COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

Fifteenth Session Geneva, 21 to 25 May 2012

Submissions from entities in the United Nations system and elsewhere on their efforts in 2011 to implement the outcome of the WSIS

Submission by

WHO

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 15th 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.

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WHO Contribution to the 2011 UNSG report on the World Summit on the Information Society, to the Commission on Science & Technology for Development

eHealth action line (C7)

Priority areas in this World Summit on the Information Society (WSIS) action line include improving health information systems, facilitating access to knowledge and information in health, promoting the adoption of international standards for exchange of health data, and strengthening systems for disaster response and communicable diseases monitoring and alert.

Information and communication are core to effective public health action. Every field mission, country office, ministry, partnership and programme depends on reliable and timely information to do their work. As a basis for health action and advocacy the world over, the role of information gathering, analysis, reporting and dissemination remains fundamental.

The WSIS called for participation of all stakeholders. In the health sector, this includes: governments, multilateral agencies, development partners, health care organizations, academic, research and public health institutions, standards development organizations, health care workers, entrepreneurs, information and communication technology (ICT) experts from the public and private sectors, citizens and nongovernmental organizations.

The WSIS action line on eHealth aligns with World Health Assembly Resolution on eHealth, adopted by the Fifty-eighth World Health Assembly in 2005. Resolution WHA58.28¹ urges Member States to consider drawing up long-term strategic plans for the development and implementation of eHealth services. It calls on governments to form national eHealth bodies to guide policy and strategy development in eHealth including data security, privacy, interoperability, cultural and linguistic issues, infrastructure, funding, monitoring and evaluation. WHO recommends that each Member State establish a national-level body for eHealth, formally supported by the Ministry of Health as a key instrument in implementing the eHealth resolution.

WHO's Global Observatory for eHealth monitors country progress on the World Health Assembly Resolution and the WSIS agenda. Established by the World Health Organization in 2005, the Observatory is charged with monitoring, analyzing and reporting developments and trends in eHealth worldwide. Since the first global survey in 2005 there has been continued country progress in building the foundation policies, strategies and infrastructure for eHealth. Thematic reports assessing progress in 2011 included reports on *Online Safety, mHealth* (mobile health) and *Legal frameworks for eHealth*. All reports are available on the Observatory website (www.who.int/GOe/en). As an example, the existence and maturity of mHealth related activities in countries and the types of initiatives being conducted was reported on by WHO in 2011: *mHealth* is a term used to describe health care or public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, Personal Digital Assistants (PDAs) and other wireless devices. Applications include the use of mobile devices in collecting community and clinical data, delivery of healthcare information to practitioners, researchers and patients, real-time monitoring of patient vital signs, and direct provision of care. There is significant

¹ http://www.who.int/gb/ebwha/pdf_files/WHA58/WHA58_28-en.pdf

experimentation in countries, with mHealth typically characterized by small-scale pilot projects that address single issues in information collection, sharing and access. Many of the barriers to scaling up reflect the need for further evidence and information, such as on the cost-effectiveness of mHealth applications.

As reported in previous years, a number of WHO's programmes respond to the call for *improving access to the world's health information*, in partnership with the private sector. Chief among them, the HINARI Access to Research in Health programme set up by WHO together with major publishers, enables developing countries to gain access to one of the world's largest collections of biomedical and health literature. Since its launch in 2002, the number of participating publishers and of journals and other full-text resources has grown continuously. More than 8,000 information resources in 30 languages are now available to health institutions in 105 countries, areas and territories benefiting many thousands of health workers and researchers. This year, the Research4Life partnership, comprising WHO, FAO and UNEP, was joined by WIPO, making its Access to Research for Development and Innovation programme the fourth in the partnership.

Similarly, WHO's multilingual initiatives to make health knowledge available include the Global Health Library, which brings together national and regional initiatives to increase access to information and scientific evidence on health, as well as to provide the support necessary to increase visibility of scientific and health information produced in developing regions. Through a network of librarians the initiative connects local, national, regional and international information on health (http://www.globalhealthlibrary.net).

Improving access to *quality health care information* for policymakers, health care workers, patients and their families is a shared goal of many stakeholders. Governments are concerned with consumer trust and therefore focus on policy measures to advance consumer protection, safety and privacy in the online world. There are notable professional and civil society initiatives advocating for inclusiveness and free access to health information in all its forms, including for open access to health research data and prospective research registration in publicly accessible national health research registries. However, major challenges remain. Examples include ensuring that information is accurate, relevant to diverse cultures, and up-to-date; leveraging the right technologies; and developing sustainable governance and business models to enable equitable, affordable access and outreach.

The crucial importance of ICT in *systems for emergency response* was highlighted again in 2011 with significant global earthquake activity, including an earthquake and tsunami in Japan. Such events underscore the world's reliance on ICT in preparedness and response. Examples of the use of ICT in these crises include timely local reporting and mapping, the rapid and secure sharing of information, the use of web-based and mobile technologies alongside traditional media for public information exchange, and the increasing role of social media. It also underscored the need to connect communities and those on the front lines of care in emergencies. As was seen in 2009 with the advent of the Influenza A (H1N1) global pandemic and the 2010 earthquake in Haiti, ICT plays a vital role in all public health events, connecting research, academic, laboratory and clinical institutions, professionals, communities, and citizens for health action.

In addition, *public health reporting* is formally addressed through the revised International Health Regulations (IHR). The IHR entered into force in 2007 and were tested with the Influenza A (H1N1) pandemic in 2009 when, in addition to formal communication channels, new media emerged as an important factor in global health communication. The IHR commit all countries to collectively apply agreed rules for preventing and managing public health risks. Country preparedness includes developing 8 core capacities, as well as capacities at points of entry, and 4 relevant hazards (zoonotic, food safety, chemical, radiological and nuclear); a monitoring tool shows progress in development of these national capacities (<u>www.who.int/ihr/</u>).

Developing a national eHealth strategy is a goal of many countries. A national eHealth program can contribute to reaching health and development goals and, for some countries, will constitute a major step towards implementing recommendations such as those of the UN Commission on Information and Accountability for Women's and Children's Health², towards the improvement of *health information systems*. Experience has shown that harnessing ICT for health requires planning at the national level, to make the best use of existing capacity while providing a solid foundation for investment and innovation. Establishing the main directions as well as planning the detailed steps needed are key to achieving longer-term goals such as health sector efficiency, reform or more fundamental transformation. Both WHO and the ITU have recognized the importance of collaboration for eHealth in their global resolutions³, which encourage countries to develop national eHealth strategies. Towards that goal, both organizations collaborated in the development of a *National eHealth Strategy Toolkit* as a comprehensive, practical guide that all governments, their ministries, departments and agencies can adapt to suit their own circumstances, vision and goals.

ITU Telecom World 2011, Geneva, was a unique opportunity to highlight the contribution of ICT to health, through a joint WHO and ITU event. The eHealth pavilion, side-talks and workshop provided a place for networking, discussion and demonstration of innovative solutions for countries. Above all, it was an opportunity to showcase local solutions and applications to meet the need for low-cost, high-impact eHealth programmes towards achieving the UN MDGs. Exhibitors included NGOs, governments, academic and research institutes, WHO programmes and partnerships, and the private sector. Their work covered a range of proven applications in diverse areas such as health services and medical education in Africa, telemedicine, medical imaging, disaster medicine, and child health.

As in 2010, the current global economic scenario brings unsettling prospects for ICT in health, as the results of the global economic downturn have continued to affect investment in infrastructure, products and services. More than ever, the strategic use of ICT in health is vital in order to ensure that scarce funds are well spent. Going forward, it will be important to invest in research that can guide eHealth policy and practice in countries and particularly in emerging economies. Given the current fundamental transformation of communications platforms, applications and services in health, it is important to develop a better understanding of the wide-ranging implications of these changes as they affect health systems and services. As the number of stakeholders participating in ICT and eHealth increases, the effects of policies on the overall evolution of the sector are more difficult to assess. Policy makers at national level need to develop shared models and consensus around the pertinent policy problems and possible solutions. In this respect, policy experts in communications, media and health all have an essential contribution to make towards implementing this action line.

WHO as facilitator of this action line recognizes the broad scope of ICT in health and the significant effort still required to meet the WSIS commitments. The launch of the WHO-ITU National eHealth Strategy programme represents an important new commitment. In addition, an on-going priority is addressing common concerns related to the legal and regulatory landscape as well as the improvement of systems for monitoring disaster and emergency response, which requires collaboration between countries, effective and durable public-private partnerships, and investment across sectors.

² www.un.org/.../pdf/Press_Release_Accountability_16Dec_final.pdf

³ World Health Assembly Resolution 58.28 (2005) and ITU World Telecom Development Conference Resolution 65 (2010)