

Nigeria's health transitions

Country data summary

October 2021

Currently, Nigeria is undergoing four key transitions in its health sector—demographic transition, changes in the disease burden, a transition away from development assistance for health, and a shift towards domestic financing. Specifically, despite health gains in previous decades, Nigeria 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 exits. In this profile, we summarize the key transitions that will have an extensive impact on achieving universal health coverage (UHC) in Nigeria.

Demographic transition

Nigeria is a young country with about 54% of Nigerians below the age of 19, and will remain relatively young for the next couple of decades. The country is also rapidly urbanizing with more Nigerians currently living in urban centers than in rural areas. Its government will need to understand the current and changing demography to fulfill the health needs of its population.

Domestic finance transition

Only about 5% of Nigerians are covered by health insurance. ¹⁸ The domestic general government health expenditure (GGHE-D) as a percent of GDP in Nigeria is around o.5%, which is below the average across Sub-Saharan African countries and across low- and middle-income countries. Most Nigerians spend out-of-pocket on health, which accounts for about 77% of the current health expenditure in the country. Nigeria will need to transition towards domestic financing of healthcare to provide UHC to its population. ⁴

Disease (epidemiological) transition

Nigeria is increasingly facing the problem of a double-disease burden. In 2016, according to the WHO, maternal and neonatal diseases still accounted for about 63% of deaths, and communicable (including maternal and neonatal) diseases were the top 4 causes of deaths in 2019.¹³ At the same time, deaths from NCDs such as cardiovascular disease have also increased in the last 10 years.

Donor health aid transition

Heavy dependence of donor financing to fund healthcare in Nigeria is a major impediment towards reaching UHC. Many donors have exit criteria such as reaching a particular threshold per capita income. When these criteria are met, the donors begin to exit the country. Nigeria is already a lower-middle income country and has reached, or is about to reach, the exit criteria established by many donors. Therefore, Nigeria needs to prepare itself for the donor health aid transition to avoid experiencing a sudden shock of a reduction in development assistance in health.



Development indicators			Health statistics		
Total population	200,963,599	2019	Life expectancy at birth	54.7	2018
GDP	US\$397.27b	2018	Infant mortality rate per 1,000 live births	75.7	2018
Gross national income (per capita)	US\$1,968	2017	Maternal mortality ratio per 100,000 live births	917	2017
Public health expenditure (% GDP)	0.5	2017	Doctor- population ratio per 100,000 population	38.9	2016
Literacy rate	62.016	2018	Public health expenditure (% GDP)	3.89	2017
Human Development Index	0.534	2019	Total health insurance coverage	5%	2015
Proportion of population living in rural areas	50%	2018	DALYs from NCDs, rate per 100,000 population	14,454	2019
Median age (years)	18.1	2020	DALYs, rate per 100,000 population	54,038	2019
External aid (% of current health expenditure (CHE)	7.86%	2018			

Abbreviations: GDP, gross domestic product; DALYs, disability-adjusted life years

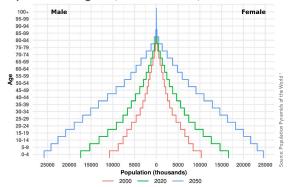


Demographic transition

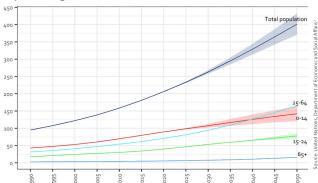
Key takeaways

- Currently, Nigeria has a 'young' population, a population growth rate of 2.57% (2019), and more people living in urban than rural areas.
- During the last decade of the 20th century, Nigeria had a dependency ratio of >90%. After a slight decline between 2000 and 2004, the dependency ratio increased reaching 89% in 2013. Currently, Nigeria has a high age dependency ratio of 87% (2019).
- Between now and 2050, Nigeria's population structure will rapidly grow, urbanize, and age, creating profound challenges for the healthcare system.
- At this time, the Basic Health Care Provision Fund (BHCPF) is implemented in rural areas of Nigeria only.
- By generously allocating money to the BHCPF, some of these challenges can be mitigated, allowing coverage expansion to urban populations.

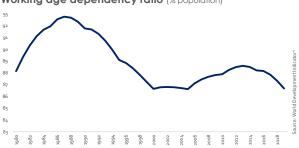
Population of Nigeria (2000, 2020, and 2050)



Population growth (millions)



Working age dependency ratio (% population)



Demographic transition

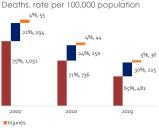
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	2000	2020	2050
Median age (years)	17.9	18.1	22.4
o-4 (% of population)	17.2	16.4	12.5
5-19 (% of population)	37.2	37.6	33
20-64 (% of population)	42.7	43	50.5
>64 (% of population)	2.8	2.7	3.8
Age dependency ratio	86.64	-	-
Rural (% of population)	65	48	30
Total population (millions)	122.2	206.1	401.3

Disease (epidemiological) transition

Key takeaways

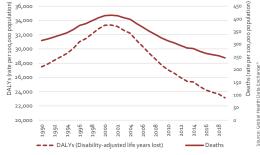
- Communicable (including maternal and neonatal) diseases are the top 5 causes of mortality in Nigeria. But the burden from non-communicable diseases (NCDs) is on the rise as the average annual rate of change between 2000 and 2019 was lower for NCDs (at -1%) than communicable diseases (at -4%),
- Nigeria will increasingly face the challenge of a double burden of disease in coming years—NCDs plus communicable, maternal and neonatal diseases.
- Given this increase in NCD burden and the high mortality from communicable and $\,$ maternal and neonatal diseases, Nigeria's healthcare system will need to quickly
- The basic minimum package of health services (BMPHS) of the BHCPF currently includes four interventions for maternal health, regular immunization, and two interventions for NCDs. The package needs to expand to include more interventions in order to address these disease transition challenges

Main causes of mortality

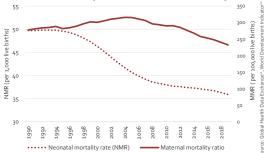


■ Non-communicable diseases ■ Communicable, maternal, neonatal, and nutritional diseases

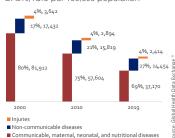
Adult morbidity and mortality (15-59 years)



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	Enteric infections	Enteric infections	Enteric infections
2	RTIs and TB	NTDs & malaria	RTIs and TB
3	NTDs & malaria	RTIs & TB	Maternal & Neonatal
4	Other infections	Maternal & Neonatal	NTDs & malaria
5	Maternal & Neonatal	Cardiovascular diseases	Cardiovascular diseases
6	Cardiovascular diseases	Other infections	HIV/AIDS & STIs
7	HIV/AIDS & STIs	HIV/AIDS & STIs	Other infections
8	Other NCDs	Other NCDs	Neoplasms
9	Digestive diseases	Digestive diseases	Other NCDs
10	Neoplasms	Neoplasms	Digestive diseases

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

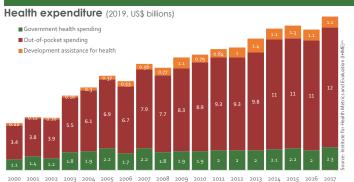
1.77				,
	2000	2010	2019	Ann. ROC*
Deaths				
Communicable, maternal, neo- natal, and nutritional diseases	1,051	736	481	-4%
NCDs	294	250	225	-1%
Injuries	55	44	36	-2%
All diseases	1,400	1030	742	-3%
DALYs				
Communicable, maternal, neonatal, and nutritional diseases	81,912	57,604	37,170	-4%
NCDs	17,432	15,819	14,454	-1%
Injuries	3,642	2,894	2,414	-2%
All diseases	102,986	76,317	54,038	-3%
From 2000 to 2019, communicable, mat	ernal and neon	atal diseases	decreased a	at a faster rate

(-4% per year) than non-communicable diseases (-1% per year).

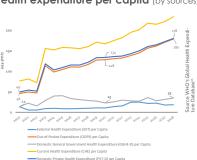
Domestic finance transition

Key takeaways

- In 2018, domestic general government health expenditure accounted for only about 15% of current health expenditure (CHE); 76.6% of CHE in the same year was outof-pocket spending (OOPS). Health insurance coverage and financing from pooled sources hasn't gained traction in Nigeria as only about 5% of Nigerians have any kind
- OOPS, external health expenditure (EXT), and CHE per capita went up in 2002 before falling by a small amount in 2003. Since then these expenditures have mostly been on
- Challenges related to demographic, disease, and donor transition will be exacerbated if the situation remains the same and Nigeria does not increase public expenditure on healthcare
- Nigeria's National Health Act provides protected funding for UHC through the BHCPF. By providing continuous funding for the BHCPF— and thus an increase in public expenditure on healthcare—the government will be ensuring improvements in

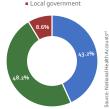






Government source of health financing

- Federal government
- State government
- Local government

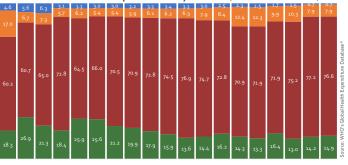


Health expenditure (comparing Nigeria with all low- and middle-income countries)

	Nigeria			Low- and middle income countries		
	2000	2018	AARC*	2000	2018	AARC*
CHE per capita (US\$)	17.7	83.8	9%	22.9	85.7	7.6%
GGHE-D (% of current health expenditure)	18.3%	14.9%	-1.1%	31.3%	33.2%	0.3%
EXT (% of current health expenditure)	17%	7.9%	-4.2%	3.5%	3.2%	-0.5%
OOPS (% of current health expenditure)	60.2%	76.6%	1.3%	59.2%	55.7%	-0.3%

	Nigeria				and mi ne cour	
	2000	2018	AARC*	2000	2018	AARC*
CHE per capita (US\$)	17.7	83.8	9%	22.9	85.7	7.6%
GGHE-D (% of current health expenditure)	18.3%	14.9%	-1.1%	31.3%	33.2%	0.3%
EXT (% of current health expenditure)	17%	7.9%	-4.2%	3.5%	3.2%	-0.5%
OOPS (% of current health expenditure)	60.2%	76.6%	1.3%	59.2%	55.7%	-0.3%
*Average annual rate of change						

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



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 ■ GGHE-D (% of CHE) ■ OOPS (% of CHE) ■ EXT (% of CHE) ■ Other (% of CHE)

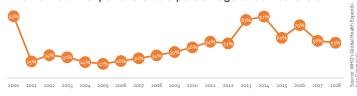
Abbreviations: GGHE-D, domestic general government health expenditure; CHE: current health expenditure; OOPS, out of pocket spending; EXT, external health expenditure.

Donor health aid transition

Key takeaways 18

- Gavi, the Vaccine Alliance, the United Kingdom, the World Bank, the Global Fund, and the United States each have criteria for withdrawing support to countries (e.g., reaching a specific per capita income threshold). Nigeria is satisfying some of the its aid to 2028. Nigeria is a World Bank International Development Association (IDA)
- in development assistance for health (DAH).
- way in addressing transition challenges Nigeria is undergoing.

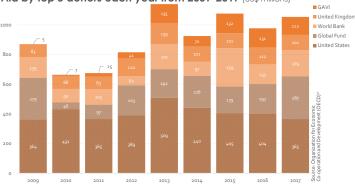
External health expenditure as a percentage of domestic GGHE-D



Aid received by health area 2009-2018

Health area	Total flow (US\$ millions)	Percentage of total flow
STD control including HIV/AIDS	3,802.1	41.3%
Malaria control	1,580.6	17.2%
Infectious disease control	987.1	13%
Basic health care	979-9	10%
Reproductive health care	571.7	7%
Health policy & administrative management	348.9	3.8%
Tuberculosis control	304.3	3.3%
Family planning	227.4	2.5%
Basic nutrition	180.7	2.0%
Population policy and administrative management	68.9	0.7%
Personnel development for population and reproductive health	42.7	2.5% 2.0% 0.7% 0.5% 0.5% 0.2% 0.2% 0.2%
Medical services	42.1	0.5%
Health education	21.0	0.2%
Health personnel development	14.9	0.2%
Medical research	14.9	0.2%
Basic health infrastructure	14.4	0.2%
Medical education/training	7.9	0.1%

Aid by top 5 donors each year from 2009-2017 (US\$ millions)



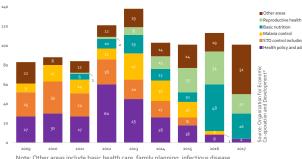
Abbreviations: GGHE-D, domestic general government health expenditure; STD, sexually transmitted disease

Donor health aid transition (continued)

Top 5 donors (89%, US\$8.2 billion, of all development assistance for health 2009-2017)

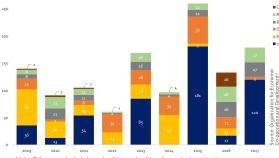
Donor	Total	Percentage
United States	3,671.9	40%
Global Fund	1,696.2	18%
World Bank Group	1,233.9	13%
United Kingdom	928.5	10%
Gavi, the Vaccine Alliance	667.2	7%
Other	1,012.0	11%

United Kingdom aid to health (US\$ millions)



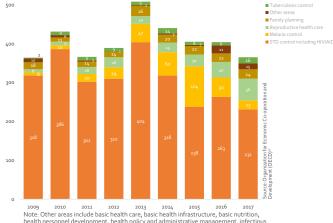
Note: Other areas include basic health care, family planning, infectious disease control, health education, health personnel development, medical research, pen development for population and reproductive health, and population policy and administrative management

World Bank aid to health (US\$ millions)



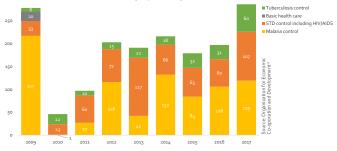
Note: Other areas include basic health care, health policy and administrative management, and family planning $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2} \right$

United States aid to health (US\$ millions)

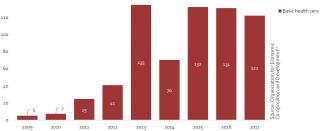


Note: Other areas include basic health care, basic health infrastructure, basic nutrition health personnel development, health policy and administrative management, infecti disease control, medical services, and population policy and administrative managem

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

References

- Administrative map of Nigeria. Available at: https:// www.nationsonline.org/oneworld/map/nigeria-administrative-map.htm
- Second National Strategic Health Development Plan (2018-2022). Data available at: https://www.health.gov.ng/doc/NSHDP%20II%20Final.pdf
- Human Development Report 2020, Nigeria. Data available at: http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/NGA.pdf
- The World Development Indicators, The World bank. Data available at: https://databank.worldbank.org/source/world-development-indicators#
- Global Health Expenditure Database, World Health Organization. Data available at: https://apps.who.int/nha/database/country_profile/Index/en
- Operationalizing universal health coverage in Nigeria through social health insurance. Data available at: https://www.nigeriamedj.com/article.asp?issn=0300-1652;year=2015;volume=56;issue=5;spage=305;epage=310;aulast=Okpani
- Population Pyramids of the World from 1950 to 2100. Chart available at: https://www.populationpyramid.net/ nigeria/2018/
- United Nations, Department of Economic and Social Affairs, Population Division. Data available at: https:// population.un.org/wpp/Download/Standard/Population/
- World Development Indicator (Age Dependency Ratio), The World Bank. Data available at: https://data.worldbank.org/indicator/SP.POP.DPND?locations=NG

- 10. United Nations, Department of Economic and Social Affairs, Population Division. Data available at: https://population.un.org/wup/Country-Profiles/
- Global Health Data Exchange. Data available at: http:// ghdx.healthdata.org/gbd-results-tool
- World Development Indicator (Neonatal mortality rate), The World Bank: Data available at: https://data.worldbank.org/indicator/SH.DYN.NMRT
- Institute for Health Metrics and Evaluation (IHME), GDB Compare, Viz Hub. Data available at: https://vizhub. healthdata.org/gbd-compare/
- Institute for Health Metrics and Evaluation (IHME), Financing Global Health, Viz Hub. Data available at: https://vizhub.healthdata.org/fgh/
- WHO's Global Health Expenditure Database. Data available at: https://apps.who.int/nha/database/Select/ Indicators/en
- 16. National Health Accounts 2017, Nigeria. Data available on page 20: https://www.health.gov.ng/doc/FINAL-VER-SION-NHA-2017.pdf
- Organization for Economic Co-oporation and Development (OECD), Credit Reporting System (CRS). Data available at: https://stats.oecd.org/Index.aspx?DataSet-Code=CRS1
- Nigeria Health Financing System Assessment 2018, by Reem hafiz. Report available at: https://elibrary.worldbank.org/doi/abs/10.1596/30174

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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.

