Data, analytics and delivery for impact in focus 2021: priorities and progress updates

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Achieving WHO’s Thirteenth General Programme of Work (GPW 13) and its “Triple Billion” targets as well as the health-related SDGs would be impossible without robust data and science. As part of WHO’s transformation agenda, the Division of Data, Analytics and Delivery for Impact was established to improve measurement, focus on results and deliver impact. Since its creation, and amid historic challenges, the Division has laid a strong foundation for health information systems strengthening, data governance and country capacity-building that will accelerate progress across all levels of the Organization and in the communities we serve.

The COVID-19 pandemic has underscored this need and the importance of strong health information systems, but it has also shone a light on persistent data gaps and fragmentation that must be urgently addressed.

This progress update on data and delivery highlights key achievements and offers an exciting glimpse into the future. It also gratefully acknowledges the many collaborating centres and partners that are working with us to build sustained data and analytical capacities that support evidence-based policy dialogue and strategic health interventions.

By connecting data, analytics and delivery we will create a new powerhouse for country-focused health information that makes a measurable difference to lives and livelihoods, addresses inequalities and delivers measurable health impacts for all.

Dr Tedros Adhanom Ghebreyesus
Director-General, World Health Organization
Overview

WHO is fulfilling its transformation to a modern data-driven organisation enabled by the Division of Data, Analytics and Delivery for Impact. We focus on establishing data governance and standards, monitoring population health trends, strengthening country capacity and leveraging partnerships to collect, analyse and use data to deliver on WHO’s Triple Billion targets and accelerate progress towards the health-related Sustainable Development Goals.

We know that achieving these common global goals will be impossible without data and science. As Dr Tedros says, “How can we make progress, if we cannot measure it?”. Indeed, the COVID-19 pandemic has reinforced the importance of timely, reliable, and actionable data. It has also highlighted the long-standing data gaps and inequalities that must be urgently addressed if we are to get back on track.

You can read more about our plans to strengthen health information systems and deliver the 2030 agenda for sustainable development in two papers that were presented and discussed at the World Health Assembly.

This ‘In Focus: 2021’ summary outlines the strategic direction and progress in strengthening country health information systems, making data available as a global public good, delivering a measurable impact and using data to drive public health policy.

We cannot do this alone. Together with our regional and country offices, Member States and partners we are uniting to ensure every country has the capacity to meet national and subnational priorities. By connecting data, analytics and delivery, we will strengthen our support for country-focused health information that makes a measurable difference to the lives and livelihoods of billions of people, everywhere.

Dr Samira Asma
Assistant Director-General, World Health Organization
Division of Data, Analytics and Delivery for Impact
September 2021
A trusted source for global health data
As the custodian of global health data, WHO must develop, uphold and ensure high global standards of data collection, processing, synthesis and analysis. This normative role of WHO is essential to ensuring the timeliness, reliability and validity of measurements, ensuring comparability of data and allowing the world to track trends, progress and impact.

5 Data Principles govern our work:

1. **Data as a public good**
2. **Upholding Member States’ trust in data**
3. **Strengthening country data and health information systems capacities**
4. **Being a responsible data steward**
5. **Addressing public health data gaps**

Key WHO resources include the [WHO's Data Sharing Policies](#), the [UN Joint Statement on Data Protection and Privacy in the COVID-19 Response](#), and GATHER (Guidelines for Accurate and Transparent Health Estimates Reporting).

WHO is committed to improving data governance by reducing fragmentation, increasing efficiencies, and providing policy recommendations and best practices through its Data Hub and Spoke Collaborative and Data Governance Committee.

The recent [Health Data Governance Summit](#) brought together experts to review best practices in data governance, sharing and use and also to build high-level political commitment for health data as a global public good.
The World Health Data Hub

The Hub is an interactive digital destination and trusted source for global health data, fulfilling WHO's commitment to provide complete, transparent and open data as a public good.

It provides easy access to view and download health data sets using powerful visualization tools to better understand trends, patterns and connections.

It allows countries to securely upload and review their data and provides a method of exchange and consultation among countries and WHO.

The World Health Data Hub brings together all existing WHO data assets into a data lake, including the Global Health Observatory, the Triple Billion Dashboard, the Health Equity Monitor, the Mortality Database and more. The Hub offers intelligence insights, tools for predictive analysis, and visualizations and is developed with key technology partners Microsoft and Avanade offering their pro bono expertise.

WHO Geographic Information Systems (GIS) Centre for Health

The newly established GIS Centre for Health, with pro bono support from Esri, enhances WHO's capabilities in presenting spatial data that in turn better supports improved public health planning and real-time decision making.

The global health applications of GIS are numerous and include:

• Finding disease clusters and possible causes
• Working with COVAX to support equitable COVID-19 vaccine distribution
• Determining if an area is being served adequately by health services
• Improving deployment of emergency services

By connecting maps, data and people the WHO GIS Centre for Health supports countries and partners in making informed public health decisions faster and is working to extend the reach of geospatial information across the organization.
**Family of International Classification**

Data standards provide a common language for medical terminology and support interoperability between governments, the scientific community, and data users. The Family of International Classification (FIC) includes the International Classification of Diseases (ICD), the International Classification of Health Interventions (ICHI), and the International Classification of Functioning, Disability and Health (ICF). The International Classification of Diseases, eleventh edition (ICD-11) provides 17,000 diagnostic categories, over 130,000 medical diagnostic index terms, and is usable online or offline. ICD-11 is fully digitalized and is being implemented in select countries with an aim to scale more widely by 2022.

**World Health Statistics Report**

The World Health Statistics Report is WHO's annual 'state of the world's health' assessment, including the most recent available data on health and health-related indicators for its 194 Member States. The 2021 edition features the latest data for more than 50 health-related Sustainable Development Goal (SDG) and Triple Billion target indicators. This year's report includes preliminary estimates for global excess deaths attributable to COVID-19 for 2020, the impact of COVID-19 on population health, and the state of global and regional health trends from 2000-2019. It also focuses on the persistent health inequalities and data gaps that have been accentuated by the pandemic, with a call to urgently invest in health information systems to ensure the world is better prepared with better data.

**Global Health Estimates**

WHO's Global Health Estimates provide the latest available data on death and disability globally, by region and country, age, sex and cause from 2000-2019. These estimates provide key insights on mortality and morbidity trends including leading causes of death to support informed decision-making on health policy and resource allocation.

The next Global Health Estimates will be released at the end of the year and will include more details on the impact of COVID-19 on population health.

**Monitoring Health Inequalities**

Monitoring health inequalities is vital for tracking progress towards Universal Health Coverage and ensuring no one is left behind in meeting the health SDGs and Triple Billion targets. Tools to build country capacity to measure and report on health inequalities include The Health Equity Monitor database, Health Equity Assessment Toolkit (HEAT or HEAT Plus) software, the health inequality monitoring handbook, state of inequality reports, and step-by-step manuals on national health inequality monitoring and inequality monitoring in immunization. In addition, statistical codes for data disaggregation and a compendium of indicator definitions support equity analysis and monitoring efforts.
Strengthening country data and health information systems
Timely, reliable, and actionable health data is essential to inform decisions on public health interventions and deliver targeted action where it is most needed. A major challenge is how to address data gaps in countries, where data either does not exist or is fragmented and siloed.

**SCORE for Health Data Technical Package**

Our SCORE technical package (Survey, Count, Optimize, Review, and Enable) identifies data gaps and provides countries with tools to precisely address them. SCORE has been developed in partnership with the Bloomberg Data for Health Initiative.

As part of SCORE, WHO completed the first ever global assessment of health information systems capacity in 133 countries, covering 87% of the world’s population. The next assessment will be in 2025. Between now and then there is a window of opportunity for WHO to work with partners and countries with the ambition of elevating country scores over this time.

WHO is working with countries and partners to rapidly improve capacity in surveillance, civil registration and vital statistics (CRVS) and optimizing health services data systems.

**Surveying populations and health risks**

Monitoring the health-related SDGs and the Triple Billion target indicators requires strong public health surveillance systems. The World Health Survey Plus (WHS+) is a multi-topic, multi-platform and multi-mode surveillance system to gather, analyse and disseminate health data.

WHS+ transforms how countries collect data to assess inequality and track progress towards their national and subnational targets by building on existing surveillance tools with the flexibility to adapt to countries’ unique data needs. It is complemented by improved web-based and mobile phone surveys to collect important health data, including on COVID-19 where traditional in-person surveys are limited.

The assessment highlighted the striking gap in the reporting of the world’s deaths: 4 in 10 deaths remain unregistered. 27% of countries have the capacity to survey public health threats. 

Source: SCORE Global Report on Health Data Systems and Capacity, 2020
Counting births, deaths and causes of death

67 of the 231 SDG indicators rely on functioning CRVS systems that produce information on milestone events such as births, deaths, and causes of death. The COVID-19 pandemic has shown that many low- and middle-income countries do not have CRVS systems capable of producing cause-of-death statistics of sufficient quality to guide public health decision-making.

WHO’s new CRVS strategic implementation plan 2021-2025 supports countries to improve their capacity. WHO is also working with UNICEF on CRVS service delivery and Vital Strategies on the #Counting Everyone campaign.

In addition, the Rapid Mortality Surveillance and Epidemic Response guidance and country portal have enabled timely, weekly counts of deaths due to COVID-19.

Optimizing health facility data to ensure equitable quality services for all

Improving primary health care relies on accurate data from and about health facilities. It is often hampered by fragmented data systems, lack of standardization, poor data quality and lack of analytical capacity.

There are several solutions to address this. The WHO Toolkit for Routine Health Information Systems Data strengthens facility data analysis through standardized indicators, visualizations and guidance, while promoting integrated routine data platforms. These WHO Toolkit standards are operationalized through the District Health Information Software (DHIS2). It has been adopted in over 70 countries and includes modules for COVID-19 surveillance and vaccines.

The WHO Harmonized Health Facility Assessment (HHFA) is a comprehensive facility survey providing data on the availability of health services and the resources and systems needed to improve quality. The HHFA package supports countries in conducting high-quality health facility surveys.

These data solutions enable public health decision makers to improve essential health services and better respond to emergencies.
Delivering on the Triple Billion targets and health SDGs
Delivering impact goes beyond data and health information systems. It also requires strong analytics, strategic implementation and accountability for measurable results.

Globally, significant shortfalls are projected for each of the Triple Billion targets. This is exacerbated by the impact of the COVID-19 pandemic which is not yet accounted for in this chart. Through regular stocktakes, countries are getting back on track, identifying specific delivery priorities and accelerating progress towards each of the Billions.

Countries are defining strategic objectives and tracking progress against measurable implementation plans. This ensures accountability to deliver on the Triple Billion targets and national priorities.

These tools allow countries to monitor performance against individual indicators, review and track acceleration scenarios and course correct when needed to ensure targets are met with timeliness and efficiency.
The GPW 13 Methods for impact measurement report and the Triple Billion dashboard track progress towards the three targets and 46 outcome indicators. The goals outlined in the Mid-term results report are:

1 billion more people enjoying better health and well-being

About 900 million people could be enjoying better health and well-being by 2023. Progress is uneven, as it is limited in low-income countries, and over one third of countries show negative overall trends. Focus should be directed to the indicators lagging furthest behind the SDG targets, including water and sanitation, air quality and tobacco use. Tackling the worldwide trend of increasing obesity is also essential.

1 billion more people benefiting from universal health coverage

An additional 290 million people are projected to have access to good quality health-care services without incurring financial hardship by 2023, leaving a significant expected shortfall. With accelerated progress, it might be possible to close the 710 million gap by about 30%. Progress is expected to be greatest in low-income countries. The COVID-19 pandemic, however, threatens progress towards universal health coverage by severely disrupting services and worsening financial hardship. Redoubled emphasis on primary health care, which is also the basis for the other two billion, will be key to recovery from COVID-19.

1 billion more people better protected from health emergencies

Approximately 920 million more people are projected to be better protected from health emergencies by 2023 due to improvements in preparedness, prevention, detection and response to events. COVID-19 has shown that the world was unprepared for a pandemic of such a scale; the lessons learnt will guide concerted action to improve how the world prepares, prevents and responds to health emergencies.
Stocktakes: A cadence of accountability

Regular stocktakes are taking place with programmes and regional offices, informed by the latest data and oriented towards a single, driving question: Where are we in relation to our goals, and what can we do to make sure we stay on track?

The most recent stocktake focused on equity across the Triple Billion targets and how we can accelerate progress through a primary health care lens.

Delivery for Impact Knowledge Hub Program: Building sustainable delivery capacity at the country level

The Delivery for Impact Knowledge Hub is a virtual capacity-building platform at the country level, blending webinars, workshops, problem-solving sessions and communities of practice. The initiative focused on 8 country teams to define meaningful, measurable and moveable strategic health objectives; to set specific, time-bound targets; and to build real-world implementation plans.

Experience from the knowledge hub has informed the transition to an open access capacity-building course offered through the WHO Academy which will be fully accessible for all countries.

Stocktakes are structured to identify and prioritize the interventions that will make the most meaningful impact on peoples' health in national and sub-national contexts through data-driven reviews. They promote effective problem solving and performance management by:

- Sustaining cadence and shared urgency in implementing targets
- Promoting efficient decision-making at regional and national levels
- Identifying and troubleshooting bottlenecks, aligning stakeholders and managing risks
Translating Countries’ Strategic Objectives into Measurable Targets

Below is a selection of country examples showing how Delivery stocktakes can support identifying strategic objectives and concrete steps to more quickly reach the Triple Billion targets. This is soon to be rolled out to more countries.

<table>
<thead>
<tr>
<th>STRATEGIC OBJECTIVE</th>
<th>SPECIFIC, TIME-BOUND TARGET</th>
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<tbody>
<tr>
<td>Close the equity gap in maternal health services among special support regions (SSRs)</td>
<td>Increase skilled birth attendance by 5% in SSRs (vs national average) by the end of 2021</td>
</tr>
<tr>
<td>Reduce preventable and premature morbidity, mortality and disability</td>
<td>Reduce tobacco use from 19.3% in 2020 to 15% in 2025</td>
</tr>
<tr>
<td>Develop a coordinated syndemic surveillance and response system with a focus on diabetes/COVID-19 co-infection</td>
<td>Reduce hospitalization from COVID-19 among people with diabetes (2% monthly reduction from January baseline)</td>
</tr>
<tr>
<td>Launch the national digital health strategy and implement it in Islamabad Capital Territory (ICT) to improve the efficiency and accessibility of health services</td>
<td>Launch in 2021; ensure 100% facilities in ICT have electronic medical records (EMR) by 2025</td>
</tr>
<tr>
<td>Reduce deaths from traffic accidents</td>
<td>Reduce mortality rate due to road traffic accidents by 30% by 2023 in 3 of the 10 departments with the highest mortality rate</td>
</tr>
<tr>
<td>Integrate UHC performance monitoring at the sub-national level</td>
<td>Roll out monitoring framework for UHC in select sub-national units</td>
</tr>
<tr>
<td>Increase delivery of screening services for hypertension at Primary Health Care</td>
<td>Reduce proportion of adults (≥35 years) who have not been screened for HTN from 33% to 20% by 2025</td>
</tr>
<tr>
<td>Improve prevention of chronic health conditions and drive up health data</td>
<td>Improve age-adjusted PHC utilization 5% above baseline</td>
</tr>
</tbody>
</table>

“We have gained a lot from hearing about the challenges and progress of other countries and hope we can engage more with our colleagues in the future.”

Oksana Yakovenko  
Project Management Officer,  
WHO Country Office, Ukraine

“The tools make us more institutionalized, more systemic ... this will also help us in the future.”

Dr. Sabeen Afzal  
Deputy Director Programs/Health Systems,  
MoNHSR&C, Pakistan
Partnerships
WHO is committed to working collaboratively to reach our ambitious goals by leveraging world-class expertise, tools, technologies and partnerships to support countries.

The Health Data Collaborative (HDC)
The HDC brings together a network of over 60 partner organizations with 183 members from the private and public sectors, civil society, academia, philanthropic groups, multilateral organizations and countries to align technical and financial resources to support countries’ priority data needs. WHO serves as the Secretariat to the HDC.

The SDG Global Action Plan
The SDG Global Action Plan’s ‘Data and Digital Health Accelerator’ brings together multilateral health, development, and humanitarian agencies to support countries in accelerating progress towards the health-related SDGs with a focus on strengthening data for primary health care and CRVS. WHO co-chairs the Accelerator with the United Nations Population Fund.
Reference Group on Health Statistics
Sharing knowledge among experts is crucial for the success of WHO’s data strategy and reaching our ambitious goals. The Reference Group on Health Statistics (RGHS) enables that knowledge sharing and ensures WHO and its Member States benefit from the best possible scientific and strategic advice in the generation, use, interpretation and dissemination of global health data. Experts forming RGHS come from national statistical offices and ministries of health, observers, and the WHO Secretariat.

Technical Advisory Group on COVID-19 Mortality Assessment
The Technical Advisory Group on COVID-19 Mortality Assessment, comprising around 40 experts, is developing a globally standardized estimation methodology to assess excess deaths due to COVID-19 in countries. These estimates will be agreed via carefully considered country consultations. WHO and the United Nations Department of Economic and Social Affairs (UN DESA) serve as the joint-Secretariat.

‘In Focus: 2021’ summarises the actions we are taking and showcases the next phase of scaling and accelerating implementation. We will update you as the progress we all make together continues.

We are always looking for new opportunities to collaborate. Please contact us at ddi@who.int and visit our webpage www.who.int/data/ddi to learn more.

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