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Submissions from entities in the United Nations system and elsewhere on their efforts in 2016 to implement the outcome of the WSIS

Submission by

World Health Organization

This submission was prepared as an input to the report of the UN Secretary-General on "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels" (to the 20th session of the CSTD), in response to the request by the Economic and Social Council, in its resolution 2006/46, to the UN Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the WSIS as part of his annual reporting to the Commission.

World Health Organization

World Summit on the Information Society: eHealth action line (C7)

Report for 2016. Priority areas in the action line include improving health information systems, facilitating access to knowledge and information, promoting international standards for exchange of health data, and strengthening systems for disaster response and communicable diseases monitoring and alert.

Summary

The World Health Assembly in 2005 encouraged Governments to develop long-term strategies for the use of information and communication technologies (ICTs) for health, or eHealth.[1] As of the end of 2016, over 120 countries have national eHealth strategies in progress or in place to incorporate ICTs into their health development and delivery priorities. Across the world, ICTs are contributing to making health services and systems more efficient, safe and effective. eHealth can be a strategic tool to improve access to care, access to knowledge, and to empower citizens in managing their own health. ICTs link integrated networks of care, ensuring continuity of care in communities and permitting faster referrals to specialists. The adoption of eHealth tools, including mobile technologies, continues to expand in areas such as health promotion, clinical care, health research and public health. Other uses relate to health information records and systems, capacity development for health personnel and accountability mechanisms in health systems.

The World Health Organization (WHO) Global Observatory for eHealth reports that progress on eHealth related to the World Summit on the Information Society (WSIS) outcomes is impressive, with important gains seen in many countries. Yet, progress is not systematic or assured. Opportunities to build eHealth foundations, develop appropriate policies and strengthen workforce capacity still need to be emphasised. Detailed information on countries can be found in the 125 national eHealth profiles and the Observatory's global report[2], which is referred to extensively in this document.

The crucial importance of ICT for global emergency and humanitarian response has been highlighted by recent disease epidemics, natural disasters and conflicts. ICT enables timely local reporting and mapping, including through social media; rapid and secure sharing of information; the use of web-based and mobile technologies alongside traditional media for public information exchange and the connection of communities with front-line personnel. The efficient and effective coordination of the many agencies, NGOs and other actors involved would not be possible without ICT.

Overview of progress in eHealth

WHO has long worked to advance the use of ICT in the health sector. From the early days of the WSIS process, WHO has focused on policy guidance, evidence building, and provision of norms and technical assistance. WHO has always done so with an emphasis on stakeholder engagement and cross-sectoral collaboration at the global, regional and country levels.

The transition from the UN Millennium Development Goals to the Sustainable Development Goals (SDGs) continues this approach. Governments are recognizing that incorporating ICT in health systems and services in a strategic and integrated way is a long-term commitment

[1] http://www.who.int/gb/ebwha/pdf_files/WHA58/WHA58_28-en.pdf
[2] WHO Global Observatory for Health. Global diffusion of eHealth (2016). WHO, Geneva http://www.who.int/goe/publications

and will be key to achieving the SDGs. The adoption by countries of the agenda for universal health coverage (UHC) is critical, as it underpins the achievement of the SDGs.

Governments are using eHealth to provide more care and better care to people, at a time when all health systems face economic challenges, greater demands for efficiencies and higher expectations from citizens. The national planning approach promoted by WHO and ITU through their joint guidance to countries[3] can help engage stakeholders to strengthen, accelerate and align eHealth efforts towards the provision of integrated, people-centred care in line with the WHO Framework on Integrated People-Centred Services[4]. At the international level, systems for surveillance and monitoring of diseases and epidemics, and initiatives to share knowledge and data for health research and health development are part of this work.

The global economic scenario underscores that scarce funds must be invested strategically, including but not limited to low-income countries and emerging economies. Strengthening the enabling environment essential in order to justify investment, protect consumers and industry, and ensure that eHealth services are sustainable. Approaches that Member States are adopting include strategic investment in line with national programmes or strategies for eHealth development; at the primary care level, ensuring that electronic tools are fit-for-purpose and adapted to the local context; and recognizing that the tools themselves are not stand-alone solutions and therefore adopting standards that will allow integration with other eHealth tools.

In addition, countries are learning from trends and experience in order to better understand the potential outcomes that can be achieved with eHealth, thereby gaining an appreciation of the available technologies, challenges and risks that should be considered in planning.

The fundamentals of eHealth are still important and countries are recognizing that eHealth in all its forms must be implemented on a foundation of infrastructure, standards and legislation. They are also taking action to strengthen workforce capacity in order to ensure the full adoption and effective use of eHealth in a variety of health care settings.

The absence of an enabling legal framework has been identified as an impediment, especially for low- and middle-income countries, to the systematic adoption of eHealth in health services and systems. Stakeholders including consumers, patients, policy-makers, legislators, regulators, health care providers and industry all benefit from an environment that supports investment, protects citizens, builds trust and promotes the adoption of critical eHealth functions towards improving quality, safety and access to health care. Legislation, regulation and policy already support the provision of many eHealth services (such as e-prescription and telemedicine) in many countries. However, improving the eHealth legal and regulatory environment in low- and low-middle income countries still represents an important challenge.

Beyond their role in health information systems, ICTs are increasingly being relied on in measuring the health of communities and groups. There are numerous data sources that offer information on the health of a community. For example, hospitals and clinics provide data to monitoring systems. Additional data sources, such as school and work attendance, social media and weather-related data offer expanded sources of data that can be combined and analysed for a more rapid, reliable and actionable picture of the community's health than is possible with clinical data alone. Other sources, for example Internet and mobile cell phone use can provide a significant amount of data on an individual's health behaviours (such as

[3] WHO-ITU National eHealth Strategy Development Toolkit. (2012). WHO, Geneva. http://www.who.int/ehealth/publications/en/

[4] WHA document A69/39, Framework on integrated, people-centred health services (2016).

Internet searches and purchases). If used ethically such data can be used to issue health alerts, enabling the public health sector to, for example, detect outbreaks, swiftly identify foodborne illnesses, and facilitate response to emergency situations.

WHO tracks the adoption of eHealth and supports the incorporation of UHC goals into national eHealth strategies. UHC is part of the "post-2015" agenda geared to meeting the SDGs adopted by the UN General Assembly in September 2015. Goal 3 is to "Ensure healthy lives and promote well-being for all at all ages" and its target 8 is to "Achieve universal health coverage", so that all people receive the high-quality health services they need without suffering financial hardship. This presents an opportunity for eHealth to support a comprehensive approach to health and support integrated, people-centred health services.

Two particular work areas will help advance this: the Health Data Collaborative and the implementation of the WHO Framework for Integrated People-Centred Services. First, the Health Data Collaborative is a partnership with WHO and other development agencies, countries, donors and academics formed in 2015 to strengthen health information systems as part of monitoring the SDGs. Its objective is to strengthen country capacity for collecting and using health data, including through the use of ICT.[5] Second, the 69th World Health Assembly in 2016 adopted the Framework on integrated, people-centred health services, recognizing that: "4. Making progress towards the United Nations' Sustainable Development Goal 3 (Ensure healthy lives and promote well-being for all at all ages), including target 3.8 on universal health coverage, requires countries to move towards ensuring that all people and communities have access to health services that are high quality, safe and acceptable." The five inter-dependent strategies include the information systems that are fundamental to implementing this approach.

The Global Observatory for eHealth reports that 90% of eHealth strategies reference the objectives of UHC or its key elements and that it is becoming mainstream for countries to have policies for managing health information. When well articulated, eHealth strategies should enable the interoperability needed to support people-centred health services for everyone, and the move from disease silos to resilient health systems that can deliver UHC.

In 2015, a large number of countries reported at least one mobile health (mHealth) initiative (83%). This continues to be a dynamic area but despite the rapid growth few Member States reported evaluations of government-sponsored mHealth programmes, thereby limiting knowledge of what works well and what mistakes to avoid. The use of telehealth continues to grow with teleradiology the most widespread (77%). Other services such as telepathology, remote patient monitoring and teledermatology are also in use in nearly half of countries. By offering care at a distance such services enable greater equity in health coverage.

eLearning is used for medical students and doctors' education in over 84% of countries and has the potential to play a significant part in addressing the skills gap. National electronic health records (HER) systems are now reported in 47% of countries. While implementing EHR programmes is complex and costly, they have the potential to provide clinical decision-makers with complete and accessible information for every patient at point of care, thereby improving the quality and, in aggregate, providing better data on effectiveness and coverage of interventions. Key international standards are being implemented for interoperability. In total 78% of countries reported legislation protecting the privacy of personal information, and 54% reported legislation to protect the privacy of electronically held patient data. There has been slow but steady development of a general eHealth regulatory environment, with good advances in the adoption of health data privacy legislation. Nearly 80% of countries reported that health care organizations use social media for health promotion. A number of countries

[5] *www.who.int/features/2016/health-data-collaborative/en*

(17%) report having a national policy or strategy regulating the use of big data in the health sector: using new analytical tools on big stores of digital data offers health care advocates the potential to explore individual, group and national level problems.

Overcoming barriers and moving forward

Fundamental to overcoming the barriers to eHealth is the understanding that today governments are acknowledging the role of ICTs as an integral part of delivering improvements in health. Country-driven eHealth strategies must determine how eHealth solutions best reflect health priorities and needs. Over the past decade there has been a substantial increase in the number and range of solutions, particularly with the advent of mHealth, which is changing the paradigm for access to care. However, the process of embedding eHealth everywhere still has a long way to go, both in terms of coverage and functionality. The picture now is quite mixed, with progress reflecting different national or local priorities. Nevertheless, eHealth is going forward in a meaningful way and is set to play a key role in achieving the SDG targets for health.