negotiated by the government (UNDP, 2019b). A debt swap is "a method of transforming debt into resources for development. Debt swaps are a type of debt relief, often as part of the official development assistance (ODA) funding: instead of paying back the debt to creditor countries, debtor countries use the debt money for their social development, such as education and health care" (UNDP, 2019b:27). This means money meant for debt repayments can now be redirected to social development, including health financing for UHC.

However, debt swaps depend on donors' willingness to cancel the debt. The government can also continue seeking donor funding of the health sector. It can continue working towards removal of user fees for the poor, indigent and marginalised through provision of subsidies and introduction of social protection insurance (Government of Kenya, 2019a). Also, it can gradually increase its budget allocation to the



Industrial action among various health cadres seeking better working conditions and terms of service have occasionally presented serious challenges to service delivery



Under-age girls who get pregnant can register for Linda Mama using their guardian's identification documents.

TIDBITS

There has been weak management of benefit utilisation; existence of multiple fragmented health insurance pools at national, county, donor and private sector levels; leakages in the flow of healthcare funds of over 30 percent; low health insurance coverage (about 17 percent coverage), meaning 85 percent of the population does not contribute towards insurance;

TIDBITS

High incidence of communicable diseases accounting for the highest proportion of the disease burden in the sector, and increase in non-communicable diseases (NCDs) – hypertension, heart disease, diabetes, cancer and substance abuse. These are putting pressure on the health sector (Government of Kenya, 2018; Government of Kenya, 2014).



health sector from the current 7 percent of the Total Government Budget towards the Abuja Declaration target of 15 per cent of Total Government Budget. This is, however, dependent on the level of a country's economic growth.

- ii. **Infrastructure gap:** This is made worse by skewed distribution of health infrastructure, with a bias to urban areas. Most of the equipment is also obsolete and urgently needs replacement.

The government should create an enabling infrastructure for quality service delivery through promotion of Public Private Partnerships (PPP). Also, a model of lease financing can be explored further as it reduces the need for upfront capital, with monthly rentals paid for using the assets.

The Kenya Managed Equipment Service is a good example of this. The owner of the assets gives the right of use to the government and gets periodic payments (UNDP, 2019b). Another recommendation is to rationalise hospital infrastructure and create a network of hospitals within counties and inter-counties to optimise efficiency, like in the case of Brazil and Central Asia (Kimathi, 2017).

- iii. **Corruption in the health sector has been highlighted at various forums as one of the biggest impediments to UHC.** Plunder is common, including donor funds. This leads to inefficiency, shortage of human resource and inadequate supply of other HPTs at public health facilities. Combating corruption and prudence in management of public and donor funds should be strengthened.
- iv. **Human capital deficit:** The Kenya Health Policy 2014-2030 aims at 'achieving adequate and equitable distribution of a productive health workforce' (Kenya Government, 2014). This can be done through identifying training needs. Also, postgraduate training and internship programmes should be promoted as part of capacity building.
- v. **Faith-based health facilities can also work out arrangements/agreements with county governments where some workers can be deployed to support public facilities. Mechanisms should be put in place to attract, retain and motivate workers, especially in marginalised areas.**
- v. **Health Product and Technologies (HPT):** Kenya, Malawi, Peru and Haiti are among early adopters of electronic medical records. Kenya should strengthen its Health Information Sys-

tem (HIS) to facilitate procurement of health products and related modern technologies and timely distribution to health facilities.

The system can also help in 'micro-targeting those furthest' (UNDP, 2019:69), hence improving access to quality UHC. The system should also have the capacity to trace drugs and equipment to guard against dangerous products entering the supply chain.

In January 2020, KEMSA signed a contract with Postal Corporation of Kenya to use its wide transport network to distribute HPT. It is important to put in place an effective and reliable procurement and supply system. The Kenya Health Policy 2014-2030 categorises HPTs as:

- Strategic: vaccines and drugs for TB, HIV/Aids, epidemics;
- Special and expensive: cancer drugs and immunosuppressive agents;
- Essentials/basic products.

vi. **Strengthen research and development:** KEMRI should focus more on public health and health systems, traditional medicine and drug development; biotechnology; infectious parasitic diseases; non-communicable diseases; reproductive health, and adolescent and child health. The agency, working with international partners, should re-energise research on how best to implement UHC and the emerging challenges.

vii. Strengthen the capacity of PPB to ensure that only registered pharmacies operate and that the drugs they procure and sell are of unquestionable quality. They should increase monitoring and evaluation of pharmaceutical companies to guarantee high standards of HPTs. The

PPB should monitor and ensure adherence to set standards and regulations.

The Constitution of Kenya (2010) introduced a decentralised/devolved health sector. The system aimed to 'allow the County governments to design innovative models and interventions that are suitable to their unique health needs and 'encourage effective citizen participation and make autonomous and quick decisions on resources' (Kimathi, 2017:55).

However, in almost all the counties, the health sector is faced with mammoth challenges, mirroring most of the challenges experienced at the national level. These challenges range from capacity gaps, inadequate human resource, lack of critical legal and institutional infrastructure, runaway corruption and antagonistic relationship with the national government (Kimathi, 2017).

These challenges have led to stagnation of healthcare and a decline in the gains made on UHC. However, Makueni County has pioneered the implementation of UHC and the experience and lessons learned can serve as an inspiration to other counties.



Apart from the government coming up with innovative ways to increase the national health budget, it can also tap into other sources of funding the health sector in order to bridge these gaps





TIDBITS

Debt swaps are a type of debt relief, often as part of the official development assistance (ODA) funding: instead of paying back the debt to creditor countries, debtor countries use the debt money for their social development, such as education and health care" (UNDP, 2019b:27). This means money meant for debt repayments can now be redirected to social development, including health financing for UHC.



SURVIVING CANCER: MILICENT KAGONGA'S STORY

I still remember feeling an emotion, almost like pain, when the doctor said it. It is like the darkest cloud had enveloped me. I felt helpless and hopeless. He had pronounced the big word: cancer. It was heavy, cruel, and I felt desperate. What was I going to do?

I had been through a lot already. I had experienced unexplained bleeding over time. At first it was a consistent discharge. Then bleeding, which I attributed to irregular menstruation. But this continued for months and worsened. I visited several health facilities. Mostly, there was no proper diagnosis or explanation. They would send me away with antibiotics, painkillers or just regular explanations. Cancer had never been mentioned before.

At home, this unfamiliar situation had begun to draw attention. I started to feel a sense of shame. My partner had begun to tire of it. Why was it not stopping? Was it a curse? He wondered. My neighbours had taken note of it, too, because unfortunately we shared a common bathroom. What was wrong with me? What was this about? No

CONTINUED ON PAGE 177

UNIVERSAL HEALTH COVERAGE IN MAKUENI COUNTY, KENYA

Kenya has just completed piloting UHC in Kisumu, Nyeri, Machakos and Isiolo counties. The remaining counties were to start rolling out the UHC programme from January 2020, apart from Makueni, which pioneered the implementation of Universal Health Coverage in Kenya in a project referred to as Makuenicare. According to the proceedings of a conference held in Makueni in April 2018, UHC is achievable.

Objectives of the conference were: to deliberate on current national and country government strategies on health; create an enabling environment to address health systems; and develop a framework of action to realise UHC (Makueni County, 2018:6). Some of the key achievements of UHC/Makuenicare, as outlined by the County Governor during the conference, include:

- i. *Dedicating 33.7 percent of the county's annual budget to healthcare;*
- ii. *Increasing healthcare facilities from 109 to 232 by April 2018, which greatly reduced the average nine-kilometre distance that people walked to the nearest health facility for treatment. The Kenya Health Policy 2014-2030 aims to reduce this distance to five kilometres (Government of Kenya, 2014). This clearly enhances accessibility to healthcare.*
- iii. *Makueni County manufactures its own oxygen in Wote town. UHC is also about reducing costs and ensuring provision of affordable healthcare;*
- iv. *The county has increased its recruitment of health workers from 977 in the financial year 2013-2014 to 1462 in 2017-2018 to meet an influx of patients from other counties attracted by Makuenicare;*
- v. *Trained workers in various cadres, namely;*

CONTINUED FROM PAGE 176

one seemed to have the answers. At the clinic the doctor had listened keenly. He asked various questions. He also seemed to have understood something. He then did some further observations. Then he asked me to sit down so he could speak to me. He also showed me some pictures of a woman's anatomy in relation to my problem. It seemed I had been suffering from cervical cancer for some years and I had not known.

He explained some next steps I needed to take. I felt lost and desperate. It did not matter because I figured I was going to die after all. Die young (at 25) and leave my children. Was this it? I found it hard to deal with it or to tell anyone. After all, word had already spread around that I had a strange disease. Some neighbours and friends would not share a meal with me or eat from my pot.

I had moved from my initial house to save myself the shame. But things had not gotten better. My husband had shown little sympathy with my situation and was seemingly not honouring our relationship and marriage any more. In fact, he had asked me to leave. I felt stigmatized. It then occurred to me that the best thing to do was to go to (my rural) home in Western Kenya. My children were there with my family and I could go and die there. I even considered taking my life. But while at home I got the courage to visit the nearby hospital ... to follow up on the doctor's advice. This is where I got the first glimmer of hope. The doctors there took quick action after further observation of my condition. They told me I had stage-four cancer, which required that I go through certain proce-

dures for treatment. They then referred me to Kenyatta National Hospital in Nairobi where I could undergo chemotherapy, radiotherapy and other treatment I needed. This process took about six months because I did not have the funds needed. This meant that now and then I missed my appointment until I could raise money for treatment. The clinic is also very busy because it serves the whole country.

While this was a very difficult process, it gave me hope in that I felt I could live longer and take care of my children. Last September, my daughter Grace received the HPV (human papillomavirus) vaccine, which the country introduced to counter cervical cancer. The news that cervical cancer could be stopped and that girls could be vaccinated against it truly gratified my heart.

I decided immediately that my daughter would be vaccinated because I never want her to go through the nightmare I have gone through. I don't want her or her brother to be the subject of stigma that I have experienced or have her life so shaken and threatened like I have been. No child or woman should go through what I have experienced. So these days I speak to every mother and father I meet to encourage them to have their daughters vaccinated against HPV.

My battle with cancer also empowered me with knowledge of the problem, which I use to encourage other women to go for their regular check-ups and to support anyone needing help when they get the disease. I particularly help all cancer patients in my community because I realise how difficult it is when one is told they have the disease.

- specialist doctors, medical officers, dentists, nurses and clinical officers;
- vi. The county constructed Makindu Hospital Trauma Centre to serve accident victims on the Nairobi-Mombasa Highway, and others in the county;
- vii. Makueni is implementing a local UHC scheme where a household pays an annual fee of US\$ 5 (Ksh500) to access healthcare services. This is quite affordable, although it is not clear which health package benefits one can access.
- viii. Makuenicare has seen an extraordinary enrolment rate of 91 percent, all registered with the local insurance scheme, compared with only 8.8 percent in 2013.
- ix. The county has upgraded healthcare facilities and built newer ones in its quest to implement UHC. By April 2018, the number of health facilities had increased from 22 to 47, coupled with an increase in the number of professionals.
- x. A 120-bed capacity Makueni County Mother and Child facility is under construction.

The Makueni UHC conference highlighted challenges facing implementation of UHC, such as shortage of government budgetary resources, corruption, weak health systems, high poverty levels, difficulties in reaching vulnerable people, selecting the right package of benefits, integration of the informal sector and poor distribution of human resources.

Most of these challenges are similar to those identified at national levels (Government of Kenya, 2018; Government of Kenya, 2014), and County Government levels (Kimathi, 2017). The way forward is highlighted below.

- i. The Kenya Government should come up with innovative ways of funding UHC, such as increasing the health sector budgetary allocation. Funding should be increased from the

current 2.5 per cent of GDP to 5 percent as recommended by McIntyre et al. (2017). The country's health system is mainly anchored on donor funds and out-of-pocket payments (Barasa, Nhuihu and McIntyre, 2017). There have been clear cases of people incurring some form of OOP in public health facilities, even after removal of user fees, thus exposing them to financial risks. Promotion of partnerships and collaborations with the private sector, encouraging prepayment schemes (insurance schemes and taxes) and pooling them to ensure access and minimal financial risk. Prudent management of available finances, both at National Government and County Government levels.

Increase human resources in the health sector. MakueniCare shows the huge number of people seeking UHC, thus putting pressure on health personnel and equipment.

- ii. Training healthcare workers at all cadres. They should be sensitised on the UHC system and the lessons learned in the pilot projects in Makueni, Kisumu, Nyeri, Isiolo and Machakos.
- iii. The government should build more health infrastructure, especially public health facilities, in peripheral areas. There should be equitable distribution of health facilities and equipment. The Kenya Health Policy 2014-2030 projects



Kenya's decentralised health system aims to 'allow County governments to design innovative models and interventions that are suitable to their unique health needs and 'encourage effective citizen participation'



to have health facilities within five kilometres of every home.

- iv. *Win the support of politicians and other leaders to prioritise UHC and develop policies that promote it.*
- v. *The government should put in place policies, strategies and plans to spur economic growth and economic development so as to enhance tax revenue, hence the capacity to increase budgetary allocation to health.*

SUBSIDISED SCHEME FOR THE POOR, INDIGENT AND ELDERLY

The Health Insurance Subsidy of the Poor (HISP) is designed to target vulnerable sections of the population and is implemented by the NHIF. The programme was launched in 2014 in all 47 counties in Kenya with the objective of improving health indicators of the poor, as well as reducing their financial burden.

The HISP is a fully subsidised health insurance programme for the poorest echelon of society (Government of Kenya, 2019a). The health programme covers outpatient and inpatient care. The World Bank provided U\$20 million (about Ksh2 billion) for the first phase. Beneficiaries are drawn from a government poverty list covering all the 47 counties (World Bank, 2014).

According to the Government of Kenya (2019a), a total of 181,415 households are registered. They benefit from a Transfer Programme for Orphans and Vulnerable Children. In 2014, a pilot programme for Older Persons and Persons with Severe Disability (OP&PWD) was launched, targeting 23,000 households (about 142,000 people) to benefit from inpatient services from this government cash transfer scheme.

Those on the list were targeted through proxy and community verification tactics (Government of Kenya, 2019a). The benefit pay-out



MURANGA COUNTY'S NEW 35-BED CAPACITY ICU FACILITY

Governor Mwangi Wa Iria yesterday the 5th of May 2020 launched the new Murang'a County Level 5 Hospital ICU facility. The 35 bed capacity ICU facility was completed in a record 21 days and is the largest such facility in the country. The project is part of the ongoing campaign to enhance the preparedness of Murang'a County in combating the Coronavirus Pandemic. At the same time it provides relief for patients in need of ICU facilities in the region. Murang'a County Hospital has previously had to refer about 10 patients every month to other facilities. Earlier the county boss, Governor Mwangi wa Iria who personally supervised the construction of the 35-bed ICU day to day alongside county architects and engineers, had announced that the construction works would be completed in a record time of 21 days.

However, the facility was completed two days earlier, with only fitting and equipping of the wards left to be done, thanks to the over two hundred workers on site who worked day and night disregarding the dusk-to-dawn curfew to ensure things moved according to the plan.

ratio achieved is 50 percent. Members benefit from the NHIF Supacover, which allows them to receive comprehensive services from contracted public and private health service providers (Government of Kenya, 2019a, Barasa et al., 2018). In 2016 the HISP programme was expanded to cover about 170,000 households (about 600,000 people), including outpatient services (Barasa et al., 2018).

UHC PILOTING IN 4 COUNTIES: RESULTS, EXPERIENCES, GAINS AND AFYA CARDS

NYERI COUNTY

It registered 716,947 people under the Universal Health Coverage (UHC), the government initiative aimed at providing improved and cost-effective healthcare. Through a concerted and collaborative approach, the county has ensured that 349,901 households, with 86.2 percent of its population, are under the programme.

According to the Nyeri County Executive Committee Member for Health, Dr Rachel Kamau, the programme took off with remarkable success despite some teething problems. Nyeri County is one of the four counties identified to pilot Universal Health Coverage in Kenya, owing to a high prevalence of communicable and non-communicable diseases, high population density, high maternal mortality and high incidents of road traffic injuries.

SUCCESES

Dr Kamau said in a media briefing that UHC, which was identified as one of the Big Four Agenda of national development and economic priorities towards achieving the Kenya Vision

2030, has seen the county record a tremendous expansion of oncology and Intensive Care Units (ICUs), among other services. She said 10 haematology machines were procured and installed in health centres across the county, while Nyeri County Referral Hospital and Naromoru Hospital were provided with generators and coolers for the mortuaries. Other achievements include boosting surveillance and research on non-communicable diseases, establishment of weekly clinics for diabetes and hypertension in selected health centres in the eight sub-counties and recruitment of 2,500 community health volunteers spread across the county.

CHALLENGES

The health official, despite painting a rosy picture of the UHC initiative, enumerated challenges which should be addressed. She said increased workload at referral hospitals due to community preferences, compounded by referrals from the neighbouring counties of Laikipia and Kirinyaga, were putting pressure on health infrastructure.

ISIOLI COUNTY PILOT CASE

Isiolo is among the four counties that have been piloting the Universal Health Coverage programme (UHC). The project has been implemented successfully and is a huge step in improving healthcare since it provides access to cost-effective, specialised health services.

Isiolo was selected based on research pegged on the Kenya Health Strategic and Health Plan 2014-2018. The high number of non-communicable diseases, accidents, cases of maternal mortality, and prevalence of communicable diseases like HIV/Aids formed the basis for selection.

REGISTRATION

Those registered under the programme include both employed and unemployed residents who already have identification cards for the package. According to the Chief Officer for Health, Ibrahim Alio, recent statistics show that about 100 per cent of patient's seeking healthcare services in public facilities are already registered under the UHC programme.

The UHC package caters for outpatient care such as consultation, mental illness and emergency healthcare. Any beneficiary of the UHC package card can be referred to Kenyatta National Hospital (KNH) for further treatment.

Isiolo Governor Mohammed Kuti, who is also the Council of Governors' health committee chairman, has been at the forefront of ensuring the county becomes a role model for the programme. He says Isiolo has made significant steps in finding solutions to challenges hindering health policy implementation .

Maternal and child health are among the main areas of coverage for UHC in the county. Many households spend more on maternal and child health complications as a result of lack of medical cover. The programme has brought positive change to the health sector in Isiolo, with its 56 health facilities experiencing an upsurge in the number of patients seeking free services.

The Isiolo Teaching and Referral Hospital (ITRH) is overstretched, with about 100 patients being attended to by one clinical officer daily. The administration has had to hire additional healthcare workers – nurses, doctors, clinicians and community health workers – to supplement the workforce.

In November 2018, Governor Kuti accom-



panied then Health Cabinet Secretary Sicily Kariuki at the launch of a biometric registration exercise for locals to acquire UHC cards in Isiolo, Merti and Garbatulla sub-counties.

The exercise, conducted by community health volunteers (CHVs) at household level, targeted more than 184,765 people in 36,953 households, as per the 2018 population estimates. At least 157,289 people were registered, translating to 85 percent of the population. There has been subsequent registration with the NHIF.

The county health official added that to ensure that residents fully benefit from the programme, the county government, through the health department, is conducting a mop-up exercise to ensure they attain 100 percent coverage. Mr Alio said two additional theatres in Merti and



TIDBITS

Nyeri County is one of the four counties identified to pilot the Universal Health Coverage in the country owing to collective high prevalence of communicable and non-communicable diseases, high population density, high maternal mortality and high incidences of road traffic injuries.

Garbatulla sub-county hospitals have become emergency service delivery points following a Rapid Results Initiative (RRI) in compliance with the UHC policy. He added that good leadership and governance structures to oversee smooth implementation of the UHC programme makes them optimistic that the project will help address poor health indicators and reverse the tainted image of public facilities in the region.

To ensure adequate supply of essential commodities, Mr Alio revealed that the administration resolved to regularise medical supplies on quarterly orders with timely payments after they signed a memorandum of understanding (MoU) with the Kenya Medical Supplies Authority (KEMSA). To address a shortage in radiology services, the administration recently opened a CT scan facility which is connected to Kenyatta National Hospital (KNH) through cloud computing. It sends back details through a digital reporting system.

CHALLENGES

Despite these milestones, the programme faces several challenges, including high depletion of drugs due to a surge in patients and increased workload. The county government has formulated new leadership and governance structures comprising a technical working group, and steering and

oversight committees for implementation of UHC. Provision of quality healthcare remains the top agenda of the county government despite the meagre resources it receives from the Exchequer.

KISUMU COUNTY

Kisumu is one of the four counties that were identified for piloting the UHC programme. On 25th March 2020, the county organised a meeting to sensitise leaders and partners on the UHC programme, facilitate exchange of views and ensure access to quality health services without financial hardships. The County Executive Committee (CEC) leader for Health and Sanitation, Dr Rosemary Obara, said all stakeholders, including Members of the County Assembly, County Government, National Government together with the private sector, should work together to realise affordable healthcare.

She highlighted UHC's three key elements: equity in access to healthcare in terms of geographic coverage, range of available services; and financial protection against any hardship to users of health services which may arise from out-of-pocket payments. Dr Obara also highlighted key achievements on healthcare, among them operationalising of maternity theatres in all sub-counties to reduce referrals and mortalities.

UHC REGISTRATION

By May 2019, the UHC mobilisation had registered 306,697 households, with details of 887,038 people being captured, which reflects 75 percent above the estimated number of 250,000 households. However, it was reported that since the mop-up began, the county has had an influx of people seeking health services,



Members benefit from the NHIF Supacover, which allows them to receive comprehensive services from contracted public and private health service providers

occasioning an 82 percent increase in outpatient workload. The county was allocated Kshs 217,383,080 by the National Government in the first half of the financial year and had already spent Kshs 158,242,582, equivalent to 72.79 percent of the allocation, in just the first quarter of the financial year.

CHALLENGES

The sensitisation conference heard that the county was planning to address human resource deficits caused by high enrolment of residents to the programme, ensure adequate supply of commodities to laboratories and pharmaceuticals, expand the capacity of existing facilities, and ensure prudent flow of funds, efficiency and accountability.

Other key stakeholders who attended the conference included representatives of the National Government, Ministry of Health, Kisumu County Assembly, Members of the Health Committee, NHIF, and community health workers.

MACHAKOS COUNTY

Machakos County was among the four pilot counties for UHC. The County Governor officially launched the programme in December 2018, promising to remain uncompromising on issues that provide comfort and quality treatment to patients and their guests. The county anticipated to register 100 percent of the population and provide free UHC.

Machakos County was selected for the UHC pilot phase because it has the highest number of accidents in Kenya, high number of non-communicable diseases, prevalence of communicable ailments like HIV/Aids, and many cases of maternal mortality.

UHC REGISTRATION

The county had achieved about 86 percent UHC registration, equivalent to 1.2 million people, by December 2019. The number of visits by patients hit 2.8 million.

The county has also endeavoured to enhance access to medical care through upgrading of its health facilities. It has established a 35-bed, well-equipped cancer treatment centre which provides free treatment to patients registered under UHC.

ACHIEVEMENT

The county has been able to avert industrial action by health workers through Comprehensive Bargaining Agreements (CBAs) with relevant trade unions and ensuring timely payment of salaries for health workers.

As one of the health officials said, 'a motivated employee is an employee who delivers'. The Principal Secretary (CS) for Health, Ms Susan Mochache, during a visit in March 2019 with a delegation from Thailand led by the Minister for Public Health, announced that Kenya and Thailand have a memorandum of understanding (MoU) and a plan of action on UHC.



UHC programme in Isiolo County has been implemented successfully and is a huge step in improving healthcare since it provides access to cost-effective, specialised health services



Maternal and child health are among the main areas of coverage for UHC because most households, especially the poor, spend more on maternal and child health complications due to lack of medical cover.

TIDBITS

The UHC package caters for outpatient care such as consultations, mental illness and emergency health care. Any beneficiary of the UHC package card in the county is covered and can be referred to KNH for further treatment. Isiolo Governor Dr. Mohammed Kuti has been on the forefront in ensuring that Isiolo County becomes a model for programme.

“

Universal Health Coverage is a human rights issue and is enshrined in our Constitution of Kenya 2010. UHC has political support considering that health is one of the President’s “Big Four Agenda”





The MoU focuses on capacity building, research and health technology assessments

The county has also procured 70 ambulances and five advanced ambulances and has employed 84 paramedics and 75 drivers. To take UHC to the grassroots, the county plans to procure more ambulances and employ more middle cadre workers and additional health professionals.

CHALLENGES

Like the other three counties, there has been a surge in the number of patients seeking healthcare under UHC, coupled with an increase in patients from neighbouring counties. This points to the need for more investment in human re-

sources to make the implementation of UHC a reality. Also needed is procurement of more health products and technologies (HPTs) and construction of additional health facilities in response to the high number of people seeking medical services under UHC.

RECOMMENDATIONS

- i. *To progressively increase human resource to enhance access to health services, the two levels of government must demonstrate commitment to recruit additional skilled staff to offer services and help cope with the increased number of people seeking healthcare under UHC.*
- ii. *Increase budgetary provisions for UHC. Under the negotiated Intergovernmental Partnership Agreement (IPA), counties are required to allo-*



Kisumu County Government held a sensitisation conference where announced to enrol more residents to the programme

TIDBITS

On 25th March 2020, Kisumu County organised a meeting to sensitise leaders and partners on the UHC programme, facilitate exchange of views and ensure access to quality health services without financial hardships. County Executive Committee leader for Health and Sanitation, Dr Rosemary Obara, said all stakeholders, should work together to realise affordable healthcare.



cate a minimum of 30 percent of their respective budgets to health and progressively increase it.

- iii. The National Government should commit to supplement county allocations for supply of essential medicines and supplies, including laboratory commodities, through the Kenya Medical Supplies Authority (KEMSA).*
- iv. The two levels of government should jointly invest in community health services to ensure full implementation of the Community Health Strategy and ensure augmentation of Primary Health Care (PHC) to bring health services closer to the community.*
- v. Counties should focus on households and robust screening of illness with the aim of early identification, management and referrals to the appropriate health facilities.*

CONCLUSION

Universal Health Coverage is a human rights issue and is enshrined in the Constitution of Kenya 2010. UHC has political support, considering that health is one of the President's Big Four Agenda. The success stories and lessons

learned from Makueni County, which pioneered UHC in Kenya, have inspired both the National and County governments. Both two levels of government are actively involved in promoting UHC.

According to Thiong'o (2020), Kenya's Central region undertook to implement UHC starting January 2020. However, there have been a number challenges, including funding, inadequate human resources and infrastructure. These must be addressed if the UHC programme is to succeed. The government should come up with more innovative financing strategies for the UHC programme.



The success stories and lessons learned from Makueni County, which pioneered UHC in Kenya, have inspired both the National and County governments

CHAPTER 7



PRIVATE, PUBLIC PARTNERSHIPS
AND IMPACT

INTRODUCTION

A public, private partnership (PPP) is a contract between a public agency and a private entity (for-profit or not-for-profit) for the provision of services, facilities and/ or equipment. In line with the UHC initiative, the National Government's budgetary allocation on health services was increased by 57.8 percent from Ksh61.8 billion in 2017/18 to Ksh97.5 billion in 2018/19. Development expenditure on health services is expected to expand by 77.7 percent to Ksh59 billion, accounting for 60.5 percent of the total expenditure in 2018/19. Recurrent expenditure is expected to grow by 34.5 per cent to Ksh38.5 billion in 2018/19. County governments' expenditure on health services is projected to increase by 28.7 per cent to Ksh108.1 billion in 2018/19, out of which 77.5 per cent will be recurrent. However, the Government recognises that the rising costs of healthcare and the soaring demand for related services cannot entirely be funded from the national budget. This is especially so for Universal Health Coverage (UHC), where the focus of the Government is:

- a) *Better operation and expansion of public health services and facilities;*
- b) *Space to leverage private sector investment in specialised public health services;*
- c) *Attracting potential non-profit partners to help deliver UHC.*

The Government is therefore using public, private partnerships (PPPs) to allow participation of the private sector in the financing, construction, development, operation, or maintenance of infrastructure or development projects in the health sector through concession or other contractual arrangements.





Private sector players that have signed PPPs on health, share the Government's vision and goals and bring critical resources to the table. Without a shared vision, a PPP cannot succeed. It is important to note that PPPs do not include divestitures (removing the public sector from health services).

LAWS DEFINING AND PROTECTING PPPs IN HEALTH

The success of Universal Health Coverage (UHC) is dependent on PPPs. Such partnerships are only possible where they are backed by laws that protect the interests of the public.

The Health Act 2017 is one such law. Part XIII of the Health Act details how the Government will engage private players in the health sector. In addition to outlining how the Ministry

of Health implements policies to encourage growth of private health services, and the licensing of private hospitals, clinics and other related institutions, the Health Act 2017 also allows the Government to ensure that they meet the required standards.

The Cabinet Secretary is empowered to pursue strategies conducive to the development and regulation of private health services and their attunement to the needs of the population.

But it is the section on Partnership Agreements that is key. Under it, both the national and county governments are allowed to sign partnerships with companies in the private sector to develop capacity in specialised health services and facilities. Such partnerships are subject to the provisions of the Public, Private Partnerships Act (No. 15 of 2013), under which the Cabinet

Secretary and the County Governors can seal partnership agreements with companies in the private sector to develop specific services or facilities that serve the needs of public health.

The Public, Private Partnerships Act is an important legislation, especially Part V of the Act, because it clearly lays out the procedures for the National and County governments to enter into PPPs for financing, construction, operation, equipping or maintenance of the infrastructure or development of facilities or provision of services to the Government. No PPP is possible without a sector diagnostic study to define the following:

- i. Technical issues;
- ii. Legal, regulatory and technical frameworks;
- iii. Institutional and capacity status;
- iv. Commercial, financial and economic issues; and,
- v. Such other issues as the Cabinet Secretary may stipulate.

The Health Act and the Public Private Partnerships Act are proof that the Government is focused on ensuring the pillars supporting Universal Health Coverage are in place. When measured against international standards, Kenya has established a sterling reputation in PPPs. A report by the World Bank, Benchmarking PPP Procurement 2017, ranked Kenya in the top 10 among 20 Sub-Saharan Africa (SSA) countries.

Because the Constitution has devolved a significant chunk of health services to County governments, the Public, Private Partnerships Amendment Bill 2018 seeks to ensure the National Government consults with County governments on issues concerning key infrastructure and services, such as health facilities, county roads, water and sanitation services, and waste management.

It will ensure that counties' lists of priorities for health, based on the County Integrated Development Plans (CIDP), are given due consideration in consultation with the National Government. More significantly, amendments in the Bill seek to close a weak area of governance that was identified in relation to privately initiated partnerships (PIPs) to make them more competitive where there are sole bids or unsolicited PPP proposals.

PPPS IN THE HEALTH SECTOR

LINDA MAMA

Following a Government directive in June 2013, maternal health services would be free in all public health facilities. Provision of high quality maternal delivery services in public health facilities has been a key focus of UHC under the Big Four Agenda, alongside the Managed Equipment Scheme (MES), to lower maternal, infant and neonatal mortalities and ensure every child gets the recommended vaccines.

The Free Maternity Services programme was rolled out in all public health facilities in 2013 to eliminate financial barriers and high cost of treatment in accessing maternity services at public hospitals, and to address geographical and infrastructural challenges that hinder access to the services and social-cultural barriers.



A report by the World Bank, Benchmarking PPP Procurement 2017, ranked Kenya in the top 10 among 20 Sub-Saharan African SSA countries



This resulted in an increase in the number of skilled deliveries from 600,323 to 950,000 annually. Since the introduction of free maternity services on 1st June, 2013, deliveries under skilled attendants significantly increased from 44 percent to 62 percent in 2016/17, with a drop to 57 percent in 2017/18 due to health workers strikes/unrests that were experienced throughout the country; this is a significant increase of over 360,000 skilled deliveries between 2013/14 and 2017/2018. As part of the movement towards UHC, the Government has expanded social health protection by implementing the Linda Mama, Boresha Maisha programme targeting mothers and their infants.

Late referral to health facilities, health worker strikes, and quality of care including inadequate staff and medical equipment, remain the main issues in the number of maternal deaths. The main objectives of the programme are;

TIDBITS

Because the Constitution of Kenya has devolved a significant chunk of health services to county governments, the Public Private Partnerships Amendment Bill 2018 seeks to ensure the national government consults with county governments on issues to do key infrastructure and services such as health facilities, county roads, water and sanitation services and waste management among other things. It will ensure that counties' lists of priorities for health based on the County Integrated Development Plans (CIDP) are given due consideration in consultations with the national government.

- To promote and encourage women to give birth in health facilities, and therefore contribute to improvement of pregnancy outcomes, including maternal and neonatal deaths;
- To secure household incomes meant for maternity facilities to other economic activities with a potential positive impact on poor households;
- To supplement the public health budgetary requirement to effectively address access and quality gaps to improve service delivery;

The Ministry allocated a budget of Ksh4.298 billion in FY 2017/18 to ensure that all facilities were reimbursed for their health services. The National Health Insurance Fund (NHIF) received premiums for the programme amounting to Ksh3,361,525,853 in the financial year 2017/2018.

This programme has seen the number of deliveries at public health facilities in the country increase from 925,674 (2014/15), to 995,946 (2015/16), and drop to 962,885 (2017/18). A total of Ksh12.2 billion has been transferred to public health facilities offering the free service.

This has also necessitated a change in the way the programme is implemented to ensure increased coverage and benefits to mothers. From the final quarter of the 2016/17 financial year, the programme was implemented through the NHIF, covering antenatal care, deliveries, postnatal care and other newborn illnesses.. The service was also available all over the country in both public and private not-for-profit healthcare providers interested in joining the programme.

The total number of beneficiaries for the FY 2016/17 was 987,122 against an expenditure of Ksh3.54 billion, while for Linda Mama, 762,661 expectant mothers have been registered and a total of Ksh1,487,620,052 has been paid out for

516,906 deliveries, covering both inpatient and outpatient care. A total of 209,637 ante-natal care and 35,245 post-natal care visits have been recorded.

The Health Act of 2017 is also paving the way for the implementation and development of other health-related legislative instruments that will address health rights as per the Constitution. The ministries of Health and Agriculture, Livestock and Fisheries approved and signed the National Policy for the Prevention and Containment of Antimicrobial Resistance in Kenya and its national action plan on the prevention and containment of antimicrobial resistance in June 2017.

The Kenya Quality Model for Health (KQMH) has been reviewed and forms the basis for Quality of Care measurement and accreditation. Some 40 counties had their County Health Medical Teams (CHMTs) trained on Quality Improvement approaches as enshrined in the KQMH for equipping health professionals with skills and knowledge in Quality Improvement for improved delivery of health services. The Linda Mama, Boresha Jamii programme being implemented by the Government through the NHIF, seeks to improve the efficiency and performance of the Government's initiative on



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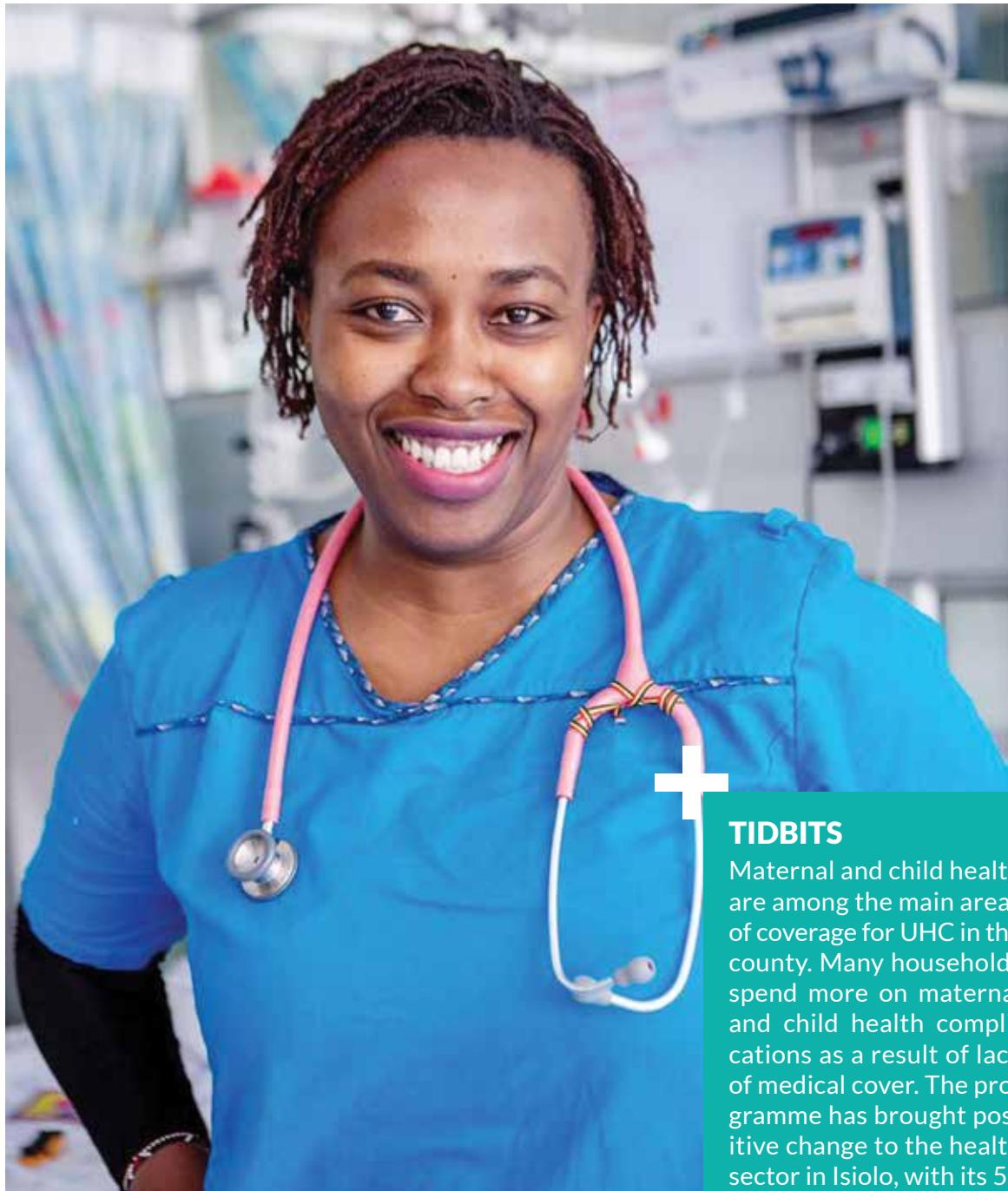


maternal and child healthcare. NHIF was chosen because of its expanded provider network to public, private and faith-based health facilities, and its mobile registration platform to track beneficiaries of the cover. Under it, women get access to a one-year expanded package of benefits consisting of antenatal and postnatal care, deliveries and care for the newborn.

The focus is on equity, access, affordability and quality. Under the Linda Mama, Boresha Jamii programme, public health facilities that provide maternity services are assured of funds to supplement their regular budgetary allocations to address gaps in provision of services. Since its implementation, the number of deliveries in public health facilities has continued to grow.

TIDBITS

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Just like the other three counties experienced a surge in the number of patients seeking health care under UHC, coupled with increase in traffic of patients from neighbouring counties.

TIDBITS

Maternal and child health are among the main areas of coverage for UHC in the county. Many households spend more on maternal and child health complications as a result of lack of medical cover. The programme has brought positive change to the health sector in Isiolo, with its 56 health facilities experiencing an upsurge in the number of patients seeking free services.

CUMULATIVE NUMBER OF DELIVERIES IN PUBLIC HEALTH FACILITIES

Financial Year	2012/13	2013/14	2014/15	2015/16	Cumulative No. of Beneficiaries
No. of deliveries in Public Health Facilities	461,995	627,487	811,645	900,000	2,801,127

Source: NHIF Linda Mama Boresha Jamii Implementation Manual 2016



REGISTERED BIRTHS BY PLACE OF OCCURRENCE

Registered Births			
	Health Facility (percent)	Home (percent)	Total (percent)
2014	83.4	16.6	954,254
2015	90.1	9.9	950,224
2016	92.3	7.7	948,351
2017	92.6	7.4	923,487
2018	94.5	5.5	1,135,378

Source: Kenya National Bureau of Statistics & Civil Registrations Service



Partners in Linda Mama include the African Health Markets for Equity (AHME), which is supported by the Bill and Melinda Gates Foundation, and the UK Department for International Development (DfID).

The programme is supported to deliver health services in public and private health facilities in partnership with PharmAccess Foundation, Population Services International (PSI), and Marie Stopes International.

A case study of the Linda Mama programme by PSI and Marie Stopes for AHME made interesting observations that they shared with the Ministry of Health. They noted that the Linda Mama programme is more attractive to health providers contracted by NHIF for its in-patient and out-patient services, but they are affected by inconsistent and unpredictable disbursement of funds. Another interesting finding was that increased NHIF enrollment has changed the



TIDBITS

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business strategies of healthcare providers, because it strengthened their social franchise value proposition. The Linda Mama scheme was introduced in three phases:

- Phase 1, from April 2017, targeted faith-based facilities and the private sector;*
- Phase 2, from July 2017, targeted the public sector;*
- Phase 3, from March 2018, added antenatal care (ANC) and post-natal care (PNC) services to the benefits package.*

The reimbursements rated are in tiers, determined by the level of care offered by the provider. Tariffs for public health facilities are therefore lower, while private sector tariffs are slightly high.



LINDA MAMA BORESHA JAMII TARIFFS (2019)

Facility Level	Normal Delivery (Ksh)	Caesarean section (Ksh)	ANC (per visit)	PNC (per visit)
Private health centres and maternity homes (Level 3)	3,500	N/A	1 st visit = Ksh1000 2 nd – 4 th visits = Ksh500	1 st – 4 th visits Ksh250
Public health centres and dispensaries (Levels 2 and 3)	2,500	N/A	1 st visit = Ksh600 2 nd – 4 th visits = Ksh300	1 st – 4 th visits Ksh250
Private hospitals (Level 4)	6000	17,000	1 st visit = Ksh1000 2 nd – 4 th visits = 500	1 st – 4 th visits Ksh250

Source: African Health Markets for Equity (AHME)

By enrolling private health facilities and providers in the Linda Mama programme, NHIF is championing UHC by increasing access to quality primary health services for the poor in difficult-to-access areas. The NHIF is also considering a number of options to increase participation of the private sector in the Linda Mama programme. They include:

- a) *Introducing a standardised reimbursement rate for normal deliveries in private healthcare facilities to ensure quality at all levels of care.*
- b) *Insisting on a standardised contract for all private healthcare providers to eliminate delays in claims processing and reimbursements caused by variations in contracts.*
- c) *Working with county departments of health to increase public awareness of the scheme, and boost participation by poor and marginalised women, who are the main targets.*

A key indicator that Linda Mama is impacting positively on UHC can be seen in the increase in pentavalent third dose immunisation countrywide. This type of immunisation is used as a global measure of the number of children who have received the full regimen of immunisation. There was an increase in pentavalent vaccine uptake by 18.1 per cent from 1,064,500 in 2017 to 1,299,700 thousand in 2018.

Immunisation coverage for infants increased from 68.4 per cent in 2017 to 81.6 percent in 2018. The decline in the number of infants vaccinated in 2017 is attributed to industrial action by health workers.

ACCESS TO SAFE BLOOD TRANSFUSION

A key goal of Kenya's UHC is access to safe blood transfusions. This includes providing ac-

cess to up-to-date information and strategies on blood safety and access, and a sustainable national blood programme all the way from planning and implementation to monitoring.

From 1985, with the advent of HIV/Aids, reduced blood collections, increased cost of blood, and higher emphasis on blood safety, became more critical. In 1994, Kenya recognised the need to set up a national blood service in line with WHO recommendations. Recommendations were made to establish a regional network of transfusion centres under central coordination.

In 2001, Kenya's first-ever blood policy guidelines were developed and launched and the first regional blood transfusion centre (RBTC) and national coordinating office were established in Nairobi.

Progressively, six regional and nine satellite centres have been established and blood policy guidelines and national standards developed. There is also increased hemovigilance the set of surveillance procedures covering the entire blood transfusion chain, from the donation and processing of blood and its components,



There has also been a massive improvement in donor selection and deferrals resulting in lower sero-prevalence and the Kenya National Blood Transfusion Service (KNBTS) has adopted the appropriate blood testing algorithm in line with WHO recommendations



through to their provision and transfusion to patients, and including follow-up.

Key to all these is the setting up of RBTCs in Nairobi, Nakuru, Mombasa and Embu. Today, 100 percent of collected blood is screened for HIV, HBV, HCV and syphilis.

There has also been a massive improvement in donor selection and deferrals, resulting in lower sero-prevalence. The Kenya National Blood Transfusion Service (KNBTS) has adopted the appropriate blood testing algorithm in line with WHO recommendations.

Each centre is equipped with a cold room for storage and appropriate blood bank fridges with a capacity of up to 5,000 units of blood. Unsafe units are sorted and incinerated. Also, each centre has an incinerator and standby generator, while safe units are stored at appropriate

temperatures. RBTCs maintain proper blood inventory by type and product, and blood is released to the user institutions as per their orders, subject to availability of stock.

KNBTS supplies blood and blood products to both public and private hospitals and ensures that there is a cold chain up to the hospitals. Blood use guidelines have been developed and distributed by KNBTS and quality is assured via HIV testing and counselling centres (HTCs) linked to hospital transfusion units.

Monitoring of blood use, haemovigilance and investigations of adverse transfusion reactions are also done through HTCs. The Government has recognised the need for KNBTS operations to be self-sustainable to avoid a lapse when donor funds trickle out. Among the measures taken is increased funding to KNBTS and provision of adequate blood storage facilities at



VOLUNTEERS HELP KEEP FAMILIES SAFE FROM COVID-19

In the Nairobi informal settlement of Kibera, people are accustomed to warm greetings with big hugs and hearty handshakes. But social distancing guidelines brought in since the COVID-19 outbreak in Kenya have changed how residents greet each other. In a small mudbrick and tin-roof house in Kibera, mother of eight Joyce Mterengo sits on her bed, with a rose-embroidered curtain separating her sleeping and sitting quarters. Bags hang on nails in wall, containing her few possessions. Joyce apologizes to Community Health Volunteer Violet Chemesunde as she beckons her to come inside. "Welcome to my home," Joyce says with a smile. "I'm sorry I can't welcome you the way I'm supposed to."

After schools closed, Joyce sent six of her children to their rural home in Taita Taveta, partly over concerns about social distancing, which is difficult to do in crowded informal settlements. When the two women have finished chatting, Violet fetches a water jug and bar of soap. With the help of some neighbourhood children, she shows Joyce how to protect herself and her family from COVID-19.

the hospitals. Lack of a legal framework has been addressed via the Health Act of 2017, allowing for mobilisation of support at national, regional and global level. This allows foreign governments and development partners to invest in, strengthen and sustain national blood programmes.

An additional strategy is public education to raise awareness on the need for voluntary blood donation, patients' rights, and informed consent as a foundation for universal access to safe blood transfusion. International best practice, the WHO, and Kenya Blood Policy, recommends that patients should be transfused with the component of blood they require as opposed to giving them whole blood.

It has also been shown that close to 95 percent of all transfusions require blood components and only about five percent require whole blood. Also, one third of all transfusions go to children who require smaller blood volumes compared to adults.

To comply with best practice, KNBTS converts a certain percentage of the whole blood units collected into various blood components namely packed red cells, platelets, fresh frozen plasma and cryoprecipitate.

It also prepares small packs for children. This process requires dedicated skilled staff, special blood bags, and appropriate infrastructure including transport and blood storage equipment. Kenya has approximately 561 transfusing facilities (government, faith-based and private) which get blood from KNBTS. However, KNBTS is only able to meet 52 percent of their total needs.

In three years, a total of 158,749 (2015-16), through to 158,378 (2016-17) and to 160,000 (2017-18) blood units were collected. This is



TIDBITS

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about 38 percent of the national demand for blood. The shortage led to many preventable deaths of mothers and children.

In 2015, Kenya became the first country in East Africa to fully automate its blood bank processes when the KNBTS installed an electronic system in its national office and all the RBTCs, covering the entire country.

The ePROGESA software solution was specifically designed to meet the functional requirements of blood banks and blood transfusion centers. It enables the blood bank to keep track of donors and units of blood available in all its facilities, which ensures the traceability of blood and blood products from collection to distribution.

The system also enables an interface of the various processes to ensure quality and safety



TIDBITS

The KEPI programme concentrated initially on establishing and strengthening the health service delivery. However, in the 1990s, having achieved the Universal Child Immunization goals of immunizing at least 80 percent of the target population, KEPI's focus changed to disease control, elimination and eradication. The immunization program is managed by the Unit of Vaccine and Immunization services (UVIS) within the Ministry of Health.

measures are enforced, right from collection to administration of the blood to needy patients.

Global Communities supported the installation and training of KNBTS staff on management of the software under the Kenya Blood Safety Programme (BSP). The five-year programme, funded by the US Center for Disease Control and Prevention (CDC), was instrumental in strengthening the capacity of KNBTS to ensure a safe and sufficient blood supply in Kenya.

The programme's key contributions include developing guidelines on the establishment of blood transfusion facilities. The BSP also helped to increase blood collection and testing levels. As a result, the KNBTS is now collecting more blood than before. Additionally, the programme supported KNBTS to become more transparent in its planning and budgetary processes, helping it develop an asset registry and set goals.

The BSP also mapped all of the transfusing hospitals in the country on an interactive map so that KNBTS can better organise their service and plan for new facility sites; trained engineers on how to repair and maintain the specialised equipment; and advised KNBTS on how to improve service during blood donations. The private sector is also supporting the Government's efforts to increase supply of blood to hospitals.

Amref Health Africa and technology solutions firm Advanced IT Solutions (AISL) have partnered to boost blood supply using a Blood Services Information Management System known as Damu – Sasa. The solution is an innovation borne of the Presidential Digital Talent Programme (PDTP) launched by President Uhuru Kenyatta in 2015. Damu – Sasa was developed to maintain up-to-date information in the blood services value chain. This includes maintaining an accurate donor databank through which

timely appeals for donations can be made during emergencies, ensuring real-time observation of blood level fluctuations and improving their real-time reporting.

In addition, through information sharing, Damu – Sasa enables collaboration among players in the blood services ecosystem, thus making blood services management more efficient and effective.

Through this partnership, Amref Health Africa provides support to AISL by marketing the technology solution, developing health-related content, promoting associated advocacy and offering other technical support. AISL, in turn, will focus on rolling out the Damu – Sasa solution, supporting clients and enhancing solutions. The innovation ensures that blood banks have accurate data to improve effective use of blood as well as help with targeted donor appeals.

KENYA EXPANDED PROGRAMME ON IMMUNISATION

The Ministry of Health established the Kenya Expanded Programme on Immunisation (KEPI) in 1980 with the aim of providing immunisation against the then six killer childhood diseases; namely tuberculosis, polio, diphtheria, whooping cough, tetanus and measles to all children in the country before their first birthday, and tetanus toxoid vaccination to all pregnant women. KEPI was part of the global Expanded Programmes on Immunisation (EPIs), whose main goal was to control killer, vaccine-preventable diseases of childhood.

Prior to 1980, vaccination services had been provided on an ad-hoc basis, mainly through primary schools and larger health institutions and facilities. During the late 1970s the National

Public Health Laboratories of the Ministry of Health (NPHLs) used to manufacture smallpox and cholera vaccines, besides investigating all outbreaks of public health importance in Kenya.

Because of their role in the surveillance for and response to diseases of public health importance, the NPHLs became the repository of all emergency vaccines such as cholera, Hepatitis B, typhoid, rabies and anti-snake venom. However, with the global eradication of smallpox, the NPHLs ceased manufacturing the smallpox vaccine, but continued to coordinate the use of other emergency vaccines, except for cholera, which was phased out in the 1980s due to poor efficacy.

From the early 1970s when international regulations mandated that people moving across countries must be appropriately vaccinated to prevent global transmission of regional endemic diseases, the Nairobi City Council coordinated the vaccination of prospective overseas travellers with cholera and yellow fever vaccines.

Subsequently, this role was taken up by the Department of Environmental Health within the Ministry of Health and was administered through the Port Health Services in collaboration with the Department of Immigration.

The KEPI programme concentrated initially on establishing and strengthening health service delivery. However, in the 1990s, having achieved the Universal Child Immunisation goal of at least 80 percent of the target population, KEPI's focus changed to disease control, elimination and eradication.

The immunisation programme is managed by the Unit of Vaccine and Immunisation Services (UVIS) within the Ministry of Health. The unit's mandate is to coordinate vaccination

services for all preventable diseases through the provision of guidelines, selected priority vaccines, and related biological sera such as immunoglobulins.

Apart from routine infant vaccines, the unit also provides vaccines for high risk groups (tetanus for special occupational risk groups, Hepatitis B vaccines for health workers, typhoid vaccine for food handlers, yellow fever vaccination for foreign travellers, emergency anti-rabies vaccine, snake anti-venoms and any other vaccines as may be prescribed during outbreaks).

The roles of the Unit of Vaccines and Immunisation Services (UVIS) are:

- i. *Policy regulation and oversight;*
- ii. *Commodity security and quality assurance;*
- iii. *Monitoring and evaluation;*
- iv. *Advocacy and resource mobilisation;*
- v. *Capacity strengthening; and,*
- vi. *Conducting appropriate operational research.*

The 47 county governments are responsible for health service delivery in their jurisdictions. The counties are responsible for hiring healthcare providers, training health service providers and management of cold chain equipment at the



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county, sub-county and facility level. They are also responsible for vaccine distribution and response to advance effects following immunisation (AEFIs) within the counties in collaboration with the national government and immunisation services. UVIS is responsible for forecasting of vaccines, procurement, storage at the national and regional stores, and distribution from the airport to the regional stores.

The county governments are responsible for storage of vaccines in county stores, sub county stores and at facility level, and distribution of vaccines between these levels.

The Government of Kenya currently procures all traditional vaccines (measles, BCG, tetanus toxoid and polio vaccines), non-EPI vaccines such as Hepatitis B, typhoid vaccine and biological sera such as anti-snake venom and anti-rabies antibodies.

The Government also co-pays for Gavi-supported vaccines such as PCV, rotavirus, pentavalent and yellow fever. The procurement of vaccines is done through Unicef for traditional vaccines and for Gavi-supported vaccines, while the nonEPI vaccines are bought through public procurement procedures through the Kenya Medical Supplies Authority (KEMSA).

The County governments are also responsible for procurement of non-EPI vaccines and biological sera through KEMSA. Vaccine distribution and storage responsibilities are shared between the National and County governments. The National government is responsible for storage and distribution from the airport through to the national and regional vaccine stores.

The county governments are responsible for collecting vaccines from the regional stores, for

distribution and storage of vaccines, and maintenance of cold chain equipment at the county, sub-county and facility levels. The vaccine cold chain and repair system is a challenge and UVIS, together with strategic partners, is working to ensure that the Replacement, Expansion and Maintenance (REM) plan is implemented.

The cold chain management system is also facing a challenge with the introduction of new technologies such as solar direct drive and continuous temperature monitoring systems, and the current gap in technicians' skills and abilities is glaring.

When skills and abilities are available, there are challenges with resources to support installation, and repair and maintenance of equipment. Procuring spare parts and mobilizing staff is also a challenge.

Vaccine procurement has also faced several challenges with securing and ring fencing funds for vaccine procurement. This is due to devolution of funds that were secured in the previous system. The Ministry of Health is working to ensure that funding for vaccines and co-financed vaccines is ring fenced.



Procurement of vaccines is done through UNICEF for traditional vaccines and for Gavi supported vaccines while the non EPI vaccines are procured through public procurement procedures through the Kenya Medical Supplies Authority (KEMSA)

KENYA'S COLD CHAIN CAPACITY FOR STORAGE OF VACCINES

Type of facility	Numbers	Responsible Authority
Sub county stores	300	County Government
Immunizing facilities with cold chain	4566	County Government
Facilities with no cold chain		County Government
Regional stores	9	National Government
National stores	1	National Government
Total		

Source: Comprehensive Multiyear Plan for Immunization: July 2015- June 2019 Unit of Vaccines and Immunization Services

These challenges have been reflected by the defaulting on Gavi co-financed vaccines in the financial year 2013/2014. However, the Ministry of Health has made several improvements in improving vaccine procurement, vaccine supply, and the cold chain and logistics system.

The Ministry has outsourced the distribution of vaccines between the national and regional vaccine stores to several private sector companies that manage and distribute vaccines in refrigerated trucks. The outsourcing has successfully been managed by the Unit of Vaccines from 2013.

The outsourcing has improved the speed and efficiency of vaccine delivery, quantity of vaccines delivered, and improved the temperature maintained during transportation. The Unit of Vaccines has also developed an online reporting system for vaccines from the national to the regional vaccine level, and is implementing the same system at the sub-county stores.

The Unit of Vaccines is developing the system with support from the Clinton Health Access Initiative (CHAI), Unicef, USAID's Maternal and

Child Health Integrated Program (MCHIP) and the WHO. The system will also integrate with the national reporting system.

The unit has also made changes to the temperature monitoring system to ensure that the vaccine cold chain is maintained at high quality through deployment of Fridge-Tag2, a continuous temperature monitoring device, in all health facilities – this has replaced the thermometer at all levels. The unit is also working to introduce remote temperature monitoring devices in larger vaccine stores and cold rooms through the introduction of Remonsys temperature monitoring devices.

Vaccine service delivery is a function of the County governments. They are responsible for service delivery at facility level. The counties are also responsible for hiring, training and supervision of healthcare workers, and management of health facilities.

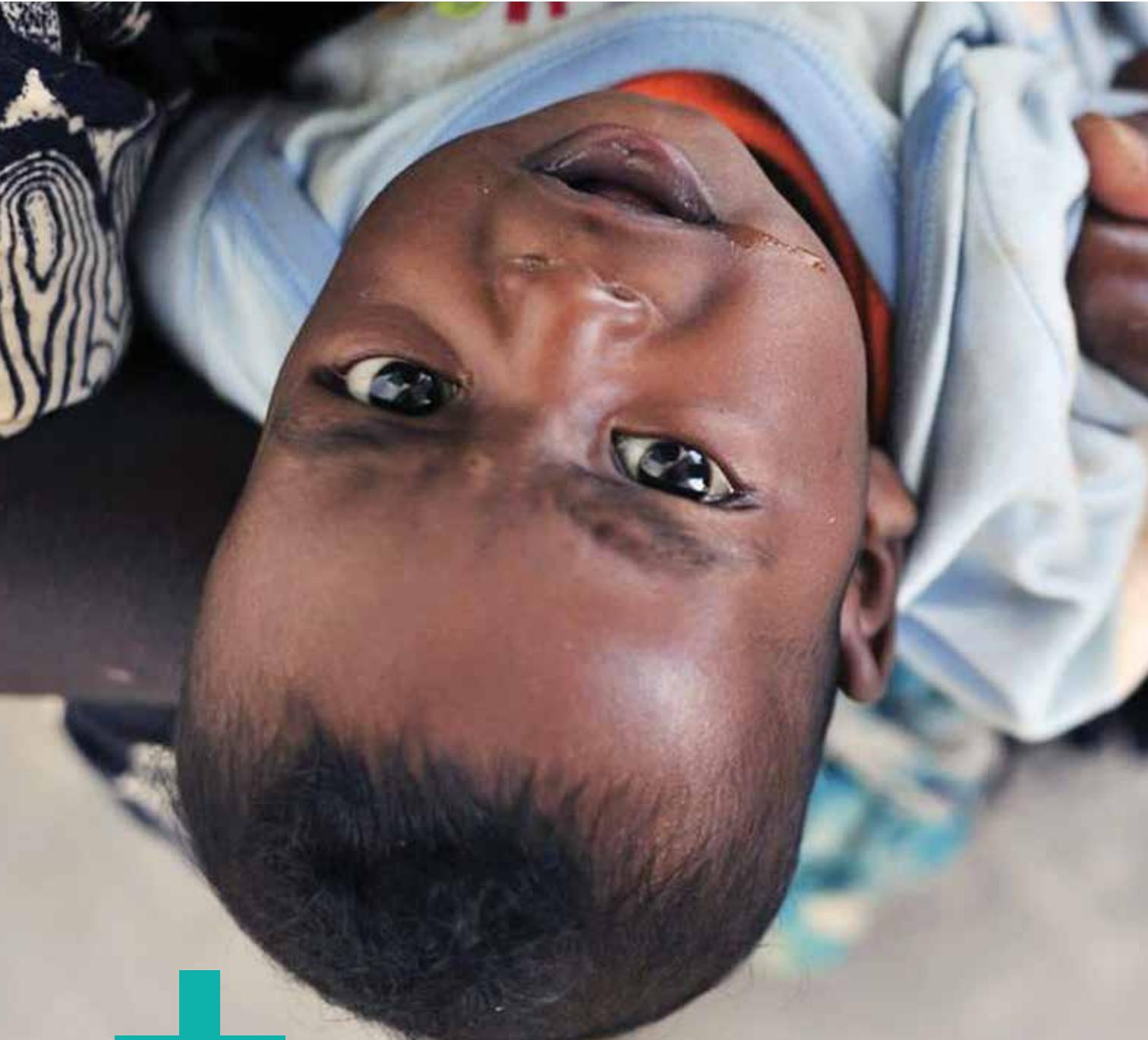
Following devolution of health services, the current roles for the National government are: policy direction, standards and quality assurance, capacity building, immunisation services

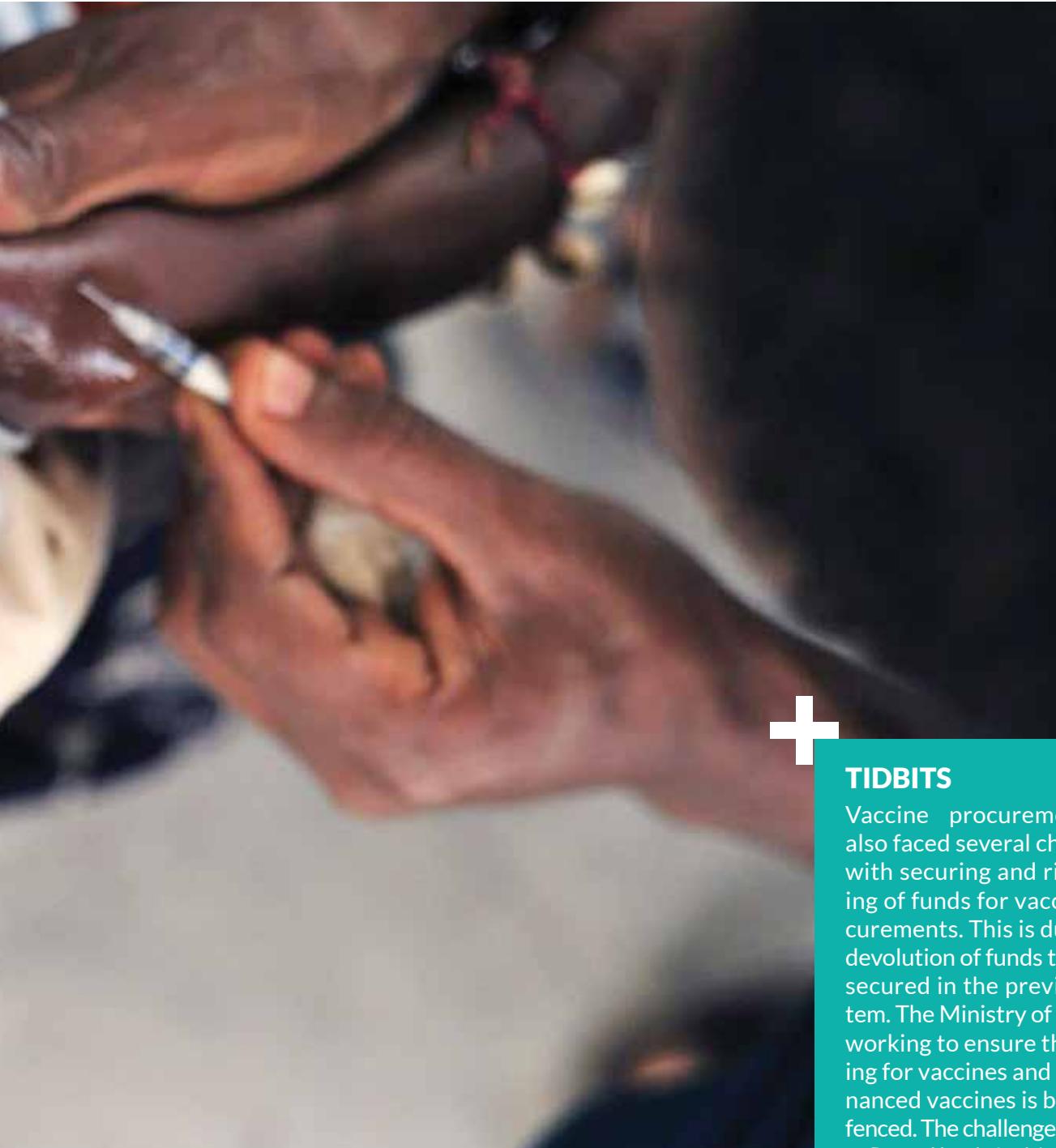


TIDBITS

The Unit of Vaccines and Immunization is responsible for the forecasting, procurement, storage and distribution of vaccines from the airport to the regional store. The Government of Kenya currently procures all traditional vaccines (Measles, BCG, Tetanus Toxoid and Polio vaccines), non EPI vaccines such as Hepatitis B, Typhoid vaccine and biological sera such as anti-snake venom and anti-rabies antibodies

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monitoring, procurement of vaccines, limited logistics, resource mobilisation, and responding to outbreaks. County governments are mandated by the Constitution to manage health service delivery, mobilise resources, monitor delivery of services, and mobilise communities to demand and utilise services. The National government's responsibilities in service delivery are mainly to develop standards and training guidelines for the counties to implement.

The National government offers technical assistance by training the county health management teams, providing technical assistance, and ensuring that quality standards in service delivery are well known and adhered to.

The County Governments are responsible for generating information on immunisation services offered and reporting the information through DHIS-2, which is a management in-

TIDBITS

The County Governments are responsible for generating information on immunization services offered and in reporting the information through the DHIS- 2. The county is responsible for developing and analyzing county level immunization coverage and other related data such as the wastages, dropout and identify areas where unimmunized children can be reached. The counties face several challenges in their ability to critically analyze the immunization data reported and developed at the county and using the information in development of plans based on this information.

formation system. The county is responsible for developing and analysing county level immunisation coverage and other related data. The counties face several challenges in their ability to critically analyse the immunisation data reported and developed at the county, and in using the information to develop plans. The challenge in technical skills at the county level is also worsened by loss of healthcare workers due to movement from volatile counties and transfer of trained health workers within and between different counties.

As Kenya implements devolution, improving and sustaining national immunisation outcomes will be crucial.

Surveillance is a key component of immunisation services, which can be sub-divided into two:

- i. *Surveillance activities that help the system to be sensitive in detecting and reporting on priority diseases;*
- ii. *Surveillance of accelerated disease control, which includes vaccine preventable diseases like measles, polio, neonatal tetanus, maternal neonatal tetanus, rotavirus and meningitis.*

Disease surveillance activities are implemented in the 47 counties, which comprise 292 sub-counties. Networking strategies between the National and County governments are in place to ensure that the gains are not lost, but sustained in a manner that will achieve the global polio eradication goals.

Kenya and other Horn of Africa countries remain at risk of imported wild poliovirus from neighbouring Somalia, as in the 2013 outbreak that continued until July 2014. In 2014, all the 47 counties reported Acute Flaccid Paralysis (AFP) cases, with 45 (97 percent) having a non-polio AFP detection rate greater than

2.0/100,000. AFP is the most common sign of acute polio. All but four counties (Kericho, Marsabit, Busia and Muranga) had stool adequacy greater than 80 percent. To improve AFP surveillance, the Ministry of Health and key partners have rolled out community disease monitoring in Garissa, Wajir and Nairobi.

After the polio outbreak in May 2013, the country initiated environmental surveillance for polio viruses in an effort to supplement AFP surveillance, which is the gold standard for monitoring the wild polio virus.

Rotavirus surveillance was introduced at the Kenyatta National Hospital (KNH) in 2006. It documented the burden of rotavirus disease, and thus formed the baseline information for the introduction of the rotavirus vaccine in Kenya. Further, sentinel surveillance continues at the sites so as to inform on the effects of the vaccine after its introduction in July 2014.

The Disease Surveillance and Outbreak Response Unit (DSRU) has also continued to facilitate activities towards containment of the laboratory wild polio virus and has developed activities towards this end, following the establishment of an effective surveillance system for wild poliovirus eradication.



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Further, the DSRU gets weekly reports from all sub-counties through the Integrated Disease Surveillance and Response (eIDSR) web-based system. However, the District Health Information System (DHIS) is more comprehensive. Surveillance activities done in the past included capacity building of health workers on vaccine preventable diseases (VPD), IDSR and laboratory surveillance, which helped achieve the objective of strengthening and sustaining reporting of priority diseases, and the active case search for VPDs.

However, high staff turnover due to devolution, among other reasons, has left many counties with staff who are not trained in disease surveillance, and more specifically VPDs. There is low government funding for immunisation operations. Therefore, there is a need to increase funds allocated for operations from Ksh3.3 million to KshSh100 million by 2018, to determine allocations at county level, and increase the allocations. The Ministry of Health has been fac-

ing challenges in timely disbursement of funds to Gavi before December 15 every year. This has been due to challenges in mobilising funds from the National Treasury in a timely manner. Devolution of health services, including immunisation, has provided opportunities to increase access. More health facilities are being built in regions that suffered years of marginalisation.



The challenge in technical skills at the county level is also worsened by loss of health care workers due to movement from some counties that have difficulties and transferring of trained and knowledgeable health workers within and between different counties



The devolved structures also provide opportunities to further disaggregate data for action. Challenges during the past two years include underfunding, low prioritisation of immunisation, delivery, weak coordination of programmes and delayed procurement and related logistics, leading to stockouts.

New healthcare providers have been employed and managers appointed to provide immunisation services. This has created a pool of vaccinators and EPI managers who do not possess the prerequisite knowledge, skills and competencies to improve service delivery. The northern counties in Kenya continue to suffer insecurity that has affected delivery of quality services. Due to insecurity and high population movement in the Horn of Africa (HoA) there is continued risk of VPDs.

The multiyear plan identifies the following key strategies: Advocacy with key decision makers and stakeholders at National and County governments to prioritise investing in immunisation services, improving linkages with communities and other health programmes, including reproductive, maternal, newborn and child health (RMNCH), HIV/TB/Malaria, and civil registration (CRD), with the county administration playing a key role in mobilising additional resources for immunisation services.

Use of quality disaggregated data to address inequities in access and utilisation of immunisation services by the poor and less educated remains key to reaching the 20 percent of children that have been consistently missed for the past three years.

Use of new technologies for knowledge management, and exchanges and linkages with professional accreditation systems are the innovative approaches identified to address the



PHYSICAL ACTIVITY LOWERS RISK OF NCDs

The Government recognizes that a sustainable and healthy future for mwananchi requires that more Kenyans become physically active more often. Data shows that non-communicable diseases (NCDs) kill 38 million people each year and three quarters of such deaths (28 million), occur in low-and middle-income countries. The major NCDs are Cardiovascular diseases (heart diseases) accounting for the majority of NCD deaths (17.5 million people annually), followed by cancers (8.2 million), respiratory diseases (4 million), and diabetes (1.5 million).

The four groups of diseases account for 82 percent of all NCD deaths and share four major common risk factors, namely tobacco use and or exposure, harmful use of alcohol, poor eating habits and lack of physical activity. Greater amounts of regular moderate-to-vigorous physical activity reduce the risk of heart disease, stroke, hypertension, Type 2 diabetes, dementia, depression, postpartum depression, excessive weight gain, falls with injuries among the elderly, and breast, colon, endometrial, esophageal, kidney, stomach, and lung cancer.

knowledge and skills gap among healthcare providers. PIRI has specifically been identified as a key strategy to ensuring delivery of services to insecure regions. The following are key gains:

- i. *Disease surveillance reporting structures are now in place;*
- ii. *There is availability of standardised reporting tools at all levels;*
- iii. *Devolution has decentralised many services but counties must prioritise surveillance operations;*
- iv. *There is a good laboratory network for confirmation of cases;*
- v. *There is an active logistics management team at national programme level;*
- vi. *There is ample cold storage capacity at national and regional stores;*
- vii. *A clear logistical pipeline/structure exists at all levels;*
- viii. *There is a reliable vaccine inventory management tool;*
- ix. *EPI now has focal points in every county;*
- x. *Cold chain technicians are available at national and subnational levels;*
- xi. *A waste management policy exists at national level, and is implemented in partner-supported areas;*
- xii. *DHIS is regularly providing data on vaccine consumption;*
- xiii. *There is high community acceptance of immunisation;*
- xiv. *Communities across the country are generally more aware of the importance of immunisation;*
- xv. *Healthcare workers are more knowledgeable on the importance of immunisation.*

Disease surveillance and response used to be part of the larger EPI programme. A separate unit was created for ease of management and disease surveillance and response. After devolution, most staff in the counties had limited

knowledge and huge training gaps. These are now being addressed.

Laboratory support services are being revamped to handle the increasing number of test samples from the field. Action is also being taken to address adverse events following immunisation (AEFI), which were initially poorly reported and investigated due lack of trained staff and scarce resources.

The unit has partnered with the Pharmacy and Poisons (PPB) to have a robust and well-funded AEFI section. Kenya is committed to the 1988 World Health Assembly resolution of global poliomyelitis eradication. Towards this end, the country has been implementing the four recommended strategies; Acute Flaccid Paralysis (AFP) surveillance, routine immunisation, National/Sub-national Immunisation Days and mop-up vaccination campaigns.

A lot of progress has been made in the performance of AFP and population immunity in the country since commencement of this initiative. The last indigenous wild poliovirus (WPV) in Kenya was in 1984. However, the country suffered importations of WPV from Somalia and Sudan in 2006 (two cases in Garissa County) and 2009 (19 cases in Turkana County). One additional WPV type 1 case was detected in



Action is being taken to address adverse events following immunization (AEFI) which were initially poorly reported and investigated due lack of trained staff and scarce resources



Kenya in July 2011 and was genetically linked to the 2010 outbreak in eastern Uganda (Bugiri district) and the 2009 outbreak in Kenya. On 16th May 2013, a polio outbreak linked to the epidemic in Somalia was reported in Garissa County at a refugee camp. A total of 14 confirmed cases were reported by the time it was contained in July 2014.

Quarterly polio risk analysis is done based on the following:

- i. *AFP surveillance performance indicators;*
- ii. *Routine immunisation coverage; and,*
- iii. *Surveillance index.*

Based on these, gaps have been identified at sub-national level that require continuous support in terms of capacity building, support supervision, review meetings and conducting polio SIAs. For measles, the current positivity

rate is less than 10 percent and 40-5 percent for samples tested at Kemri's EPI laboratory. It is against this background that the country has decided to introduce rubella vaccine in the routine immunisation programme.

Despite the success achieved so far in measles case-based surveillance, there are challenges to the system. These are similar to those facing polio surveillance, but in addition, measles suffers a poor investigation rate by all counties due to lack of funds for shipment of specimens and inadequate capacity of health workers to conduct investigations due to high turnover of staff.

KENYA'S WAR ON TUBERCULOSIS

The fight against TB in Kenya started soon after the Second World War but gained momentum after independence from Britain. The cumula-

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TIDBITS

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tive experience of dealing with TB over so many years has provided a sound basis for building a strong NTP and, in particular, for countering the impact of HIV, which dramatically increased the incidence of TB. Since 1990, the TB notification rate increased by a factor of six, mainly as a result of HIV.

Despite the increased burden of disease, the National Tuberculosis Control Programme (NTP) has been strengthened, cure rates have improved and rates of case detection have increased. Kenya has reached the 2005 targets for both case detection and cure.

There are now plans to continue improving the quality of programme data through the use of electronic reporting and recording systems, strengthen community involvement in TB control, engage all health service providers, strengthen TB control in congregate settings, re-examine the control of TB in nomadic areas, and to strengthen the control and treatment of drug-resistant TB.

In 2017, Kenya marked World Tuberculosis Day by releasing results of a study by the Ministry of Health (MoH) — the first of its kind since Kenya's independence. It revealed that

TB remains high in Kenya, and experts say the country still lags in the fight against the disease. The survey represents a united front by many committed parties to determine the true burden of tuberculosis, and how to best combat the fourth-leading cause of death in Kenya.

The survey provided an accurate estimate of Kenya's TB burden, revealed the challenges in delivering TB testing and treatment, and identified people with TB not yet detected by the NTP. It was conducted to inform the government on how to effectively respond to TB.

More than 63,000 people across 45 counties were screened for the survey and, for the first time, there was accurate data on TB's prevalence. The report stated that there were more cases than previously estimated, with a TB prevalence of 558 per 100,000 people. TB was found to be higher in men between the ages of 25 and 34 years, urban dwellers, and women over the age of 65. The majority (83 percent) of TB cases were HIV negative, suggesting that broad efforts at controlling TB in people with and without HIV are needed. Most people who exhibit TB symptoms such as dry cough usually buy medicine at local chemists. Early diagnosis is important in treating TB cases, though few

chemists stock TB drugs because they are readily available in public and private health facilities.

The United States Agency for International Development (USAID) and the US Department of Health and Human Services' Center for Disease Control and Prevention (CDC) provided technical and scientific support to the Government of Kenya in the design and implementation of the survey and \$575,000 in funding to conduct it. According to Kenya's National Tuberculosis, Leprosy and Lung Disease Programme, the major factor responsible for the large TB burden is the concurrent HIV epidemic.

Other contributing factors include poverty and social deprivation that have led to a mushrooming of peri-urban slums between cities and the countryside, and limited access to general healthcare services.

The survey findings also reveal that the current practice of screening for TB symptoms and using microscopy as the only test misses many cases. Using GeneXpert, an innovative technology for diagnosis of TB, has led to the detection of 78 percent of TB cases among those screened. The government has increased engagement with the private sector, and carries out targeted approaches through community-based action, and improved community awareness of TB symptoms to bring home the message that "TB can be treated".

In March 2019, the MoH launched a new strategy to diagnose and cure at least 597,000 TB patients by the year 2023. The National Strategic Plan for Tuberculosis, Leprosy and Lung Disease (2019-2023) was launched by then Cabinet Secretary Sicily Kariuki during the commemoration of the World Tuberculosis Day, at Thika Stadium, Kiambu County. She said the strategy would ensure a patient-centered approach to

TB prevention, diagnosis, treatment and care, that calls for elimination of fees associated with diagnostic testing, including chest radiography services.

"This is in line with President Uhuru Kenyatta's commitment to have at least 597,000 people with TB treated by the year 2023, including 55,000 children, 542,000 adults and 4,500 people with Multiple Drug Resistant (MDR) TB, in addition to providing TB Preventive Therapy to at least 900,000 Kenyans at risk," the CS said.

In addition, the CS launched the "Maliza TB County Initiative" to mobilise domestic efforts to support TB prevention, treatment and care. "This initiative will be piloted in Kiambu County. It is envisaged that by 2025, all the counties will be covered," she said. The CS urged all the partners to double their efforts towards finding all the missed cases and put them on treatment as per the national call: "Mulika TB, Maliza TB." In the past one year, Kenya reported and treated 96,434 TB patients, among them 10,087 children and 669 Multiple Drug Resistant (MDR) TB cases. Though TB diagnosis, medicines and nutritional support are offered free in all gov-



Most TB patients who exhibit symptoms such as dry coughs usually buy medicines at a local chemist. Early diagnosis is important in treating most cases and few Chemists stock TB drugs because they are readily available in public and private health facilities

ernment and faith-based health facilities, 40 percent of the cases are missed annually. Currently, the Health Ministry is partnering with the Ministry of Education, Science and Technology in conducting school health programmes focusing on TB prevention.

"I would like to urge all other sectors, including line ministries and corporate entities, to identify and take up their crucial roles on TB response," she said.

Tuberculosis (TB) remains a global threat to public health and is the leading cause of death by a single infectious agent, with 1.6 million deaths in 2017. An estimated 10 million people developed TB in 2017 but only 6.4 million (61%) were notified.

The global targets aim at 95 percent reduction in TB deaths, and 90 percent reduction in incidence compared to 2015 and 0 percent TB-affected families facing catastrophic costs due to TB by 2035 [2]. The true burden of TB needs to be ascertained so that efforts to find all incident cases are scaled up. In countries without high quality vital registration and health notification systems, TB prevalence surveys offer the best method of accurately measuring the TB burden.

Kenya is listed by the World Health Organisation (WHO) among the 30 high burden TB states. Despite the considerable investment done by the government and partners in TB care and prevention in the past 20 years, the disease is still the fourth leading cause of death. The prevalence of bacteriologically confirmed pulmonary TB in those above 15 years in Kenya was found to be 558 (455–662) per 100,000 population. In Uganda, it was found to be 401 (292–509) per 100,000 adult population, Nigeria 524 (378–670) per 100,000 adult population, and Zambia 638 (502–774) per 100,000

adult population. In Tanzania, the prevalence was found to be 295 per 100,000 adult population, and in Ethiopia 277 (208–347) per 100,000 population.

Gender disparity in health seeking behaviour has been observed in HIV and TB care, showing a greater reluctance by men to seek healthcare when sick. In the survey, the confirmed cases, majority (65 percent) of those with symptoms who did not seek treatment were men.

This, together with the finding that men had a disproportionately high burden of TB – two and half times more than women and twice that reported through routine surveillance – shows that Kenya needs specific approaches to remove access barriers, reduce delays in diagnosis and improve management of TB.

In addition, the prevalence to notification gap was highest in the age group 25–34 and those over 65 years old. This indicates that there are many cases in these age groups who are not notified or not diagnosed.

In the inventory study, under-reporting was found to be higher in those over 55 years old, which correlates with what was found in this survey. Operational research should be carried out to identify risk factors and understand why TB is being missed in these two age groups.



Tuberculosis (TB) remains a global threat to public health and is the leading cause of death by a single infectious agent, with 1.6 million deaths in 2017



There have been challenges with securing and protecting funds for vaccine procurement.

TIDBITS

The Unit of Vaccines and Immunization is responsible for the forecasting, procurement, storage and distribution of vaccines from the airport to the regional store. The Government of Kenya currently procures all traditional vaccines (Measles, BCG, Tetanus Toxoid and Polio vaccines), non EPI vaccines such as Hepatitis B, Typhoid vaccine and biological sera such as anti-snake venom and anti-rabies antibodies

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Tuberculosis (TB) remains a global threat to public health and is the leading cause of death by a single infectious agent, with 1.6 million deaths in 2017. An estimated 10 million people developed TB in 2017 but only 6.4 million (61%) were notified





The percentage of individuals with TB symptoms who had not sought care was 67 percent in the survey. They may not have been experiencing severe symptoms yet, or they faced barriers to healthcare. The TB patient study found that TB can impose profound costs on families, with a third of TB-affected households and two thirds of drug-resistant TB-affected households experiencing catastrophic health costs.

In addition, it highlighted that TB is a cause of poverty, with 28 percent of patients using negative coping mechanisms like taking loans, using savings and selling assets to meet medical expenses.

This means that people may not access healthcare due to financial difficulties. Addressing these financial barriers may encourage more people to seek treatment and help close the current case detection gap. These findings call for sufficient investment in community TB health communication to increase awareness and

encourage people to seek early intervention. Health interventions in RMNCH in parts of Kenya have successfully invested in this approach by using school health programmes to target children as change agents within their families. In addition, strengthening systematic screening of selected high-risk groups, like all contacts of people with TB, can help identify patients with early symptoms. Possible solutions lie in optimising TB surveillance to eliminate leakages, and developing and implementing approaches to systematically screen all people seeking care in health facilities.



Men have a disproportionately high burden of TB- two and half times that observed in females and twice more than that reported through routine surveillance

CHAPTER 8



LEVERAGING DIGITAL TECHNOLOGY TO
DELIVER UNIVERSAL HEALTH COVERAGE

CUTTING-EDGE INNOVATION AND TECHNOLOGIES ARE HELPING HEALTH PROFESSIONALS OVERCOME COMMON CHALLENGES

"My government is geared towards basic primary health care services and finding ways of integrating cost-effective technological advances in providing care even at the lowest level possible."

- President Uhuru Kenyatta at the 74th United Nations General Assembly, New York on September 24, 2019.

In the forward to the Kenya National eHealth Policy 2016-2030, then Cabinet Secretary for Health, Mr Cleopa Mailu, acknowledges that while there are concerted efforts worldwide aimed at transforming access, care delivery, patient experiences and health outcomes through electronic health, eHealth remains in its infancy in Kenya. This, writes the Minister, is partly due to social, economic and technical challenges.

"It is noteworthy that some of these challenges include high cost of eHealth systems and innovations; low ICT literacy among users; lack of interoperability of eHealth systems; market fragmentation; weak regulatory framework; and possible violation of patients' privacy and confidentiality."

It is for this reason that the Ministry of Health has recognised and prioritised the need to develop and operationalise a comprehensive National eHealth Policy that clearly outlines the strategic direction on the use of ICTs in the health sector. The Policy will not only benefit the National and County governments by guiding them plan and budget for healthcare

services, but will also propel the realisation of Sustainable Development Goals and Universal Health Coverage.

It is in view of these challenges and the infancy nature of digital technology in Kenya, specifically eHealth, that this chapter will digress a bit to highlight technologies and innovations (not necessarily ICT) that are in use in other parts of the world and in Kenya, in the hope of helping you, the reader - whether for leisure or as a techie, a health worker or policy maker - envision what healthcare driven by thought, creativity and innovation looks like.

Most importantly, the anecdotes will prove that indeed it is important to incorporate technology and innovation in healthcare, especially at this time when the world is galloping fast into the fourth industrial revolution fuelled by digital technology.

This chapter will also highlight some of the health projects by the Government of Kenya that are incorporating ICT, either to record and aggregate patient data or for registration to access services, like those by NHIF.

WHAT HUMAN POOP, A TECHIE BILLIONAIRE AND CLEAN WATER HAVE IN COMMON

In early 2015, billionaire philanthropist and Microsoft founder Bill Gates aroused the global media's curiosity when he coolly sipped water made from human faeces. He said tests were ongoing to begin poop processing plants around the world.

Three years later, on November 2018, Mr Gates hit the stage at the Shanghai Reinvented Toilet Expo event. In his hand was a glass jar of poop, human faeces.

In his speech with the jar beside him, Mr Gates said the faeces therein could contain as many as 200 trillion rotavirus, 20 billion shigella bacteria and 100,000 parasitic worm eggs.

Rotavirus is a contagious virus and the most common cause of diarrhoea in infants and children worldwide, with an estimated over 200,000 deaths annually. Shigella is a family of bacteria which is passed through stool, contaminated food, drinking or swimming in contaminated water. They cause an intestinal disease in children leading to bloody diarrhoea. Parasitic or intestinal worms are nasty; they feed on human beings, commonly as tapeworms and hookworms. They cause stomach upsets, nausea, abdominal pain and many other ailments.

All the above have one thing in common, poor sanitation. But what, pray, is the connection with a tech billionaire?

"Any problem... I will look at how technical innovation can help solve that problem. It's the



In early 2015, billionaire philanthropist and Microsoft founder Bill Gates aroused the media's curiosity when he coolly sipped water made from human faeces. He said tests were ongoing to begin poop processing plants worldwide

one thing I know and the one thing I'm good at."

Ever since retiring as chairman of tech giant Microsoft, Mr Gates has been seeking to change the world through the Bill & Melinda Gates Foundation. In a 2019 Netflix documentary, Inside Bill's Brain: Decoding Bill Gates, Mr Gates expresses his shock by a 1995 article that shows that children are still dying of diarrhoea in most areas of developing countries. He sets out to find a solution to change this. The solution, says Mr Gates, lies in technology and innovation, as he believes that it is the answer to 21st Century problems, from sanitation, nuclear energy to climate change.

He then sets out in 2011 to fund universities, scientists and organisations to the tune of US\$200 million (about Ksh20 billion), challenging them to design an affordable toilet that can solve the world's sewage menace. This is based in his belief that it will be more expensive to build sewers and toilets for emerging cities and slums already in existence but which lack sanitation facilities such as flushing basins.

Thus the Shanghai expo, which showcased 20 bacteria-fighting innovations. Mr Gates also worked with Peter Janicki of Janicki Industries, an engineering and manufacturing company, whom he challenged to come up with an innovation that could solve the world's death-causing poop problem. Mr Janicki developed the Omni Processor, which turned human waste to clean drinking water, and which Mr Gates coolly drunk in full glare of the cameras.

In the Netflix documentary, Mr Janicki explains how the Omni Processor, which took him and a team of engineers 18 months to develop, works. "You empty all the pit latrines, and instead of dumping the waste in the rivers (before this is a graphic display of how the sewage is emp-

tied from pit latrines around the developing nations, dumped in sewers and rivers in slums where people live and actually fetch water for drinking and cooking), you put it in a central place". The processor has a centralised location, which evaporates the water. The dirty water is put through a cleaning system to produce drinking water.

The remaining solids are burned in a fire, generating steam is used to generate electricity, and which in turn runs the Omni Processor. The by-product of the human waste is clean water, electricity and ash. The process doesn't use outside energy. It generates its own energy – clean, green energy, which saves the planet from the effects of warming as a result of greenhouse gases.

"The water tasted as good as any I've had out of a bottle," wrote Mr Gates in his blog, "and having studied the engineering behind it, I would happily drink it every day. It's that safe," he added.

The Omni Processor has been in use in Dakar, Senegal, since May 2015, reaching about a third of the population. So why bring this into a book about Universal Health Coverage?

Though what has been described above is more of a technical innovation, the world is moving fast to digital technology and innovations that will change the future of all human experience, including in medicine and health.

Indeed, we are moving fast into the fourth revolution. The third revolution used electronics and information technology as described above. The second revolution used electric power which led to mass production, while the first harnessed water and steam to mechanise production. According to an article by the World Economic Forum, the fourth industrial revolution is build-

ing on the third. It is the digital revolution that has been occurring since the middle of the last century. It is characterised by a fusion of technologies and is blurring the lines between the physical, digital and biological spheres.

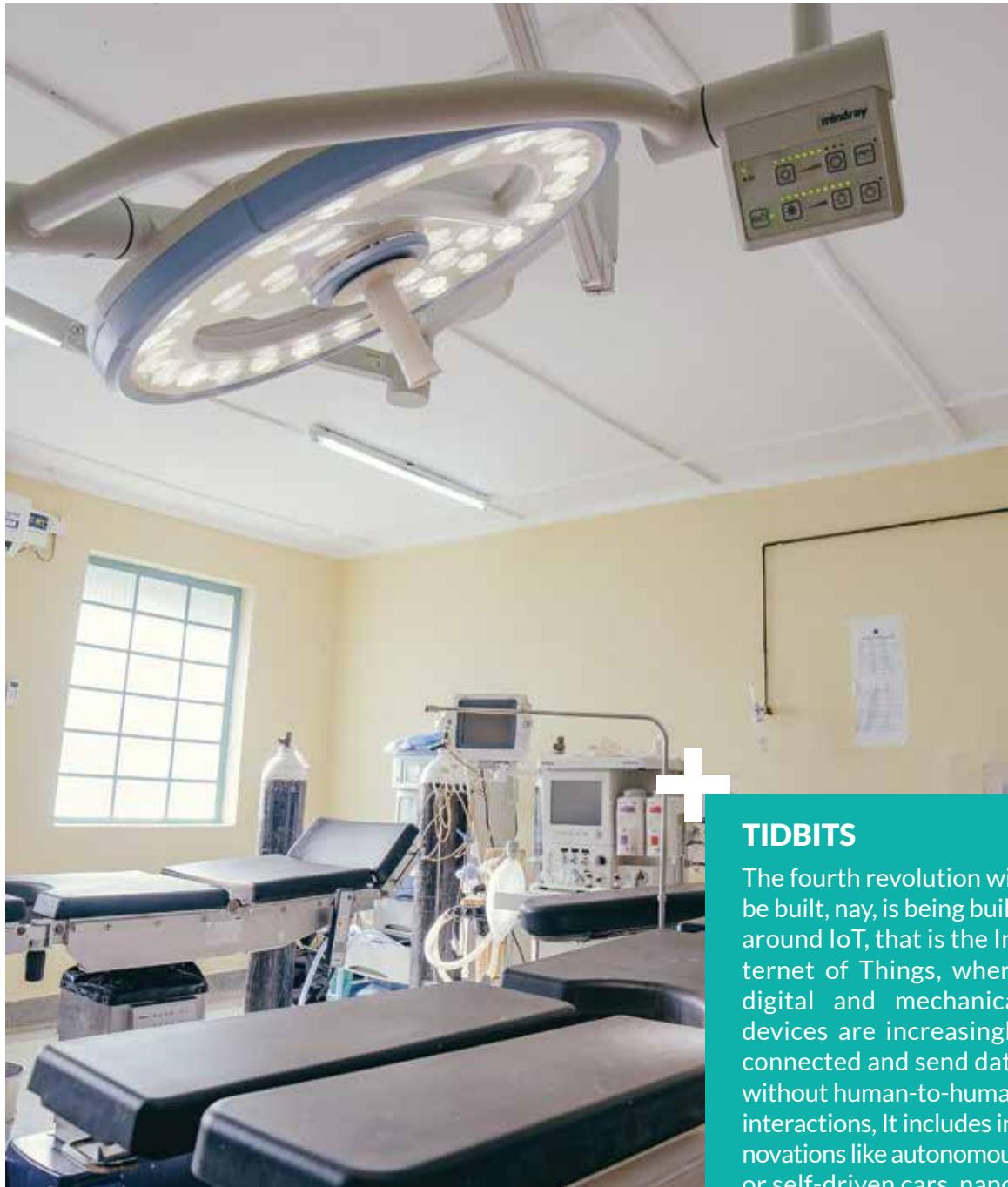
At its centre is knowledge shared in real time, since the digital revolution is fuelled by fast Internet connectivity and mobile phone networks. This technological revolution has been defined as disruptive, that is, it starts slowly, like a simple application, and then integrates in the market to push off established systems, habits and brands with superior alternatives.

Examples include taxi-hailing mobile apps like Uber or Bolt. Another example is Airbnb, where homestays have been taken online, threatening the existence of traditional hotels as we know them. The fourth revolution will be built, nay, is being built, around IoT, that is the Internet of Things, where digital and mechanical devices are increasingly connected and send data without human-to-human interactions. It includes innovations like autonomous or self-driven cars, nanotechnology, biotechnology, artificial intelligence (AI) and robotics.

Indeed, today, robots are already in use in hospitals, where they assist in surgery through non-invasive tiny incisions instead of inch-



A recent study by researchers from the Google Health and Imperial College London said that a computer algorithm outperformed six radiologists in reading mammograms



Digital technology and innovations are changing healthcare delivery.

TIDBITS

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es-long incisions common with traditional surgery. Robots and AI are said to be more accurate than human beings. A recent study by researchers from Google Health and Imperial College, London found that a computer algorithm outperformed six radiologists in reading mammograms.

They had designed and trained a computer model on X-rays from nearly 29,000 women. Traditionally, it takes two radiologists to analyse each woman's X-rays. The human experts also know the woman's history to help them in diagnosis, but the AI model was not given such privilege. Regardless, it was as good as the double readings of the radiologists.

Robots are already being used to relieve medical personnel of some routine duties, like monitoring patients' vitals and alerting medical personnel in case there is need for human interaction. In countries like Japan, the government invested

in robots as early as 2013, allowing the health ministry to roll out a programme designed to meet workforce shortages and help prevent injuries by promoting the use of nursing care robots that assist with lifting and moving patients. This is according to Louise Aronson in an opinion piece for the New York Times.

Aronson noted that, "A consortium of European companies, universities and research institutions collaborated on Mobicerv, a project that developed a touch-screen-toting, humanoid-looking "social companion" robot that offers reminders about appointments and medications and encourages social activity, healthy eating and exercise.

In Sweden, researchers have developed GiraffPlus, a robot that looks like a standing mirror-cum-vacuum cleaner, which monitors health metrics like blood pressure and has a screen for virtual doctor and family visits."



This is a demonstration that the world is geared towards digital revolution. It is a wake-up call for Kenya to invest in the same if the country is to achieve the Universal Health Coverage vision. This is in addition to improving the economic livelihoods of citizens, especially the youth, who stand to lose a lot if they are not re-educated with 21st Century digital skills.

But there is hope. Already there are many government-led, or public-private partnerships, and civil society, NGO-led investments which are taking advantage of technology to achieve healthcare in Kenya. Let us look at just a few:

Telemedicine: Where patients in ‘forgotten places’ are receiving five-star care virtually

“Indeed, connectivity, in one form or another, has been a necessary component of medical care delivery throughout history. Telemedicine provided the tools for connectivity when providers and recipients of care could not be in the same place and time.” – Bashshur and Shannon, ‘History of Telemedicine.’

Telemedicine is the remote use of telecommunications technology by healthcare practitioners to evaluate, diagnose and treat patients.

The World Health Organisation defines telemedicine as: “The delivery of healthcare services, where distance is a critical factor, by all healthcare professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of healthcare providers, all in the interests of advancing the health of individuals and their communities”. This phenomenon is becoming increasingly popular, especially in far-flung, marginalised areas, where there are few health



IMPROVING KENYA’S WATER AND SANITIZATION STANDARDS

The WASH joint monitoring programme report (2019) by The World Health Organization and UNICEF found that only 59% of Kenyans have access to basic water services and only 29% have access to sanitary services.

Clean water, basic toilets and good hygiene practices are essential for the survival of children. Water and sanitation-related diseases are one of the leading causes of death for children under five years of age. Achieving universal access to drinking water and sanitation by 2030 will be challenging given current levels of investment, projected population growth and climate variability. Kenya has the third-largest number of people in sub-Saharan Africa who drink directly from contaminated surface water sources - 9.4 million people.

An estimated 5 million Kenyans (10 per cent) practice open defecation, while only 14 per cent have hand-washing facilities with soap and water at home. Access to water, sanitation and hygiene is a problem in many schools, with the number of latrines insufficient given the population of pupils.

centres and health workers. A good example is Garissa County, where people travel long distances through precarious, hot and dry terrain to seek healthcare. The Kenya Demographic Health Survey (KDHS) of 2014 shows that on average, a woman in Garissa travels 35 kilometres to the nearest health centre.

This is a county, out of Kenya's 47, with the highest rate of maternal deaths. Maternal and infant deaths are good indicators of the health status of any region or country. In Garissa, according to the KDHS, the infant mortality rate is 33 children out of 1,000 live births annually. The national average is 22 out of 1,000 live births per annum.

Kenya's doctor-to-patient ratio stands at one to 17,000, against the recommended World Health Organisation ratio of one doctor for every 1,000 patients. This means that the situation is worse in places like Garissa. The health workforce report indicates that Garissa had 19 doctors in 2015. When it comes to children-specialised healthcare, you need a paediatrician. Kenya has only 295 paediatricians, with Garissa, a county of one million people, having only two.

But thanks to telemedicine, residents of Garissa, especially in Dadaab, are now reaping the health benefits of technology. This is courtesy of Gertrude's Children's Hospital in Nairobi.

An article by Gardy Chacha of The Standard newspaper highlighted how telemedicine works. He narrated the story of four-month-old Abdirahman Abdi who was brought to Dadaab Sub-County Hospital in Garissa writhing in pain. The mother said the child had lost appetite, and that he had not been breastfeeding. He was diagnosed with acute malnutrition. The mother, Yurub Mohamed, was told that the boy needed to see a paediatrician immediately. But

since there was no child specialist stationed in Dadaab, Yurub had two daunting options; either travel for three hours through rough terrain to Garissa Level Five Hospital, or take the 400-kilometre journey to Nairobi.

But thankfully, technology came in handy and mother and child did not need to waste precious time on the road. Abdi was examined by Dr Ren-sion Mukhwana of Gertrude's Children's Hospital 400 kilometres away in Nairobi through a computer enabled with internet connection.

"Using a set of computers and some accompanying devices, Dr Mukhwana was able to examine Abdi from 414 kilometres away. He was able to read the boy's vital signs, including his heartbeat, blood pressure and temperature," wrote Chacha. The computers on both sides - in Nairobi and Dadaab - are video enabled, with the one in Dadaab zooming on the patient so that the doctor can read vital signs miles away, and even record sounds.

The only thing that lacks from the regular doctor check-up is the touch, which in the case of Dadaab, is complemented by the clinical officer stationed there. "When I am examining a patient, I use sight, hearing and feeling. Images and sound are promptly transmitted.



When I am examining a patient, I use sight, hearing and feeling. Images and sound are promptly transmitted. The only thing I cannot do is use my hands to palpate the patient



The only thing I cannot do is use my hands to palpate the patient," said Dr Mukhwana. With funding from the United Kingdom's Department for International Development (DFID), through the County Innovations Challenge Fund, the Gertrude's telemedicine technology mimics the best in the world. It comprises a computer, a video camera and a speaker. To help in diagnosis, another computer is connected to a medical diagnosis and patient monitoring system.

Since its launch in 2017, Gertrude's says the system has successfully diagnosed and treated over 60 patients. Similarly, the Aga Khan University Hospital, Mombasa, in August 2018, launched a telemedicine programme. Using digital medical equipment, and connected to high-speed fibre network, the hospital installed digital stethoscopes and multi-purpose scope equipment for examining patients' vitals to enable diagnosis in real time. Through this digital technology, the hospital is able to record and store data on the Health Management Information System



TIDBITS

Using digital medical equipment, and connected to high speed fibre network, the Hospital installed digital stethoscopes and multi purpose scope equipment for examining patients' vitals to enable in diagnosis in real time. Through this digital technology, the Hospital is able to record and store data on the Health Management Information System, HMIS, which is linked to its clinics meaning if a patient travels from Kilifi to Voi, they needn't go the pain of being newly tested. Their records will be available at the click of a button.



(HMIS), which is linked to its clinics. Therefore, if a patient travels from Kilifi to Voi, they needn't go through the pain of being tested afresh. Their records will be available at the click of a button. The hospital's management says the telemedicine system benefits about 200 patients daily. But while Gertrude's Children's Hospital uses computers for telemedicine, mobile phones are increasingly becoming popular as telemedicine devices. Mobile phone use in Kenya, according to the Communication Authority, is now at 95 percent, with a 50 percent smartphone penetration.

A good example is Safaricom's M-TIBA, a mobile phone application that allows users to save funds for healthcare. This is groundbreaking in a country where only about a quarter of the population has any form of health insurance, according to data from the Kenya Integrated

Household Budget Survey (KIHBS). Subsequently, about 1.5 million Kenyans are pushed below the poverty line because of medical bills, according to research by health experts Thomas Maina and Jane Chuma.

M-TIBA, which has over 4.5 million registered users, ensures the money saved can only be used for healthcare at selected healthcare providers. This affords Kenyans, many of whom pay for their health care out-of-pocket, quality, fair-priced and convenient medical service.

Indeed, the public sector, in the spirit of public-private partnerships, has seen most counties, like Kisumu, embracing M-TIBA to deliver Universal Health Coverage. The application has received recognition around the globe, noticeably during the 2019 UN High Level Meeting on UHC. During the meeting, World Bank Group

President, Mr David Malpass, described M-TIBA as a new model for health financing and delivery.

There are other mobile apps in use by various sector players that, if scaled up, can revolutionise healthcare and accelerate the achievement of Universal Health Coverage. Unfortunately, as the National eHealth Policy notes, most of these technologies are donor-funded, meaning that when the contracts time expire, or the donor funds are depleted, the innovations are rarely scaled up or adopted beyond the pilot phase.

Nonetheless, a number of organisations have continued to introduce ground-breaking technologies, like the Health-E-Net, which specialises in remote consultations. Health-E-Net have a mobile app known as Gabriel Teleconsultations, which is being piloted in Turkana.

Turkana is similar in terrain to Garissa – dry, hot and marginalised – and its residents also travel long distances to seek healthcare. Many die on the way, including mothers in childbirth. The Gabriel Tele-consultations app allows a health worker in any of Turkana's remote locations to consult a doctor or specialist in the county's headquarters in Lodwar.

The technology can be used offline and in a 2G environment. This is significant as Turkana doesn't have a well-developed internet network

like other parts of the country close to the capital which use fast 4G fibre connection.

The app records patient data, images, videos and radiology images, which can be reviewed by an expert anywhere on the world. This is very important since, in Kenya, medical records are still entered manually. This means that if a patient in Turkana was to travel to, say Nairobi, they would have to be examined afresh, since the health workers in the city will not have access to the patient's records.

This is not only time-consuming, but also expensive, in a sector that is already reeling from underfunding and decreasing donor funds. Thus, to achieve Universal Health Coverage, the country needs to invest in digital technology, not only for diagnosing and treating patients remotely, but to also save patients' data, which can be shared or made available to all providers – private to private, public to public and private to public – whether affiliated to each other or not.

Hospitals like Thika Level 5 have already embraced digital data storage. With partnership from Africa Research Africa, a local NGO, the hospital has a paediatrics and lab information management model for electronic medical records already in use. At the same time, the hospital is working on a similar, but integrated module, for reproductive and sexual health to support antenatal, maternity and gynaecological services.

"In Kenya, mobile penetration continues to rise, according to the Communications Authority," says Kelvin Waweru of Health-E-Net, "where nine in 10 people have a cellphone. Similarly, Internet use is on the rise, with the majority accessing Internet through mobile. Thus, embracing innovations like mobile telemedicine will help address different aspects of UHC, like



M-TIBA, which has over 4.5 million registered users, ensures the money saved can only be used for healthcare at selected healthcare providers



availability of human resources, knowledge transfer to nurses in remote areas, and access to specialists. This will reduce unnecessary referrals, improve quality of care, and save Kenyans untold pain and suffering.”

SELECTED COUNTIES AND DIGITAL TECHNOLOGY USE TO ACHIEVE UHC

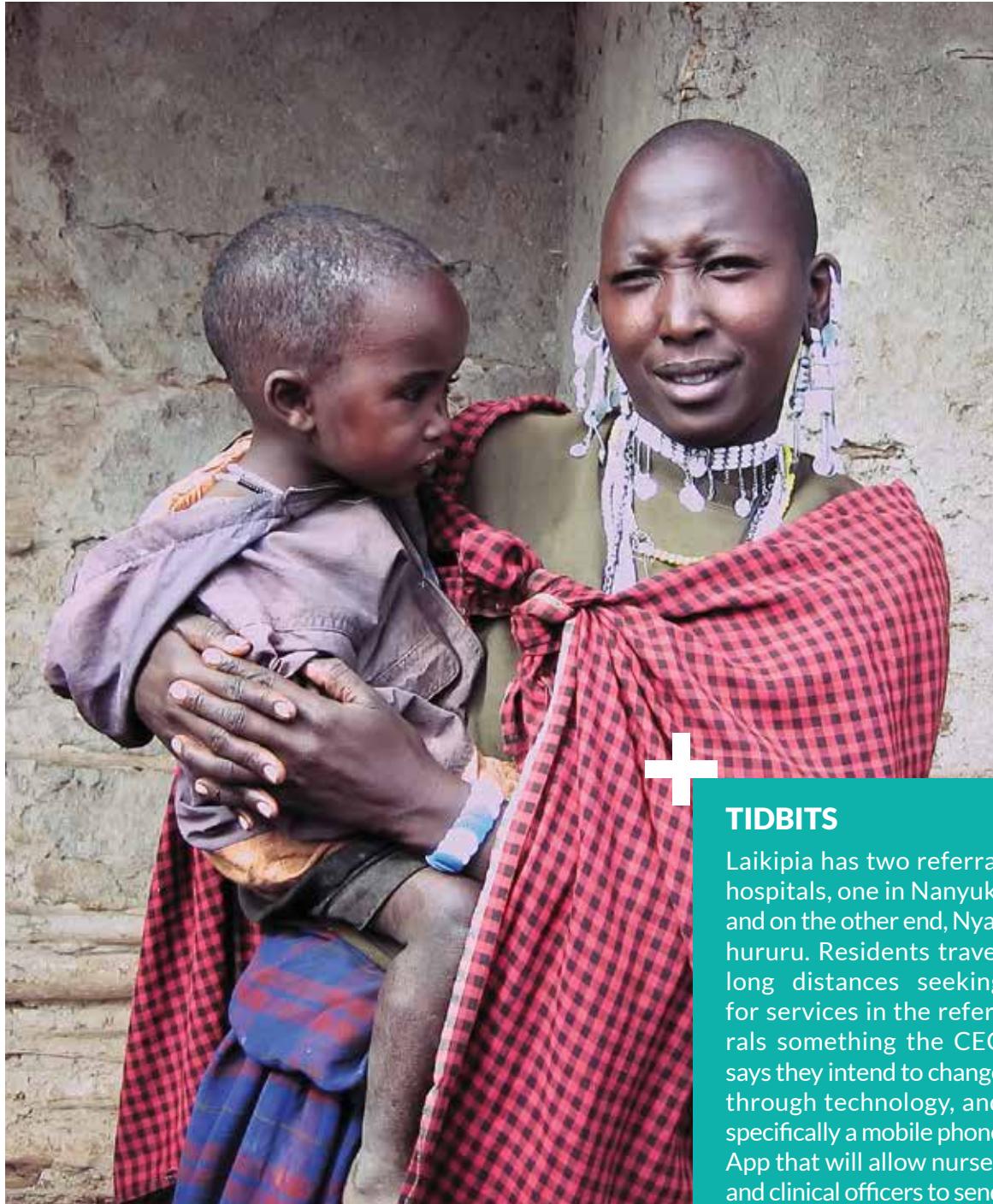
LAIKIPIA

Health is the largest devolved sector in Kenya, following the promulgation of the 2010 Constitution. In a study titled Challenges of the Devolved Health Sector in Kenya: Teething Problems or Systemic Contradictions?, Leah Kimathi of Jomo Kenyatta University of Agriculture and Technology observed that the rationale for devolving the sector was to allow county governments to design innovative models and interventions suitable to their unique needs and contexts. It was also supposed to encourage effective citizen participation and make



TIDBITS

The Kenyan health sector is the largest to be devolved following the promulgation of the 2010 Constitution. According to Leah Kimathi of Jomo Kenyatta University of Agriculture and Technology, the rationale for devolving the sector was to allow the county governments to design innovative models and interventions that suited the unique health needs in their contexts, encourage effective citizen participation and make autonomous and quick decisions on resource mobilization and management of possible issues.

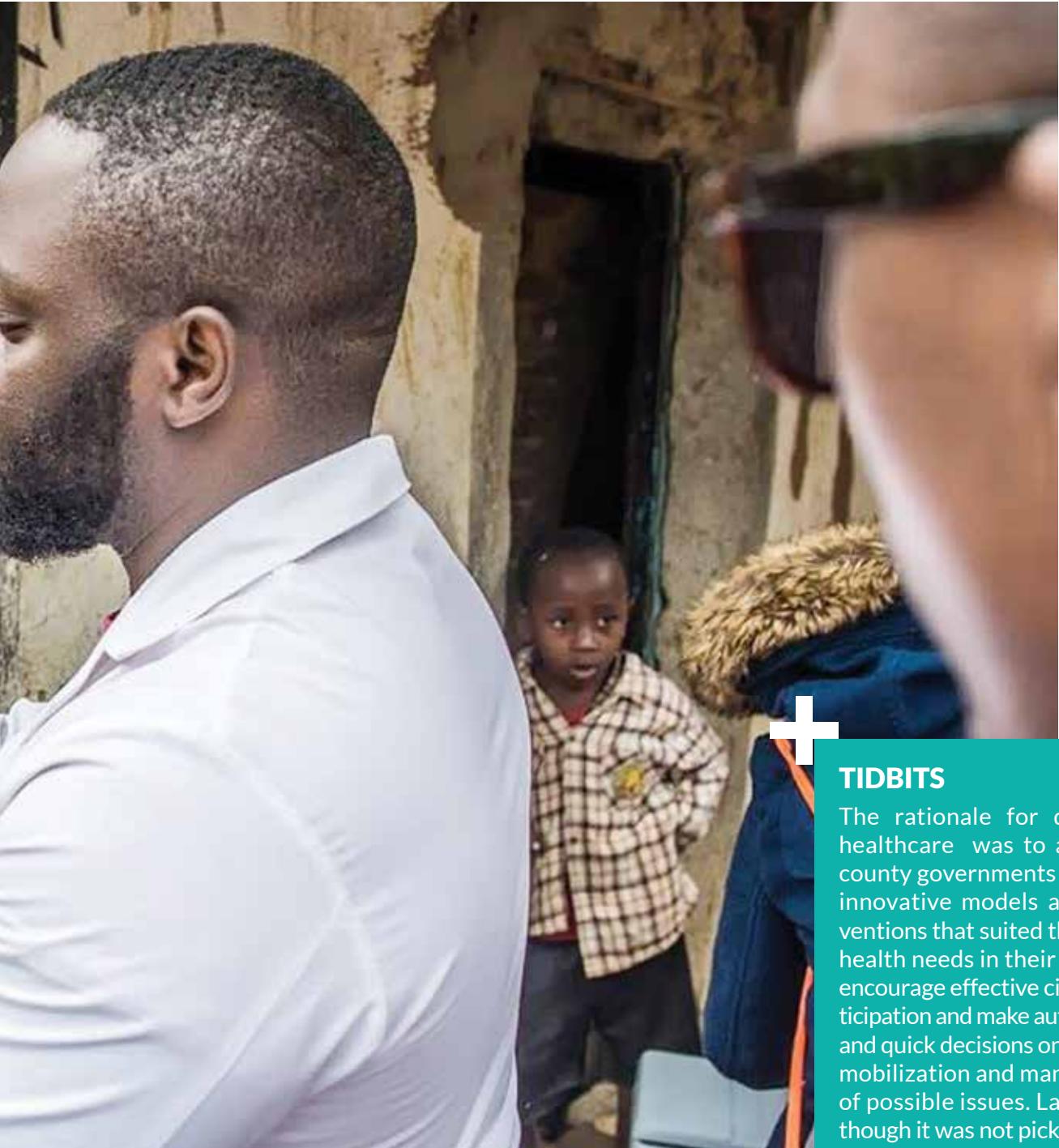


TIDBITS

Laikipia has two referral hospitals, one in Nanyuki and on the other end, Nyahururu. Residents travel long distances seeking for services in the referrals something the CEC says they intend to change through technology, and specifically a mobile phone App that will allow nurses and clinical officers to send and share videos and images of diagnostic samples.

Kenya's health sector was devolved following the promulgation of the current Constitution in 2010.





TIDBITS

The rationale for devolving healthcare was to allow the county governments to design innovative models and interventions that suited the unique health needs in their contexts, encourage effective citizen participation and make autonomous and quick decisions on resource mobilization and management of possible issues. Laikipia, although it was not picked for the UHC pilot study is one of the counties that has shown interest in embracing technology to achieve the health of its people.



autonomous and quick decisions on resource mobilisation and management of issues.

Although Laikipia was not one of the counties picked for the UHC pilot study, it has shown interest in embracing technology to realise good healthcare. The Laikipia County Health Executive, Lenai Kamario, says they intend to streamline the referral system through technology, so that nurses and clinical officers in dispensaries can consult specialists based in major hospitals.

Laikipia has two referral hospitals, one in Nanyuki, and the other in Nyahururu. Residents have been forced to travel long distances to seek services at referral hospitals, something the Health Executive says they intend to change through technology. Specifically, the county plans to deploy a mobile phone app that will allow nurses and clinical officers to send and

share videos and images of diagnostic samples. Health workers will also be able to contact medics in other areas of the country and even abroad.

Similarly, Kisii County has reported that it is in the process of starting telemedicine.

OTHER MEASURES IMPROVING HEALTH OUTCOMES

HUMAN MILK BANK

Every second around the world, a baby dies. In a year, about one million babies out of 15 million born prematurely, die. In Kenya, according to WHO, an estimated 196,000 babies are born prematurely, while eight percent are of low weight – less than 2.5 kilogrammes. This is according to the Born Too Soon, The Global



Action Report on Preterm Death by WHO, Save the Children, among others.

Breastfeeding is one sure way of saving infants' lives. Unfortunately, Kenya loses an estimated 20 women every day in childbirth, or 362 women for every 100,000 births. There are other reasons a baby may be denied the life-giving chance of breastfeeding. One, the mother may be sick, or has delayed lactation due to premature birth, or the baby has been abandoned.

WHO recommends breast milk as the first superior feeding option for all newborns. Breastfeeding is the first preventive health measure available to a child at birth and also enhances mother-infant relationship. It is nature's first form of immunisation, enabling infants to fight potentially serious infections.

Breastmilk contains growth factors that enhances the maturation of an infant's organ systems. For this reason, WHO recommends exclusive breastfeeding for the first six months. The health benefits of exclusive breastfeeding include protection from infection, allergies, some chronic diseases and childhood cancers, as well as sudden infant death syndrome.

So what happens if, for any reason, a baby cannot get breastmilk from the mother? Some people feed children with formula milk, which increases the risk of diarrhoea, bacterial infections and feeding intolerance.

In traditional societies, babies and children belonged to the community. In a case where a mother was unable to breastfeed or died soon after giving birth, a lactating mother in the community would step in and breastfeed the baby alongside hers. This is known as wet nursing. This tradition has been borrowed by health workers in the form of human milk banks. Lac-



INSURANCE SUBSIDY BOOSTS ACCESS TO HEALTHCARE

While access to quality health care is a constitutional right, millions of Kenyans cannot afford to pay for health services at public or private clinics. That is changing, thanks to a collaborative Health Insurance Subsidy Program (HISP), launched by the government in April 2014. The World Bank Group (WBG)'s IFC and IDA support the program, as well as other development partners including UKAid and the Bill & Melinda Gates Foundation-funded African Health Markets for Equity programme.

HISP is an initiative to extend financial risk protection to Kenya's poorest through the National Hospital Insurance Fund (NHIF) by providing them with a health insurance subsidy, which covers both inpatient and outpatient care in public and private health facilities.

The first phase of the program covered 125,000 Kenyans in 23,500 families, selected from a poverty list developed by the Ministry of Labour, Social Protection and Services, across the country's 47 counties. These results were then validated at community level to ensure the program benefits the neediest.

tating mothers with excess breastmilk can donate the milk, which is screened, just like with blood donations. The milk is then pasteurised and stored for long periods of time.

The first milk bank is believed to have been established in 1909 by Theodor Escherich in Vienna. The following year, America got its first bank at the Boston Floating Hospital.

South Africa was for a long time the only country in Africa with a human milk bank (HMB), until Kenya, acclaimed as an early adopter in health innovations, opened its first HMB in 2019 at Pumwani Maternity Hospital, Nairobi. This was made possible through a partnership with PATH, Africa Population and Health Research Centre (APHRC) and the Ministry of Health.

In 2017, the consortium came up with national human milk banking guidelines.

The process of donating milk includes screening and recruiting healthy mothers with excess breast milk as donors. The screening involves testing for syphilis, HIV and Hepatitis B and C. Donors express milk using either manual or electric pumps.

The milk is then pasteurised - this involves heating the milk in a water bath at high temperatures followed by rapid cooling.

Thereafter, the milk is frozen and stored in the bank at -20 degrees. The milk is availed to deserving children through prescription by a health professional.

The Pumwani HMB was opened in March 2019 and is already benefiting children who would have otherwise been fed on formula milk.

KANGAROO MOTHER CARE

The lifesaving innovation of donating and pasteurising human breast milk is complemented by yet another crucial and lifesaving practice known as Kangaroo Mother Care (KMC). This practice is not driven by technology, but rather inspired by nature. KMC care is given to preterm infants through skin-to-skin contact, usually by their mothers or any other member of the family.

The infants are held by the caregivers chest-to-chest, much like the marsupial Kangaroo that carries its young in a natural pouch. KMC is used in areas without electricity or incubators. According to medics, KMC is better than incubators, as it provides a mother's warmth, thus helping in the bonding between mother and child, as well as breastfeeding. Recommended by WHO, KMC was first tried in 1978 in the Instituto Materno Infantil Nicu in Bogota, Colombia, following high infant death rates in that country.

According to the International Federation for Gynecology and Obstetrics (FIGO), 450,000 babies could be saved each year if KMC was provided to 95 percent of babies. In Kenya, over 20 counties use KMC, including at hospitals



Scaling human milk is a cost effective way to save the needless death of infants while saving parents mental stress and also money which could otherwise be used for treatment

like Pumwani and Kenyatta National Hospital. At Pumwani, the KMC unit has 20 beds and is supported by Unicef and Save the Children. It is hailed by various partners as a success story, and is the reason Pumwani hospital was picked to pilot the milk bank project in the country.

The results of scaling human milk banking and KMC to all corners of the country is a no-brainer; it's a cost-effective way to halt the needless death of infants while saving parents mental stress. It also saves money that can be used in treatment.

DIGITISATION OF DATA IN KENYA'S HEALTH FACILITIES

Kenya enters its patients' data daily on what is known as the District Health Information System (DHIS2). Besides recording, DHIS2 also validates, analyses and aggregates the data. It is basically the national 'hive' for data management and analysis, from monitoring health programmes to facility registries and logistics management. The data can be captured on desktops, laptops and smartphones, in addition to being available offline, hence ideal for rural areas.

Being digital, DHIS2 allows the collection and integration of data from various sources, which can be used in real time, from people in different locations. Health workers, the government and NGO users can gain access to the system by signing up online with a username and password.

According to the developers, the DHIS2 platform is coordinated by the Health Information System Programme (HISP) at the Department of Informatics at the University of Oslo, which actively promotes DHIS2 as a global public good.

The core aims of HISP are, through research and development, to strengthen national health information systems, enable countries master and manage their systems and wider health information architecture, and to provide countries with the capacity to carry this out. It also aims to improve local management of healthcare delivery and information flows, fostering collaboration and sharing best practices across developing countries.

Kenya is one of the over 70 countries that has adopted the use of the open source software. Other African countries include Tanzania, Uganda, Rwanda, Ghana and Liberia, as well as countries in Asia and Latin America.

EMERGENCY MEDICARE GOES HI-TECH

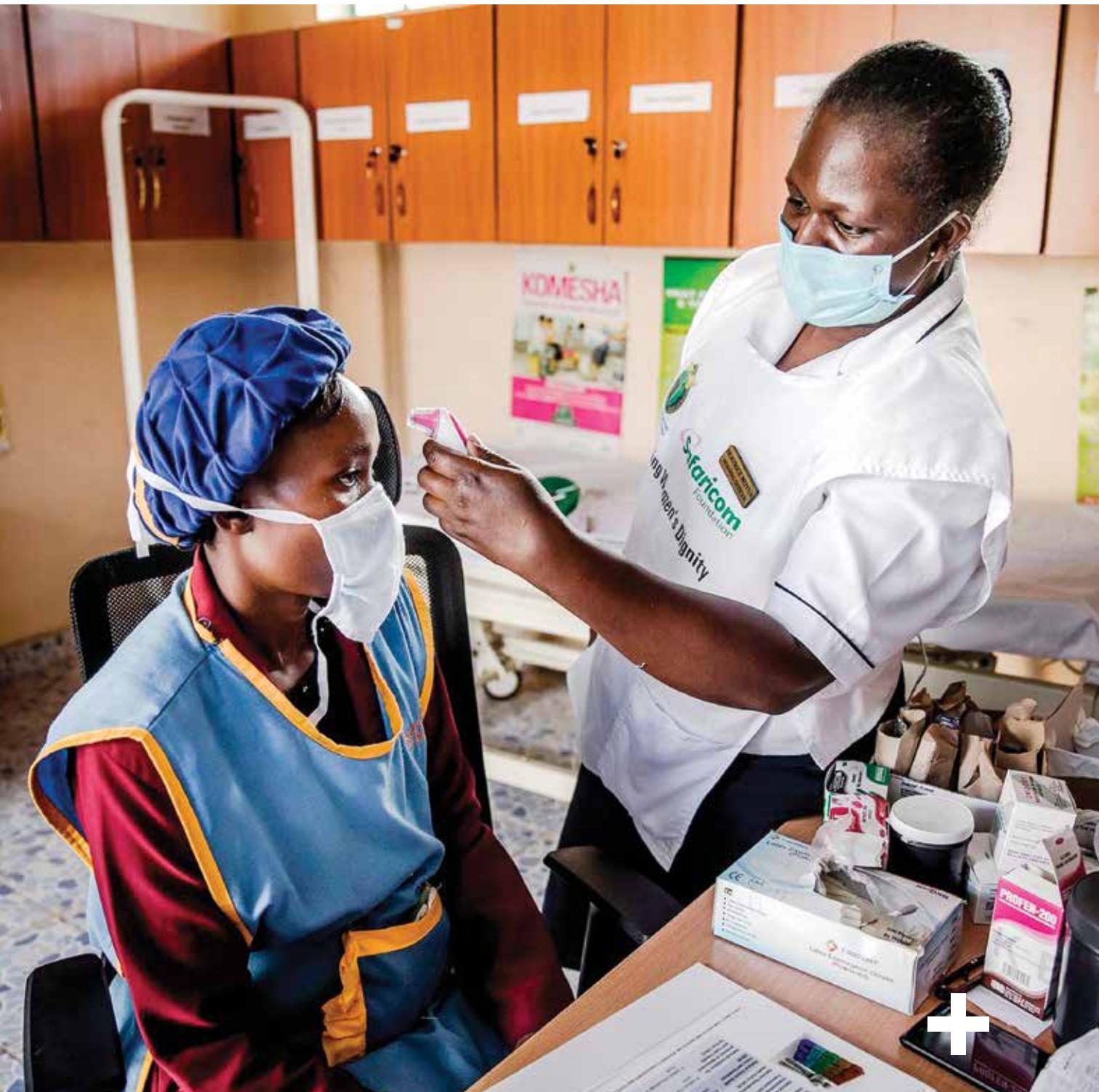
What would you do if you were with someone who suddenly collapses due to a heart attack or other ailment, or if you or a close relative, friend, colleague or family is involved in an accident? What would you do, knowing that they need immediate medical attention, but have no idea where to rush them?

That is a real situation that most Kenyans can find themselves in. Most people are not aware of their medical conditions, are unfamiliar with first aid and would not know what to do in case of an emergency.

For instance, sicklers, or people with sickle cell disease, often get pain attacks which wrack their bodies, and need emergency care. However, when rushed to hospital, they are made to wait in the queue like everyone else, whereas they should be rushed for treatment with painkillers like morphine. Most die as a result of this neglect.

“

Kenyans basically are not aware of their health, first aid and what to do in case of an emergency. For instance, sicklers, or people with sickle cell disease most times get pain attacks regularly which wrack their bodies and they need emergency care





Indeed, emergency medicine in Kenya is just now getting traction, following the realisation that not many health centres can offer emergency services.

This led to the establishment of the Emergency Medicine Kenya Foundation (EMKF). Recently, EMKF partnered with the Ministry of Health, BP Systems Online and Google to map public hospitals that offer emergency medical care services across the country.

All you need is a smartphone connected to the internet. A search on Google Maps for 'emergency centre near me' will guide you to the nearest facility. Apart from giving the exact location of the emergency centre, the search will also detail respective centres' opening times, contact numbers and the type of emergency services offered in public hospitals.

By May 2019, there were 178 such facilities mapped online.

Medics have a term to describe a life and death situation during an emergency; the golden hour. This means that a patient requires an hour to receive medical care after an emergency, failure to which they might develop further complications or worse, lose their life. Fortunately, according to Google Kenya, there have been increased enquiries online on hospitals that offer emergency medical care, meaning that people are aware of the life-saving service.

Google data from March 2018 when the mapping campaign began to March 2019, indicated that there was a 250 percent increase in total searches on Google Search and Maps for the 178 public health facilities.

In the same period, there was a 32 percent increase in visibility on Google Search for the mapped facilities, as well as a 38 percent increase in direction requests to public health facilities with emergency centres. Additionally, there has been a 177 percent increase in phone

calls to the mapped public health facilities with emergency centres within the same period.

KENYA MASTER HEALTH FACILITY LIST

Similarly, the Ministry of Health has an online application that lists all health facilities in geo-coded locations, namely the Kenya Master Health Facility List (KMHFL).

According to WHO, a master facility list (MFL) is a single, centrally maintained database of health facilities with a unique code for each facility and includes information on hours of operation, contact person, owner, facility classification, number of beds, types of services provided (e.g. Emergency Medical Obstetric Care and HIV testing), and geographic location.

In Kenya, the Master Health Facility List is an application with all health facilities and community units. Each health facility and community unit is identified with a unique code and its details describing the geographical location, administrative location, ownership, type and the services offered.

Publicly available online, KMHFL uses Global Positioning System (GPS), which directs a user to the exact location of a health centre or community units. Besides directing you to the nearest health facility, it saves you time trying to locate services needed. This is because a Master Facility lists all health facilities in a country (both public and private) and is comprised of a set of administrative information and unique identifiers and services offered.

It is especially useful for administrative purposes, the reason an MFL must contain contact information and the type of facility. In its service

domain, the MFL contains a basic inventory of available services and facility capacity, providing essential information for health systems planning and management. “Consolidating health systems information through the MFL will improve record-keeping and reporting efficiency as well as transparency in the health sector,” says WHO.

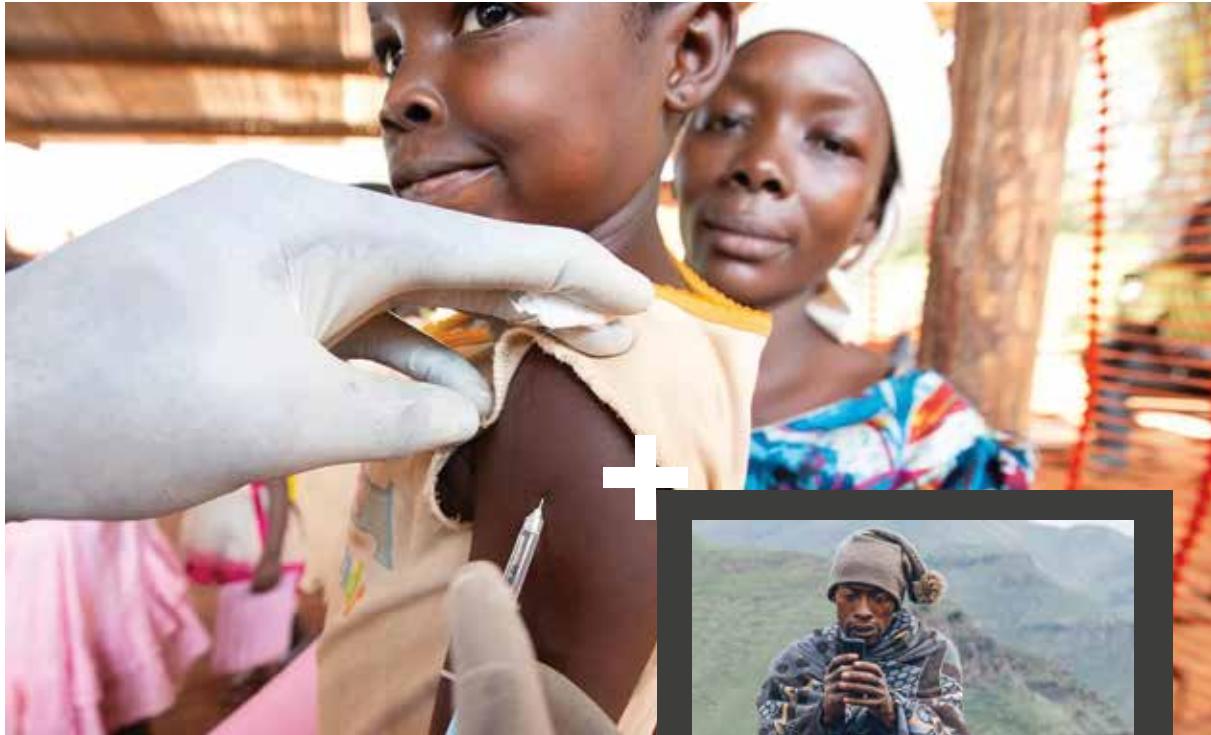
In the website, you are able to view and geolocate health facilities, stand-alone health facilities and a community health unit.

A health delivery structure provides service and has one or more departments operating within it, like the outpatient, pharmacy and laboratory. In KMHFL, a facility is described by its unique code, ownership type, administrative and geographic location, and services provided. A stand-alone health facility is one that offers services that complement other facilities – consultative and curative services – while a community health unit is a structure within a defined geographic area covering a population of approximately 5,000 people. Each unit is assigned five community health extension workers (CHEWs) and community health volunteers (CHVs).

KEMSA'S ONLINE AND E-MOBILE DRUG PURCHASE PROGRAMME

In a public-private partnership with mHealth Kenya, the government's medical supplies agency, the Kenya Medical Supplies Authority (KEMSA) digitised its logistics services.

mHealth, a software development enterprise for service delivery companies, developed a mobile and web-based system that is integrated to the Logistics Management Information System (LMIS).



The KEMSA eMobile/LMIS system is a commodity management application implemented in the 47 counties.

Using the system, the counties and other facilities digitally order for medical supplies directly from KEMSA. It allows them to track the orders in real-time. This saves on time, while making the process transparent and efficient. The mHealth says that the eMobile management information system has reduced the turnaround time from order to receipt of commodities at facilities from 64 days to seven days.

Further, KEMSA has an e-mobile platform that includes a module designed to provide information to stakeholders about a health facility. This includes key decision makers in the health facilities who ordinarily do not need access to the ordering system, but need important data such as order status, order fill rate, order turna-



TIDBITS

By introducing mobile banking, most people no longer need to go to the bank physically, or even to the ATMS. See, when your money hits the account, be it from salary or payment from any other source, your phone dings with a message alerting you of the payment. Using the same phone, you log into your bank App. You can either transfer the money to your landlords account, or to your Mpesa wallet for ease of use. Indeed, popular of this is the National Health Insurance Fund where one can now forego the traditional queues to register at a click of a button.

round time, county/facility statements/balances and facilities' programmes reporting rates. The KEMSA Logistic Management Information System is integrated in the Enterprise Resource Planning (ERP) platform that gives visibility to the customer once an order has been made through LMIS.

The KEMSA eMobile only compliments the LMIS by providing visibility and information concerning their orders, which is done in the LMIS, thus the eMobile comes at the tail end of the process after it is initialised in the LMIS.

The application allows for visibility of reporting rates that would allow the key stakeholders to see which facility has reported for which programme. The eMobile enables facilities to confirm their receipt of supplies, measure turn-around time, and view county statements fill rate and order status.

It targets public hospitals, especially in remote areas to ease procurement of medical supplies from KEMSA. Various health sector partners, including Ministry of Health departmental staff, donors, and facility support partners, also have access to relevant information at facility and national level to aid in decision making.

The public too is not left in the dark as one is able to check whether specific drugs are available in their nearest health facility. This means that a patient doesn't have to waste time going to a facility which has run out of a drug they need. NHIF leads in digitising registration requirements

Kenya is known for its long queues. There is a common joke that in Kenya, you work hard for your money then have to queue even harder to access it at your local bank branch. People even

have to queue at ATMs, which were designed to solve the queuing problem in bank halls in the first place.

Fortunately, banks were first adopters of technology. By introducing mobile banking, most people no longer need to physically visit their banks, or even go to ATMs. When your money hits the account, be it from salary or payment from any other source, your phone dings with a message alerting you of the payment. Using the same phone, you can log into your bank app to transfer the money to your landlord's account, or to your M-Pesa wallet for ease of use. Welcome to the 21st Century!

Other industries have also quickly adopted technology to ease operations, not only in payments, but also for service provision.

The National Health Insurance Fund (NHIF) is one such service provider whose adoption of technology has been greatly beneficial. You no longer have to brave long queues to register, as you can now do that with just the click of a button.

Requirements for registration, which is free, are simple: you need to be a Kenyan citizen with a national ID card. Dependents - children under the age of 18 - are registered with their passports or birth certificates.

REGISTERING FOR LINDA MAMA

NHIF runs the government programme initially known as Free Maternity Care, which was upgraded and renamed, Linda Mama, Boresha Jamii. All pregnant women are eligible for the Linda Mama programme. All they need to do is register to access free maternity services, which include pre-natal care, delivery and post-natal



GIVING FARMERS A BOOST FOR HEALTHIER FAMILIES

Across Africa, the majority of farmers are smallholders who oversee small plots of land and rarely produce a surplus beyond their own household consumption. Many of the world's estimated 500 million smallholder farmers can barely feed their own families, let alone make a profit from their crops. For the past 50 years, these farmers have been struggling to grow more and healthier food for their families and earn more income from their farms. They face significant challenges that have led to lower yields, including climate change, outdated seeds that are not adapted to withstand today's pests and tough growing conditions, and a lack of access to new technologies and crop information.

These farmers also lack access to finance, and because they live in rural areas, they have trouble getting modern seeds and fertilizers that are usually sold in the cities. With support from the Bill & Melinda Gates Foundation, the Alliance for a Green Revolution in Africa (AGRA) seeks to address these challenges by investing in programs such as Farm Input Promotions Africa.

care. For registration, one can either walk to the nearest Huduma Centre or NHIF service centres. However, for those who abhor queuing at these centres, a mobile phone comes in handy. You don't need a smartphone or internet connection either. Simply dial *263# on your phone, whether it is a 'kabambe' or smartphone. You will then be directed to the service you need – payment, maternity or any other service. For maternity services, you must have your ID number or ante-natal card. Note that you can pay for other services using the USSD code, or otherwise log onto www.nhif.or.ke.

Similarly, registering for UHC has gone online, with each county designing their own process. Initial reports after the UHC launch indicate that registration was so impressive that some medical facilities struggled to meet the demand. Patients in the pilot counties were required to register in order to benefit from the programme.

In Kisumu, the county partnered with PharmAccess to facilitate digital registrations into NHIF through a public-private partnership. This was by way of partnership with Safaricom's M-TIBA mobile application platform, as has been discussed in a previous sub-topic. Community health workers were engaged by PharmAccess (an entrepreneurial organisation dedicated to connecting more people to better healthcare in Africa through the mobile phone) and empowered to register residents using a smartphone with the M-TIBA application.

M-TIBA is linked to NHIF, meaning that registration is automatic and real-time, which also allows for immediate issuance of registration numbers. The health workers also record socio-economic data of the residents. The county further partnered with the Amsterdam Institute for International Development, which developed a poverty mapping tool. The registration

process started before the launch, with then Cabinet Secretary for Health Sicily Kariuki visiting the different counties to sensitise people about the registration process and its importance. She was hosted in Kisumu by Governor Anyang' Nyong'o on November 15, 2018, where they launched the registration at Okore Oganda Primary School. The county was expected to register 240,000 people.

Health Informatics Governance and Data Analytics, an ICT project led by Jomo Kenyatta University of Agriculture and Technology to prepare counties for UHC

The Health Informatics Governance and Data Analytics (HIGDA) is a five-year project funded by the United States Agency for International Development (USAID) and mandated to support the Kenyan Government's health sector, as well as strengthen national and county organisational and management capacity in governance, health informatics, data analytics, monitoring, evaluation, learning and accountability.

Through training, HIGDA empowers county health information officers on the use of geographical information system (GIS) in analysis and presentation of health data. A review by participants on integration of GIS in healthcare provision revealed that the training has enabled the health officers to approach routine tasks



Initial reports after the UHC launch indicate that registration was so impressive that some medical facilities struggled to meet the demand

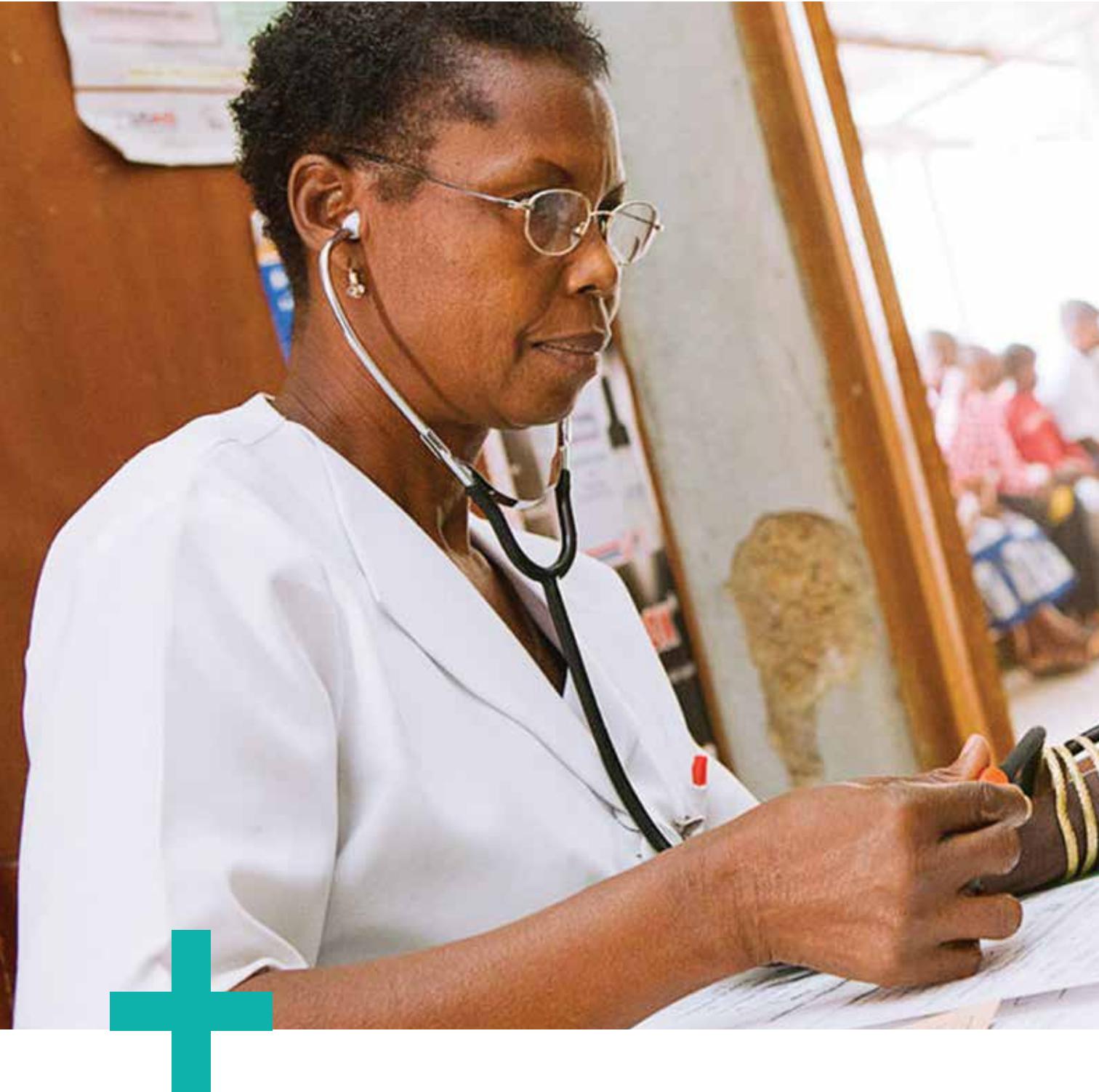
in ingenious ways with corresponding positive outcomes. According to the communications team at the Jomo Kenyatta University of Agriculture and Technology (JKUAT), one of the partners in implementing the project, HIGDA focuses on mapping the distribution of health facilities as well as clients; ground the correlation between diseases and their respective causes; besides generating trends and forecasts of disease prevalence in the counties.

This is in the spirit of strengthening institutional capacity in Kenya's health value chain, which will in turn catapult the enrollment and service provision of UHC.

CONCLUSION

Historians will probably note that December 12, 2017 was a critical moment in Kenya's development agenda. It is on this date, at the Kasarani Stadium in Nairobi during Jamhuri Day celebrations, that President Uhuru Kenyatta announced what he calls the Big Four Agenda. This entails expansion of manufacturing, affordable housing, affordable healthcare through Universal Health Coverage for all by 2022 and food security.

Pundits agree that since the first president, Mzee Jomo Kenyatta declared that the newly-independent country would seek to slay disease, poverty and ignorance, few of his successors have defined such an elaborate plan or roadmap to development. Indeed, the four pillars of President Uhuru Kenyatta, which will cement his legacy if he achieves them in his second and final term, are simple but a masterstroke. They are only four, but with scrutiny you will find out that they answer almost all aspects of the human being's hierarchy of needs. In their entirety, they will ensure that Kenyans will be healthy, have food on the table, live decently (if





TIDBITS

The four pillars of Uhuru Kenyatta, which will cement his legacy if he achieves them in this his second and final term are simple but a master stroke. In their entirety, they will ensure that Kenyans will be healthy, will have food on their table, will live decently if affordable housing will include all aspects including sanitation, and with expanded manufacturing, they will have more money in the pocket.



affordable housing will cover all aspects of life including sanitation), and with expanded manufacturing, have more money in their pockets. The many unemployed youth will get jobs in various sectors.

But will achievement of the Big Four Agenda be easy, especially UHC? This remains to be seen. When it comes to delivery and attainment of UHC, the government, and indeed all the sector players including private sector, NGOs and civil society, must adopt technology to simplify, ease and expedite health and medical services. Some people argue that technology, and indeed artificial intelligence, will replace humans at work. This is true to some extent, but ultimately technology improves lives.

According to a 2016 study by The Global Future of Work – The Future Labour Force: Impending Demographic Shifts Are Shaping 2025's Labour Outlook - most jobs as we know them today will be obsolete by 2025, as artificial intelligence

replaces people. However, experts agree that as this happens, the losers will in time innovate so as to capitalise on the new wealth created by technology.

And as the report notes, in 2025 most business leaders will be digital natives, that is the generation born during the era of tech and digital who are able to adopt to new technologies faster. There will be new jobs like cyber security experts, engineering psychologists, neuro implant technicians and virtual healthcare specialists.

As a country, we have no choice but to move with the rest of the world, a world that is already having robots assisting in surgery, a world that is designing autonomous or self-driven cars. But we must align this with education, one that is flexible, adaptive and unstructured to avoid what techies call grand mothering – putting oneself to extinction – in order to ensure that the digital natives, or nomads, are well attuned to technological advances.

CHAPTER 9



LIVING UHC: STORIES FROM PILOT COUNTIES

INTRODUCTION

Close to four billion people, half of the world's population, do not have full coverage of essential health services. About another 100 million are being pushed into extreme poverty because, according to the WHO, they have to pay for healthcare. Extreme poverty is defined as living on KSh250 or less a day, 10 percent of which goes to healthcare for at least 930 million people around the world.

This is a reality in Kenya – from the rural enclaves of Western to Northern to Central Kenya, to the informal settlements of Kibera, Kawangware and Korogocho. But healthcare is not only a headache for those who live below two dollars a day. Many times, when disease strikes in a well-to-do family, they exhaust their savings before long and resort to fundraisers. Others are forced to sell their property and land to foot the medical costs. It is this sad state of affairs that moved the UN member states, while adopting the Sustainable Development Goals in 2015, to commit to achieving universal health coverage by 2030.

But, as WHO indicates, UHC is much more than provision of health services, or free healthcare, which is not sustainable in the long term.

"UHC is not only about individual treatment services, but also includes population-based services, such as public health campaigns, adding fluoride to water, controlling mosquito breeding and so on," states the health global body, noting that, "UHC is comprised of much more than just health; taking steps towards UHC means steps towards equity, development priorities, social inclusion and cohesion".

Indeed, the last sentence best illustrates what you will read in this chapter - about initiatives by the government and development partners in helping communities to deal with their most pressing health matters, including maternal healthcare. You will hear from a few people who have already registered for UHC in one of the four pilot counties, and how you, as an individual, can take advantage of your surroundings to prevent disease incidence while keeping healthy and fit.

PATIENT EXPERIENCES IN THE FOUR UHC PILOT COUNTIES

THE CASE OF MACHAKOS

The year 2013 offered what can only be described as a new dispensation in Kenya. For the first time since independence, the country got semi-autonomous governments, 47 in all, known as counties, and run by elected governors.

Health was devolved and transferred to the counties from the National Government. By 2014, it seemed like the idea of improving peo-



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ple's health in the counties was by quickly getting them to health centres whenever they fell sick. This saw a rush to buy or hire ambulances.

Machakos County Governor, Dr Alfred Mutua, is on record saying that in his county, most children are named Nzia (road) because they were born by the roadside. He explained that their expectant mothers, confronted by long distances, rough terrain and lack of transport, could not reach health centres in time. Some were ferried to health centres on wheelbarrows and even donkey carts.

This scenario was the same throughout the country, and thus the governors wanted to change the state of affairs. In February 2014, during the launch of a comprehensive care programme, Kenyatta Stadium in Machakos was resplendent with 70 new ambulances, 10 rapid

TIDBITS

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High cost of treatment prevents many poor Kenyans from accessing basic health services.

TIDBITS

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response motorbikes and 89 security cars. Fast forward to 2018, and Machakos was among the four counties selected to pilot Kenya's Universal Health Coverage (UHC). The others are Kisumu, Isiolo and Nyeri.

According to Machakos County Executive Committee Member for Health, Ancient Kituku, the county had registered over 1.2 million residents by January 2020, which is equivalent to 86 percent of the total population. The CEC, in an interview, said that the UHC programme is ensuring that all residents get accessible, affordable, and quality healthcare.

"But even before the pilot," said Kituku, "we had invested heavily in our healthcare. We had ambulances which helped ferry patients from all corners of Machakos. The ambulances were also used to rush serious referral cases to Nairobi, mainly to the Kenyatta National Hospital".

The county minister added that the UHC programme is ensuring that all residents get accessible, affordable and quality healthcare. The UHC package includes services accessible in public health facilities, such as door-to-door screening for non-communicable diseases, immunisation, antenatal care, outpatient services and inpatient services. But what do the residents of Machakos say about UHC? We sought to find out.

"I was very sick in January 2020," says Joyce Mutei of Machakos. "I was told to register for the M-TIBA card so that I could be treated for free."

The county used M-TIBA, a mobile app which allows people without medical insurance to save for medical care. The app has evolved to integrate payments, as well as health services like registration. It is to this platform that Machakos

County turned to for help to achieve UHC for the residents. Mutei had pain in her legs and feared that she the cost of treatment would be overwhelming. "I expected the treatment to cost me an arm and a leg," she said. When the doctor recommended an X-ray and she saw the amount payable for the examination, she believed that her worst fears had been confirmed.

"As if to confirm my fears, I was handed a Ksh1,000 invoice," she says. "But I was not required to pay for it because I had the M-TIBA card," she explained. But there was more good news for Mutei. She also did not have to pay for the prescribed drugs. When we met her a month later, she had returned for a check-up at the Machakos Level Five Hospital, where she was expecting to see an orthopaedic.

"A few months ago, I could never have expected to seek a specialist's services. I know they are expensive," she said beaming. She explained that in her village, most people self-medicate using herbs, while others pray for a cure. Others, she added, ignore their ailments and hope to get better.

"No one would like to suffer, or watch their families suffer, from ill health. But people fear that the cost of treatment at hospitals is very expensive. They do not have money even for



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food, so going to a hospital is out of the question." Machakos, according to the 2019 Census by the Kenya National Bureau of Statistics, has a population of 1,421,932, most of whom are scattered and live away from the town. But like most Kenyans, in case of illness, the residents sought treatment at the highest level hospitals, believing they are better equipped and staffed.

For this reason, the CEC in January 2020, and with a view to extend free, quality services to all residents, the county upgraded Mutituni, Masinga, Ndithini and Athi River health centres to Level Four status. In addition, the county upgraded 40 dispensaries to advanced health centres (Level Three). Most of the residents are happy, as Joseph Kilonzo told us. "Unastahili tu kuregister with M-TIBA, kufuatiya hivyo, matibabu na dawa ni bure; kwako na kwa familia yako pia (you just need to register with M-TIBA, after which treatment and medication is available for free to you and your family).

When it comes to healthcare seeking behaviour, both anecdotal and scientific evidence shows that women are more likely to go to health centres, especially for check-ups. On the other hand, men only go to hospitals when they fall ill, very ill at that. Peter Komu from Kangundo however dispels this notion. Armed with his card, he decided to get tested for 'everything'. "I got tested for free and was given drugs without paying a cent. This thing is real", he said,

However, Komu says that he had to travel to the Level Five hospital in Machakos, as some of the tests he wanted were not available in his home area of Kangundo. "I hope they could bring all the machines closer to the people," he says. Indeed, though most residents of Machakos hail the initiative, it does not lack a few challenges, as Christine Mueni highlighted. Born in Makueni, Mueni got married in the next-door

county of Machakos. When she heard about UHC, she rushed to the Level Five hospital to be registered. But there was a hitch. "Unfortunately, I was told I couldn't be registered as my national identity card showed that I was not a resident of Machakos, but Makueni," she said.

Mueni decries this, urging the government to look into the issue as many people have migrated from their birth areas. She notes that people move due to marriage, work and a myriad other reasons. "The government should look into this. Does it mean if I was born in Mombasa and I live in Nairobi, then I have to travel to Mombasa every time I am ill to benefit from this government programme?" she posed.

These, and Komu's concerns, are some of the lessons the government has learned from the pilot counties, which will inform the rollout to the rest of the country.

CANCER

Traditionally thought and seen as a lifestyle disease for the well-to-do and the aged, the increasing cases of children with cancer today baffles many people.



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At the Kenyatta National Hospital Children Oncology Ward, you will find angelic, innocent, and beautiful children battling cancer. Some of them have been in the ward for months. Others have been there for years, mostly due to non-payment of bills, the difficult treatment regimen for children and critical state of their terminal illness.

The only respite for children is speedy treatment and being creatively engaged while at the wards. Indeed, the Kenyatta National Paediatric Cancer Ward 1E is painted in bright yellow colours, with cartoon illustrations on the walls. But this is not all or enough. Well-wishers, families and organisations often hold fun activities at the wards to alleviate the children's boredom and pain.

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TIDBITS

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Like adults, children are afflicted by different types of cancers, the most common being eye cancer. Other common cancers in children are lymphomas and leukaemia.

Even though 80 percent of cancers are curable, the cure rates in Kenya are very low. According to the World Child Cancer Organisation, only 20 percent of children with cancer in Kenya survive. This contrasts sharply with the developed nations, where up to 80 percent of children with cancer survive. This sad state of affairs is attributed to late diagnosis, lack of specialised training and the heavy cost of treatment.

Indeed, a recent study titled Access to Financial Burden for Patients with Cancer in Ghana, Kenya and Nigeria, which looked at breast cancer treatment in the three countries, showed that a patient's chances of survival is determined by delays in diagnosis and treatment, access to appropriate and quality care, and more importantly, cost.

The study, commissioned by global biotech company, Roche, and led by Dr. Majid Twahir of Aga Khan University Hospital, Kenya, and Razaq Oyesegun of National Hospital in Abuja, showed that patients travel long distances to access treatment in the three countries. In Kenya, that is about 398 kilometres.

When it comes to children and cancer, the major treatment centres are the Kenyatta National Hospital and MTRH. The latter diagnoses about 100 to 110 children with cancer per year.

The World Child Cancer Organisation stated that while the National Health Insurance Fund (NHIF) caters for treatment, it does not cov-

er the whole cost and thus, most families are forced to pay from the pocket.

Perhaps, the study, Influence of Health Insurance Status on Childhood Cancer Treatment Outcomes in Kenya better expounds this. The retrospective study looked at all the children diagnosed with a malignancy from 2010 to 2012, with data on treatment outcomes and health insurance status at diagnosis abstracted from patient charts.

The study's findings indicated that of the 280 patients sampled, 34 percent abandoned treatment, 19 percent died, and 18 percent had progressive or relapsed disease, resulting in a 29 percent event-free survival.

Sixty-five percent of the patients did not have health insurance at diagnosis. Treatment results differed significantly between patients with different health insurance status at diagnosis - 37 percent of uninsured versus 28 percent of insured patients abandoned treatment; while 24 percent of uninsured versus 37 percent of insured patients had event-free survival.

Of patients without health insurance at diagnosis, 77 percent enrolled during treatment.



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Among those patients who later enrolled for health insurance, the frequency of progressive or relapsed disease and death was significantly lower, while the event-free survival estimate was significantly higher compared to those who had not enrolled.

This shows the importance of having health insurance like NHIF, which is still not available to everyone, the reason the government is pushing for UHC. The hospital administration at MTRH states that NHIF pays for most of the cancer services, including CT scans, MRI, surgery, chemotherapy and radiotherapy, admission and bed fees. It has an NHIF clinic at its premises and it encourages patients to register.

The MTRH treats cancer patients through its Directorate of Haemato-Oncology, whose objective is to prevent, diagnose early, and comprehensively treat diseases of the blood and cancer.

Started in 2005 as a volunteer service, it grew over the years to become a fully-fledged directorate in 2016. In 2005, it was treating 50 patients, a number which has since risen to over 8,000 patients. It collaborates with world-renowned teaching schools like Ivy League Brown University, Harvard Medical School, University of Toronto, and others. Besides outpatient clinics at MTRH, the directorate runs outreach programmes in western Kenya, including Busia, Kitale, Bungoma, Kakamega, Turbo and Webuye.

The hospital provides free breast and cervical cancer screening services five days a week, as well as through outreach medical camps. This is in a bid to sensitise people on the need for early diagnosis. Diagnosis includes fine-needle aspiration cytology and biopsies. Treatment, including chemotherapy, is done at the hospital.



CANCER RATES

Children in developed nations who survive cancer, attributed to early diagnosis, specialised training and the affordable cost of treatment

INSURANCE

Patients who did not have health insurance at diagnosis, according to "Access to Financial Burden for Cancer Patients in Ghana, Kenya and Nigeria"

TIDBITS



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tal, which has strived to make the premises as comfortable as possible.

The hospital has gradually positioned itself as the go-to facility for cancer patients, not only from Nyanza and Western region, which it serves, but Nairobi too. Indeed, patients with the aggressive type of breast cancer, known as HER2-Positive – the Human Epidermal Growth Factor Receptor 2 Positive – find that treatment in Nairobi is way too expensive, but affordable at MTRH. Thus, patients travel many kilometres for treatment here.

At the Kenyatta National Hospital, besides NHIF, organisations like Faraja Trust also chip in. Through its Faraja Medical Support Fund, the trust strives to have all children and adults diagnosed in Kenya able to access the right, affordable treatment at the right time.



TIDBITS

When working, cycling or walking is the new norm. Kenyans are becoming increasingly conscious of their health. Not long ago, gyms seemed to be a preserve of the privileged, who after bingeing on unhealthy food or junk, as it is commonly known, would be urged by their doctors to lose weight. Then, gyms were mostly available in towns and cities, where people would rush from the office during lunch break for a quick workout, or pass by in the morning or evenings.

WHEN WORKING, CYCLING OR WALKING IS THE NEW NORM

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But today, gyms dot every corner of estates, from Kinoo to Utawala to Buru Buru and Lavington. They have become available, not only to the increasing number of middle-class and the rich, but also to young people who, most of the time, would be idle in the estates. With a daily fee of as little as KSh100, one can workout on treadmills and lift weights for up to an hour.

But it is not only gyms that are a sign that a good section of Kenyans is alive to the idea of exercising for good health and, for some, recreation. Depending on which estate you come from, you are bound to encounter residents, jogging, walking or even walking their dogs. Writing in an Op-Ed (opinion-editorial) piece in the Daily Nation, Dr Nelly Bosire once said that running early in the morning and late in the evening is also an indication of how safe your neighbourhoods are.

Additionally, it is an indication how the road network is maintained. You cannot run through potholes or pebble-strewn walkways. Upmarket estates like Kilimani, Lavington, Muthaiga and Runda have well-paved walkways where resi-

dents can run, jog, walk and bike comfortably without the fear of straining an ankle. You will see residents, most wearing headphones and designer sportswear and sneakers, running on footpaths and walkways peacefully. Unfortunately, in some estates, like Eastlands and Ngara, pavements pedestrian walkways have been taken over by hawkers, making exercising almost an impossibility.

Hawkers place their wares on the ground, while others operate from makeshift stands. There are also those who sell fruits from wheelbarrows, especially in neighbourhoods like Eastleigh, blocking walkways meant for pedestrians. Pedestrians are thus pushed onto narrow roads, which they have to share with cars and matatus and risk their lives.

Outer Ring Road, a newly-constructed highway is even worse. No sooner was it commissioned than hawkers moved in and set up ‘base’ – temporary structures on service lanes and walkways – creating mayhem, which is exacerbated by rogue matatus dropping and picking passengers at undesignated stops. According to the Walk Score app, Ring Road in Kilimani has a walk score of 88 out of 100. Walk Sore is



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a web-based, mobile application which shows that walkable neighbourhoods are one of the simplest and best solutions for the environment, our health and economy. It gives Thika Road a walkability score of 59 out of 100. This is because, despite Thika Road having walkways and cycling lanes, some in busy areas like Githurai have been taken over by all types of businesses.

But in some places like Kahawa Sukari, you will find people jogging and running early in the morning and evenings. Charles Muriuki, a martial arts expert and taekwondo trainer, even stretches and works out along Kenyatta University after his daily runs, which he has done for six years now. We caught up with the lean martial arts expert stretching and flexing his muscles at the Kenyatta University footpath. "I find it convenient to work out on the road, it gives me flexibility and an open-air environment conducive for exercising", he said. He added that in the six years he has been practising along that section, he has seen an increasing number of fitness enthusiasts, which he believes is a good thing.

Indeed, in the developed world, running, walking and cycling on walkways are almost the norm. The well-paved roads and tree-lined streets are conducive for outdoor exercising. Most Kenyans would love to leave their fuel guzzlers at home or avoid the chaotic matatus and instead cycle, but the roads are a big hindrance. Increasingly, poor road workmanship (which sees potholes emerging as soon as the roads are surfaced), flooding during rainy seasons, and crime in some estates, discourage many people from exercising on pedestrian pathways along the roads.

But there is good news. The newly-completed Phase One of Ngong Road lit up social media like a Christmas tree. Not long ago, driving on Ngong Road was akin to a rush-hour walk in

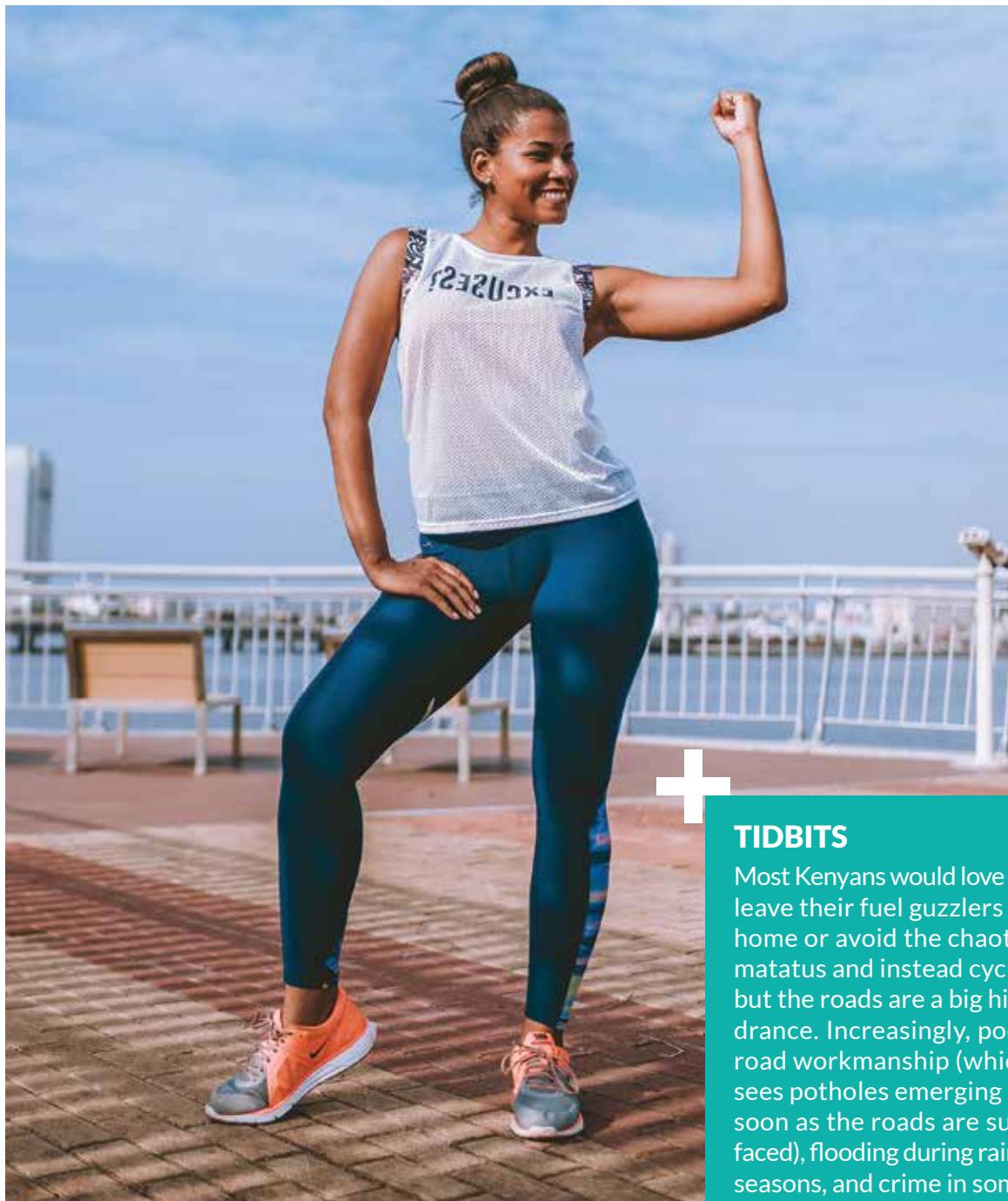
Gikomba, due to the chock full. Enter Japanese contractors and superior engineering. They dualled the road from the Kenya National Library Services to the junction at Kilimani Ring Road, which has now been extended to the junction at Dagoretti Corner, enroute to Karen. Said to be very walkable at a score of 70, Ngong Road has crossing sections for pedestrians and separate ones for bikers, complete with well-marked lines and signage.

There are walkways and paths designated for cyclists. The road's workmanship is attractive and a joy to walk or cycle on. Unfortunately, sections of the footpaths and bicycle paths on Ngong Road are already being turned into car-wash slots. Even car sellers have taken them up, using them as lots to display cars on sale.

This calls for strict enforcement of city bylaws and stringent policing by traffic police, the National Transport and Safety Authority (NTSA), and the Kenya National Highways Authority (KeNHA), in order to rein in the wayward traders who not only pose a risk to road users, but also deny people a healthy and clean environment. With most people either lacking money or time for gym membership, pathways and



With most people either lacking money or time for gym membership, pathways and cycling trails are ideal exercising alternatives to promote fitness, which has the health benefit of reducing the increasing cases of non-communicable diseases



Doctors are now advising office workers to eat right and adopt active lifestyles to stay fit and healthy.

TIDBITS

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EXERCISE FRIENDLY SPACES

In some places like Kahawa Sukari, you will find people jogging and running early in the morning and evenings. Charles Muriuki, a martial arts expert and taekwondo trainer, even stretches and works out along Kenyatta University after his daily runs, which he has done for six years now.

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In the past couple of years, Kenya has seen a drop in the number of people suffering from and losing their lives to communicable diseases, particularly ATM – Aids, TB and Malaria. Conversely, the country has witnessed a rise in non-communicable diseases. These are preventable diseases arising from habits like tobacco use and exposure, unhealthy diet, sedentary lifestyles and alcohol abuse.

Doctors are now recommending the avoidance of sedentary lifestyles, especially for office workers. But one does not have to go to the gym to keep fit. A thirty-minute brisk walk, running, jogging or cycling two to three times a week, are just as good and effective in keeping non-communicable diseases like cancer and heart disease at bay. As the Aga Khan University Hospital, Nairobi CEO, Ms Asmita Gillani, says, "There is a growing middle-class and people are living more sedentary lifestyles and consuming unhealthy diets. Stress levels are also high, and coupled with lack of exercise, more and more people are getting exposed to and becoming more vulnerable to non-communicable diseases like cancer, heart disease and diabetes".

ENTER COVID-19 PANDEMIC, AND ROADSIDE WORKOUTS WENT TO A WHOLE NEW LEVEL

We started working on this chapter from late 2019 to early 2020. It is important to highlight the changes brought about by the outbreak of the coronavirus.

In February, the Government of Kenya, through the newly-appointed Cabinet Secretary for Health, Mutahi Kagwe, banned all meetings, conferences and events of international nature to curb the spread of Covid-19. This escalated fast, following the first Covid-19 case in Kenya in March 13, 2020. The government asked employers to have their employees work from home, banned all public gatherings including meetings at church services, burials and entertainment spots. A dusk-to-dawn curfew was also enforced.

Overnight, Kenyans, like most citizens of the world, from China to Italy to the United States, found themselves forced to stay and work from home. Online meetings and conferences, commonly known as webinars, became the norm. Soon, people realised that these web-based meetings facilitated by technology through the use of devices like desktop, tablet, smartphone and laptop computers are very different from in-person meetings. People were spending more time in online meetings, which drains energy and strains the eyes, resulting in fatigue and stress. People resorted to new coping mechanisms, from trying out new recipes in the kitchen, recording memes on social media like TikTok, to running, jogging and cycling. Estate

roads and streets were soon filled with people walking, jogging, running or cycling. This was a welcomed relief to environmentalists and conservationists, who predicted that less cars on the roads would give the planet time to take a breather after decades of industrial pollution.

To health workers, Covid-19, though a great catastrophe of the 21st Century, was a blessing in disguise as it gave people an opportunity to rethink the way they live. People were relooking their attitude towards the environment and on how they treat their bodies. The question is, will this new habit last?

'HAILING BODA BODAS' TO GET PREGNANT MOTHERS TO HOSPITAL FAST

As then Health Cabinet Secretary Sicily Kariuki noted at the 6th Diaspora Homecoming Convention, 2019, one of the lessons the ministry has learned from the UHC pilot programme is that to succeed, there must be adoption of technology, specifically mobile technology. But the technology or innovation does not have to be grand.

Here is an illustrative story:

WHERE BODABODAS WORK LIKE AMBULANCES, FERRYING EXPECTANT MOTHERS TO HOSPITALS

The slopes of Mt Elgon look disarmingly cool and laidback. Residents move around unhurried, boda bodas revving and raising dust as they pick and drop customers. Cows moo. A dog barks, and a boy throws a stone at it. Here in Kaptanai, a quiet village in Sirisia, about 50 kilometres from Bungoma town, the main mode of transport is the motorcycle, commonly known



With most people either lacking money or time for gym membership, pathways and cycling trails are ideal exercising alternatives to promote fitness, which has the benefit of reducing increasing cases of non-communicable diseases

as the boda boda. Like anywhere else in Kenya, and indeed around East Africa, the boda boda riders are loved and loathed in equal measure. Most flout traffic rules and considered a danger to other road users. A majority of these riders are school dropouts lured to the sector by the promise of quick money. For a small fee, they are trained how to ride the motorcycles by other riders who never went to a driving school. Others are used as getaway riders by criminals, with some actively involved in robberies and other crimes.

But something curious happened here in Sirisia Sub-County in 2015. An NGO that focuses on maternal health was overwhelmed by the number of mothers who lost their lives and/or newborn babies during delivery. According to the United Nations Population Fund (UNFPA) in a 2014 report, Bungoma County was ranked eighth out of 15 counties in Kenya with high rates of maternal deaths. In fact, the Kenya Demographic and Health Survey 2014 indicated that only 46 percent of women delivered in health facilities, and that only 40 percent were assisted to deliver by skilled healthcare providers. The rest gave birth at home, most times assisted by untrained (and now outlawed) traditional birth attendants.

The NGO realised that most of the residents of Bungoma County lived far from health centres. Others resided in remote, hilly terrains with thick bushes where no car or ambulance could access. This meant that in case of an emergency occasioned by labour or any pregnancy-related condition or complication, especially at night, expectant mothers could easily lose their lives if not rushed to a health centre in good time. That is how the idea of using motorcycles to ferry the women to clinics for ante-natal care and delivery was born. Doctors recommend four ante-natal clinic visits before delivery. However,

most women from rural areas like Sirisia just make one visit during the period of their pregnancy. This is dangerous because it is during the ante-natal clinics that doctors can identify risk factors earlier, such as high blood pressure and infections like HIV/Aid. Identifying these risk factors earlier enables proper care for the expectant women until safe delivery.

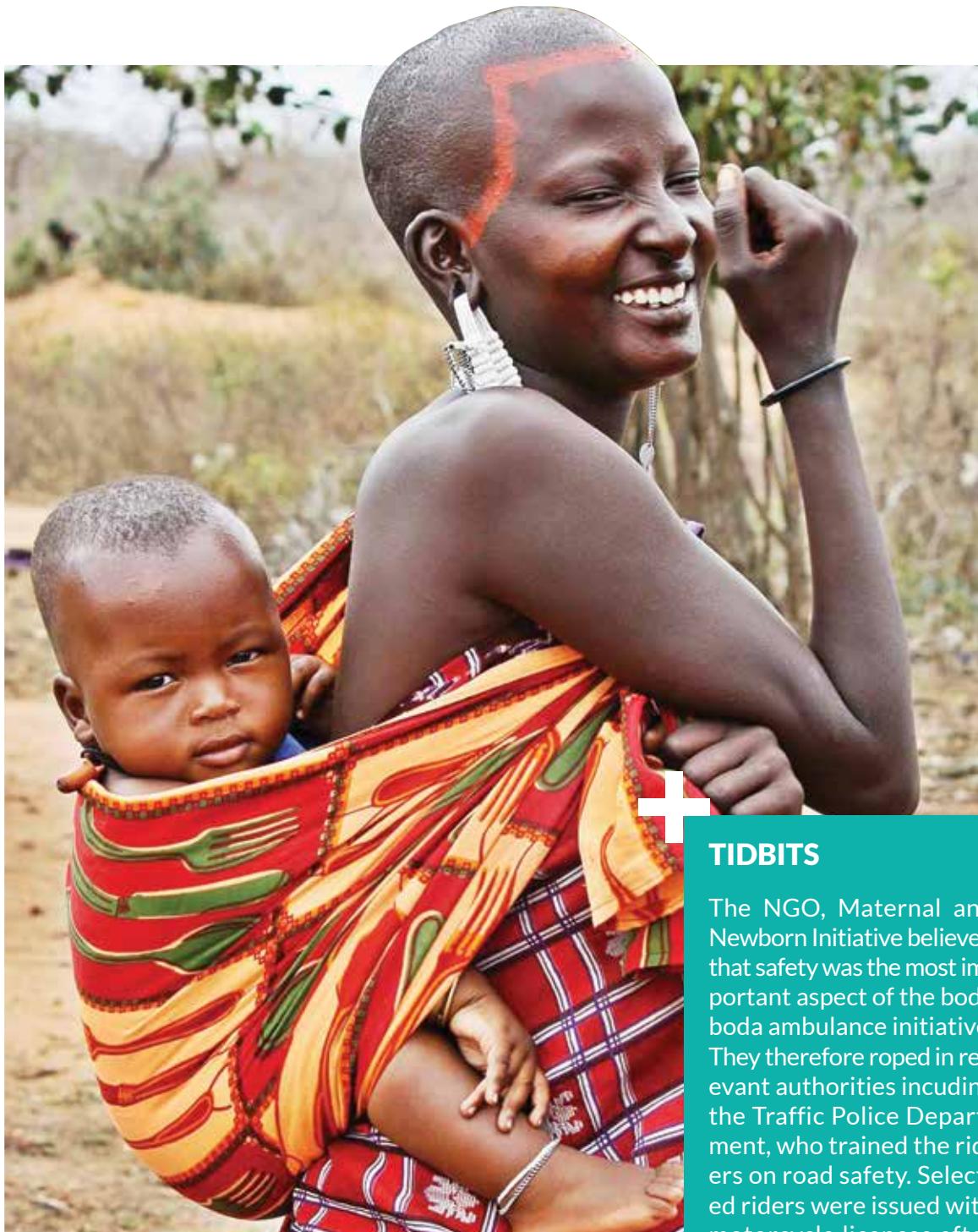
The NGO, Maternal and Newborn Initiative (MANI), believed that safety was the most important aspect of the boda boda ambulance initiative. They therefore roped in relevant authorities including the Traffic Police Department, who trained the riders on road safety. For the first time, the selected riders were issued with motorcycle licences after successfully finishing the instructional training. They were also given protective gear.

"In healthcare," said Gladys Ngeno of MANI, "there is the demand and supply side. We needed to create demand for facility-based maternal care through innovation."

But this was just one aspect of the strategy. How would mothers know which boda boda rider to trust? Enter Community Health Volunteers (CHVs). MANI also trained the volunteers on the basics of maternal health. One of their roles was to go through the villages identifying



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The Kenya Demographic and Health Survey 2014 indicated that only 46 percent of women delivered in health facilities, and that only 40 percent were assisted to deliver by skilled healthcare providers

TIDBITS

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pregnant mothers. The CHVs would assess the expectant mothers' households and those who were deemed needy would be given a voucher to present at the dispensary during delivery.

The CHVs, armed with mobile phones that used USSD code, hence no need to connect to the internet or buy airtime, then teamed up with trained boda boda riders and were on 24/7 call in case an expectant mother had an emergency.

The boda bodas became so adept at transferring mothers to hospital that they were soon nicknamed 'boda boda ambulances.' When not taking the mothers to hospital, they would carry on with their daily work of ferrying passengers. MANI paid them for each trip to the hospital, hence their income increased. In an earlier interview, the Kaptanai Dispensary Clinical Officer in Charge John Wabomba, said that before 2015 when the boda boda project started, they had about five deliveries at the centre. By 2018, that number had increased to an average of 25 in a month. MANI corroborated this, noting that in two years since the beginning of the pro-

gramme, they had seen a 20 percent increase in health facility delivery. Save the Children Fund also had a similar programme, where they paid boda boda riders KSh500 for any referral they made to a health facility. The County Government of Bungoma took up the initiative, where, for instance at the Kopsiro facility in Mt Elgon, there are about 70 CHVs who refer mothers for ante-natal care, deliveries and child welfare clinics. They get a KSh2,000-stipend per month.

As highlighted in the Primary Care chapter, the CHVs play an important role in preventing illnesses in their communities. For instance, in Bungoma, they have been empowered to test for malaria, which is prevalent in the area. They were equipped with test kits, the Malaria Test Diagnostic, and medication for patients who test positive for the disease. This helps in decongesting health facilities, while saving the community from treks to health centres.

This is just but one of the tested and proven ways of taking healthcare to the community, through the primary healthcare model.

UHC IN NUMBERS

A year after the launch of the UHC programme in Kenya, the then Cabinet Secretary for Health Sicily Kariuki said that 3.2 million people had registered. Speaking at the 6th Diaspora Homecoming Convention 2019, themed Diaspora and the Big Four Agenda in December, Ms Kariuki said that they had learned key lessons from the pilot project on rolling it out to the rest of the country.

The lessons, the CS disclosed, included key emerging issues, the need to reorient the health system towards a primary health care approach, the need for skilled health workforce and interventions that increase their productivity, and community ownership of the UHC programme to ensure its success. "The interest by the diaspora to participate in the programme confirms that community participation in health is the cornerstone of 'leaving no one behind' philosophy," she noted.

CHAPTER 10



KEMSA'S ROLE IN DELIVERY OF UHC

INTRODUCTION

The Kenya Medical Supplies Authority (KEMSA) is a State corporation established through the Kenya Medical Supplies Authority Act No. 20 of 2013, leading to a change of name from an Agency to an Authority. The Authority's functions, as outlined in the KEMSA Act that established it, are as follows:

- a) *Procure, warehouse and distribute drugs and medical supplies for prescribed public health programmes, the national strategic stock reserve, prescribed essential health packages and national referral hospitals;*
- b) *Establish a network of storage, packaging and distribution facilities for the provision of drugs and medical supplies to health institutions;*
- c) *enter into partnership with, or establish frameworks with, County Governments for purposes of providing services in procurement, warehousing, distribution of drugs and medical supplies;*
- d) *Collect information and provide regular reports to the National and County Governments on the status and cost-effectiveness of procurement, the distribution and value of prescribed essential medical supplies delivered to health facilities, stock status and on any other aspect of the supply system status and performance which may be required by stakeholders; and,*
- e) *Support County Governments to establish and maintain appropriate supply chain systems for drugs and medical supplies.*

The transition from a Public Agency to a Public Authority was intended to give the Authority greater independence in decision-making and more financial autonomy to enable it effectively deliver on its expanded mandate in a devolved health system. Another reason for the transition from an Agency to an Authority was to move from a highly bureaucratic system of medical logistics to one that is competitive and customer

focused. Prior to the establishment of the Authority, the State corporation was referred to as the Kenya Medical Supplies Agency (KEMSA), having been established under the State Corporations Act through legal notice No. 17 of 2000, Cap 466 of the Laws of Kenya. This legal notice was repealed in 2013 to pave way for the KEMSA Act that established the Authority. The Kenya Medical Supplies Agency's (KEMSA) functions were:

- a) *procure drugs and medical supplies, offer for sale and supply the same to public health institutions on such terms as the Board may from time to time prescribe;*
- b) *establish warehouse facilities in Nairobi or any other towns of Kenya for the purposes of storage, packaging or sale of drugs and medical supplies to health institutions;*
- c) *carry out or cause to be carried out technical and/or laboratory analysis of drugs and medical supplies to determine their suitability for procurement, sale, use, storage or disposal by the Agency;*
- d) *advise the consumers and health providers on the rational and cost-effective use of drugs and medical supplies in consultation with other agencies;*
- e) *use guidelines on the procurement, storage, use and disposal of pharmaceutical products within public health institutions in consultation with other agencies;*
- f) *sub-contract any of the above functions to competent agents or institutions as may be determined by the Board, without prejudice to the objects for which the Agency is established; and*
- g) *make available to facilities for use for educational purposes on such terms and conditions as the Board may deem necessary.*

Before the Kenya Medical Supplies Agency was

established, the medical supplies function was under the Ministry of Health's Medical Supplies Coordination Unit (MSCU) – a government bureaucratic outfit that struggled to deliver on its mandate. Around 1996, the Ministry of Health set up an MSCU Working Group whose purpose was to reform and restructure the MSCU. Two years later, a Ministry of Health stakeholders committee met and recommended the establishment of a corporate entity to plan, procure, warehouse and distribute drugs and other medical supplies to public health facilities.

KEMSA was created with the aim of bringing about radical improvements that MSCU was unable to achieve. Since inception in 2000, the Agency faced challenges that made it difficult to deliver on its mandate such as; inadequate funding from the Ministry of Health (MOH), lack of timely disbursement of procurement and operational budgets, lack of transparency and accountability, poor performance and lack of leadership and governance structure.

The history of medical stores in Kenya dates back to British rule (1915), when the Medical Stores was established. In 1927, the name was changed to Medical Stores and Equipment. After independence, the Ministry of Health was created, and the Kenya Medical Stores and

Equipment was mainstreamed into it. In 1970, the government changed the name Medical Stores and Equipment to Central Medical Stores (CMS), and it was reorganised to improve control and accountability in medical supplies. The reorganisation led to the development of the Central Medical Store Management Information System (CMS/MIS) where more flexible, modifiable and integrated systems – including control of orders entry, inventory, sales analysis, financial management and accounts receivable and accounts payable – were integrated.

REFORMS IN KEMSA 2008-2013: CAPACITY BUILDING AND COPING WITH DEVOLUTION

Between 2000 and 2008, the Kenya Medical Supplies Agency was going through tough times, coupled with challenges such as: inadequate funding from the government; overall lack of confidence in transparency, accountability and performance at KEMSA; lack of timely disbursement of procurement, and operational budgets.

These challenges were a great impediment to the Agency's efforts to demonstrate improvement in its overall performance. This scenario triggered a new thinking by the Government and its development partners on the need for deeper, focused and integrated reforms at the Agency.

These reforms commenced in 2008, guided by the need for institutional reforms to create appropriate organisational structures, attract the right human resource to provide leadership and the desired new strategic direction, management plans and direction, as well as streamline operational processes. From 2008 to 2013, KEMSA and its partners gradually started assembling a team of professionals for leadership



From 2008 to 2013, KEMSA and its partners gradually started assembling a team of professionals for leadership roles with the aim of building capacity to effectively and efficiently deliver its mandate

and managerial roles with the aim of building capacity to effectively and efficiently deliver on its mandate. This included competitively recruiting people with strong commercial sector experience in healthcare, financing and logistics industries, and not the usual civil servants or career bureaucrats. These individuals brought a different working style and culture to KEMSA.

According to the Third Medium Term Plan 2018-2022, KEMSA has improved its order fill rate of Health Products and Technologies (HPT), thanks to implementation of the automated business process through the use of Enterprise-wide Resource Planning (ERP) system and Logistics Management Information System (LMIS) from 50 percent in 2013/14 to 86 percent in 2015/16.

The use of LMIS has enabled KEMSA to inject and enhance efficiency in the supply chain. The plan also reports improvement in order turnaround time, which reduced from 12 days in financial year 2013/14 to nine days in 2015/2016, guaranteeing uninterrupted HPT supply to counties. Another automated system in use at KEMSA and positively impacting on service delivery is the eMobile service.

According to KEMSA, the eMobile service is aimed at easing service provision to local hospitals and enhancing efficiency and effectiveness in the distribution of essential medical supplies in Kenya. Basically, the eMobile service aims to support public health facilities by affording them smooth communication with KEMSA electronically in a seamless way. The eMobile system is a smartphone application available in Android's Google Play Store, as well as other smartphones through web browsers. Figure 1 below illustrates the functions the eMobile system can help perform to enhance quality service delivery.

NEW BUSINESS MODEL

The introduction of a devolved system of government in Kenya in 2013 and subsequent devolution of the health function to counties, informed KEMSA on the need to develop a new business model to guarantee public health facilities timely access to high quality HPTs.

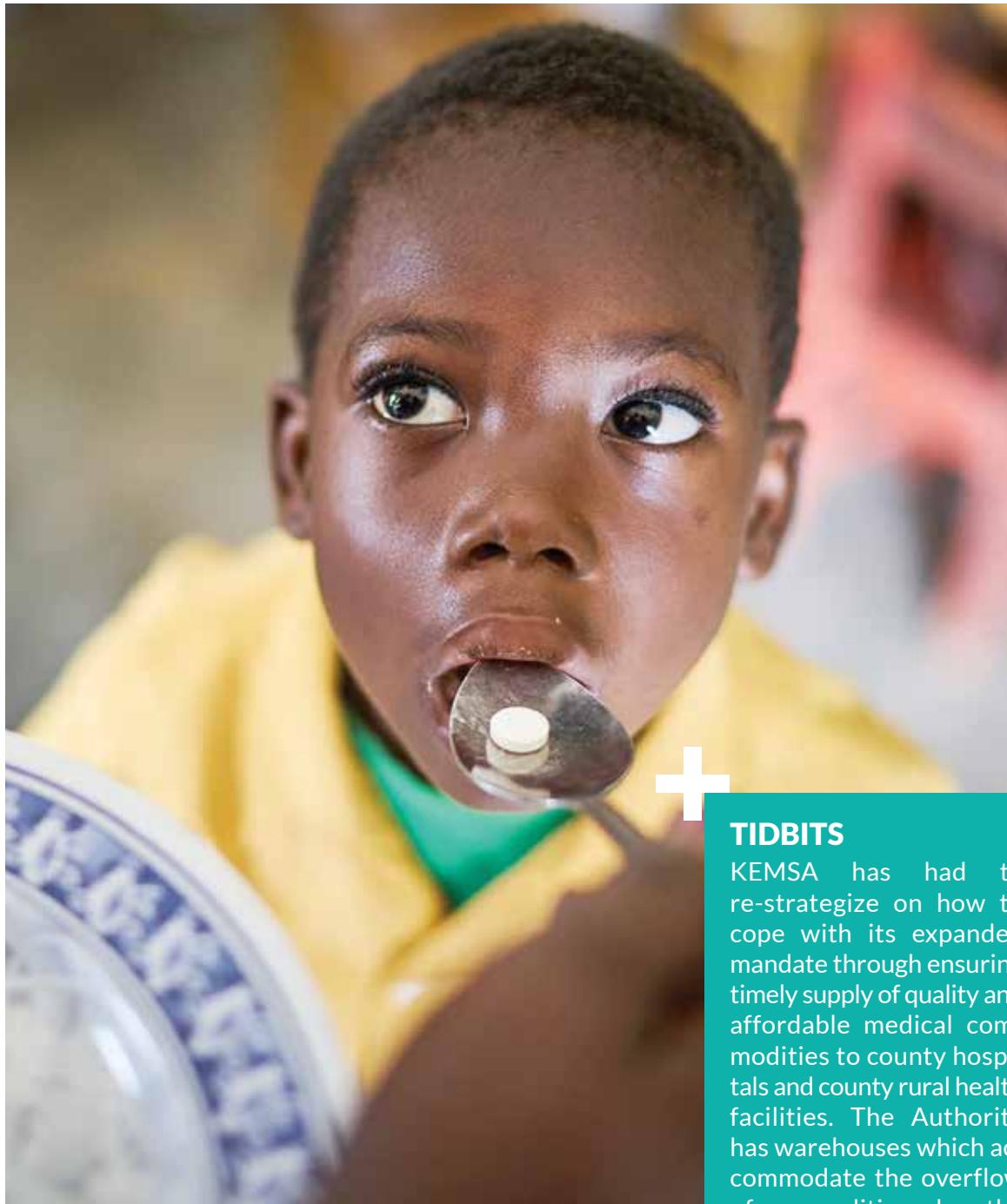
In order to efficiently and effectively implement its expanded mandate, KEMSA had to review all its systems, structures and business model, and align their operations to the devolved system of government. The new business model is aimed at ensuring a self-sustainable supply system. According to KEMSA, the new business model works as follows: KEMSA is responsible for procurement of HPTs with its own funds.

The county health facilities submit orders and make appropriate payments to KEMSA according to their own needs; KEMSA processes the orders and dispatches commodities to the respective facilities.

It is important to note that the county health facilities only order and pay for medical commodities on demand-driven basis. The Authority then uses the funds received from sale of medical commodities to restock, depending on market demand.



The use of LMIS has enabled KEMSA to inject and enhance efficiency in the supply chain. The plan also reports improvement in order turnaround time



The Constitution devolved health and other services from central government to the 47 counties.

TIDBITS

KEMSA has had to re-strategize on how to cope with its expanded mandate through ensuring timely supply of quality and affordable medical commodities to county hospitals and county rural health facilities. The Authority has warehouses which accommodate the overflow of commodities when the warehouses in Nairobi are full or health facilities have insufficient storage space.

KEMSA's transformation was initially supported by capitalisation from the World Bank through its Health Sector Support Project (HSSP) to deal with working capital needs linked to the new devolved health sector system of financing. KEMSA already has the requisite transport system in place, which includes outsourced transport, courier service and own fleet. This ensures timely dispatch of all commodities ordered by county health facilities.

OLD BUSINESS MODEL

Unlike the new business model; the old one relied on the budget KEMSA received from the Ministry of Health to procure health commodities. It then stored the procured commodities from national and international suppliers in warehouses in Nairobi, and later distributed them to over 4,000 health facilities across the country – some located in far-flung areas across Kenya.

Distribution of these commodities to rural-based health facilities was done on quarterly basis, while hospitals and urban health facilities received replenishment more frequently. Transportation of the health commodities was done by contracted private entities. The transporters would collect a Proof of Payment (POD) to verify successful and timely delivery, which was used as a basis for payment.

COPING WITH DEVOLUTION

KEMSA has had to re-strategise on how to cope with its expanded mandate by ensuring timely supply of quality and affordable medical commodities to county hospitals and county rural health facilities. The Authority has warehouses in Nairobi and regional storage depots, which accommodate the overflow of commodities

when the warehouses in Nairobi are full, or health facilities have insufficient storage space. The Authority has also embarked on building partnerships with not only counties, but also other organisations. For example, KEMSA entered into a partnership contract with the Postal Corporation of Kenya (PCK) for countrywide delivery of HPTs using their wide and well-established distribution network at Ksh. 120 million per year on performance basis.

PCK has the capacity to do this, considering its large fleet of vehicles, motorcycles and warehouses in each region, thus enabling KEMSA to deliver HPTs to the last mile. According to KEMSA, this partnership will augment its preparedness to support UHC in all counties through building capacity to supply essential HPTs countrywide.

KEMSA has divided the country into five regions, namely; Coast and North Eastern, Nairobi and its environs, Nyanza and Western, Rift Valley, and Central and Eastern for ease of sales and marketing. Each region is headed by a sales and marketing executive, while county clusters are headed by county sales and marketing officers.

KEMSA IN A DEVOLVED HEALTH-CARE SYSTEM - ONGOING LEGAL REFORMS

The Kenya Medical Supplies Authority went through tough times between 2000 through to 2008. The Kenya Medical Supplies Agency was established through Legal Notice No. 20 of 2000 with the hope of curing the challenges that its predecessor, the Medical Supplies Coordination Unit (MSCU), faced. However, the Agency was unable to fully deliver on its mandate due to inadequate funding, lack of timely disbursement



of procurement and operational budgets, and an overall lack of confidence in transparency, accountability and performance. This necessitated the recommendation by stakeholders to establish a more efficient and autonomous institution to deliver on the expanded duties through the KEMSA Amendment Act of 2013.

This Act provided for a new legal framework, enabling KEMSA to transition from a Public Agency to a Public Authority with an expanded role that factored in a devolved health system and greater autonomy. The autonomy also paved the way for the Authority to offer higher salaries to its employees after being re-categorised from Category 7C to 7B. The KEMSA Act spells out the roles of the Authority in a devolved healthcare system in line with the provisions of the Constitution of Kenya 2010, which provides for a devolved system of government. According to KEMSA, the legal and institutional reforms aim at strengthening its



TIDBITS

KEMSA Act 2013 also required that a board of governors be instituted as envisaged in the Mwongozo Code. The Code addresses matters of effectiveness of the boards, transparency and disclosure, accountability, risk management, internal controls, ethical leadership and good corporate citizenship. In the new governance structure membership of the board include prominent leaders from different fields and not limited to civil servants. Specific board committees are created with clearly outlined charters, roles and responsibilities.



NQCL

In Kenya, quality assurance of medicines fall within the docket of the National Quality Control Laboratory (NQCL) and the Pharmacy and Poisons Board. The laboratory also controls quality of veterinary medicines. The NQCL was established in 1994 following an agreement between GTZ and the Kenya Government to renovate the existing facility and equip the laboratory at its present location.

Lowering the cost of medicines in Kenya has been an uphill task, thus becoming one of the stumbling blocks to achieving universal health coverage.



institutional and governance capacity with a view to “improving governance, self-sustainability and being more responsive to provision of HPTs in the country”.

Apart from the legal reforms, KEMSA has undertaken institutional changes aimed at turning around the Authority, including restructuring of its enterprise resource system. The KEMSA Act 2013 also required that a board of governors be instituted as envisaged in the Mwongozo Code. The Code addresses matters of effectiveness of boards, transparency and disclosure, accountability, risk management, internal controls, ethical leadership and good corporate citizenship.

In the new governance structure, membership of the board includes prominent leaders from different fields and not limited to civil servants. Specific board committees are created with clearly outlined charters, roles and responsibilities. KEMSA, before 2008, faced a myriad of challenges, especially a talent deficit at the top leadership. To address this, the Authority began with re-organisation of its human resource (HR) by creating departments headed by competent directors, recruited competitively through consultancies and appointed by the Board of Directors.

LOWER COST OF MEDICINES

Lowering the cost of medicines in Kenya has been an uphill task, thus becoming one of the stumbling blocks to achieving UHC. According to WHO, 100 million people across the world fall into poverty because of out-of-pocket payments for medicines and related health services. In May 2019, Kenya’s Cabinet Secretary for Health, cognisant of this problem, alluded to the need to develop an essential drugs list with fixed prices for each health commodity to guide



CHWS LEAD KISUMU COUNTY'S WAR ON COVID-19

In the FY 2019/2020, Community Health Workers (CHWs) of Nyando were sensitized by Kisumu County Public Health Department and are now part of the COVID-19 pandemic response. The CHWs use all feasible means to help people in the rural communities to stay healthy and informed in the wake of the endemic. In the fight against the pandemic, 1,373 CHWs across the county were trained and embarked on community mobilisation of communities within Kisumu. In Kochogo North village in Wawidhi Ward, Ms. Benter Akinyi Bodo – the CHW, organises door-to-door consultations for fellow villagers, using materials from the health department.

“We regularly do home visits and in consultation with Ahero Sub-county hospital and the county health department, we share information on the preventive measures with the community and other CHWs in remote areas.” Said Ms. Bodo. According to Ms. Bodo the CHWs are available 24 hours every day for interventions in the wake of Coronavirus crisis.

the pricing of essential medicines. The National Hospital Insurance Fund (NHIF) provides health insurance coverage to members (contributors) and their dependants. However, being a contributory scheme, it means the majority of non-members cannot benefit from it. According to the NHIF strategic plan 2018-2022, the Fund had seven million principal members in 2018, and projects to increase its membership to 19 million by 2022. The NHIF has also introduced a health insurance cover for chronic conditions and vulnerable populations.

Furthermore, the Government of Kenya, through the Third Medium Term Plan 2018-2022, plans to expand social health protection by implementing schemes aimed at benefiting target populations. The Government has lined up key flagship projects that will enhance social health protection and contribute towards the achievement of UHC by 2022.

It is projected that Health Insurance Project for Elderly People and Persons with Severe Disabilities (PWSD) will cover about 1.7 million people by 2022. This is expected to cushion the elderly and PWSDs from financial hardship. The government also plans to eliminate user fees in primary healthcare facilities, as well as expand the Health Insurance Subsidy Programme (HISP) for orphans and the poor to cover about 1.5 million people by 2022.

Most of the poor either avoid seeking health-care because it is unaffordable or seek it and experience financial hardship. Other flagship projects include: Linda Mama Project (free maternity programme), which aims at covering 1.36 million mothers and babies by 2022; Informal Sector Health Insurance programme to cover 12 million informal sector workers by 2022; and, Formal Sector Medical Insurance Coverage

(medical insurance cover for retired civil servants), which targets 4.2 million people by 2022.

MEDICINES QUALITY ASSURANCE

Quality assurance is a concept that covers all matters that influence, either individually or collectively, the quality of a product. Medicines quality assurance is critically important as it contributes to providing quality public health services by ensuring quality medicines reach patients. According to WHO, quality assurance in pharmaceuticals can be categorised in the following areas: development, quality control, production, distribution, and inspection.

THE NATIONAL QUALITY CONTROL LABORATORY'S ROLE IN MEDICINES QUALITY ASSURANCE

In Kenya, quality assurance of medicines falls within the docket of the National Quality Control Laboratory (NQCL) and the Pharmacy and Poisons Board. The NQCL carries out tests and analyses and conducts research to ensure quality control for essential human medicines; and medicine devices used in Kenya, to meet international quality standards in order to guarantee patient safety. The laboratory also controls the quality of veterinary medicines.

The NQCL was established in 1994 following an agreement between GTZ and the Kenya Government to renovate the existing facility and equip the laboratory at its present location. From 1994 to 1999, the NQCL was jointly run by GTZ and the Kenya Government. In 1999, the operation of NQCL was fully handed over to the Kenya Government, attaining WHO prequalification in 2008 and retaining the WHO status in 2011 before receiving quality certification from



the International Standardisation Organisation (ISO) – ISO 17025 accreditation – in 2015. The latter is expected to improve the international credibility of the results from NQCL. However, despite this sterling performance, Kenya is yet to win the war against poor quality of medicines.

A survey conducted by Promoting the Quality of Medicines (PQM) programme revealed that poor quality of medicines was a threat to patients globally. The PQM is the United States Agency for International Development's (USAID) intervention programme for ensuring quality, safety and efficacy of medicines.

To intensify the war against poor quality medicines, the NQCL attained international accreditation and received state-of-the-art laboratory equipment for testing the quality of medicines, a laboratory information management system and an upgraded website. The PQM has committed itself to continue providing technical support to

TIDBITS

KEMSA's Role in Medicines Quality Assurance. KEMSA also has a role to play in ensuring quality assurance of medicines pursuant to its mandate and in implementing the goals of the National Medicines Policy (NMP). The NMP is grounded on both concepts of essential drugs and preventive health care to ensure pharmaceutical products meet the country's requirement of prevention, diagnosis, and treatment of disease using high quality, safety and cost effective health products. According to KEMSA, their in-house quality assurance systems including the Quality and Procedures Manual ensures all medicines meet the highest standards

NQCL and the Ministry of Health with a view to building capacity for manufacturing and monitoring of quality medicines.

KEMSA'S ROLE IN MEDICINES QUALITY ASSURANCE

KEMSA also plays a role in ensuring quality assurance of medicines, pursuant to its mandate, and in implementing the goals of the National Medicines Policy (NMP). The NMP is grounded on both concepts of essential drugs and preventive healthcare to ensure pharmaceutical products meet the country's requirement of prevention, diagnosis, and treatment of diseases using high quality, safe and cost-effective health products.

According to KEMSA, their in-house quality assurance systems, including the Quality and Procedures Manual, ensure all medicines meet the highest standards possible. In addition, KEMSA uses other quality certification bodies such as the NQCL and the Kenya Bureau of Standards (KBS) to ensure the quality of medical products. Before 2008, KEMSA had only one member of staff for quality assurance, but it now has a fully-fledged Quality Assurance Department with an in-house mini laboratory.

The department ensures that commodities in transit to health facilities are of high quality. KEMSA also conducts supplier audits and liaises with partners to carry out post-distribution surveillance to maintain the quality of products. The Authority also has Standard Operating Procedures (SOPs) for outsourced transporters to guarantee good storage and distribution practices for medicines and other health commodities. Furthermore, the Third Medium Term Plan 2018-2022 provides for construction and equipping of an ultra-modern laboratory

complex for NQCL to upscale its capabilities. Essential Medicines List, including those for non-communicable diseases. The WHO defines essential medicines as those that satisfy the priority healthcare needs of the population. The selection criteria of essential medicines is based on disease prevalence and public health relevance, evidence of clinical efficacy and safety, and comparative costs and cost-effectiveness.

The WHO usually updates its list of essential medicines every two years and is used as a reference guide for governments and institutions around the world in developing their own essential medicines list.

Globally, the concept of essential medicines incorporates the need to regularly update medicines selections to reflect new therapeutic options and changing therapeutic needs; the need to ensure drug quality; and the need for continued development of better medicines, medicines for emerging diseases, and medicines to meet changing resistance patterns . Once thought of as relevant only in resource-constrained settings, the WHO Model Lists are now seen as equally relevant to high, middle and low-income countries, particularly with the inclusion of new, highly effective and expensive medicines in more recent years.



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Kenya developed its first Essential Medicines List in 1981. Over the years, the Essential Medicines List (EML) concept has become increasingly entrenched into the health system, with successive revisions of the Kenya Essential Medicines List (KEML) in 1993, 2003 and 2010. However, it should be noted that KEML 2010 lacked effective mechanisms for promoting and monitoring its use, and for subsequent regular review and revision.

The evidence for listing medicines on the KEML 2016 was derived from a globally coordinated process of the WHO, which develops the Model List of Essential Medicines, and makes the relevant information and knowledge available to countries for their own adaptation.

According to the Ministry of Health, the KEML 2016, which is the latest, was revised in 2016 and is a key tool for promoting access to essential medicines. If properly managed, it can enhance therapeutic benefits.

The KEML 2016 provides guidance to investments in medicines by all relevant actors in Kenya. It is developed based on evidence, thus provides a basis for best practice in the selection of medicines. According to the Ministry of Health, the list is recommended for use by public sector health service providers at national and county levels; policymakers; private, faith-based organisations and NGO health facilities; as well as development partners.

NON-COMMUNICABLE DISEASES

The KEML 2016 provides good guidance to adequately address communicable diseases such as malaria, TB, and HIV. Furthermore, KEML 2016 pays attention to the management of the ever-increasing numbers of non-communicable

disease (NCDs), namely; heart diseases, diabetes, cancers and chronic respiratory diseases. According to WHO, NCDs contribute to the mortality rate of 182 per 100,000 people. On the other hand, a stepwise survey carried out in 2015 showed that 27 percent of adult Kenyans are overweight/obese, while 23.8 percent of Kenyans are hypertensive.

Overall, there is a high incidence of NCDs in Kenya, such as heart disease, diabetes, hypertension, and cancer. This is exacerbated by poor surveillance systems for NCDs. However, the inclusion of essential medicines for NCDs in the KEML 2016 is a good move towards addressing this problem. Essential medicines for neglected, yet key areas of public health, such as albinism and jiggers, have also been included on the list. In addition, the list has medicines for heart diseases, respiratory disorders (anti-asthmatics and medicines for chronic obstructive and pulmonary disease), and hypertensive conditions.

MAIN CHANGES IN KEML 2016

KEML 2016 includes additions of medicines that were previously not on the list, deletions of medicines that are either considered obsolete or evidently less cost-effective, and changes to facilitate better administration (see figure 1).

Deletions from KEML 2010	131
Additions to KEML 2016	337
Net increase	206
KEML 2016 Totals	
Total drugs	452
Total presentations	620
Total List entries	687



The WHO updates its list of essential medicines every two years. The list is a guide for governments and institutions around the world to develop their own lists.

TIDBITS

Quality assurance is a concept that covers all matters that influence the quality of a product. Medicines quality assurance is critically important as it contributes to providing quality public health services by ensuring quality medicines reach patients. According to WHO, quality assurance in pharmaceuticals can be categorised in the following areas: development, quality control, production, distribution, and inspections.



KEML 2016 is a cornerstone of the national healthcare system, and a key component of both the national health and national pharmaceutical policies. It is a vitally-important tool and reference source for guiding the management of common health conditions in the country, as well as the management and utilisation of medicines at national, county and institutional (health facility) levels.

KEML aims to support the smooth functioning of the healthcare system and radically improve the availability and appropriate use of medicines for improved health status of the population. It is also an investment guide of healthcare funds in financing essential medicines to respond to prioritised public health needs. While launching the KEML 2016, then Ministry of Health Cabinet Secretary Cleopa Mailu said KEML provides a key tool in efforts to attain

equity and high standards in healthcare. Mailu said the tool was intended to guide medicines development, production, procurement and supply, prescribing, dispensing and use, as well as the development, monitoring and evaluation of strategies, thereby enhancing Appropriate Medicines Use (AMU).

To provide comprehensive healthcare services to the population, heavy investments are required, which constitute a major and ever-increasing cost to governments, households and individuals. Therefore, effective mechanisms are needed to prioritise the various health interventions and products in order to maximise therapeutic benefits and optimise patient outcomes. KEMSA is currently working with the Ministry of Health and have jointly produced the Health Technologies and Commodities (HPT) List, guided by the KEML 2019. KEMSA is cur-

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KEML aims to support the smooth functioning of the healthcare system and radically improve the availability and appropriate use of medicines, for improved health status of the population





KAKAMEGA UNIVERSAL HEALTH-CARE PROGRAMMES ON COURSE

In the FY 2019/2020 Kakamega Governor Wycliffe Ambetsa Oparanya officially launched an ambitious universal health coverage (UHC) programme targeting 60 percent of vulnerable people currently uncovered by NHIF.

The County Government of Kakamega committed to meet all registration expenses for the target group in year one and scale it down to 50 percent in the second year. Oparanya said UHC would only succeed through involvement of all the 47 counties in the country because they have the requisite structures and capacity to serve wananchi at the grassroots.

He also said its success was dependent upon reforming the key public institutions at the centre of the programme – NHIF and the Kenya Medical Supplies Agency (KEMSA).

The County initiated a multi-pronged strategy to implement the programme including the ongoing NHIF registration of people in each of the 12 sub counties by revamping primary healthcare facilities; improving the medical supply chain to ensure all facilities have timely and adequate supply of drugs; expand the scope and coverage of the Imarisha Afya ya Mama na Mtoto (Oparanya Care); proper training of community health workers (CHWs); and proper documentation to accurately identify deserving cases and stave off corruption.

rently supplying over 850 essential medicines and medical supplies in the country. KEMSA is a critical partner for the success of UHC. The Authority has the mandate to procure warehousing and distribution of HPTs to all public health facilities in the country. KEMSA is also mandated to ensure timely supply of affordable and quality health products and technologies.

KEMSA Chief Executive Officer Jonah Manjari says the Authority has come up with enhanced strategies to increase efficiency, which will go a long way in supporting the Government's UHC programme. KEMSA also supplies counties with the medical products they require from the essential supplies list.

"To achieve this, counties place orders of their supplies, which are processed in four quarters every year to address issues of storage and expiry. Through this, counties have been able to address the requirements of their patients," Dr Manjari says.

The need for healthcare services in the four pilot counties has increased. Each of the four UHC pilot counties receives supplies on a quarterly basis. The rest of the counties get their supplies just in time before they run out of stocks. KEMSA works closely with the Ministry of Health to ensure the process of supplying essential medicines is effective and efficient.



The need for healthcare services in the four pilot counties has increased. Each of the four UHC pilot counties receives supplies on a quarterly basis

The Authority's central role in UHC has assisted in making healthcare products affordable. Dr Manjari says KEMSA is advocating for the establishment of a system that will capture consumption data. This will help in rational forecasting and quantification. A UHC scale-up roadmap has identified key areas that need improvement, and KEMSA has entered into framework contracts with its suppliers so that products are delivered as needed. This will accelerate the response to demand.

KEMSA has committed to deliver on its mandate to meet the demands of UHC scale-up. To this end, the Authority is set to introduce a suppliers performance tool to measure quality, consistency in pricing, and full delivery of commodities. This will promote best service and eliminate suppliers who fail to meet performance requirements. Dr Manjari says they will not entertain nonperforming suppliers.

The KEMSA CEO adds that they are committed to supporting local products that are affordable and meet high quality standards under UHC. He says that 40 percent of the procurement budget has been reserved for locally-produced goods and services, as directed by the government. "We are committed and obligated to reserve 40 percent of our procurement budget for purchase of locally-produced goods and services," says the KEMSA boss.

The CEO notes that counties expect KEMSA to fulfil 90 percent of the order fill rate, and therefore urged suppliers to be realistic and only accept tenders they can supply to avoid drug shortages in the country. "We have been given a good opportunity by UHC. Let us not bite more than we can chew," he stressed. Dr Manjari says that with the introduction of UHC, the business model had changed and that if suppliers were not committed to the job, the

achievement of UHC would be limited. He urges them to be strategic, understand the market, and be disciplined.

KEML IN THE CONTEXT OF DEVOLVED HEALTHCARE

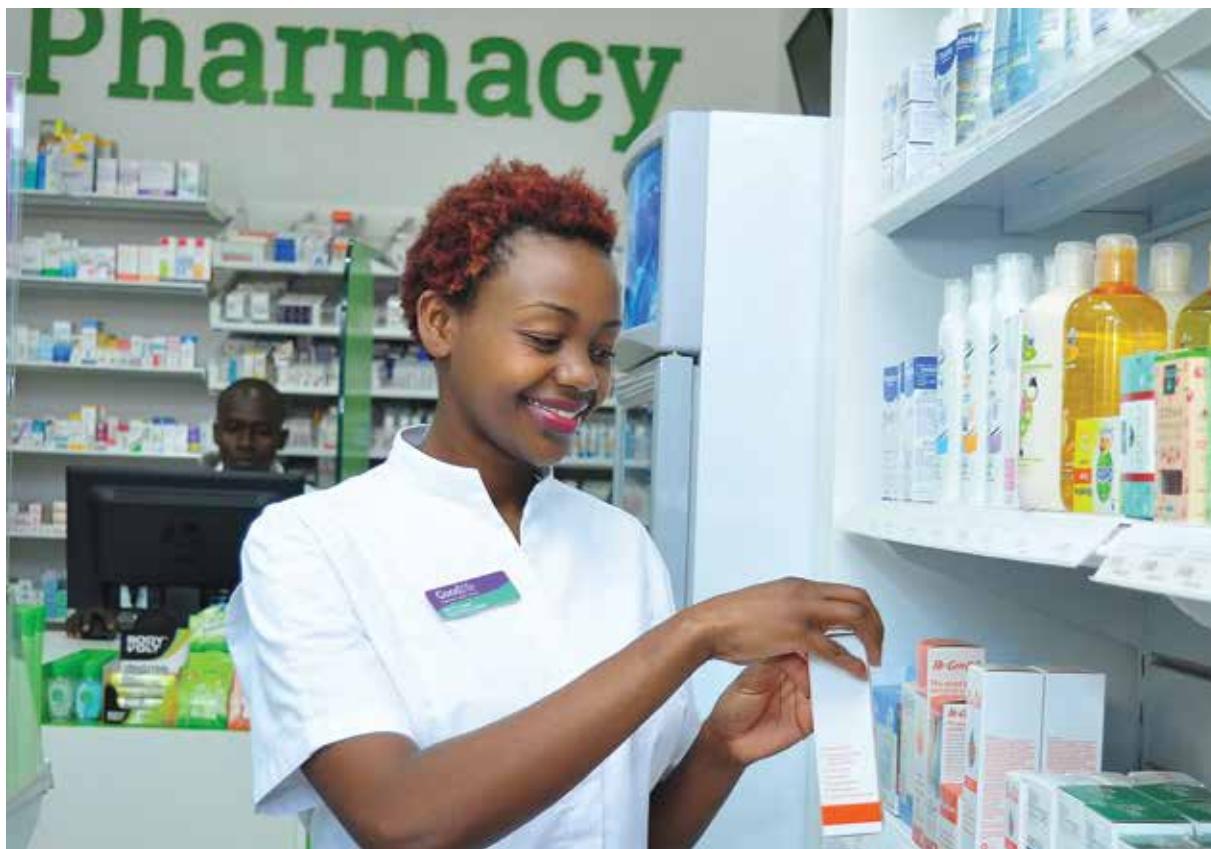
KEML 2016 is derived from a robust and globally-recognised process of scientific assessment of efficacy, safety and quality, over and above cost-effectiveness evaluation. Such evaluations require massive investments, with processes requiring standardisation of evidence in order to promote uniformity in clinical care, disease control and public protection .

The KEML will guide the Authority on the products needed as per the level of care. These levels of care are categorised as follows; Community Health Services (Level One), Dispensary/Clinic (Level Two), Health Centres (Level Three), Primary Hospitals (Level Four), County (secondary) Referral Hospitals (Level Five), and Tertiary (national) Referral Hospitals (Level Six).

The KEML is a critical tool that can go a long way in ensuring the right to health by guaranteeing optimum therapeutic interventions. Therefore, for the National and County Governments, KEML 2016 provides the basis for selecting the



A UHC scale-up roadmap has identified key areas that need improvement, and KEMSA has entered into framework contracts with its suppliers so that products are delivered as needed



medicines for procurement using public funds. The National and County Governments must ensure that essential medicines are available in terms of functioning health systems, adequate amounts, appropriate dosage, assured quality and adequate information, and at affordable prices to both individuals and the community.

KEMSA has come up with the Community Health Volunteers (CHV) kit to be used by care givers at the community level to respond to public needs.

It is also constantly reviewing the demands of customers on life-saving products for non-communicable diseases such as oncology, hypertensive, renal, diabetes, nutrition and family

planning. Arising from a study from the four pilot counties, KEMSA has included orthopaedic implants on the list of essentials as a response to the high number of road accidents witnessed on highways in the country. There is also a need for the Ministry of Health to come up with standardisation of lab equipment to address the requirements of laboratory reagents and consumables.

KEMSA has faced various challenges as counties place all manner of requests for their laboratories, thus clogging the procurement and warehousing system. KEMSA is of the view that the ministry, apart from coming up with standards, should zone counties according to their unique needs for laboratory reagents and consumables.

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