



Data for Health:  
Mid-term Review

# Executive summary

## Data for Health, an innovative, \$100 million public-private initiative, is changing how countries collect and use health data.

One of the biggest contributors to preventable deaths is not a health problem but a record keeping problem.

65% of deaths worldwide go unrecorded, with millions more having no documented cause. Many countries do not have complete birth records, while others lack reliable data about risk factors associated with poor health and noncommunicable diseases.

Without these data, governments, donors, and non-governmental organizations cannot accurately target resources to prevent deaths and diseases or measure whether their efforts are working. The absence of health data threatens our ability to reach the Sustainable Development Goals, and it means that millions of people each year are dying prematurely or suffering needlessly from disease.

Bloomberg Philanthropies and the Australian Department of Foreign Affairs and Trade, working with seven partner organizations, are supporting 20 countries across Africa, Asia, the Pacific, and Latin America to develop country-level capacity to collect more and better public health data, use those data to drive decision-making and track trends and plan interventions.

Through examining baseline data, analysing reports and interviewing partners and governments, this document provides an independent review of the Initiative's implementation in its first two years, assessing progress made and lessons learned between 2015 and 2016 and highlighting opportunities for the next two years.

## The Data for Health Initiative is closing these global gaps in health data.

With Data for Health support, countries have strengthened their systems for collecting birth and death registration and have improved information on cause of death.

Knowing how many people are born and die each year – and what is causing those deaths – is critical to well-functioning health systems and to addressing need and gender equity gaps. Data for Health investments have resulted in improved

quality of birth and death registration by modernizing national reporting systems, training people in hospitals and communities to more accurately record cause of death and requiring better and more reporting.



Verbal autopsy being performed by a midwife, trained by Data for Health. Myanmar (July 2016)

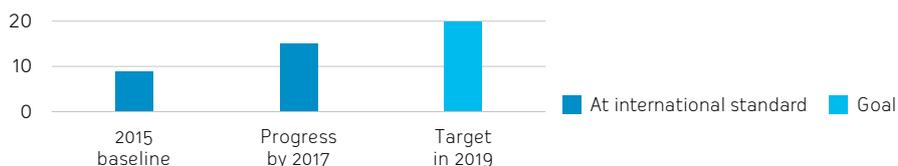
Data on out-of-hospital deaths, which in some countries represents most deaths, are being collected by the government for the first time in Rwanda and Myanmar, and preparations are underway in the Philippines, Morocco and Tanzania. In particular, Myanmar, Philippines, Solomon Islands and Sri Lanka have made significant progress toward implementation of verbal autopsy, a method through which local health workers are trained to interview family and community members to determine cause of death.

To accomplish this, governments, with Data for Health partner support, are training people in:

- Business process mapping of civil registration and vital statistics systems (also known as Enterprise Architecture)
- Improving quality of cause of death certification
- Procedures for assessing cause of death for out-of-hospital deaths (also known as Verbal Autopsy)
- Methods to provide estimates of proportion of missing deaths (also known as CRVS completeness estimation)

- Cause of death coding to international standards (also known as ICD-10 coding)
- Birth and death notification
- Analysis of mortality and cause of death data (also known as ANACONDA and ANACoD)
- Best practices for CRVS legal and regulatory review

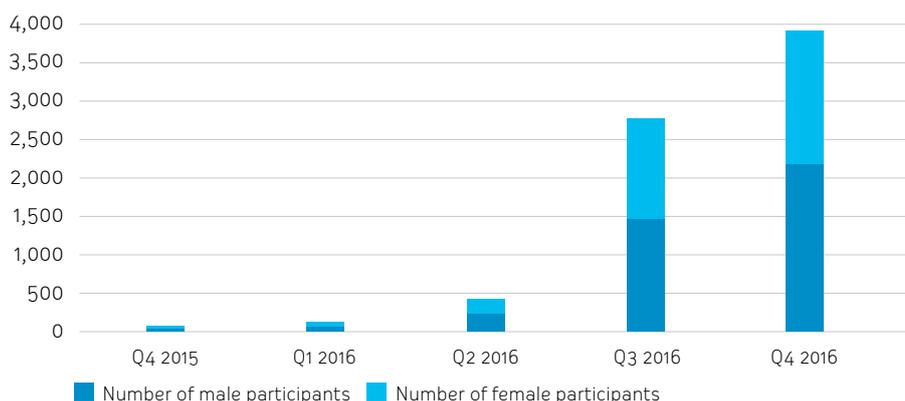
Death certificates that meet the international standard include accurate information about cause of death



# 5 COUNTRIES

With the addition of 5 new countries, Data for Health is more than half way to the target of all 20 countries using death certificates at international standard

Training people at country-level promotes sustainable improvements in the quality of birth and death data



# 3,900 INDIVIDUALS

Over 3,900 individuals from 16 countries, over 40% of them women, have been trained in innovative methods to improve birth and death data.

**Lessons and way forward:** While government engagement has taken time, which has delayed Initiative progress in some countries, the thoroughness of the process ensured that focus governments are fully committed and has allowed for

identification of in-country champions. Synergizing planning and sharing information with other actors in the field could provide new opportunities.

Data for Health partners have collaborated with countries to innovate in collecting data on noncommunicable disease risk factors.

A first-ever mobile phone based survey that promises streamlined, user-friendly data collection mechanisms, deployable in any country context has been developed and a plan for piloting it is in place. Mobile phone survey data will be compared to traditional house-based survey techniques, to improve the data generated using both methods.

inform implementation as the survey is rolled out. in anticipation of gaining momentum in the coming year.

**Lessons and way forward:** While often worth the wait, innovation takes time – the mobile platform is only now in piloting form. The NCD Risk Factor Survey arm of Data for Health partnerships have been redesigned and optimized Research on ethical, legal and societal issues in using mobile phone surveys in low- and middle-income countries will



In 2017: Morocco and Shanghai will pilot the first-ever mobile phone NCD risk factor survey, with the Philippines and Zambia to implement it shortly after. Morocco and Zambia will also conduct WHO's STEPwise approach to surveillance. This will provide the data needed to optimize NCD risk factor surveillance.



Community attending a speech on the importance of civil registration, Rwanda (2016)

The civil registration and vital statistics system in Rwanda is dynamic and evolving. Business process mapping was introduced as part of the collaboration with Data for Health. As a result, the comprehensive assessment was validated on the basis of what the desired business process maps "should be." Now, Rwanda has declared November as "National Registration Month" and trained experts are working with communities to improve data collection at all levels, including through verbal autopsy.

## Data for Health is building country capacity in using data to drive policy.

In 14 countries, Data for Health leverages country demand for high quality health data into national capacity to design data-driven policy



Data for Health partners have worked with target countries to modernize and improve capacity of country governments to use health data to inform policy development. These data are now more accessible through new technologies and data-based bulletins, and as a result, country capacities in translating data to policy are increasing. To date, 345 participants, representing 6 countries have benefited from Data Impact trainings.

**Lessons and way forward:** Culture change is difficult to measure. The innovations in policy-making that move governments to data-driven decisions are often incremental, but can have national and global impact. The strong relationships with governments that Data for Health has generated can be further leveraged to identify opportunities and accelerate progress in this area.

“ Data for Health is leveraging and capitalizing on a feeling across the world that there is a need to harness data more, that it is a data-driven time - not just in public health but across sectors. - Implementing partner



Data impact training in Caicó, Brazil (2016)

Countries want high quality data, and want to use it to craft good policy.

The government of Brazil publishes the Public Health Book annually, making tremendous amounts of public health data from across the country publicly available. With support on data visualization and communication from Data for Health partners, Brazil has dramatically improved the presentation of the data in the Public Health Book, increasing the potential impact of the report.

“Thanks to Data for Health, this year for the first time our annual health data report is a cohesive, coordinated report that tells the story of health in Brazil.”

## Data for Health is making a difference in 19 countries, bringing quality health data and policy makers together to impact the lives of millions

With Data for Health, the Australian Government's InnovationXchange, Department of Foreign Affairs and Trade, and Bloomberg Philanthropies have boldly innovated, bringing diverse partners and governments together to create a whole that is greater than the sum of its parts. In the two years since its inception, the Initiative has scaled up in 19 countries, helping governments improve health data collection

systems and ensure that data reach those who are in positions to craft targeted, smart policies. Mindful of political and logistic considerations, Data for Health continues to work with the government of the twentieth target country to be able to initiate work as soon as possible. Data for Health is already having a direct impact, working to reduce the burden of disease and death for millions of people.

## Data for Health is ambitious – but with all focus country governments fully committed and the collective expertise of the partners, its targets are realistic

In designing Data for Health, InnovationXchange and Bloomberg Philanthropies set out to change the way governments think about and use health data, with a target of covering more than one billion people in low-and middle-income countries. To make this a reality, the Initiative has ambitious goals.

As of March 2017, Data for Health partners and the governments committed to implementing the Initiative's technical package have accomplished or have laid the foundations to reach each of these goals. Thousands of people have been trained in civil registration and vital statistics interventions that work in both urban and rural environments. Dozens of government officials have learned techniques needed to improve data collection,

analysis and display. Health data collection systems have been modernized through enterprise architecture. Awareness has been raised among key decision-makers about the importance of using data to drive health policy. The world's first mobile phone-based noncommunicable disease risk factor survey platform has been developed and is about to be piloted.

Importantly, these advances are not only having an impact in the target countries, but the ideas and core messages are being disseminated on a global level through Initiative partners like the World Health Organization, the UN Economic Commission for Africa and the UN Economic and Social Commission for Asia and the Pacific.

## Monitoring and Evaluation Framework: Goals by end of year 2

Activities	Overall	Goal by end of year 2 (May 2017)	Status as of December 2016
<p><b>Data on births and deaths</b></p> <p>(Supported by University of Melbourne, CDC and Vital Strategies)</p>	<p>Support governments to improve birth and death data in 20 countries</p> <p>1) First 3 months:</p> <ul style="list-style-type: none"> <li>Secure country commitment build consensus amongst stakeholders</li> <li>Establish champion and committee</li> <li>Conduct CRVS assessment</li> <li>Prioritized country CRVS workplan</li> </ul> <p>2) Followed by:</p> <ul style="list-style-type: none"> <li>Begin country activities to review and strengthen birth and death data</li> <li>Engage data use experts</li> </ul>	<p><b>In 20 countries:</b></p> <ul style="list-style-type: none"> <li>Complete preparatory work, including convening stakeholders and hiring focal point</li> <li>Conduct broad CRVS assessment</li> <li>Conduct detailed CR assessment</li> <li>Identify detailed work plan for CRVS activities</li> </ul> <p><b>Begin country activities in 15-20 countries:</b></p> <ul style="list-style-type: none"> <li>Country focal points providing consistent technical expertise to begin executing work plan in 20 countries</li> <li>Begin trainings of civil registration staff in 10-20 countries</li> <li>Begin training physicians on certification of causes of death (COD) in 10-20 countries</li> <li>Begin Manual and Automated ICD Coder trainings in 10-20 countries</li> </ul>	<p><input checked="" type="checkbox"/> <b>On schedule.</b></p> <ul style="list-style-type: none"> <li>19 countries officially enrolled, completing preparatory work</li> <li>15 countries have broad and detailed CRVS assessments</li> <li>16 countries have detailed work plans for CRVS activities</li> </ul> <p><input checked="" type="checkbox"/> <b>On schedule.</b></p> <ul style="list-style-type: none"> <li>In 16 countries, country focal point is consistently providing technical expertise and work plan execution is solidly underway</li> <li>Remaining enrolled countries (N=3) are finalizing work plans and formalizing work arrangements</li> <li>Trainings underway, with more planned: <ul style="list-style-type: none"> <li>Civil registration in 7 countries</li> <li>Physician trainings on certification of COD in 8 countries</li> <li>Manual and Automated ICD Coder in 6 countries</li> </ul> </li> </ul>
<p><b>Data on risks</b></p> <p>(Supported by CDC and WHO)</p>	<p>Roll out innovative mobile phone surveys on risk in 10 countries</p> <p>Process includes:</p> <ul style="list-style-type: none"> <li>Foundational work out of country</li> <li>Collect and analyse survey data</li> <li>Analyse mobile phone and WHO STEPS survey data comparison</li> <li>Report/disseminate</li> </ul>	<p><b>Assessed through the presence of:</b></p> <ul style="list-style-type: none"> <li>Standard survey protocols developed</li> <li>Country selection criteria and select 10 countries – 2 pilot and 8 long-term – for survey implementation</li> <li>Conduct country-driven mobile phone-based survey in 2 pilot countries, one concurrently with a WHO STEPS survey</li> <li>Analyse 2 pilot countries' survey data</li> <li>Begin planning engagement with the 8 additional countries</li> <li>Facilitate data impact partners using the 2 pilot countries' data and results in policymaking</li> </ul>	<p><input checked="" type="checkbox"/> <b>On schedule.</b></p> <ul style="list-style-type: none"> <li>Standard protocol development is near final</li> <li>Two pilot countries, Morocco and Zambia, identified</li> <li>Countries under consideration for next set of surveys include Philippines, Papua New Guinea, Peru, Ecuador, Mumbai and others</li> <li>Country-driven mobile phone-based and WHO STEPS surveys scheduled concurrently in 2 pilot countries early in 2017</li> <li>Analysis, planning and collaboration with Data Impact partners is upcoming in 2017-2018</li> </ul>
<p><b>Data use</b></p> <p>(Supported by Vital Strategies and CDC)</p>	<p>Improve use of data by policymakers and health agencies in 20 countries</p> <p>1) Identify key stakeholders and task force for data impact improvement</p> <p>2) Analyse current status</p> <p>3) Build sustainable capacity</p>	<p><b>Complete assessment of current data use capability in 20 countries</b></p> <ul style="list-style-type: none"> <li>Create detailed work plan in 10-20 countries</li> <li>Implement work plan to build sustainable data impact capacity in 10 – 20 countries</li> </ul>	<p><input checked="" type="checkbox"/> <b>Ahead of schedule.</b></p> <ul style="list-style-type: none"> <li>14 countries have detailed work plans</li> <li>Implementation begun in several of those countries particularly those where country coordinators have been hired</li> <li>345 participants, representing 6 countries, have benefited from Data Impact trainings</li> </ul>

## DATA FOR HEALTH

2015-2016



have officially enrolled in Data for Health.



OVER

4,300 people

representing 19 countries have been trained across the Initiative's three program areas (CRVS, NCD Surveillance, and Data Impact).



Nearly 42%

of those trained are women.

## IMPROVING DATA ON BIRTHS AND DEATHS



5 countries

have moved to the international standard death certificate (Bangladesh, Ghana, Solomon Islands, Malawi and Morocco).



1,522 verbal autopsies

have been conducted in 4 countries (Brazil, Myanmar, Rwanda and Sri Lanka).



3 countries

have adopted new or revised CRVS law or regulations (Bangladesh, Peru and Tanzania).

## IMPROVING DATA ON NONCOMMUNICABLE DISEASE RISK FACTORS



4 countries

will implement the new technology platform for mobile phone NCD risk factor surveillance in 2017. Two of these, Morocco and Zambia, will also implement the WHO STEPwise household survey.



37 people

have been trained to use the NCD mobile survey.

## IMPROVING DATA USE



Shanghai has adopted a new data-driven policy on smoke-free places.



345 people

from 6 countries have benefited from Data Impact trainings.



