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New INDEPTH strategy for the SDGs using robust population data



The INDEPTH Network comprises 49 health and demographic surveillance systems (HDSSs) that monitor the lives of nearly 4 million individuals in 20 low-income and middle-income countries (LMICs). The HDSSs generate and publish robust population-based data on topics such as fertility, migration, mortality, and socioeconomic conditions. These data are needed at local, national, and global levels for setting health and population priorities and testing progress against them. HDSSs are also platforms for clinical and health intervention trials.

INDEPTH is revising its strategic approach to engage with many Sustainable Development Goals (SDGs), including those related to poverty, gender equality, and hunger.¹ INDEPTH's renewed strategy commits to tracking SDGs by mapping and publishing baseline metrics for each target and regularly publicising progress. These findings are particularly important for the third health goal: "ensuring healthy lives and promoting the well-being for all at all ages". Without reliable data, it will be impossible to assess countries' progress towards the goals and to design and adjust policies and programmes to ensure progress. INDEPTH's HDSSs are often the most reliable source of community-level demographic and health data in the countries and communities in which they work since they are often located in hard-to-reach rural and urban areas.

The SDGs are increasing demands by major international donors, including the Global Fund and the World Bank, for countries to improve their Civil Registration and Vital Statistics (CRVS) systems.² Most countries with INDEPTH HDSSs have very poor CRVS systems and fail to capture any appreciable or representative proportion of national births and deaths. Causes for most deaths are therefore not established, which undermines appropriate responses by local health systems and reduces the likelihood of achieving the third SDG. Since HDSSs regularly gather longitudinal mortality and burden of disease data, they help countries to improve national CRVS systems by providing localised interim registration data and by benchmarking new CRVS implementation. INDEPTH's

new strategy involves working closely with national CRVS systems, both in developing and implementing systems and in monitoring and evaluating their effectiveness.

INDEPTH is expanding its systems for capturing data on non-communicable diseases, making data rapidly available so that resource-constrained governments can prioritise cost-effective interventions and recognise trends and threats of chronic diseases in LMICs.³ The success of policies and programmes to tackle infectious diseases has increased life expectancy worldwide but, inevitably, this increases the burden of non-communicable diseases associated with ageing and the need to manage chronic conditions such as diabetes and HIV.⁴ INDEPTH's Adult Health and Ageing Working Group works on understanding the burden of chronic disease in LMICs, and longitudinal INDEPTH data are essential for identifying the economic, behavioural, environmental, and biological predictors of such diseases and their effects on health and social and economic wellbeing. The impacts of ageing in LMICs on physical and cognitive function, cardiometabolic disease, HIV, and economic productivity are important considerations.

The growing body of evidence on the impact of climate change on health⁵ mandates a new strategic focus for the INDEPTH Network. LMICs are potentially the regions where health is most detrimentally affected by climate change, but to develop effective strategies for adapting to and mitigating its effects, these effects need to be better understood. Longitudinal INDEPTH data⁶ offer an opportunity to investigate the short-term and long-term effects of environmental changes on health. Thus, for climate-related SDGs, INDEPTH's Environment and Health Working Group will link longitudinal mortality and morbidity data with climate and weather variables.

INDEPTH's new strategies are enabled by technological and organisational advances for rapidly collecting and publishing data. The availability of recent data is crucial for health policy makers for relating rapidly metamorphosing health problems to intervention outcomes. INDEPTH's new Comprehensive Health and

Epidemiological Surveillance System initiative,^{7,8} which integrates existing health and population data with data from health facilities, will ensure regular updates on several important metrics beyond those tracked regularly by HDSSs, including economic, education, and morbidity metrics, and social autopsy findings. The Network will reduce the turnaround time for HDSS data by using artificial intelligence tools to create learning systems that offer close-to-real-time data feedback. Annual updates on the core metrics generated from INDEPTH's longitudinal tracking of pregnancy, births, migrations, deaths, and causes of death through verbal autopsy will be freely available on the INDEPTHStats website to enable uptake by policy makers and other users.

INDEPTH's vision is "to be a trusted source for evidence supporting and evaluating progress towards health and development goals". Its new mission is "to lead a coordinated approach by the world's health and demographic surveillance systems to provide timely longitudinal evidence across the range of transitioning settings to understand and improve population health and development policy and practice." As it expands the scope and timeliness of data over the next 5 years, INDEPTH will increase its relevance in a changing global health environment and assist local, national, and international health policy makers in achieving their goals.

See Online for appendix

For the INDEPTHStats website see <http://www.indepth-ishare.org/indepthstats>

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