

TURNING AMBITION TO ACTION:

The critical role of health innovation in achieving the Sustainable Development Goals

Better health is fundamental to achieving economic prosperity in the SDGs

Despite enormous gains in global health achieved over the past decades, the health burden that falls disproportionately on low- and middle-income countries (LMICS) continues to stand as a barrier to achieving economic prosperity as envisioned in the Sustainable Development Goals (SDGs).

The health-related SDGs will not be met without R&D for new technologies

The SDGs include ambitious targets for reducing maternal and child mortality, ending the epidemics of HIV/AIDS, malaria, tuberculosis (TB), and neglected tropical diseases, and addressing other health challenges. However, existing disease-specific global strategies clearly acknowledge that achieving these targets will not be possible without research and development (R&D) of new and improved drugs, vaccines, diagnostics, and other health technologies. For example, meeting the target of ending the epidemic of TB by 2030 will require new, effective drugs to treat the growing problem of multidrug-resistant TB. Likewise, without new tools to treat and prevent HIV transmission, the scale-up of existing tools will be insufficient to achieve an end to HIV/AIDS as envisioned in the SDGs.

Despite the importance of global health R&D to achieving the SDGs, it is largely missing from the agenda

Only one of the 169 SDG targets—target 3.b—is specifically aimed at advancing R&D to meet the health needs of LMICS, and unfortunately it excludes several important categories of health interventions including diagnostics, microbicides, devices, and other health tools, and it conflates two distinct problems—the need to support R&D for new tools and the need for those new tools to be affordable and accessible. Furthermore, none of the United Nations proposals for SDG indicators include any that can adequately measure progress on global health R&D.

If the SDGs are to be successful, it is vital that they acknowledge the importance of—and measure progress toward—R&D for global health.

Recommended global health R&D indicators for SDG monitoring framework

These indicators were recommended following an in-depth analysis of potential indicators and a broad stakeholder consultation.

Global indicators

To be collected by specialized organizations at global level:

1. Public, private, and non-for-profit investment in R&D for the health needs that disproportionately affect people living in LMICs
2. Number of new registered health technologies targeting the health needs that disproportionately affect people living in LMICs

To be collected by national statistical offices:

3. R&D expenditure as a percentage of gross domestic product

Complementary national indicators

Countries choose whether to monitor based on national circumstances:

1. Number of new health technologies registered by the National Regulatory Authority and/or recommended by national guidelines
2. National Regulatory Authorities participating in harmonized registration initiatives based on internationally recognized policies and standards; and sharing regulatory policies, legislation, guidelines, and information on registered products
3. Number of formal coordination and collaboration initiatives aimed at increasing and facilitating transfer of health-related technology, including between public and private entities
4. Number of registered clinical trials that meet international quality and safety standards
5. Number of clinical trial sites that meet international quality and safety standards

The Millennium Development Goals led to increased investments in global health R&D, which catalyzed the development of breakthrough technologies that have driven significant progress in improving health worldwide. The SDGs present an opportunity to finish this work.

Child mortality

53% reduction in child mortality since 1990, driven in part by new tools to reduce deaths from pneumonia, diarrhea, and malaria

Yet today, a sub-Saharan African child is nearly **15X more likely** to die than a child in a high-income nation.

Malaria

58% reduction in malaria mortality since 2000 driven in part by bed nets and new antimalarial therapies

Yet today, **1500** African children die daily from malaria

HIV/AIDS

7.6 million deaths averted from HIV/AIDS since 1995 due to antiretrovirals

Yet today, for every **1** person who starts treatment, **2 more** are newly infected.

TB

45% reduction in TB mortality since 1990, driven by new diagnostic tools which increased detection and treatment.

Yet today, TB drugs in use are **over 40 years old** and must be taken for 6-9 months.

Catalyzing the development of new health technologies will require increased R&D investment from all nations

Despite significant need, there is little commercial incentive to drive R&D for tools to meet the health needs of LMICs. Currently, only 1 to 2 percent of spending on biomedical R&D targets the health priorities of LMICs. The Lancet Commission outlined an investment framework for achieving the dramatic health gains envisioned by the SDGs, which would see a reduction in infectious, maternal, and child deaths down to universally low levels everywhere by 2035. The commission highlighted investments in health R&D as one of the most effective interventions to achieve this “grand convergence” and called for a doubling of current R&D investments in health from all nations. The lifesaving technologies used today are the result of investments made years ago, so increasing investment now will be critical to advancing the next generation of health tools needed to achieve the SDGs.

Robust indicators for global health R&D should be included in the SDG monitoring framework

Although the SDG goals and targets are largely set, the indicators will not be finalized until mid-2016. Given the marginalization of global health R&D in the SDG goals and targets, it will be vital that effective indicators to measure global health R&D are included in the global monitoring framework in order to mobilize financial resources and political commitment for global health R&D from all countries and to ensure progress is being achieved and countries are held accountable.

Countries must translate the SDGs into national action plans that embrace R&D as essential to improved health and economic prosperity

As countries implement the SDGs, they should adopt strong benchmarks for health research budgets and outcomes, and adopt complementary national indicators to help them more comprehensively measure progress in advancing health R&D and creating a policy environment that fosters innovation.

The SDGs present an opportunity to mobilize new resources and political commitment from countries of all economic levels to support the development of critically-needed health technologies.

