DIGITAL HEALTH

WHAT YOU SHOULD KNOW

Digital health is the use of information and communication technology to improve medical services and public health. Digital health can make health programs and services more efficient, more accessible, and more powerful.

Digital health builds on today’s access to mobile networks, devices, and the Internet in low- and middle-income countries (LMICs) where the United States invests. For example, in Kenya, 90% of the population has access to a mobile phone, 65% can access a smartphone, and mobile devices represent 99% of Internet subscriptions.1

Digital health represents a strategic shift in health service delivery, leveraging new technologies so that patients can overcome barriers to access; frontline health workers can improve prevention, diagnosis, and treatment; and policymakers can increase operational efficiencies. Digital health tools are used almost everywhere — across multiple health sectors, from hospitals to rural clinics — to provide real-time data for better decision making and performance.2

Digital technology delivers training and support so that health workers can improve effectiveness. With a projected global shortage of 18 million health workers,2 e-learning is an invaluable tool for medical training in remote and underserved areas.3

Digital health helps frontline health workers, communities, and policymakers communicate quickly. For example, during the Ebola epidemic in West Africa, health workers in Liberia used mobile phones and mHero digital technology to alert authorities of new outbreaks, receive test results, and provide education.4

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RECOMMENDATIONS FOR CONGRESS

Invest in appropriate digital technology to sustain and build on existing efforts. When digital tools are well designed, tested, and implemented, they can dramatically accelerate progress on every disease and global health issue. U.S. investments in digital health can be magnified when they implement the Principles of Donor Alignment for Digital Health1 to reduce fragmentation, avoid redundancy, and leverage co-financing from other countries.

Support digital health solutions that respond to locally identified needs, resources, and priorities. Technology solutions built or adapted for development programs should align with the Principles for Digital Development6 to address privacy, security, interoperability and other concerns.

Expand digital health programs, focusing on the long-term commitment necessary for all health programs to grow and succeed. This includes careful design, deployment, and training to integrate digital health tools into existing health systems, with evidence-based program scaling to maximize impact.

Support and lead digital health partnerships between governments, private sector companies, and development organizations. Investments in digital health should leverage the leadership of national governments, the expertise and resources of private industry, and the skills and knowledge of development organizations.

Align digital health investments with focused support for frontline health workers, communities, and integrated service delivery. Digital health is a revolutionary approach to accessing health information, training frontline health workers, diagnosing disease, and monitoring public health data. Digital health tools have the greatest impact when communities have access to trained, supported workers and an integrated system to deliver services. The United States should support partner countries’ efforts to focus on communities with the least access to essential health services and those at the greatest risk for global health threats.
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WHY THIS INVESTMENT IS IMPORTANT

“Digital health” refers to the use of information and communication technology to achieve health goals. This includes exchanging health information with patients via mobile phones; using mobile technology to collect epidemiological and other data for better decision making; helping frontline health workers access information, learn skills, and make more accurate diagnoses; and informing policymakers of trends and alerts in real time.

Digital health solutions strengthen disease-focused programs, improve access to quality health services, help health systems function better, and allow health professionals to work more effectively. For example, Saving Lives at Birth: A Grand Challenge for Development — a global call for groundbreaking, scalable solutions to infant and maternal mortality around the time of birth — has supported 115 innovative tools and approaches since 2011, addressing the 303,000 maternal deaths, 2.7 million neonatal deaths, and 2.6 million stillbirths that occur each year.

The digital health revolution builds on increased access to mobile phones, smartphones, and mobile Internet services worldwide. Digital health solutions can reach millions in every community. For example, South Africa’s MomConnect project communicates with pregnant women and new mothers via text messages, voice recordings, and WhatsApp to help them care for themselves and their children, as well as to encourage them to seek health services when needed.

Digital health helps frontline health workers educate themselves about lifesaving diagnoses and treatment, which is critical in rural and hard-to-reach areas where little training or support is available. Programs such as the mPowering Frontline Health Workers partnership use text messages, mobile apps, video content, and other forms of mobile learning to help frontline health workers gain new information and maintain current skills. These materials can even be used without an Internet connection.

Digital health already plays an important role in global health security. Community health workers are using mobile tools to collect health data in their communities and to automatically alert authorities of potential outbreaks. Digital health solutions also support track-and-trace efforts to help contain outbreaks within their areas of origin.

Investments in digital health benefit multiple disease-specific programs and can increase the range and impact of existing work in some of the world’s hardest-to-reach areas. When digital solutions follow the Principles for Development and are built using open source code and openly licensed content, they can be expanded upon and adapted to new countries, health contexts, and technologies. For example, DHIS2, an open source solution for tracking health indicators, is the world’s largest health information platform, used in 67 LMICs and covering an estimated 30% of the world’s population.

The benefits of digital health applications can be magnified with a strategic shift in digital health infrastructure investments. The global health community and U.S. global health programs should move away from the current practice of single-application solutions toward a more strategic approach that aligns with both current country priorities and long-term goals. By better coordinating digital health programming, global health stakeholders can reduce duplicate efforts and ensure that digital solutions are more effective in increasing all health outcomes.

RESOURCES

mHealth Knowledge Site http://bit.ly/2h5wrdM

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CITATIONS