

# Reimagining Health Systems at a Time of Global Transition

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Adesegun Fatusi, *FNAMed, FAS*

# Outline

Health at Global Stage: Transition and Trajectories

Nigeria's Health System: Current Realities; New Paradigm

Reimagining the Future: From Traction to Target

Health at Global Stage:

“A New World”

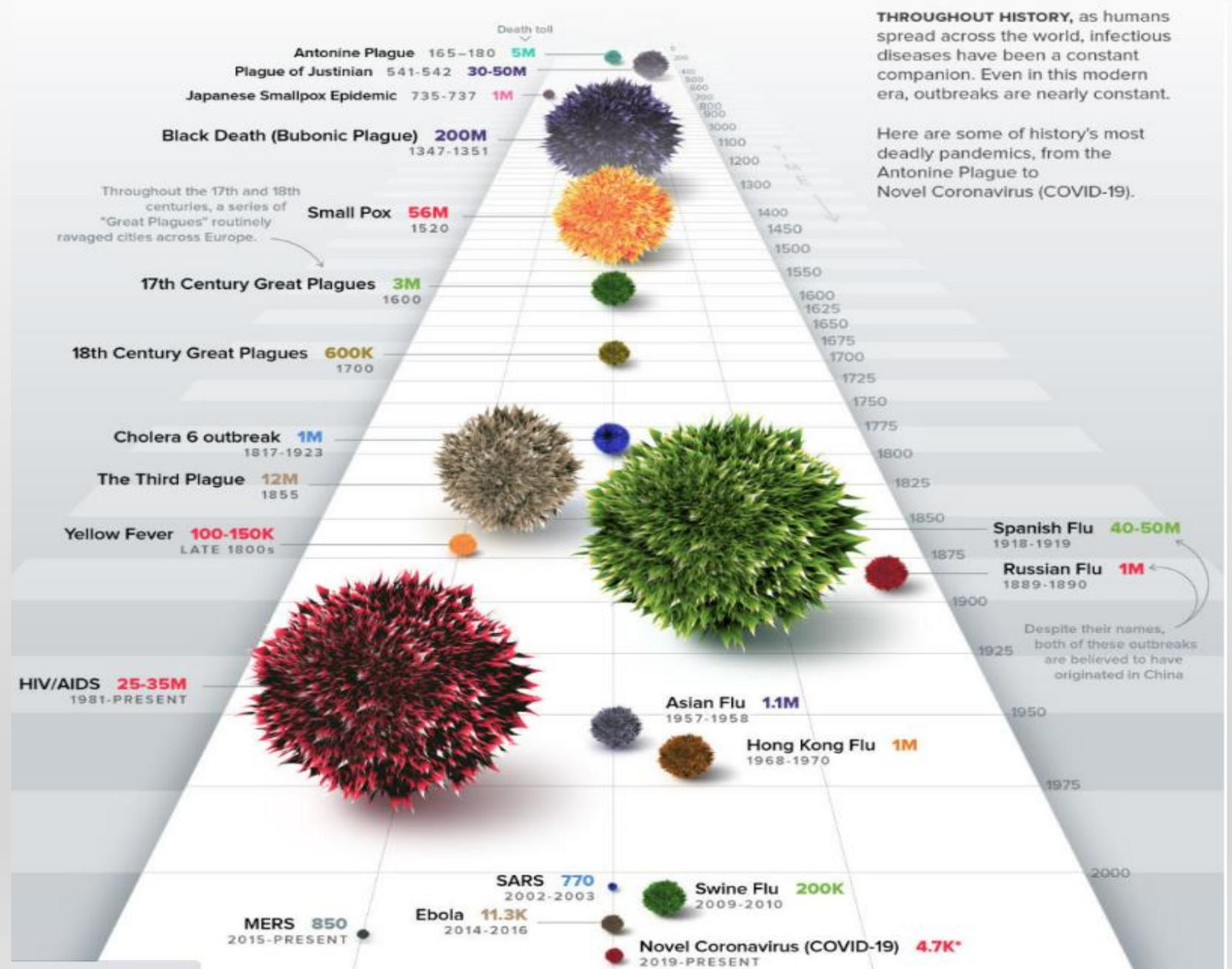
# Major global transitions shaping health systems

- Demographic and social shifts
- Health security and related epidemiological dynamic
- Climate change and environmental hazards
- Technological advancements and challenges
- Economic and geopolitical volatility

# From Local Outbreaks to Pandemics

“Throughout History, as humans spread across the world, infectious diseases have been a constant companion”

WEF, 2020. the History of Pandemics  
ImageCredit: Visual Capitalist



# The New Age...

## Intensity and frequency of extreme novel epidemics

Marco Marani<sup>a,b,c,1</sup>, Gabriel G. Katul<sup>b,c</sup>, William K. Pan<sup>b</sup>, and Anthony J. Parolari<sup>d</sup>

<sup>a</sup>Department of Civil and Environmental Engineering, University of Padova, 35122 Padova, Italy; <sup>b</sup>Nicholas School of the Environment, Duke University, Durham, NC 27710; <sup>c</sup>Department of Civil and Environmental Engineering, Duke University, Durham, NC 27708; and <sup>d</sup>Department of Civil, Construction, and Environmental Engineering, Marquette University, Milwaukee, WI 53233

Edited by Simon Asher Levin, Princeton University, Princeton, NJ, and approved July 15, 2021 (received for review March 21, 2021)

Using recent estimates of the rate of increase in disease emergence from zoonotic reservoirs associated with environmental change, we estimate that the yearly probability of occurrence of extreme epidemics can increase up to threefold in the coming decades.

Intensity, defined as the relation and epidemic of infectious disease models and to inform the probability of its significance, as a global historical record unexplored task. A 1600 to present is here used to estimate extreme epidemics.

Historical observations covering four orders of magnitude of epidemic intensity follow a common probability distribution with a slowly decaying power-law tail (generalized Pareto distribution,

number of epidemics is. Yearly occurrence is widely:  $P_y$  of an event (1918 to 1920) varies from 10<sup>-10</sup> to 10<sup>-1</sup>, while its mean recurrence time is 39 y). The slow decay implies that extreme epidemics previously undetected by secondary analysis methods increase in disease emergence with environmental change. The probability of occurrence of extreme epidemics can increase up to threefold in the coming decades.

Together with recent estimates of increasing rates of disease emergence from animal reservoirs associated with environmental change, this finding suggests a high probability of observing pandemics similar to COVID-19 (probability of experiencing it in one's lifetime currently about 38%), which may double in coming decades.

The composition of the dataset, in terms of the primary reemerging diseases and of disease types, is summarized in *SI Appendix*. We subsequently further selected epidemics to be analyzed by the following additional criteria: 2) epidemics were considered only if they are not currently active (e.g., AIDS/HIV, malaria, and COVID-19 were excluded), and 3) epidemics that were ended by the introduction of vaccines or effective treatments were excluded. This last condition, together with the difficulty of determining how some epidemics were ended at a global scale, led to the exclusion of all epidemics occurring after the end of World War II in 1945. Conditions two and three ensure that the disease dynamics are governed by the properties of the pathogen and by transmission dynamics (susceptible-infected interactions possibly mediated by vectors), unaffected by treatments or interventions. In summary, the 1600 to 1945 dataset includes 182 epidemics with known occurrence, duration, and number of deaths, 108 known to have caused less than 10,000 deaths, and 105 for which only occurrence and duration are recorded, for a total of 395 epidemics.

### Results

**The Probability Distribution of Epidemic Intensity.** The empirical exceedance frequency distribution of epidemic intensity is well described by a generalized Pareto distribution (GPD, Fig. 1) over almost four orders of magnitude of the independent variable. The GPD notably exhibits a power-law tail, which signals the absence of a characteristic epidemic intensity and a slowly decaying probability of intense epidemics (10). The fitted GPD is characterized by a power-law tail exponent  $\alpha = -0.71$  approxi-

Marani M, Katul GG, Pan WK, Parolari AJ. Intensity and frequency of extreme novel epidemics. *Proc Natl Acad Sci U S A*. 2021 Aug 31;118(35):e2105482118. doi: 10.1073/pnas.2105482118.

# The next pandemic: not if, but when

By Karen Feldscher · September 12, 2024



**HARVARD**  
**T.H. CHAN**

SCHOOL OF PUBLIC HEALTH

<https://hsph.harvard.edu/news/next-pandemic-not-if-but-when/>

# Aid at the crossroads

Trends in official development assistance

In 2023, aid to developing countries declined for the third consecutive year, affecting sectors crucial for sustainable development.

## Health & Aid in a VUCA World



- USAID Dismantled
- \$500 million Withdrawn from Global Health Funding

# Global ODA for Health Scenario: OECD Dynamics



## Policy Brief

### Cuts in official development assistance: OECD projections for 2025 and the near term

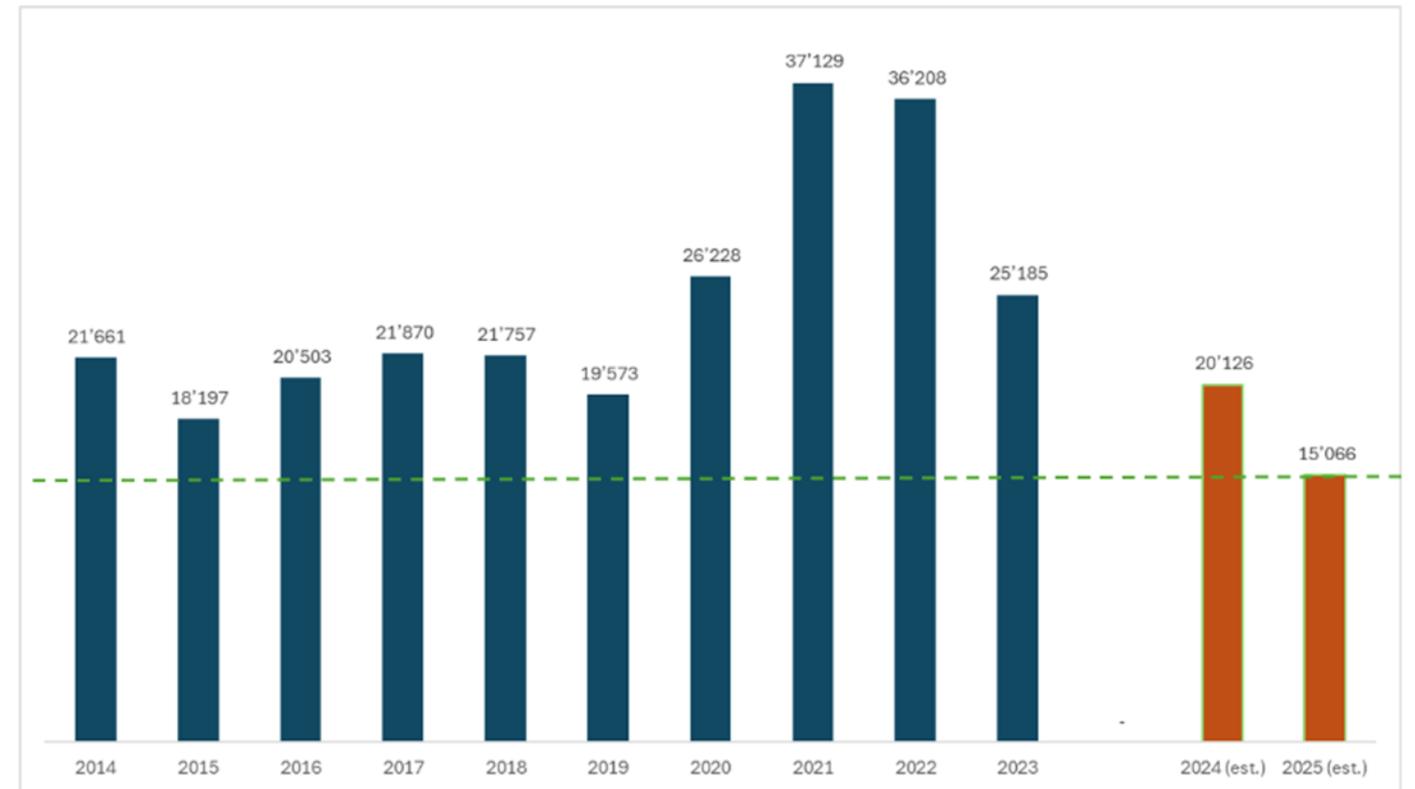
26 June 2025

“The OECD projects a 9 to 17% drop in ODA in 2025. This comes on top of a 9% drop in 2024. *The outlook beyond 2025 remains highly uncertain*”

further falls from previous high levels related to COVID-19 support. ODA for health in 2025 is projected to fall below pre-COVID-19 levels.

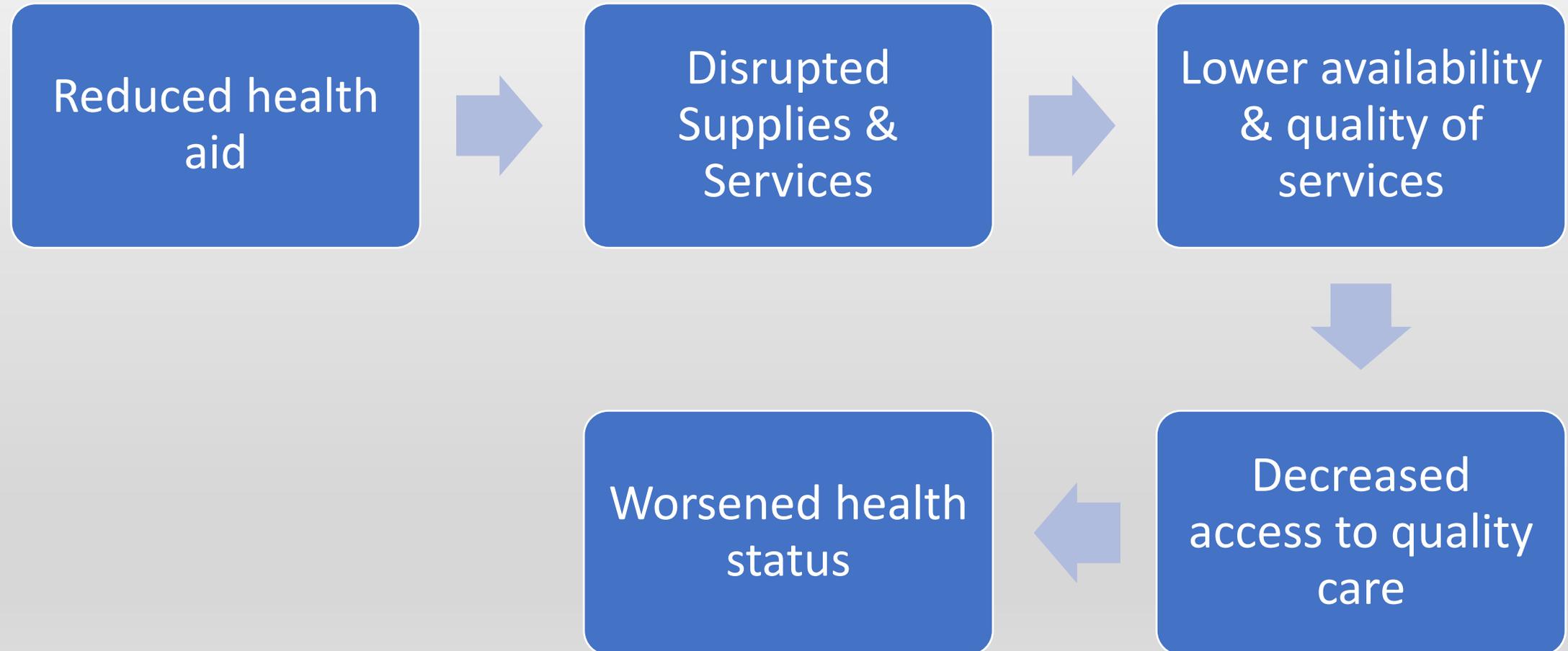
- Anticipated cuts to multilateral organisations may trigger a second wave of funding decreases for the poorest countries and vital services. In 2023, nearly half of ODA to LDCs was delivered through multilateral channels. The eleven providers that have announced cuts account for between 62% (for WHO) and 87% (for WFP) of funding to key multilateral health and humanitarian agencies.
- Co-ordinated action is critical to avoid major impacts on the countries and people most in need. Providers could:
  - Share forward plans, information, and analysis on the implications of evolving ODA levels and allocations, underpinned by data and evidence;
  - Work together, and with countries and territories that receive ODA, to find solutions to close finance gaps, and protect and sustain focus on the highest impact programmes and investments, especially for countries, sectors, and populations most in need;
- Diversify partners, pool resources, catalyse private sector investment where appropriate, and support the mobilisation of domestic resources.

Bilateral ODA for health, DAC members, in constant million US\$ (2014–2025)



<https://p4h.world/en/official-development-assistance-for-health-anticipated-40-reduction/>

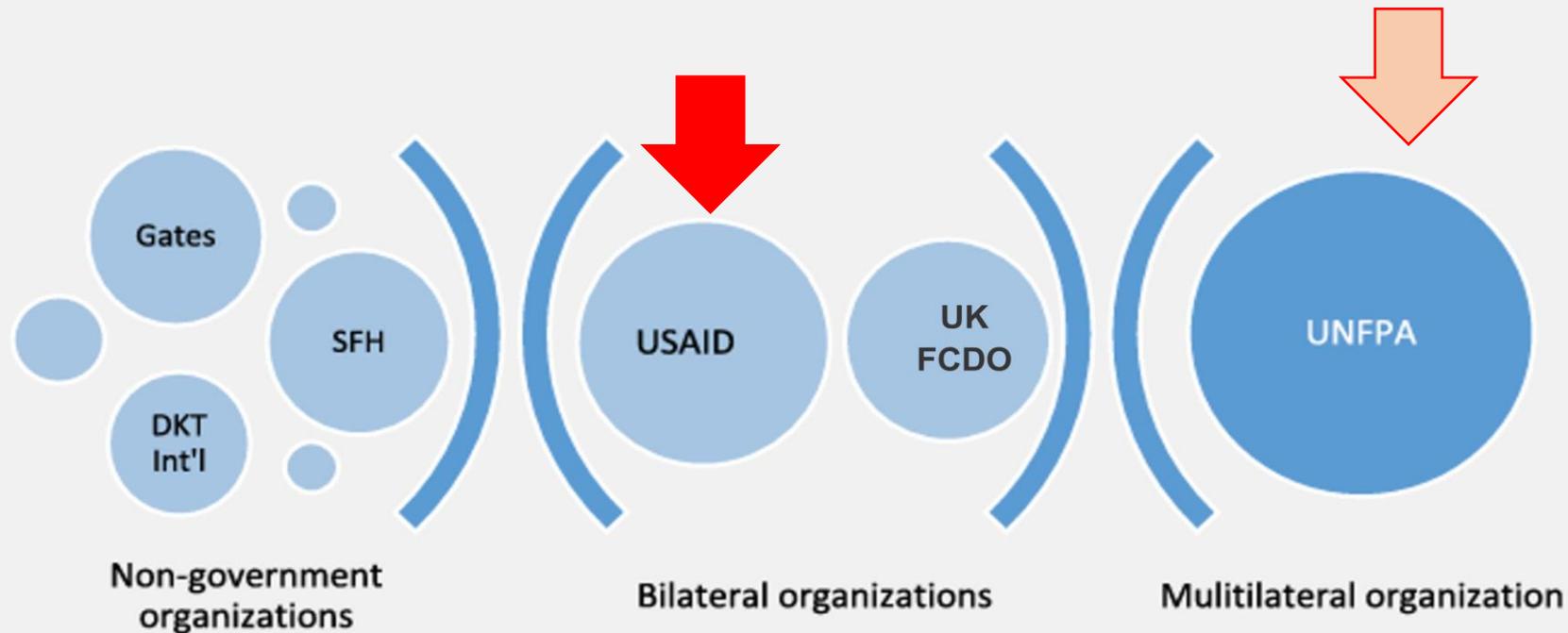
# Implications of Reduced Health Aid



# Reduced Aid & Implications for Nigeria's Health Agenda: Example of Contraceptive Commodity

## Key partners that funded FP services in Nigeria (2015 – 2020)

NB: Size of the circle indicates the relative contribution of the funder



Source: Mbachu et al, 2023.

# Contraceptive Funding & Gaps: 1<sup>st</sup> July 2025

<b>Contributor</b>	<b>Fund disbursed (1<sup>st</sup> July 2025)</b>	<b>%</b>
FGoN	3,752,426.00	8%
States	135,324	0.6%
UNFPA	8,332,403.20	19%
FCDO	414,728.68	1%
Gates Foundation	4,379,084.20	10%
CIFF	4,200,000.00	9.3%
<b>Total</b>	<b>23,793,542.54</b>	<b>47.9%</b>
<b>Funding gap</b>	<b>23,793,542.54</b>	<b>52.1%</b>

Source: UNFPA, 2025

# Africa after USAID: who will pay the health bill?

The US retreat from global health funding has disproportionately affected African countries. Will African governments allow the cycle of dependency to continue, or reassert sovereignty over their health systems?

PUBLISHED 16 OCTOBER 2025

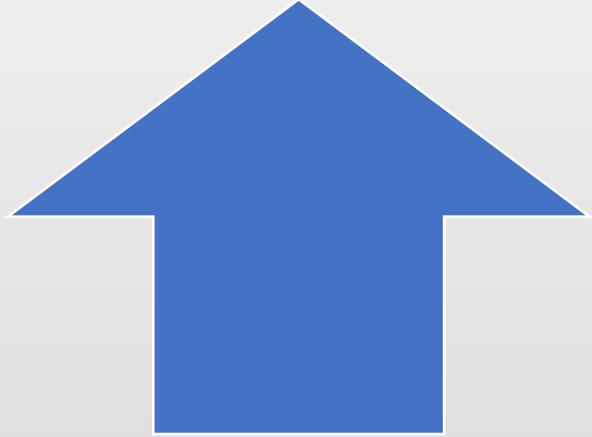


“The retreat of the US from global health has left **more** than a funding gap; it has exposed the weakness of a system that leaned too heavily on a handful of donors.”

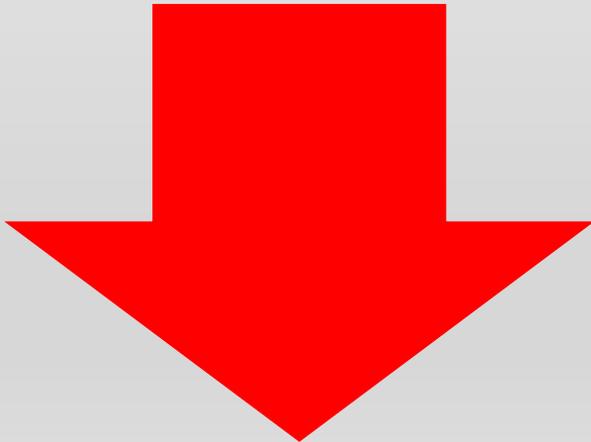
” Will African governments allow the cycle of dependency to continue, or reassert sovereignty over their health systems?”

<https://www.chathamhouse.org/2025/10/africa-after-usaid-who-will-pay-health-bill>

“Simplistic” Thinking.....



Increased funding



Decreased wastages  
& leakages

# Appropriately Defining the Challenge

The common question.....:

How can we maintain and sustain existing health services given the availability of less funds?

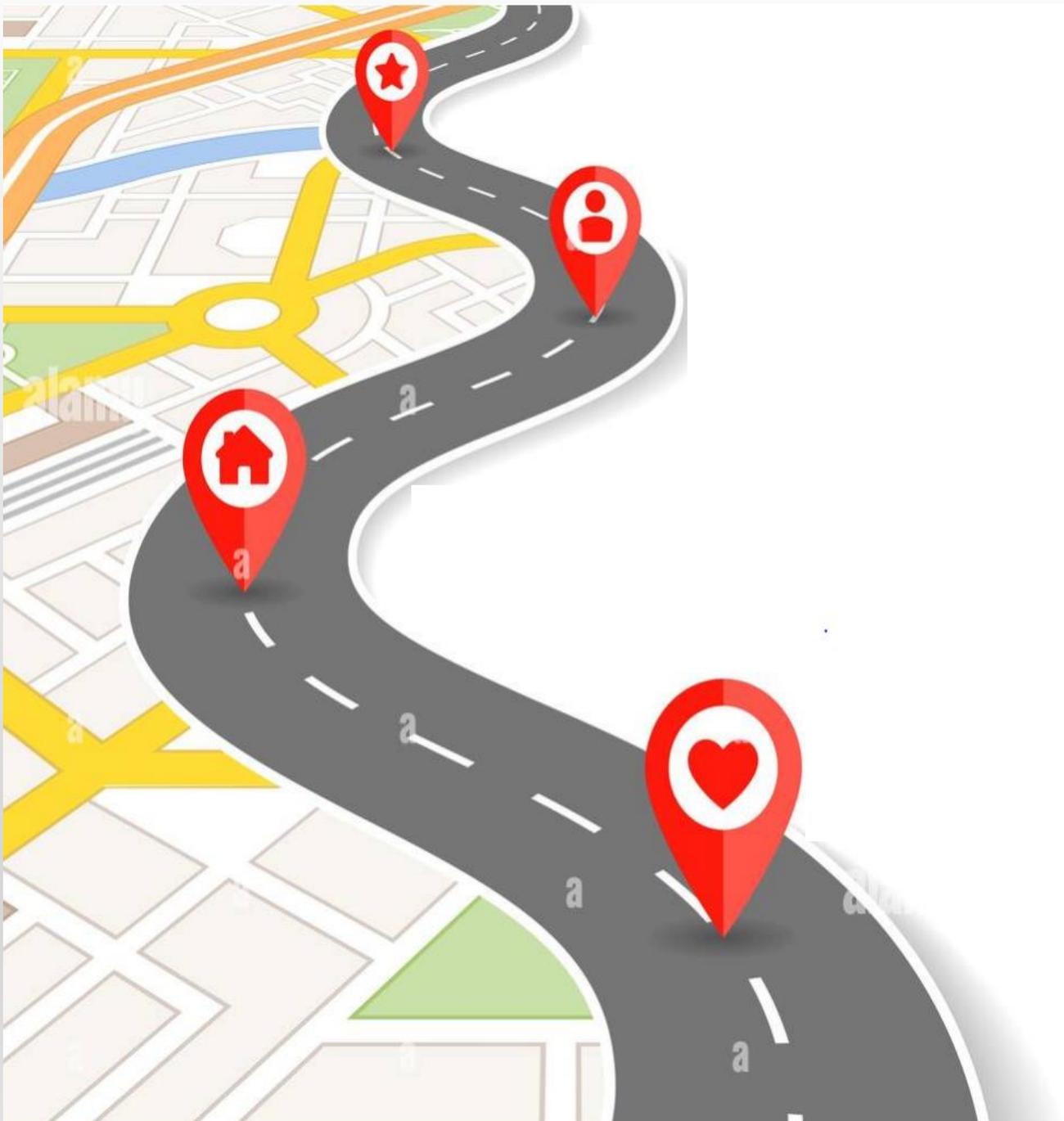
The key question and Real Issue:

How can we design/redesign our health system to function optimally, powered *primarily* by domestic resource

# Will We Embrace the Challenge?



- “But in this crisis lies an opportunity – an opportunity to shake off the yoke of aid dependency, and embrace a new era of sovereignty, self-reliance, and solidarity.”

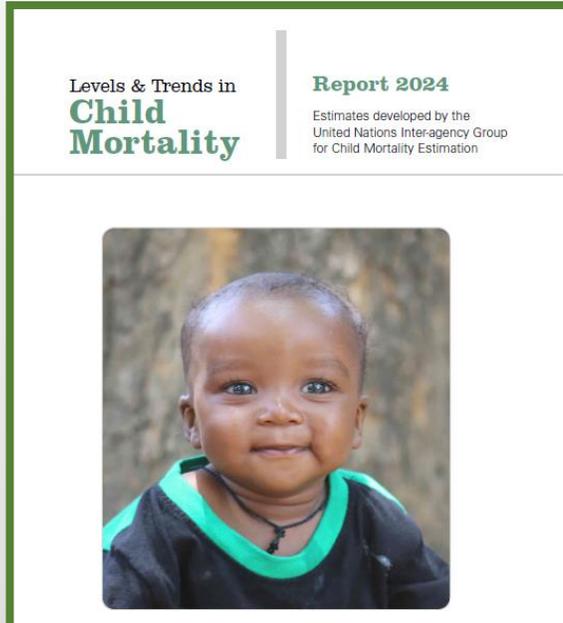


“The journey from donor dependency to domestic sustainability isn’t just about finding new money, it is about reimagining how systems are structured, delivered, and governed.”

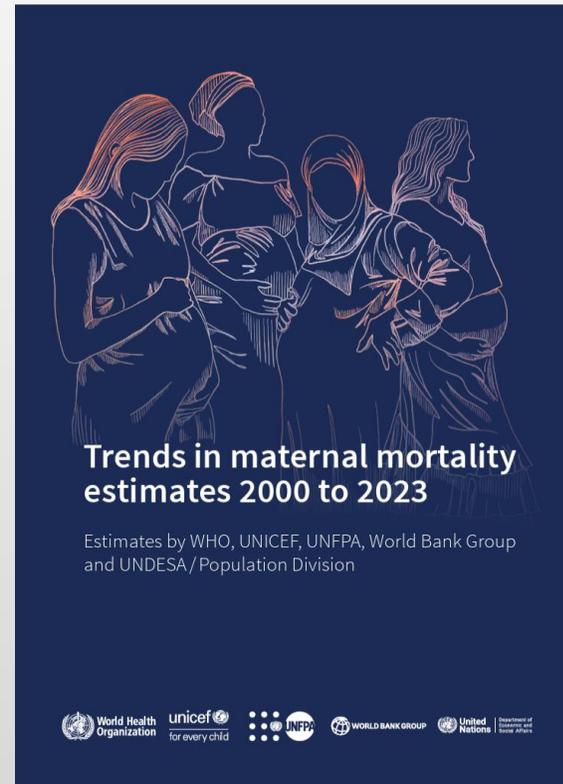
Muheki, et al, 2025

# Nigeria's Health System: Current Realities; New Paradigm

# Our Chronically Underperforming Health System...

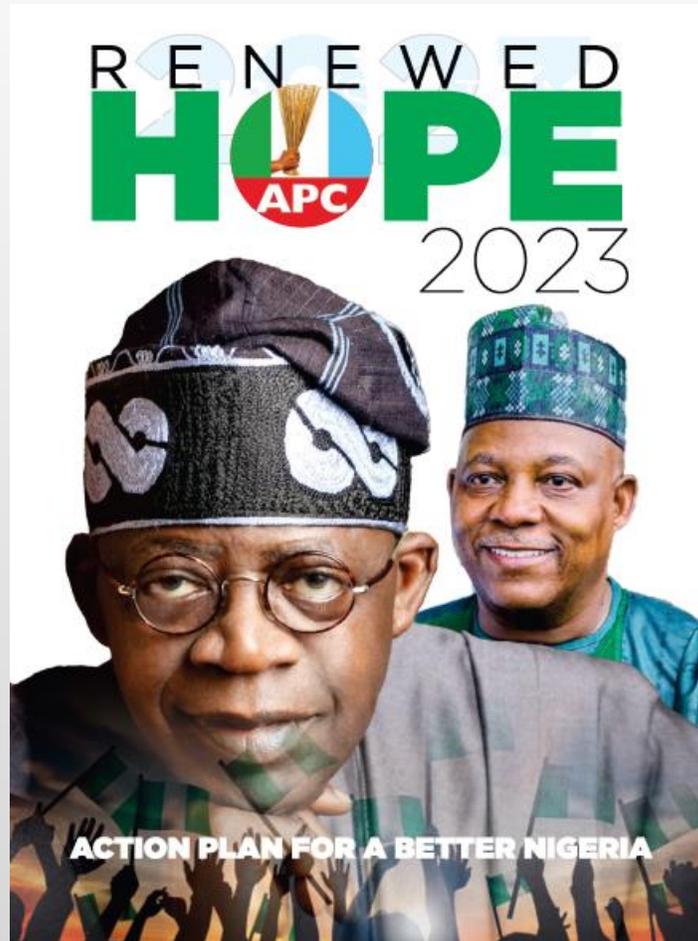


- Nigeria's U5MR (2023 NDHS) = 110/1,000; 2nd highest globally;
- One of the only 4 countries with U5MR >100/1,000



- Nigeria's maternal mortality ratio (MMR) is the highest globally: 993/100,000 live births
- Nigeria has the highest maternal mortality burden: 75,000 maternal deaths/yr
- Nigeria contributed 28.7% of 2023 global maternal deaths

“Nigeria ranks among the bottom five or ten countries globally on most key health indicators” – World Bank, 2024



The productivity and wealth of a nation depends on the vitality of its people. Basic healthcare must be considered a fundamental human right and a matter of long-term national security. Our Government shall invest greatly in the health of its people.

Our healthcare reforms and policy agenda shall be defined by the concept of Universal Health Coverage (UHC). By making universal coverage our primary objective, we shall create new jobs and bring greater economic and social development to the Nigerian people.

nation's healthcare challenges, including: inadequate health infrastructure, fragmentation, an overburdened workforce, poor insurance coverage, high maternal and infant mortality, inadequate preventative care and dependence on imported medicines and vaccines.

To rise to the challenge of improving the healthcare fortunes of our people, our healthcare policy shall entail:



**Health Sector Governance and**

Thanks to the proactive stance of the

“We shall invest greatly in the health of our people”

# Nigeria Health Sector Renewal Investment Initiative (NHSRII)

Our goal is to save lives, reduce both physical and financial pain and produce health for ALL Nigerians

Outcomes we want to achieve:

DALY improvement, lives saved, OOP reduced, [metric for producing health], [equity]



## Effective governance

- Strengthen oversight and effective implementation of the National Health Act
- Increase accountability to and participation of relevant stakeholders and Nigerian citizens
- Strengthen regulatory capacity to foster the highest standards of service provision
- Improve cross-functional coordination & effective partnerships to drive delivery



## Efficient, equitable and quality health system

- Drive health promotion in a multi-sectoral way (incl. intersectionality with education, environment, WASH and Nutrition )
- Strengthen prevention through primary health care and community health care
- Improve quality of care and service delivery across public (primary, secondary and tertiary care) and private, across all levels of the health system
- Improve equity and affordability of quality care for patients
- Revitalize the end-to-end (production to retention) healthcare workers pipeline



## Unlocking value chains

- Promote clinical research and development
- Stimulate local production of health products
- Shape markets to ensure sustainable local demand
- Strengthen supply chains



## Health Security

- Improve the ability to detect, prevent and respond to public health threats (e.g., Cholera, Lassa)
- Build climate resiliency for the health system in collaboration with all other sectors

**Data & Digitization:** Digitize the health system & have data backed decision making

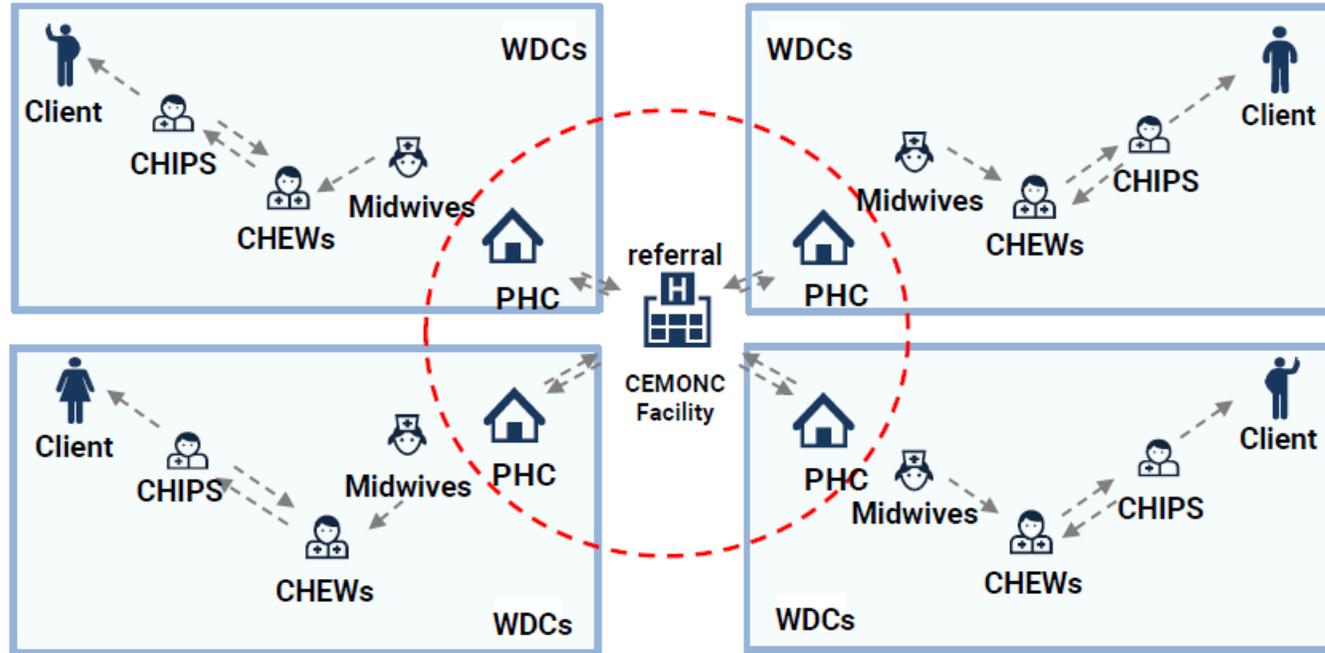
**Financing:** Increase effectiveness of spend and alignment of spend with strategic priorities

**Culture & Talent within MDAs:** Strengthen capabilities & values and drive a performance based culture within the FMOH

# NHSRII Priority Areas

Priority areas					 Services	 Systems
<b>1</b> Improve Reproductive, Maternal, Newborn and Child health, and Nutrition	<b>2</b> Accelerate immunization programs for priority antigens (e.g. DPT3, Polio, Measles, Yellow Fever) with a focus on decreasing zero dose children	<b>3</b> Slow down the growth rate of NCD prevalence	<b>4</b> Reduce the incidence of HIV, tuberculosis, and malaria	<b>5</b> Improve quality of care and service delivery in PHCs		
<b>6</b> Expand financial protection for all citizens through health insurance expansion and other innovative financing mechanisms		<b>8</b> Stimulate local production of health products (e.g., drug vaccines, malaria bed-nets, and therapeutical foods)	<b>9</b> Revitalize tertiary and quaternary care hospitals to improve access to specialized care		<b>10</b> Improve pandemic prevention, detection, preparedness and response	<b>11</b> Strengthen health data collection, reporting and usage – starting with the core indicators
	<b>7</b> Increase availability and quality of HRH	<b>12</b> Improve regulation and regulatory process				

# Leveraging the instrument of DECENTRALIZED FACILITY FINANCING, the program will aim to improve the service readiness of 17,000 PHCs and 774 secondary facilities to deliver Universal Primary Healthcare {to be delivered free to beneficiaries}



The DFF package would include the following services below, targeting about 7m pregnancies and over 6m new births annually:

- ANC
- Child-Birth
- PNC
- FP
- IMCI\*
- Nutrition
- NCD–screening {HYPERTENSION & DIABETES MELLITUS }

**Success factors:**

- Effective community Demand Creation interventions
- Strong accountability/governance structure and processes
- Quality data (routine service delivery and financial data)

## FEATURES

1. Aspire to expand to at least 2 PHC per ward BEmONC ready/certified; at least 1 higher level facility or CEmONC using the hub and spoke model. Expansion will be driven by evidence, with locations of higher needs prioritized
2. The LGAs will be categorized into three tiers (lowest to highest) and equity calculations will be reflected in funds transferred to the PHCs
3. Investment fund for facility upgrade to meet minimum requirements for a functional PHC
4. Payment of bonuses to facilities for meeting periodic quality of care targets
5. Transportation for pregnant women
6. Health worker's incentives (additional payment to workers in rural/hard-to-reach communities)
7. Operations funds, made up of a fixed component and another that depends on the number of clients served. Ops funds will be increased to support facilities to engage healthcare workers on a need basis and buy essential commodities for the provision of a free package of healthcare services.
8. Funding to improve routine HMIS at facility level and TA support to facilities

“BUSINESS UNUSUAL?”  
Human Capital Opportunities for Prosperity and Equality (HOPE)

HOPE—Primary Healthcare Provision Strengthening Program(HOPE-PHC)

## Intersection of the 3 HOPE Operations

PROPOSED APPROACH TO TACKLING CHALLENGES:  
HOPE-GOVERNANCE, HOPE-PRIMARY HEALTH CARE & HOPE-BASIC EDUCATION







## All Disbursement Linked Indicators – HOPE-PhC Program

### IMPROVING QUALITY OF SERVICES

DLI 1: Improved service readiness.

DLI 2: Increased availability of essential commodities.

### IMPROVING UTILIZATION OF ESSENTIAL SERVICES

DLI 3: Increased enrollment of poor and vulnerable populations.

DLI 4: Enhanced community delivery of health services.

DLI 5: Increased utilization of priority secondary care services.

DLI 6: Increased PHC utilization of priority services.

DLI 7: Increased utilization of EMS.

### IMPROVING RESILIENCE OF THE HEALTH SYSTEM

DLI 8: Improved allocation and disbursement of BHCPF funds.

DLI 9: Enhanced PPR through deployment.

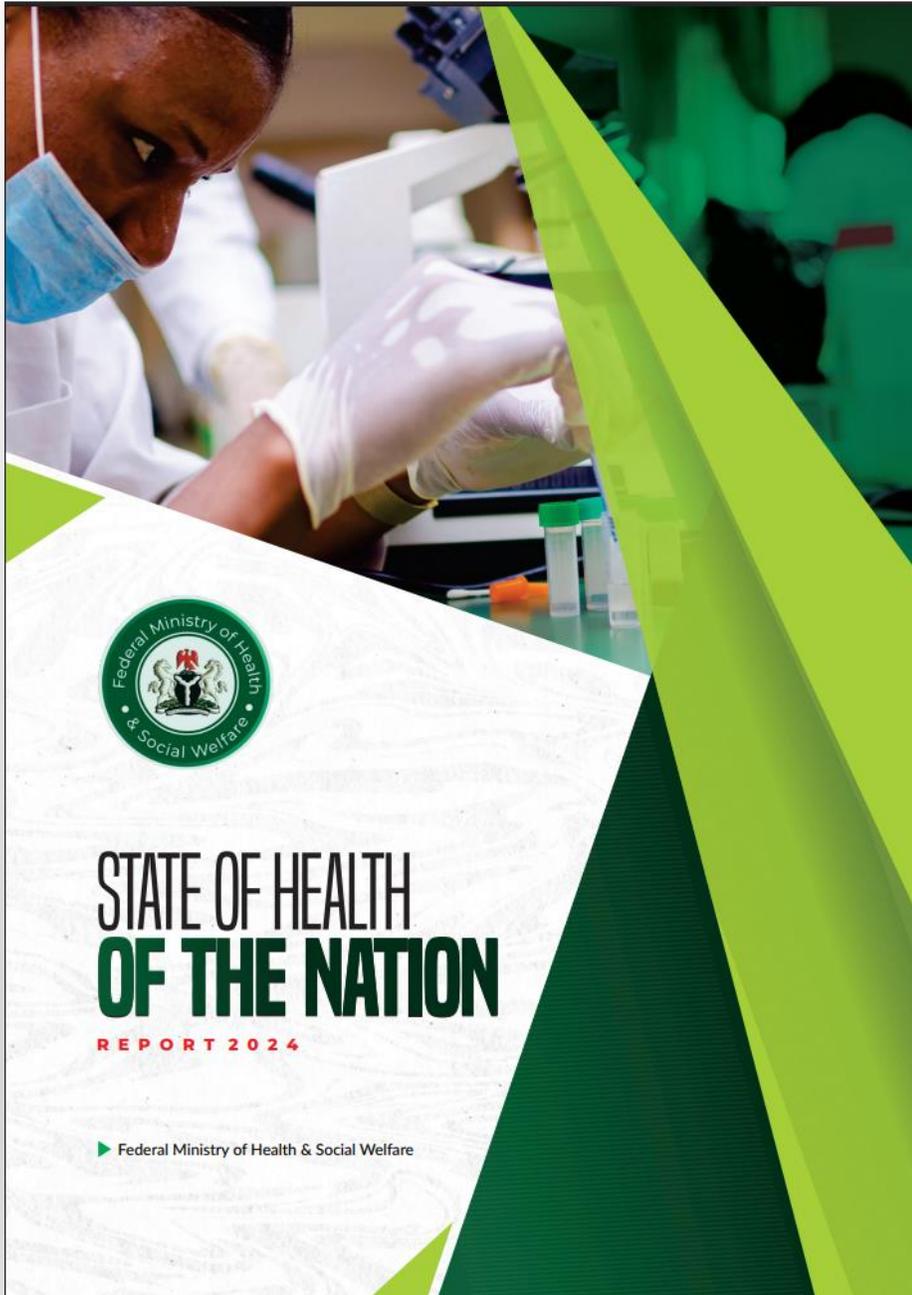
DLI 10: Improved Climate Resilience.

DLI 11: Stronger Digital Foundation.



Source: World Bank

Image credit: Nigeria Health Watch



Work in Progress....

# Reimagining the Future: From Traction to Targets



How can we reimagine the health system to best confront *existing* challenges and meet the demands of the *future* amid unprecedented global changes and transitions in a *sustainable way*?

# Realities That Our Health System Must Continue to Confront

- Huge geographical disparities in health outcomes
- High level of health inequities
- Poor access to essential health services & quality of care
- Low Government health spending
- Complex health governance structure

# Nigeria is Not Short of Sound Health Policies

## Health policy instruments for health-related SDGs in Nigeria

National Health Act (NHAAct) (2014)

National Health Policy (NHP) (2016)

National Strategic Health Development Plan II (NSHDP II) (2018–2022)

Primary Health Care Under One Roof (PHCUOR) (2012)

One Health Strategic Plan (2018–2023)

Nigeria's Strategy for Immunization and PHC System Strengthening (NSIPSS) (2018–2028)

National Health Management Information System Policy (HMIS) (2014)

National Cancer Control Plan (2018–2022)

National Multi-sectoral Action Plan for the Prevention and Control of NCDs (2019–2025)

Health Sector Next Level Agenda (2019–2023)

Health Insurance Under One Roof (2020)

## NATIONAL POLICY ON On Health Workforce Migration



Source: OSSAP-SDGs & UNICEF, 2022

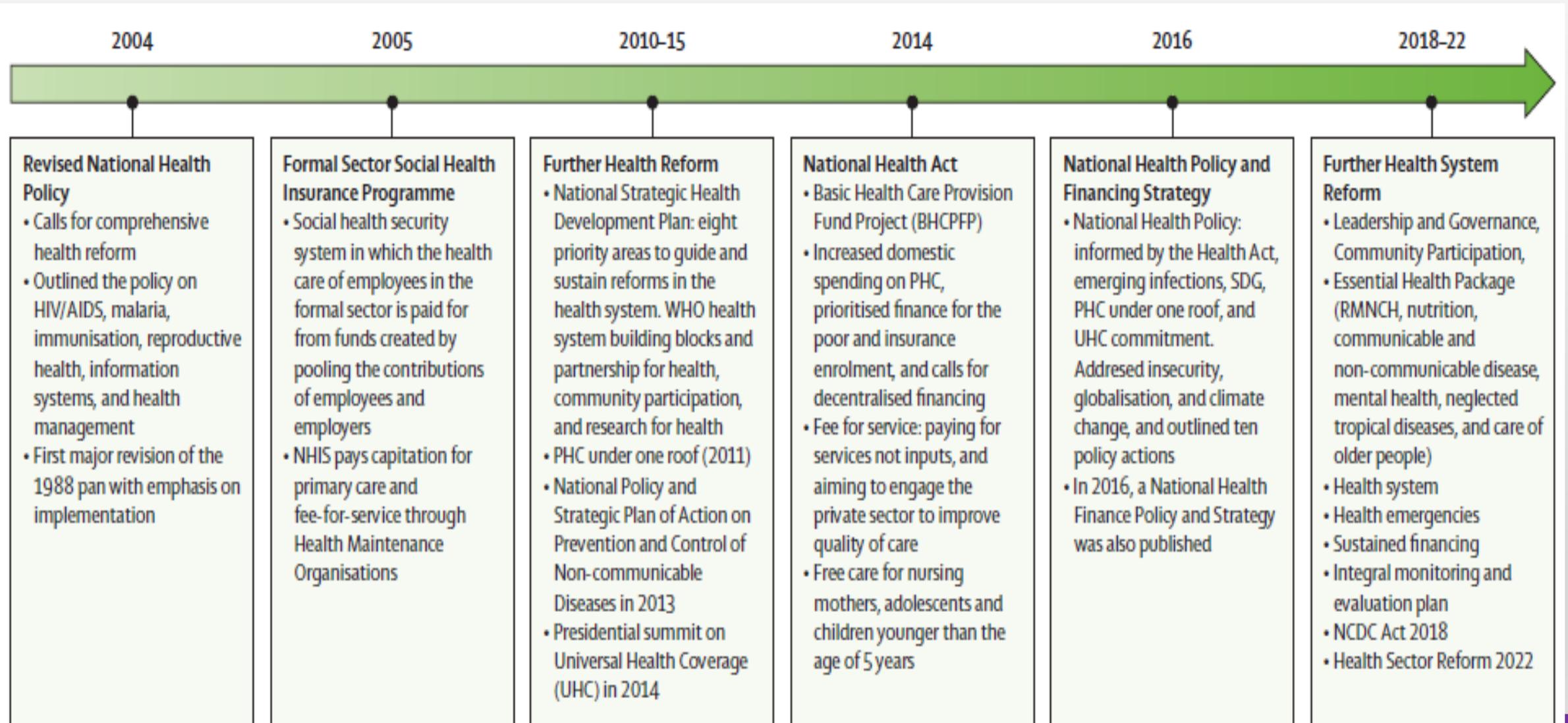
# Reform! Reform!! Reform!!!

**“... May your life never be as meaningless like  
OBJ’s Reforms”**

*- Easter prayer from a colleague (2004)!*



# One Nation: Several Health Reform Policy Agenda



# Lessons from Previous Promising Initiatives (i) “Saving One Million Lives” & National Health Act

- Political and institutional challenges hindered implementation.
- Horizontal and vertical fragmentation of authority within the health sector impeded coordination.
- Electoral cycles led to frequent turnover of sectoral leadership
- Senior politicians did not adequately support the initiatives

*Health Policy and Planning*, 39, 2024, 22–31  
DOI: <https://doi.org/10.1093/heapol/czad107>  
Advance access publication date: 18 November 2023  
Original Article

OXFORD

## **Health reform in Nigeria: the politics of primary health care and universal health coverage**

Kevin Croke<sup>1,\*</sup> and Osondu Ogbuoji<sup>2</sup>

## Lessons from Previous Promising Initiatives (ii) Midwives Service Scheme & Free MCH Program

The failure of the governments, particularly state and local government, to honour their financial commitments to the programmes led to the demise of the programmes

The *Lancet* Nigeria Commission: investing in health and the future of the nation



# NATIONAL HEALTH ACT, 2014

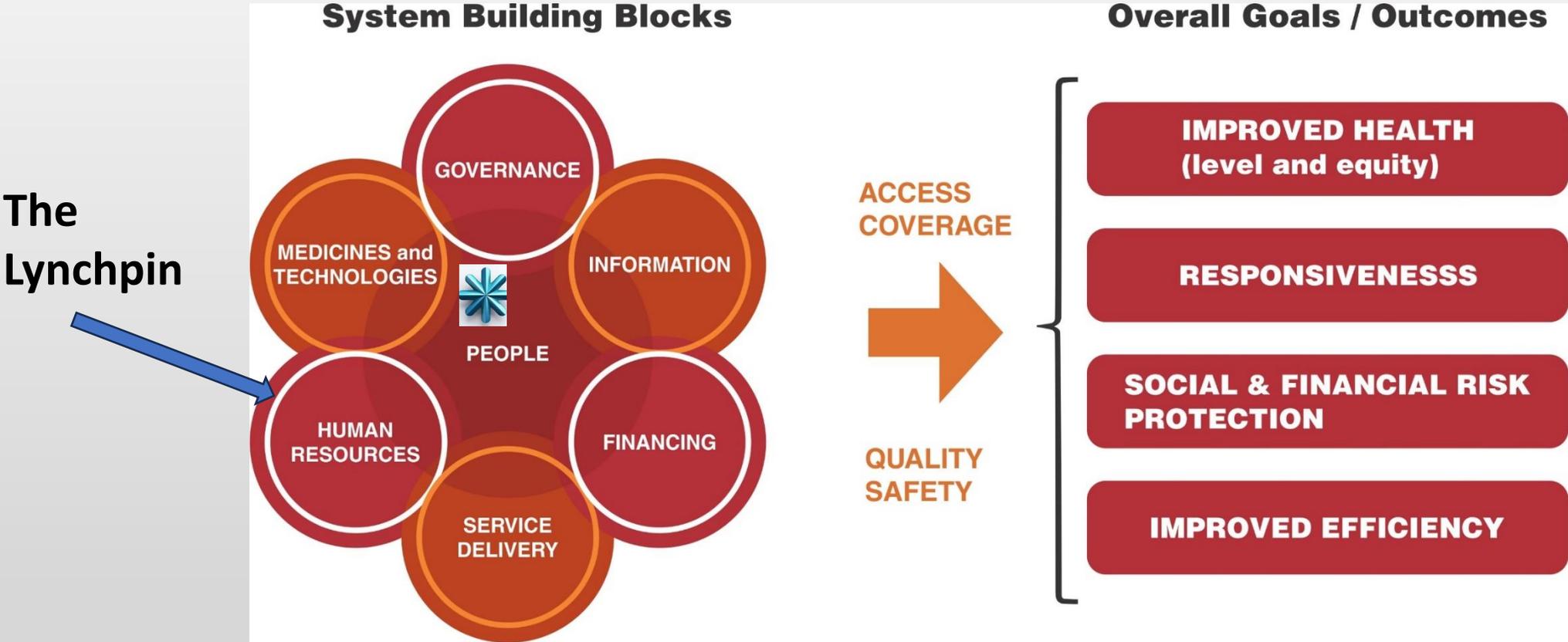
The National Health System shall include:

- a) Federal Ministry of Health;
- b) Ministry of Health in every State and the FCT Dept of Health;
- c) Parastatals under the federal and state ministries of health;
- d) All local government health authorities;
- e) Ward health committees;
- f) Village health committees;
- g) Private health care providers;
- h) Traditional health care providers;
- i) Alternative healthcare providers.

Other  
Stakeholders also  
COUNT

- Development Partners
- Academic & Research Institutions
- Professional Associations

# Back to Basic: Health System Approach



A well-functioning health system provides the platform for ensuring and improving the health of the people at individual, household & community levels

# What Really Matters? Potential Game-Changers



- **Ownership**
- **Accountability**
- **Responsiveness & Learning & Innovations**
- **Systems Thinking & Integration**
- **Sustainability**

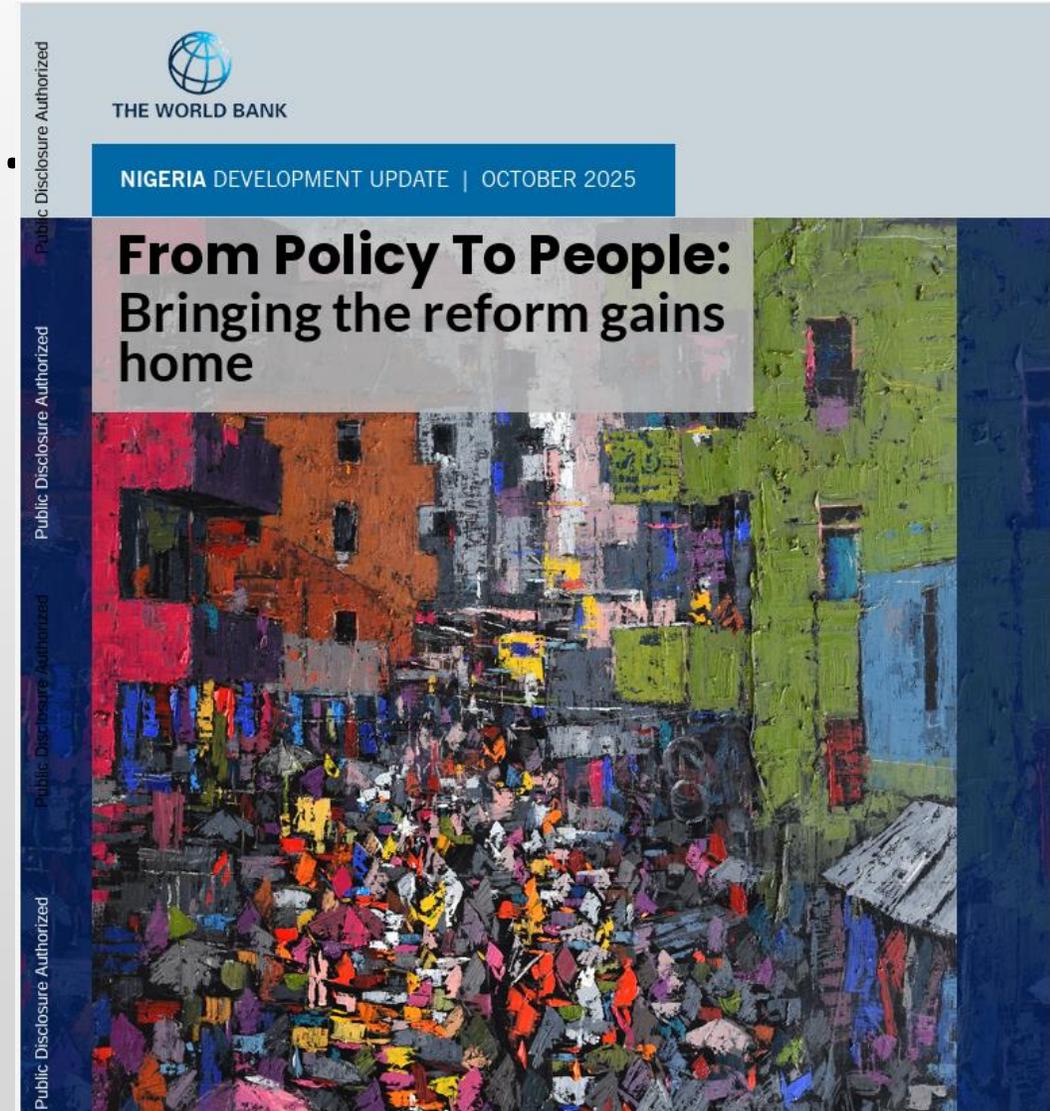
} “The Priority of Communities & Community Resources”

Improved  
Funding

Improved  
efficient use &  
cost-effectiveness

# Beyond the Health Sector...

- High and increasing level of poverty
- High & increasing level of unemployment, particularly among young people
- Challenges of insecurity and



**EXCEPT & UNTIL we address these contextual issues & associated social determinants of health appropriately, the health of Nigerians cannot improve**



“We cannot build healthier populations purely on the generosity of other nations. It is time to define our path, rooted in sovereignty and aligned with local needs”

If you want to go fast, go alone.  
If you want to go far,

**GO TOGETHER.**

African Proverb



