Introducing the INDEPTH Network

Prof. Osman Sankoh Executive Director

Tackling the Global Challenge of Antimicrobial Resistance A Global-NAMRIP network meeting

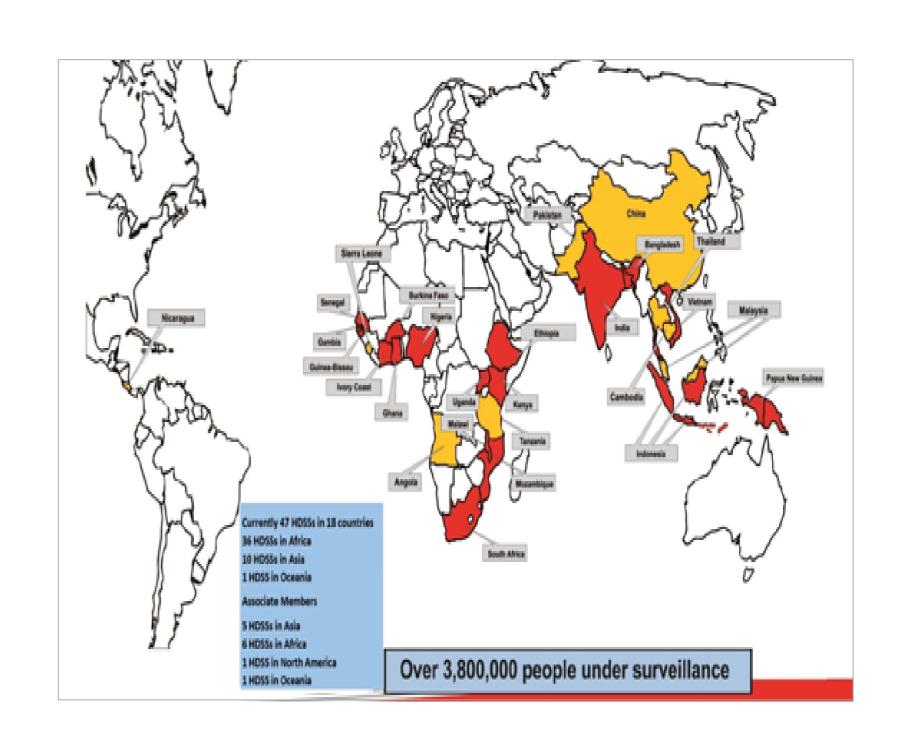
Accra, Ghana

5-6 March 2018

What is the INDEPTH Network?

INDEPTH Network is a collection of currently 49 interconnected Health and Demographic Surveillance System (HDSS) sites that conduct longitudinal research on catchment populations across urban and rural areas in low- and middle-income countries

Sites are located across 19 countries in Africa,
Asia, and Oceania and are involved in a wide
variety of implementation research and
policy development with over ~4M people
regularly monitored



What does INDEPTH do? Detailed view on INDEPTH Data

CORE

- ✓ All cause mortality rates
- √ Cause-specific mortality proportions & rates
- ✓ Life table probabilities
- √ Fertility rates
- ✓ Migration rates

ADDITIONAL

- **✓** population characteristics
- ✓ household characteristics, assets and wealth indexing
- √ health status / disease burdens
- √ access, use and impact of health services
- ✓ health seeking behaviours for severe and fatal conditions
- ✓ environmental contexts, risks, exposures
- √ household food security
- **✓** impact of poverty reduction strategies
- ✓ impact of health interventions

What are INDEPTH's core activities?

A

Standardized collection of core demographic metrics across sites

Regular, uniform collection of core set of measurements across HDSS sites reported quarterly

This includes more than just health metrics:

- Pregnancies and their outcomes
- Cause of death
- Newborn births and deaths
- Maternal deaths
- Morbidity
- Socioeconomic characteristics
- Migration
- Fertility
- Older children, adolescents and adult health



Wide range of detailed research and implementation projects

More sophisticated research projects within particular focus area, including:

- Anti-Microbial Resistance
- Clinical trials
- Genetics
- Clinical interventions
- Equity and access
- HIV
- MNCH measurement
- Vaccination
- Environmental impact on health

Projects can be multi-site or take place within single site depending on desired scale and relevance

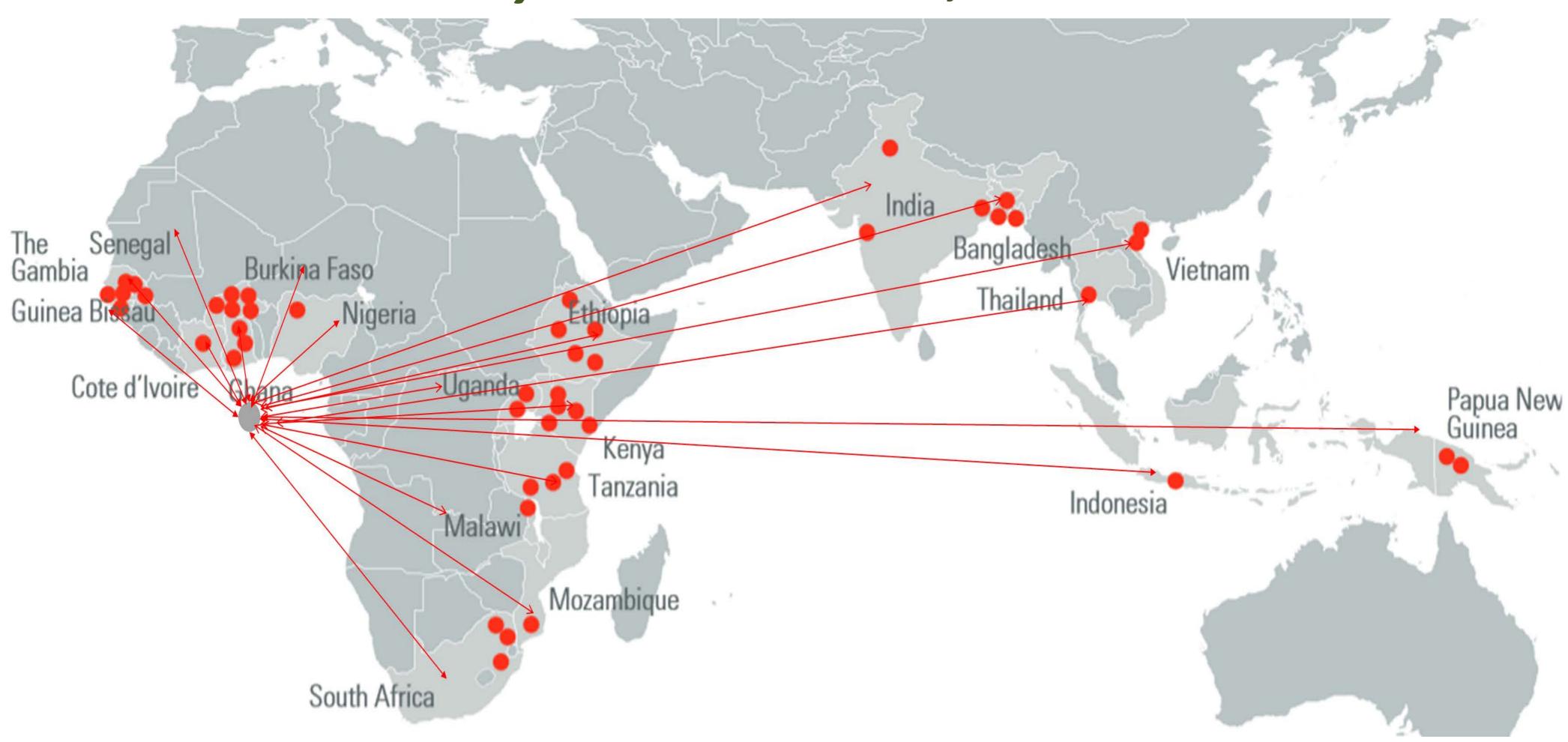
What is the policy relevance and value of INDEPTH? 1/2

INDEPTH provides a platform for on-going <u>longitudinal</u> health and demographic tracking with a global reach, operating in <u>different health</u> systems and cultures with varied epidemiology that offers a unique medium for the study of the impact of policy and practice, the testing of population-level indicators, and the development and validation of effective interventions for population-level impact.

What is the policy relevance and value of INDEPTH? 2/2

- Opportunity to leverage the collective value of quantitative and qualitative data across HDSS sites and conduct multi-site research and surveillance through effective cross-site collaboration and timely data collection
- Ability to capitalize on established links between HDSS sites and health and other policymakers to magnify research findings and enable evidence-based decisions
- Engage community of scientists, technical experts to shape and execute research projects and policy engagements
- Use own researchers (MScs & PhDs) via training partnerships with universities

Infrastructure for doing it: The Resource & Training Centre currently located in Accra, Ghana



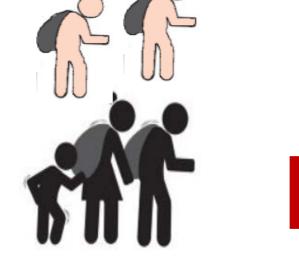
New addition: Malaysia with SEACO HDSS

Underlying Science System Infrastructue

Health and Demographic Surveillance System

HDSS equation for the denominator

Out-migrate after 6 months



Exit



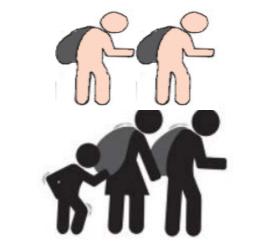
Verbal Autopsy on all deaths
WHO 2016



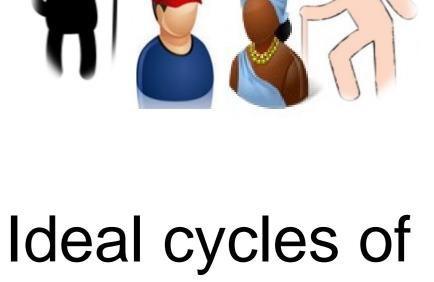
Initial Census
(Unique ID given)
(Rural/Urban/
Peri-Urban)







In-migrate after 6 months



enumeration

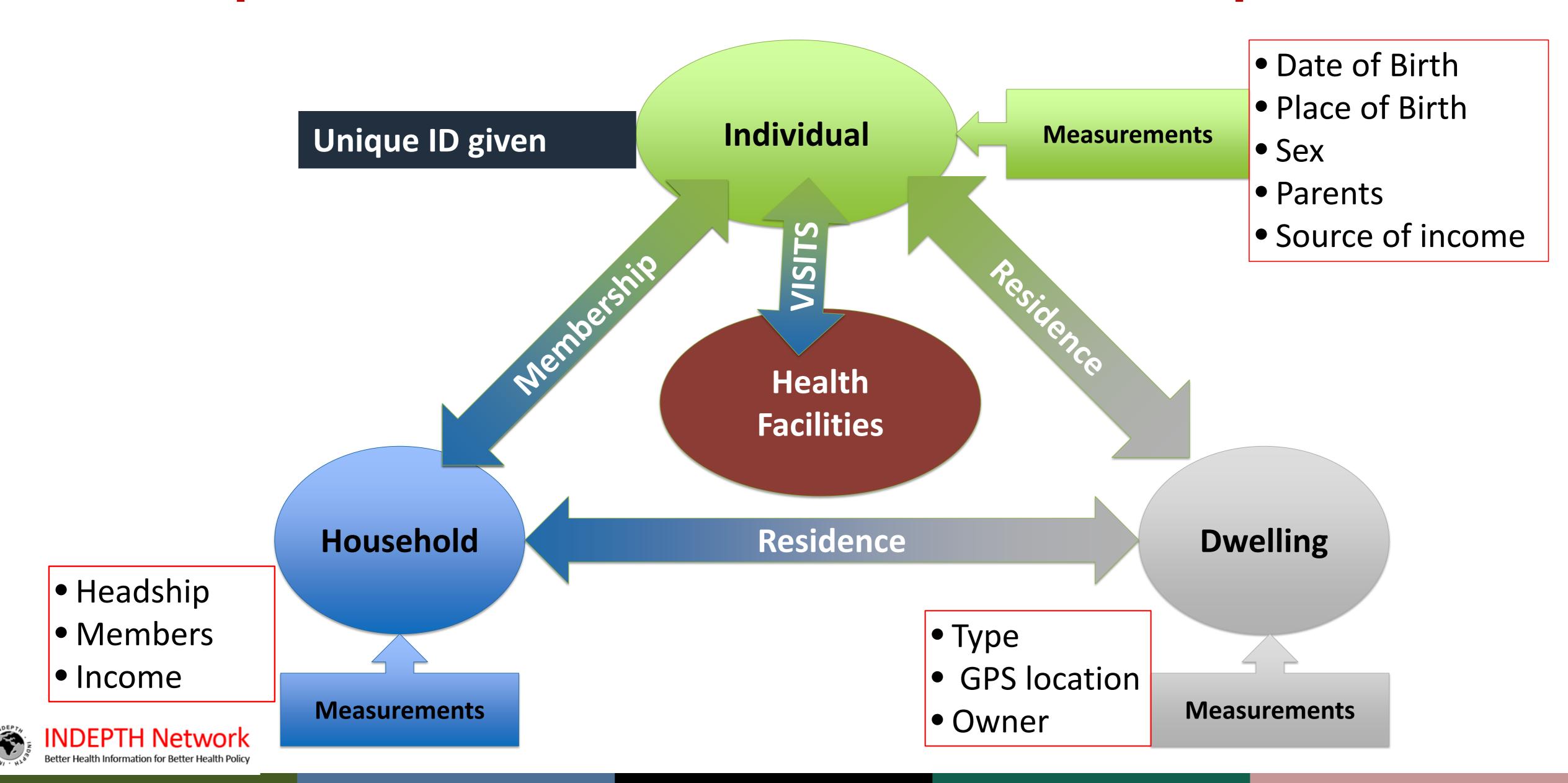




Follow up of pregnancies and their outcomes

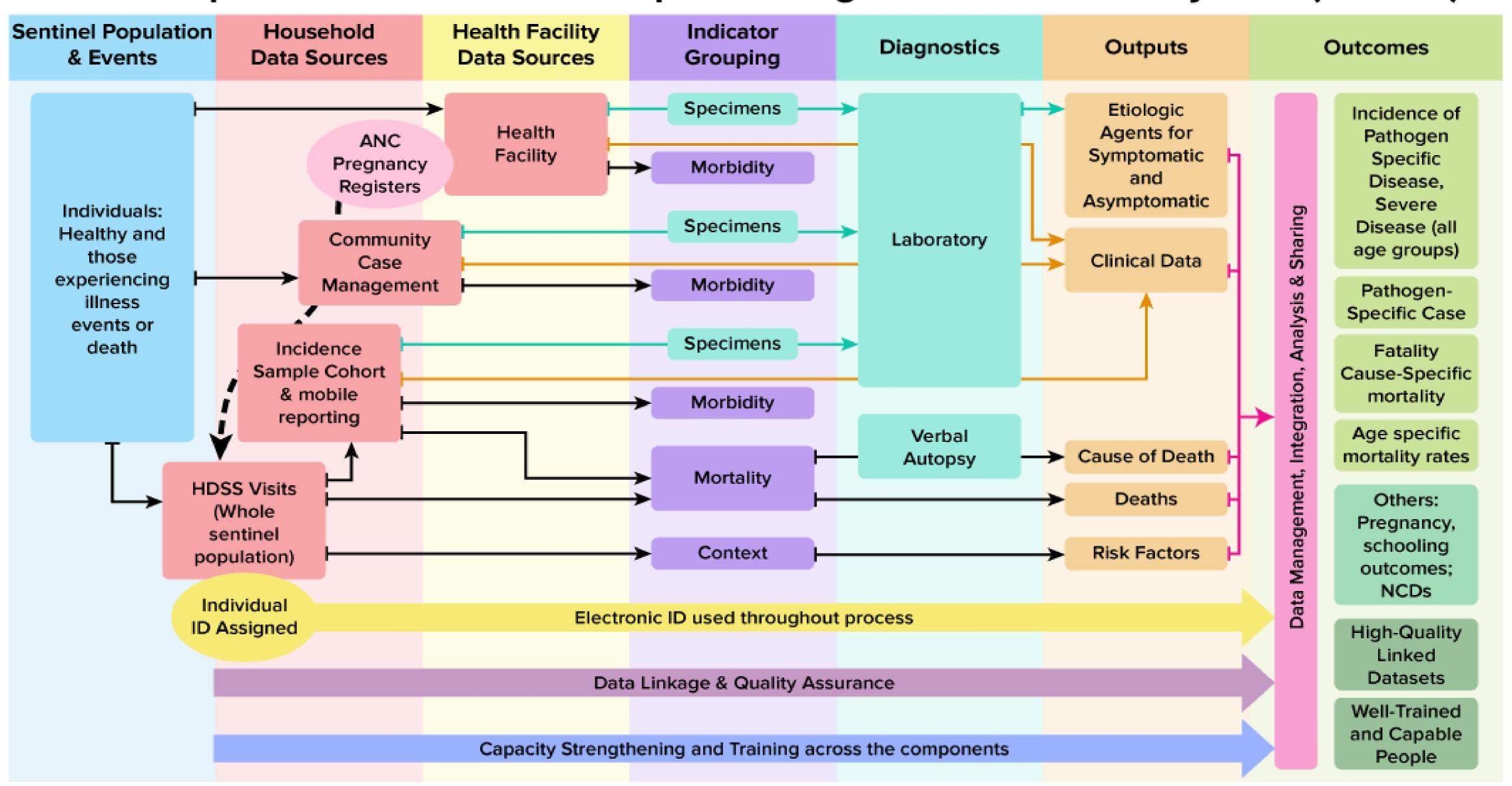


Population Data Structure – HDSS Participants

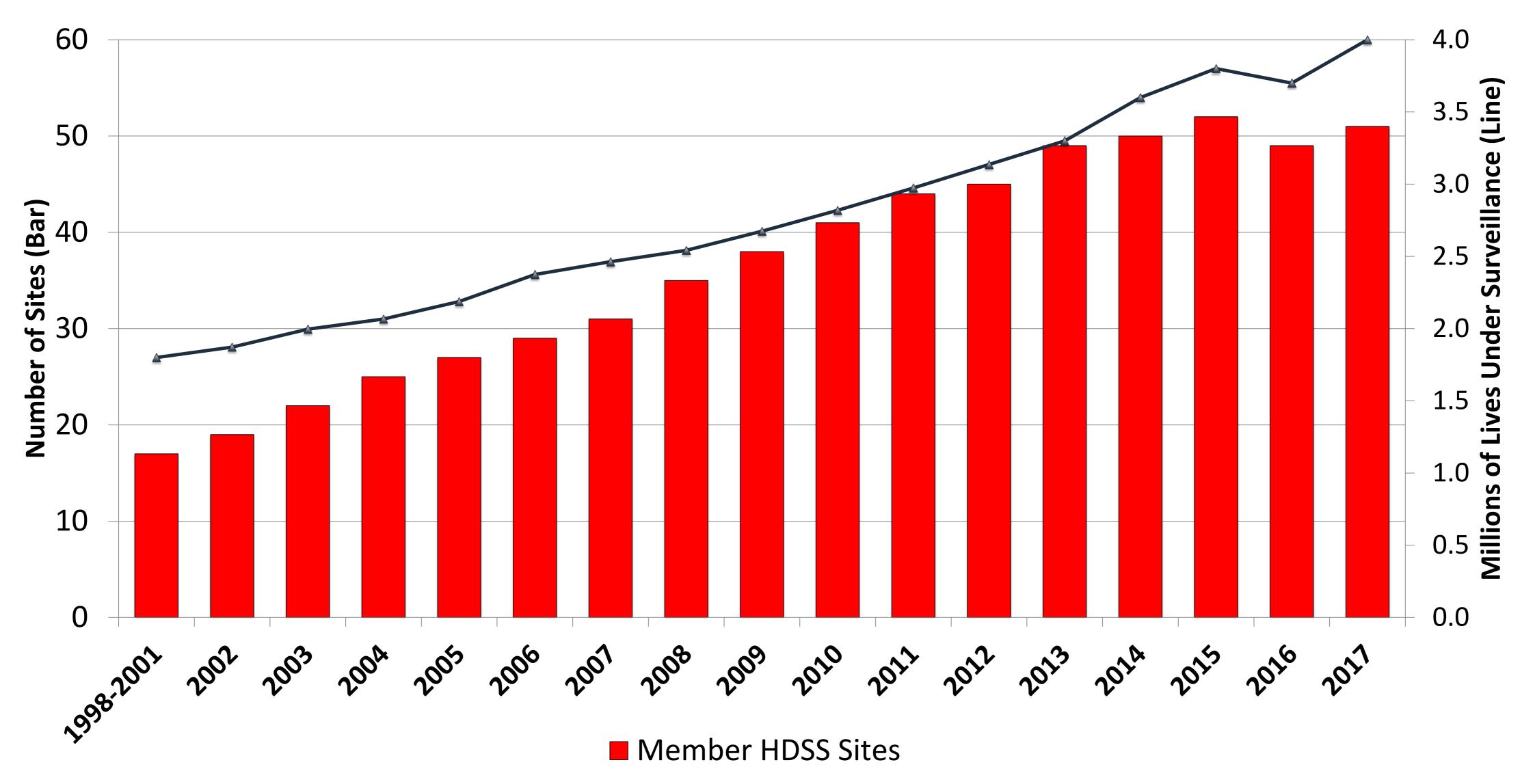


How does INDEPTH do it?

Comprehensive Health and Epidemiological Surveillance System (CHESS)



Expanding Footprint of HDSS



Strategic Plan 2017-2021

Broad Research / Activity Areas — Strategic Plan 2017-2021

- 1. Implement CHESS at all sites to deepen the longitudinal platform to answer new scientific questions: make morbidity surveillance routine
- 2. Provide timely metrics based on real data: make the best out of INDEPTHStats
- 3. Conduct studies across the life-course: from pregnancy to adult health and ageing; identify relevant practices and interventions
- 4. Expand the utility of the platform to generate and analyse SDG indicator baseline & dynamics; conduct safety and effectiveness studies of drugs and vaccines
- 5. Assess scientific- and policy-relevant determinants & context of outcomes:

 Nutrition, diet and food security; Environment, climate, indoor air pollution; Health equity, migration and poverty; Vaccines: safety, effectiveness and efficacy; Sex differentials/gender; Education-based analysis and interventions; Health system assessments

From Strategic Plan 2017-2021

Capacity Strengthening

- 1. Strengthen the capacities of people and institutions
- Expand the INDEPTH Scientific Development and Leadership Programme including the MSc programmes

Financial Sustainability

- 1. Continue to look for both core and project support from funding partners.
- 2. Strengthen the efforts at building an INDEPTH consultancy that leverages the skills and advantage of the Network.
- 3. Growing the INDEPTH Endowment Fund

Policy Engagement

- Tailor, package and direct research outputs for different stakeholders to stimulate public appreciation of findings
- 2. Leverage engagement with policy makers to attract more funding for research-into-practice activities

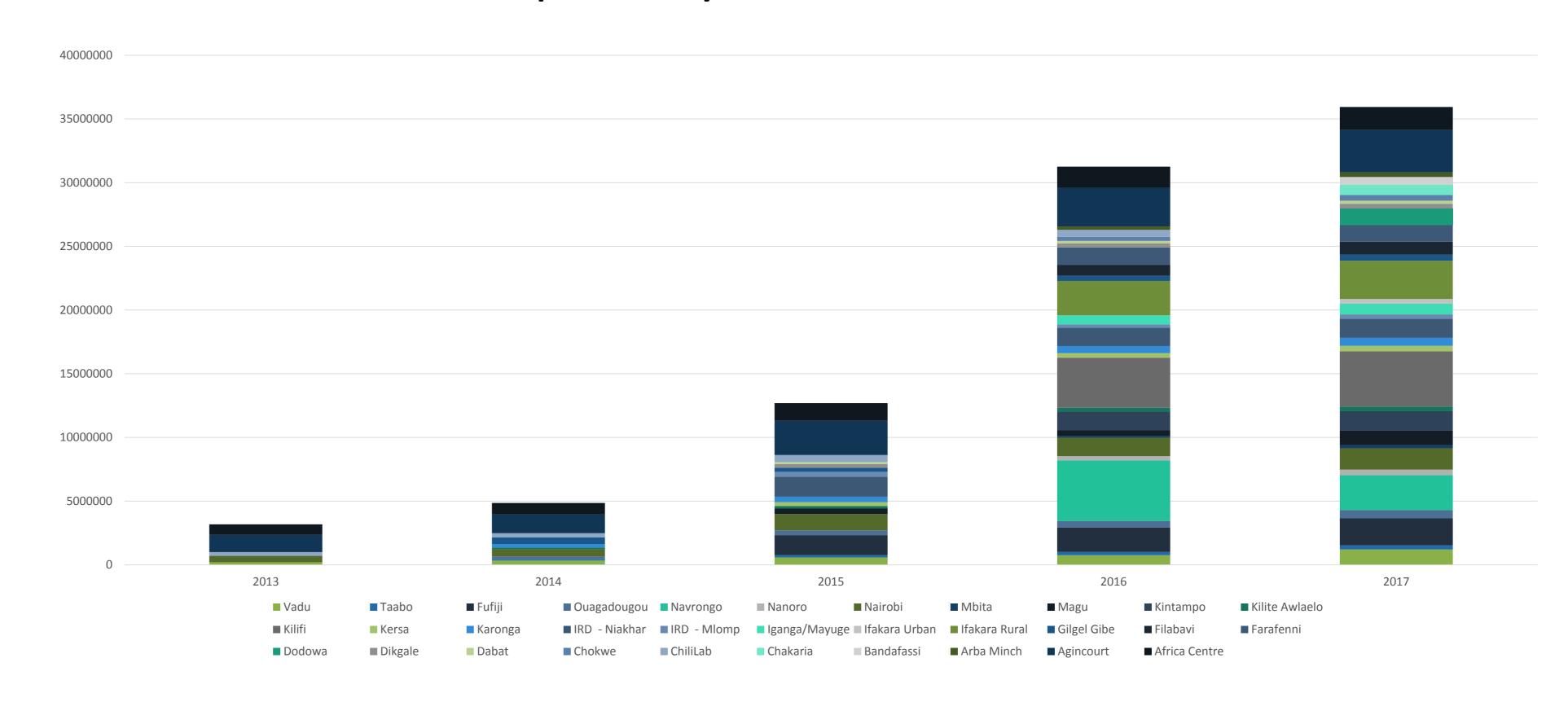


AWorking Group – Antibiotics Resistance

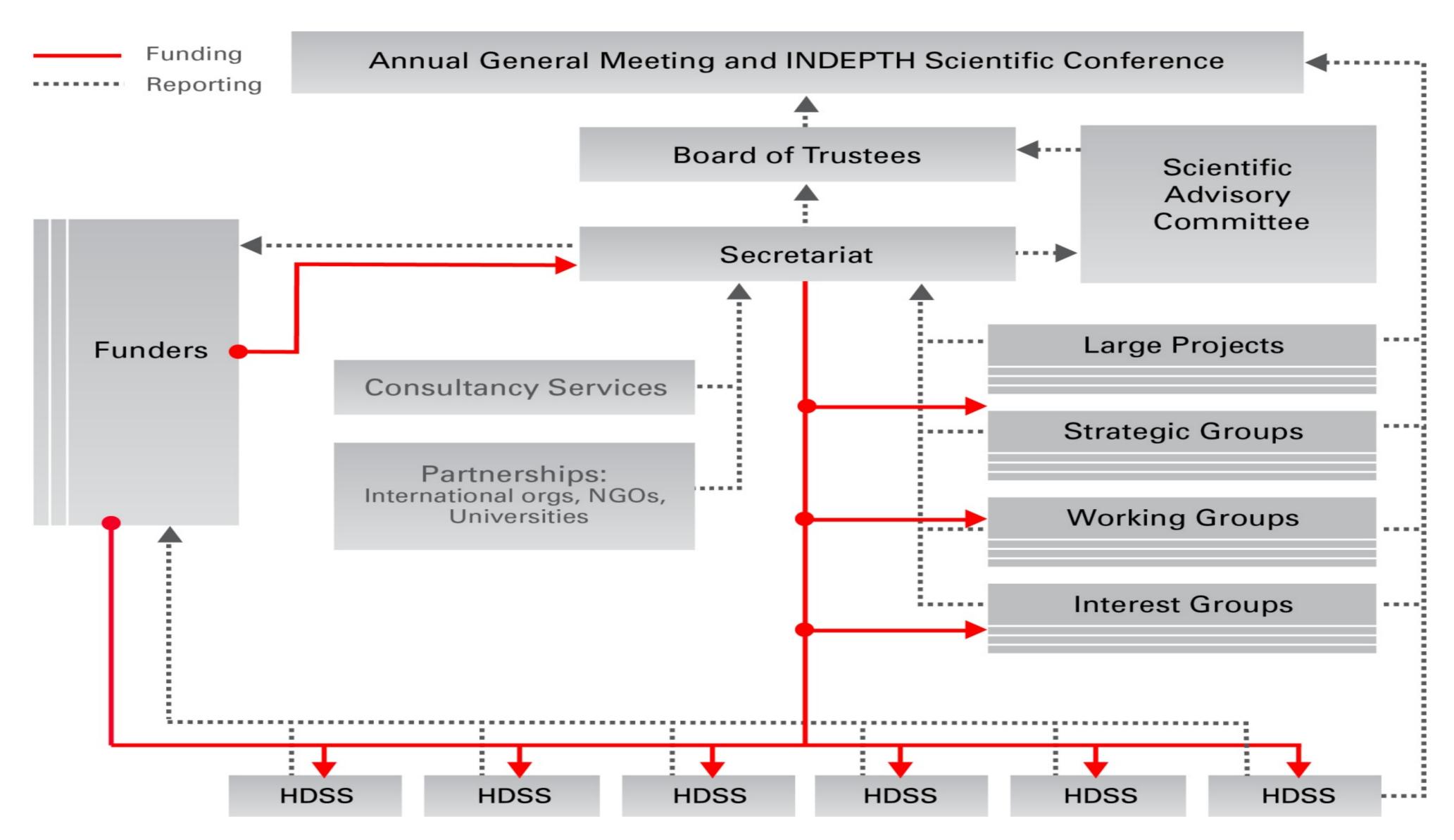
- Current project *Community level AntiBiotic ACcess and USe in low and middle countries* (ABACUS).
- ABACUS is funded by the Wellcome Trust for €799,828 between 2016 and 2018 in partnership with the University of Oxford (UK) and University of Umea (Sweden).
- Seven INDEPTH Centres Dodowa (Ghana), icddr,b (Bangladesh), Manhica (Mozambique), Hanoi Medical University (Vietnam), Kintampo (Ghana), Kanchanburi (Thailand), Agincourt (South Africa) are implementing the project.
- The study aims to assess and compare community-based antibiotic access and consumption, and the factors that underpin them.
- The results of this study can inform the design of community-based interventions to promote rational antibiotic use in LMICs.

20 Years Today, we still have a vibrant, attractive Network

- Recognised since 2013 as a leader in sharing public health research data (INDEPTHStats, INDEPTH Data Repository)
 - ✓ 32 HDSSs on INDEPTHStats
 - ✓ 25 on the INDEPTH Data Repository



INDEPTH Governance Structure



Financial Performance – 2014-2016 (Income/Expenditure) - Audited

- Board review
- International audit
- •Annual submission of financial statements to US IRS and Ghanaian authorities

A) Core Support	2016 US\$	2015 US\$	2014 US \$
B) Projects	2,140,897 2016 US\$	1,738,482 2015 US\$	2,529,580 2014 US\$
	1,390,005	3,567,693	4,686,139
CORE AND PROJECTS	2016 US\$		2014 US\$
TOTAL	3,549,537	5,306,175	7,215,719
Expenditure	2016 US\$		
TOTAL	3,520,43	3	

- Total funding raised last 10 years
 - ✓ Over **\$19,270,000** in core grants
 - ✓ Over \$14,400,000 in project grants \$33,670,000
- Subgrants to member centres
 - ✓ Over **\$25,000,000** disbursed directly to centres

INDEPTH HDSS Sites & Leaders

http://www.indepth-network.org/member-centres



INDEPTH Centres and Leaders 2018

http://www.indepthnetwork.org/secretariat/governance/centre-leaders



INDEPTH Board, December 2017 –

http://www.indepthnetwork.org/secretariat/governance/board-trustees



INDEPTH Scientific Advisory Committee 2018

http://www.indepth-

network.org/secretariat/governance/scientific-advisory-committee



Current INDEPTH Funders

http://www.indepth-network.org/about-us/funders



INDEPTH's Past, Present and Future

We have a flyer in English and French

http://www.indepth-network.org/about-us/our-past-present-future

For the future, we have a new Strategic Plan 2017-2021 available on the website

http://www.indepth-

network.org/documents/strategic_plans/indepth_strategic_plan_2017_2021.pdf

Summary in the next slides

Thank You