American Journal of
Biomedical Science & Research

www.biomedgrid.com
ISSN: 2642-1747

Opinion

Delivering Health and Care in the Digital Era depends on Forging New Partnerships

Ann Aerts[1]* and Doreen Bogdan Martin[2]

[1]*Head of the Novartis Foundation, Switzerland*

[2]*Director of the Telecommunication, Development Bureau of the International Telecommunication Union, Switzerland*

***Corresponding author:** Ann Aerts, Head of the Novartis Foundation, Switzerland.

To Cite This Article: *Ann Aerts, Delivering Health and Care in the Digital Era depends on Forging New Partnerships. 2020 - 10(2). AJBSR. MS.ID.001481.* DOI: 10.34297/AJBSR.2020.10.001482.

Received: July 25, 2020; **Published:** August 28, 2020

Opinion

"Blue sky thinking" is a perfect description for digital health: the potential is clear, the space vast and wide open. However, still countless digital health initiatives are underway around the world without overarching vision or coordinating mechanisms. This piecemeal approach makes it difficult to scale effective solutions and realize the full potential of digital in health systems. That would require new partnerships to be forged and digital technology to become integral part of every health system [1].

The Broadband Commission led by ITU and UNESCO advocates for the transformational impact of broadband technologies for development [2]. Its working group on digital health has synthesized best practices for countries to realize the potential of digital technology in health and care. The group's first two reports laid the groundwork by explaining the need for government leadership and intersectoral collaboration in developing national digital health strategies [3], then provided practical recommendations for applying digital technology to tackle noncommunicable diseases (NCDs) in low- and middle-income countries [4]. The current working group is investigating opportunities for AI to transform burning global health challenges.

Guided by its insights, the working group is emphasizing partnerships as an essential crosscutting element, too often overlooked within the digital health equation. Effective multisector partnerships are crucial to shaping health systems that will actually deliver improved outcomes through digital technology. The Novartis Foundation has been contributing to the working group's efforts in part by demonstrating new partnerships and approaches that bridge health and digital technology. Its goal is to catalyze innovations in which data, digital tech and AI can transform health systems from being reactive to proactive, preventative and predictive. The Better Hearts Better Cities initiative for example, is a multisector partnership that leverages real-time data to re-engineer health systems and improve cardiovascular outcomes in urban populations [5]. Aligning partners from different sectors and disciplines behind a same goal and using real-time data, it supports countries to reimagine health and care delivery, directing resources where most needed. In settings where primary health services for NCDs were almost inexistent, such as Dakar e.g., Better Hearts Better Cities was able to increase diagnosis and treatment rates by over 1800% and 1700% respectively. In less than two years, blood pressure control rates increased to about 30% as compared to 8% nationwide [6]. The partnership also resulted in increased healthcare budgets and new policies that are beneficial to cardiovascular health.

Key success factors were strong local ownership, a quality improvement culture and health and care delivery closer to where people live, work and play. Digital tech provided the glue between people, health providers, health systems and policy makers. Not only did it empower patients and their families to take better decisions for their own health, it also empowered health providers to deliver better health and care, and decision makers to deliver adequate health policies and planning. Lastly, digital allowed accelerating diagnosis of NCDs by maximizing screening opportunities in schools and workplaces, and in non-traditional health locations such as shops.

While multisector partnerships spell the difference between success and failure when it comes to delivering health and care in the digital era, government must be in the driver's seat from

the outset and define the health priorities to address with digital technology. Private players can provide the solutions, also at scale. Take mobile network operators (MNOs), which provide the bulk of the connectivity. They have an advanced understanding of the market and a significant customer basis, while maintaining close relationships with both regulatory authorities and consumers. MNOs can contribute expertise in critical areas such as data privacy and security for electronic health data e.g. In fact, MNOs already provide digital health services including business-to-government, business-to-business, and business-to-consumer models. In Latin America, for example, Telefónica moved into the healthcare space with its acquisition of Axis Med, a chronic care provider, allowing the companies to expand remote monitoring of patients with chronic conditions. By leveraging the MNO's subscriber base of 90 million customers in Brazil, they were able to extend services like glucose monitoring for diabetic patients to over 19 million people across Brazil.

In places where effective government partnerships exist, donors, development banks and insurers are more prone to provide resources to build health IT systems or fund promising startups. A useful model here is South Africa's Mom Connect, a mobile maternal care program developed with funding from public and private donors, along with MNOs, and with an understanding that, once established, it would transition to funding from South Africa's Department of Health. At the same time, it remains an attractive tool for MNOs seeking new subscribers.

As these examples show, partnerships must create value for all stakeholders, including private companies that must deliver their public services with an eye to profitability to allow for scale. A partnership model recognizing mutual interests of all partners, can scale solutions by orders of magnitude, with potentially significant gains in health outcomes. Finally, effective collaboration between sectors can enable another critical means of scaling digital health solutions-crossborder sharing of expertise, best practices, and the solutions themselves. One prominent example is PATH's Immunization Data Learning Network, which convenes officials and experts from national governments to disseminate successful strategies to immunization; develop shared IT products, practices and policies, test them and scale the best ones to larger target populations internationally. Another cross-border initiative, Africa's Digital Reach, aims to improve health outcomes across East Africa by harmonizing digital health strategies and standards, including development of an East Africa Open Science Cloud for Health.

The proliferation of digital health reflects the massive expansion of mobile connectivity, and growing awareness and demand for the convenience and improved health outcomes it makes possible. However, realizing the promise of digital health will require governments to foster strategic and pragmatic partnerships, bringing together public and private interests to transform the fragmented digital health landscape into a true public good, equitable and accessible to all. Only then will we truly deliver health and care in the digital era, considering technology an integral part of health systems, as essential as hospital beds.

Moving forward, an even a greater opportunity to redesign health and care systems comes from the massive quantities of data, increased computing power and machine learning now available. AI can help deliver personalized medicine and precision population health. Optimizing patient workflows, predicting outbreaks, or discovering high-risk populations are some examples of that potential. To explore the opportunities and challenges of AI-powered health and care, a new Broadband Commission Working Group on Digital Health is gathering insights from current use cases to guide countries in creating a strong basis for integrating AI to deliver health and care when and where people need it.

Conflict of Interest Statements

AA is employed by Novartis Foundation, other than that the authors declare no conflict of interest.

Role of Funding Source

The Novartis Foundation funded the reports of the UN Broadband Commission working groups on digital health. No author received any funding for their role as author of this Comment.

References

1. Committed to connecting the world.
2. Broad band Commission Agenda for action for faster and better Recovery.
3. (2017) Digital Health: A call for government leadership and cooperation between ICT and health. The Broadband Commission for Sustainable Development working group on digital health.
4. (2018) The promise of digital health: Addressing noncommunicable diseases to accelerate universal health coverage in LMICs. The Broadband Commission for Sustainable Development working group on digital health.
5. Better Hearts Better Cities.