Kenya's health transitions

Country data summary

October 2021

Kenya is undergoing four key transitions in its health sector—demographic transition, changes in disease burden, a transition away from development assistance for health, and a shift towards domestic financing for health. Despite health gains in previous decades, Kenya is facing a high burden of communicable diseases and a rapidly increasing burden of non-communicable diseases (NCDs). It is also experiencing high population growth and financial challenges resulting from donor transitions. In this profile, we summarize the key transitions that will have an impact on achieving universal health coverage (UHC) in Kenya.

Demographic transition

Kenya is a young country with about 60% of its citizens below the age of 24, and it will remain relatively young for the next couple of decades.[1] The country is also rapidly urbanizing: while three-quarters of the population still live in rural areas, nearly half of the country's population is projected to live in cities by 2050.[2] The Kenyan government will need to understand its current and changing demography to fulfill the health needs of its population.

Domestic finance transition

Domestic government expenditures for health have been increasing as a share of total health expenditure in recent years (up from 29% in 2000 to 43% in 2017) while external aid as a share of total health expenditure is on the decline (down from 28% in 2006 to 18% in 2017.)[5] Despite progress in domestic resource mobilization for health, domestic health expenditure as a share of general government expenditures, a measure of health sector prioritization, has remained fairly stagnant since 2005 (7% in 2005, 8% in 2017.)[5]

Disease (epidemiological) transition

Kenya is increasingly facing the problem of a double disease burden. Despite a fall in the annual mortality rate from communicable diseases, communicable diseases continue to make up the greatest number of annual deaths in Kenya (54%).[3] At the same time, deaths from NCDs and injuries are on the rise. It is projected that NCDs and injuries will be the primary cause of death in Kenya by 2030.[4] Disability-adjusted life years (DALYs) also follow this same pattern.

Donor health aid transition

Despite overall declines in donor resources for health in recent years, donor aid continues to play an important role in Kenya's health financing landscape. In particular, the United States is the largest donor, with most of its funds focused on HIV/AIDS.[6] Kenya is facing several key donor transitions in the near-term future that could impact its health financing landscape and it must prepare accordingly.

Development indicators			Health statistics		
GDP	$87.9 bn	2018	Life expectancy at birth	66.7	2018
Gross national income (per capita)	$1,620	2018	Infant mortality rate per 1,000 live births	35	2019
Domestic public health expenditure (% GDP)	2.10%	2017	Maternal mortality ratio per 100,000 live births	342	2017
Literacy rate, adults	81.50%	2018	Doctor- population ratio per 1,000 population	0.157	2018
Human Development Index	0.579	2019	Public health expenditure (% GDP)	4.80%	2017

Source: World Bank Development Indicators[7]
Abbreviation: GDP, gross domestic product

This is one in a series focusing on middle-income countries that are transitioning out of official development assistance for health. The profiles are part of a broader study called *Driving health progress during disease, demographic, domestic finance, and donor transitions* led by the Center for Policy Impact in Global Health.

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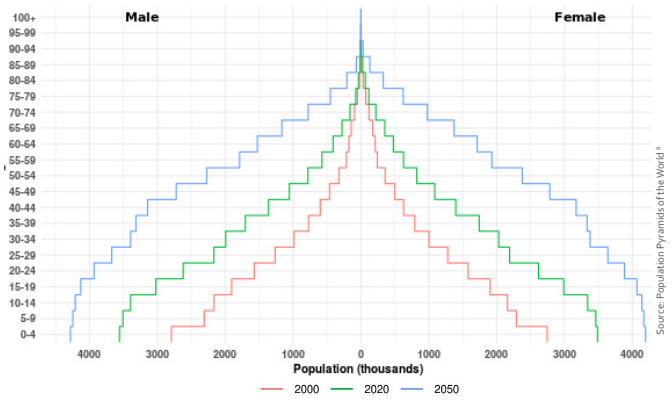
Demographic transition

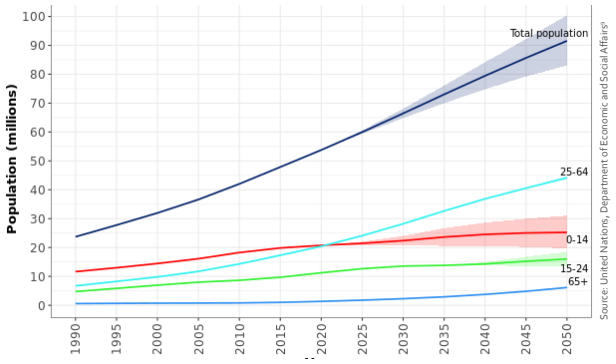
Key takeaways

- Between now and 2050, Kenya's population structure will rapidly grow, urbanize, and age, creating profound challenges for the healthcare system.
- To achieve UHC, annual health spending per person needs to grow faster than the rapidly growing population.
- Currently, Kenya has a "young" population. Kenya will need to address the health concerns of its youth, who face high unemployment rates, work disproportionately in the informal sector (thereby leaving them unqualified for employer-provided insurance), and are at higher risk of NCDs and injuries.
- Healthcare in Kenya will need to evolve to tackle the increasing burden of risk factors associated with a rapidly urbanizing population and the changing geographic distribution of health service needs.

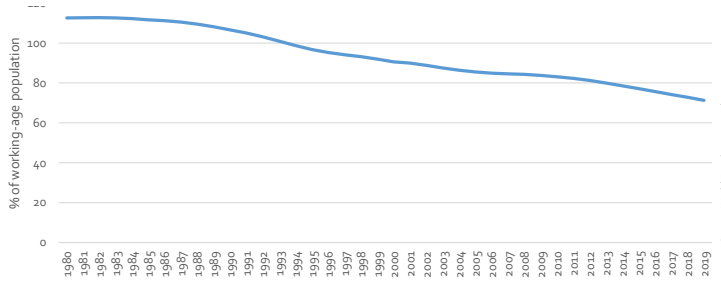
Population of Kenya (2000, 2020, and 2050)



Population growth (millions)



Working age dependency ratio (% population)



Demographic transition

	2000	2020	2050
Median age (years)	17	20	28
0-4 (% of population)	17%	13%	9%
5-19 (% of population)	40%	37%	26%
20-64 (% of population)	41%	48%	58%
>64 (% of population)	2%	2%	8%
Age dependency ratio	89.06%	80.87%*	-
Rural (% of population)	80%	72%	54%
Total population (millions)	31,965	53,771	91,575

Source: Population Pyramids of the World [1], The World Bank [2], United Nations, Department of Economic and Social Affairs [3]

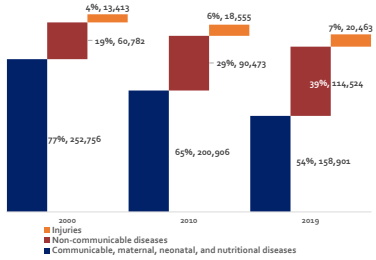
Disease (epidemiological) transition

Key takeaways

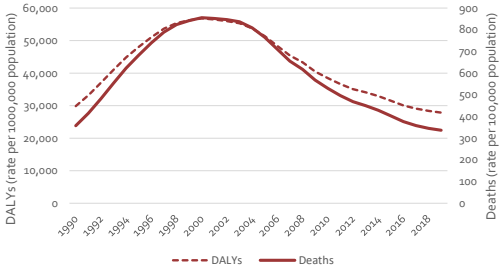
- Communicable diseases are still the primary drivers of mortality in Kenya. But the burden from NCDs and injuries is on the rise.
- Kenya, like many lower-middle income countries, faces a double burden of disease—tackling communicable diseases amidst a rising burden of NCDs and injuries.
- As its NCD burden continues to grow, Kenya must ensure NCD service access and affordability; currently, services are costly and there are disparities in access.[10]
- Kenya must also continue to improve and expand access to essential healthcare for communicable diseases and maternal and child health (MCH) conditions, while accounting for regional and socio-economic disparities.

Main causes of mortality

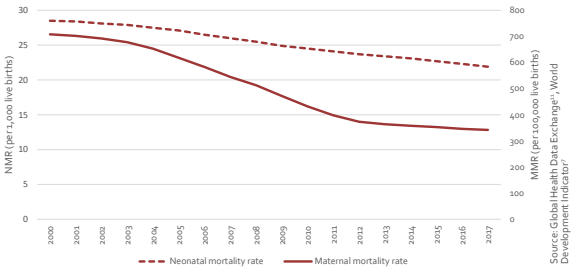
Deaths, rate per 100,000 population



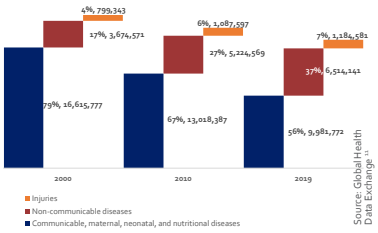
Adult morbidity and mortality (15-59 years)



Neonatal mortality rate & maternal mortality ratios



DALYs, rate per 100,000 population



Top causes of deaths per year (both sexes, all ages, per 100,000 population)

	2000	2010	2019
1	HIV/AIDS & STIs	HIV/AIDS & STIs	Enteric infections
2	RIs and TB	RTIs and TB	Cardiovascular diseases
3	Enteric infections	Cardiovascular diseases	RTIs and TB
4	Maternal & Neonatal	Enteric infections	Neoplasms
5	Cardiovascular diseases	Maternal & Neonatal	Enteric infections
6	Other infections	Neoplasms	Maternal & Neonatal
7	NTDs & malaria	Digestive diseases	Digestive diseases
8	Digestive diseases	Other infections	Diabetes & kidney diseases
9	Neoplasms	Diabetes & kidney diseases	Other infections
10	Nutritional deficiencies	Unintentional injuries	NTDs & malaria

Source: Institute for Health Metrics and Evaluation (IHME) [12]

Disease burden (types of disease, both sexes, all ages)

	2000	2010	2019	Avg. AROC*
Deaths				
Communicable, maternal, neonatal, and nutritional diseases	252,756	200,906	158,901	-2%
NCDs	60,782	90,473	114,524	3%
Injuries	13,413	18,555	20,463	2%
All diseases	326,951	309,934	293,888	-1%
DALYs				
Communicable, maternal, neonatal, and nutritional diseases	16,615,777	13,018,387	9,981,772	-3%
NCDs	3,674,571	5,224,569	6,514,141	3%
Injuries	799,343	1,087,597	1,184,581	2%
All diseases	21,089,691	19,330,553	17,680,494	-1%

Source: Global Health Data Exchange [11] (per 100,000)

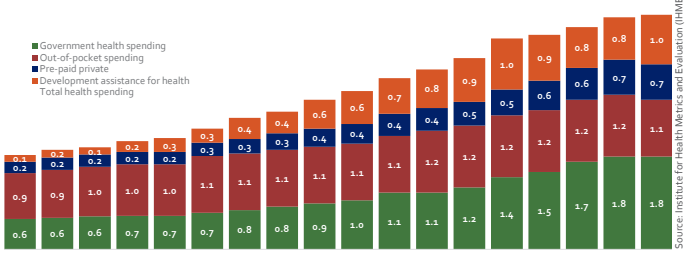
Abbreviations: RIs, respiratory infections; TB: tuberculosis; NTDs, neglected tropical diseases; STIs, sexually transmitted infections; NCDs, non-communicable diseases; DALYs, disability-adjusted life years; AROC, annual rate of change.

Domestic finance transition

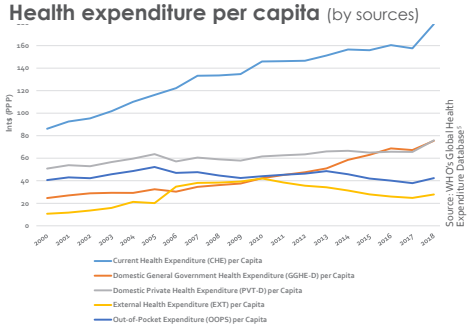
Key takeaways

- Kenya's domestic financing for healthcare is showing positive trends: domestic financing is increasing as a share of total health spending while external financing and out-of-pocket payments (OOPs) are declining.
- However, the COVID-19 pandemic has strained Kenya's economy, leading to budget cuts for key initiatives like UHC.[33] Achieving UHC by 2022 in the current economic climate remains a herculean task.
- Kenya's domestic revenue mobilization and budget execution capacity will need to improve to sustainably finance UHC.

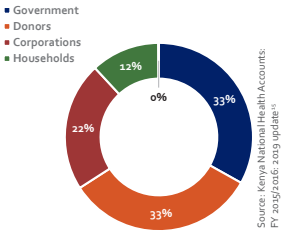
Health expenditure (2019, US$ billions)



Health expenditure per capita (by sources)



Source of health financing



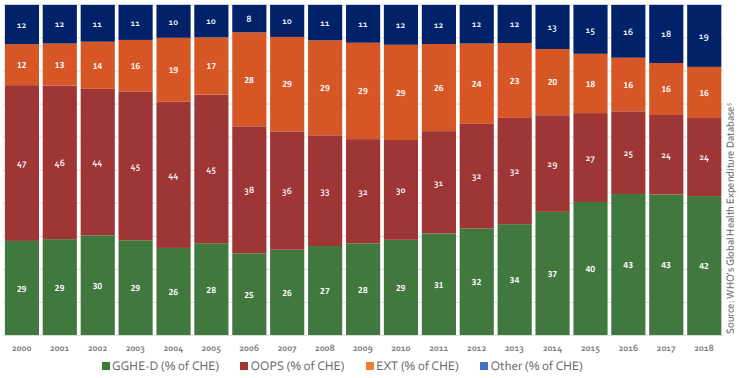
Health expenditure (comparing Kenya with all low- and middle-income countries)

	Kenya			Low- and middle-income countries		
	2000	2018	AARC*	2000	2018	AARC*
CHE per capita (US$)	21	88	8%	22.9	85.7	7.60%
GGHE-D (% of current health expenditure)	28.6	42.1	2%	31.30%	33.20%	0.30%
EXT (% of current health expenditure)	12.4	15.5	1%	3.50%	3.20%	-0.05%
OOPS (% of current health expenditure)	47.1	23.6	-4%	59.20%	55.70%	-0.03%

*Average annual rate of change

Source: The World Bank World Development Indicators[3]

Breakdown of health expenditure by source (% of current health expenditure)



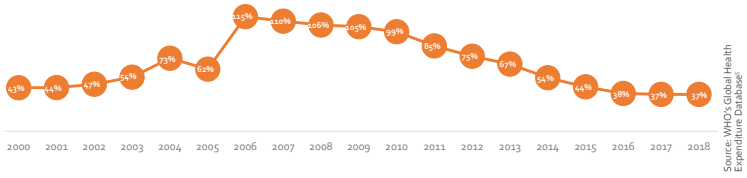
Abbreviations: GGHE-D, domestic general government health expenditure; CHE: current health expenditure; OOPS, out of pocket spending; EXT, external health expenditure.

Donor health aid transition

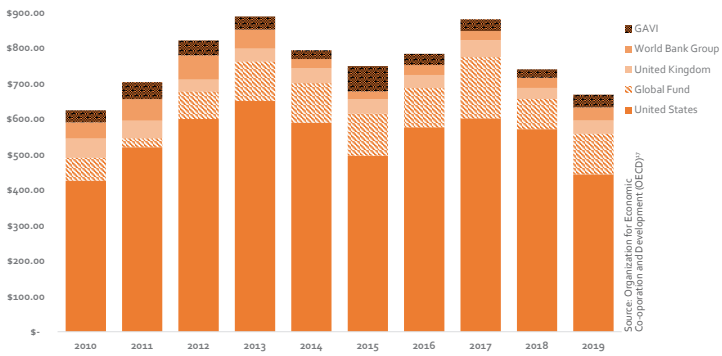
Key takeaways

- Kenya is facing several key donor transitions in the near-term future and must prepare accordingly.
- However, external sources of health financing still play a critical role in Kenya's health system.
- Transitions from aid could have a negative impact on HIV/AIDS services and services for key populations in particular, since most of these programs are still funded from external resources—primarily from one donor, the U.S. President's Emergency Plan for AIDS Relief.
- Kenya will face the challenge of absorbing donor-funded programs and services if it wants to avoid potential backsliding.

External health expenditure as a percentage of domestic GGHE-D



Aid by top 5 donors each year from 2010-2019 (US$ millions)



Aid received by health area 2009-2018

Health area	Total flow (US$ millions)	Total flow (percentage)
STD control including HIV/AIDS	5334.0	63.2%
Malaria control	709.9	8.4%
Infectious disease control	144.1	1.7%
Basic health care	634.3	7.5%
Reproductive health care	358.9	4.2%
Health policy & administrative management	400.9	4.7%
Tuberculosis control	219.1	2.6%
Family planning	237.8	2.8%
Basic nutrition	191.6	2.3%
Population policy and administrative management	33.7	0.4%
Personnel development for population and reproductive health	4.2	0.0%
Medical services	54.8	0.6%
Health education	17.6	0.2%
Health personnel development	10.1	0.1%
Medical research	32.7	0.4%
Basic health infrastructure	36.9	0.4%
Medical education/training	4.1	0.0%

Source: Organization for Economic Co-operation and Development (OECD)[4]

Abbreviations: GGHE-D, domestic general government health expenditure; STD, sexually transmitted disease.

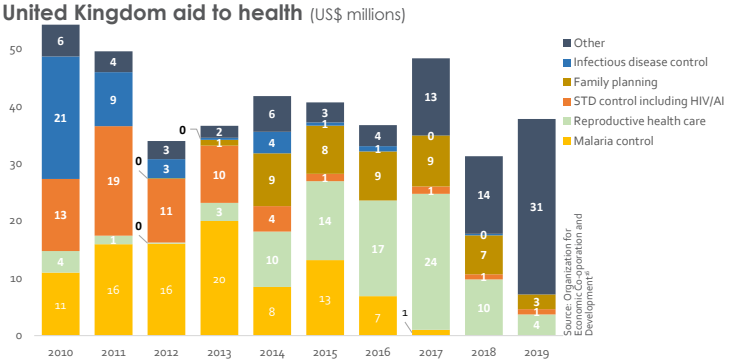
Donor health aid transition (continued)

Top 5 donors (91%, US$7.7 billion, of all ODA for health, 2010-2019)

Donor	Total	Percentage
United States	$5,479.00	65%
Global Fund	$989.68	12%
World Bank Group	$410.15	5%
United Kingdom	$395.76	5%
Gavi, the Vaccine Alliance	$382.74	5%
Other	$788.86	9%

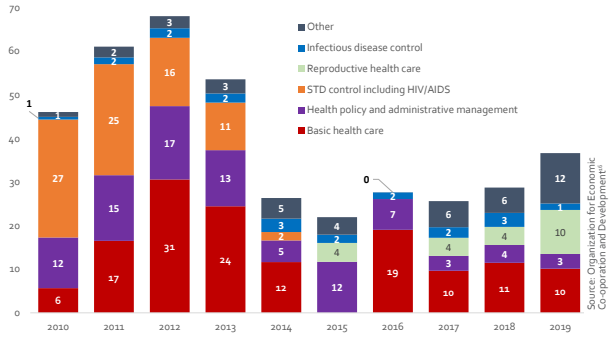
Source: Organization for Economic Co-operation and Development (OECD)[16]

United Kingdom aid to health (US$ millions)



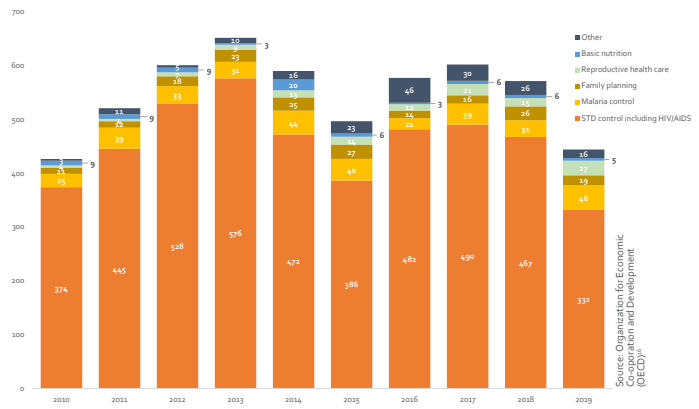
Note: Other areas include basic nutrition, medical research, health policy and administrative management, basic health care, health personnel development, population policy and administrative management, health education, other prevention and treatment of NCDs, and medical services.

World Bank aid to health (US$ millions)



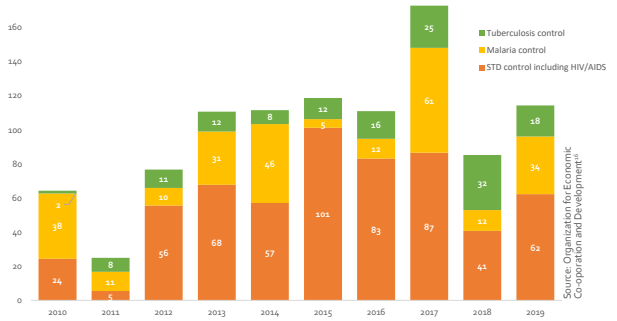
Note: Other areas include basic health care, health policy and administrative management, and family planning

United States aid to health (US$ millions)

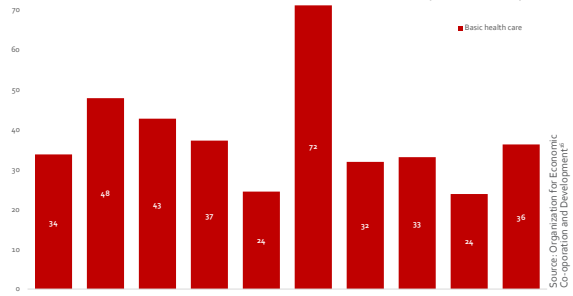


Note: Other areas include infectious disease control, tuberculosis control, health policy and administrative management, basic health care, population policy and administrative management, basic health infrastructure, personnel development for population and reproductive health, health personnel development, and health education.

Global Fund aid to health (US$ millions)



Gavi, the Vaccine Alliance aid to health (US$ millions)



Note: Basic health care as related to immunization and system strengthening

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Funding and Authorship

This profile was funded through a grant from the Bill & Melinda Gates Foundation to the Duke Center for Policy Impact in Global Health. The Foundation played no role in writing the profile. The profile was written by authors at Strathmore University (**Dosila Ogira, Joseph Onyango, Francis Wafula,** and **Gilbert Kokwaro**) and the Duke Center for Policy Impact in Global Health (**Kaci Kennedy McDade, Minahil Shahid, Wenhui Mao, Gavin Yamey,** and **Osondu Ogbuoji**). This profile was designed by Heather Hille.

Methods

Our research included a desk-based review of websites, strategy documents, grey literature reports, and academic literature. This project was screened for exemption by the Duke University Institutional Review Board as part of the study 'Driving health progress during disease, demographic, domestic finance and donor transitions (the "4Ds"): policy analysis and engagement with transitioning countries.'

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