# DIGITAL HEALTH: A CALL FOR GOVERNMENT LEADERSHIP AND COOPERATION BETWEEN ICT AND HEALTH

## THE PROMISE OF DIGITAL HEALTH

Digital health, which is the use of Information and Communication Technology (ICT) to provide health services, can advance the goal of Universal Health Coverage (UHC) and improve the quality and efficiency of healthcare services worldwide.
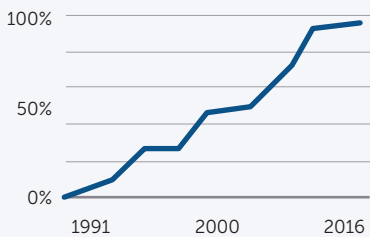
## DIGITAL HEALTH CAN...

Expand health coverage, empower people and increase people's access to health, especially for underserved populations.

Reduce costs and increase efficiencies of healthcare systems.

**The potential for harnessing the exponential growth in ICT to meet health challenges is evident:**

Mobile is the fastest adopted technology of all time: In 1991, mobile cellular penetration stood at less than **1%** compared to **99.7%** in 2016.[1]

There will be an estimated **5.6 billion** smartphones by 2020 and around **90%** of that growth will come from low- and middle-income countries (LMICs).[2]
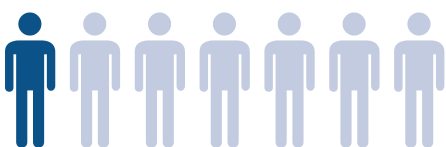
The number of health mobile-enabled products and services has doubled in the past five years in LMICs[3] and there are now over **165,000** mobile applications for health.[4]

Globally, **44%** of mobile users have seen a medical professional using a mobile device during treatment or diagnosis.[5]

**But there are still some significant obstacles:**

Only **1 in 7 people** are online in the lowest-income countries.[6]

Mobile broadband costs people in LMICs **10 times** as much as people in high-income countries (as a percentage of income).[7]

The numbers of digital health projects in LMICs increased by more than **30%** from **2005 to 2011**. But two thirds were still in pilot or informal stages.[8]

**3.9 billion people** still lack access to the internet.[9]

Pilots and fragmentation are still prevalent in digital health. Initiatives are too often implemented as an individual solution, rather than as part of an integrated and interoperable approach to strengthen health systems with digital technology.

# GOVERNMENTS HAVE A FUNDAMENTAL ROLE IN ADDRESSING THESE CHALLENGES AND FOSTERING AN ENABLING ENVIRONMENT FOR DIGITAL HEALTH TO DELIVER ITS PROMISE.

One of the first steps governments can take is the development and implementation of a national eHealth or digital health strategy. A number of countries have already done so:

**69 countries** have developed national strategies.[10]

**76 countries** have electronic health information systems.[10]

**63% of countries** have a national telehealth strategy.[10]

## The Broadband Commission Working Group on Digital Health

The UN Broadband Commission for Sustainable Development launched a Working Group on Digital Health, chaired by the Novartis Foundation, in 2015. It aimed to explore what actions may be needed for digital health to be used to its full potential to ensure healthy lives and promote well-being for all at all ages (Sustainable Development Goal 3), as well as foster Universal Health Coverage.

## Digital Health Strategies and the Role of Government

The Working Group on Digital Health will release a final report in early 2017. This will detail how strong government leadership and committed governance, and intra-governmental cooperation between ICT and Health can prevent duplication of efforts, harmonize digital technology standards and engage stakeholders. By developing national standards, policies, legislation and regulations, governments can protect the security of health information and help harmonize systems for data interoperability.

# THE FINAL REPORT WILL INCLUDE THE FOLLOWING KEY OBSERVATIONS:

**1** Sustained senior government leadership and committed financing for digital health are prerequisites for the implementation of a national digital health strategy.

**2** Effective governance mechanisms that engage stakeholders appropriate to a country's context, clearly define their roles and responsibilities, and allow for efficient decision-making, are essential.

**3** A collaborative, national ICT framework that facilitates alignment between health and ICT sectors (typically the Ministry of Health with Ministry of Communications/ICT Agency/eGovernment Agency/ICT regulator) is necessary. This framework includes building a common national ICT architecture that comprises connectivity plans, common standards and legislation.

**To find out more, and for the latest updates, visit:**

w broadbandcommission.org/workinggroups/Pages/digitalhealth.aspx

🐦 @UNBBCom   f The Broadband Commission   ▶ broadbandcommission

**To find out more about the Novartis Foundation, visit:**

w novartisfoundation.org   🐦 @NovartisFDN   in Novartis Foundation

1  ITU. Measuring the Information Society Report 2016. Available at: http://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2016.aspx. Last accessed December 2016.
2  GSMA. The Mobile Economy 2016, p. 2. Available at www.gsmaintelligence.com/research/?file=97928efe09cdba2864cdcf1ad1a2f58c&download. Last accessed December 2016.
3  GSMA. The Mobile Economy 2015, p.43. Available at www.gsma.com/mobileeconomy/global/2015/GSMA_Global_Mobile_Economy_Report_2015.pdf. Last accessed December 2016.
4  IMS Institute for Healthcare Informatics. Patient Adoption of mHealth: Use, Evidence and Remaining Barriers to Mainstream Acceptance. Available at: http://www.imshealth.com/files/web/IMSH%20Institute/Reports/Patient%20Adoption%20of%20mHealth/IIHI_Patient_Adoption_of_mHealth.pdf.  Last accessed December 2016.
5  Mobile Ecosystem Forum. Global mHealth and wearables report 2015, p.3. Available at mobileecosystemforum.com/initiatives/analytics/mef-global-mhealth-and-wearables-report-2015/. Last accessed December 2016.
6  ITU. ITU releases 2016 ICT figures. Available at: www.itu.int/en/mediacentre/Pages/2016-PR30.aspx. Last accessed December 2016.
7,8  Wilson, K., Gertz, B., Arenth, B., & Salisbury, N. Journey to Scale: Moving together past digital health pilots. Available at www.path.org/publications/files/TS_dhs_journey_to_scale.pdf. Last accessed December 2016.
9  ITU. ITU facts and figures 2016, p.2. Available at www.itu.int/en/mediacentre/Pages/2016-PR30.aspx. Last accessed December 2016.
10  World Health Organization (2015). Third Global Survey on eHealth - 2015. [Percentages of 116 respondent countries]. Available at: http://www.who.int/goe/survey/2015survey/en/ Last accessed December 2016.