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T7 Task Force Global health

POLICY BRIEF

BUILD DIGITAL PUBLIC GOODS FOR HEALTH: A PRIVATE AND PUBLIC SECTOR GLOBAL INITIATIVE

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Abstract

COVID-19 exposed the disparities in basic healthcare coverage and a human's ability to thrive. While it affects everyone on the planet, the disparity across countries is stark due to access to vaccines, basic health systems, and increasingly, data. In fact, the Lancet FT Commission recognized digital technology as "a social determinant of health". Examining social determinants of health makes apparent that the uneven distribution of and access to technology and data can make a significant difference to health outcomes. Government's' ability to implement a whole of society approach when designing digital infrastructures, systems, and services, protecting and using the data from those systems to make health decisions will be a key factor in addressing global inequity. Building on the G7 Patient Access to Health Records and the G20 Ministers Declaration on the role of Digital Health in the Pandemic Response, to address the key challenges facing health and society, we must make the necessary investment in reusable digital infrastructure and services. We must do it in a way that builds the local capabilities to ensure technology tools empower people, strengthen systems, and minimise potential harms.

Challenges

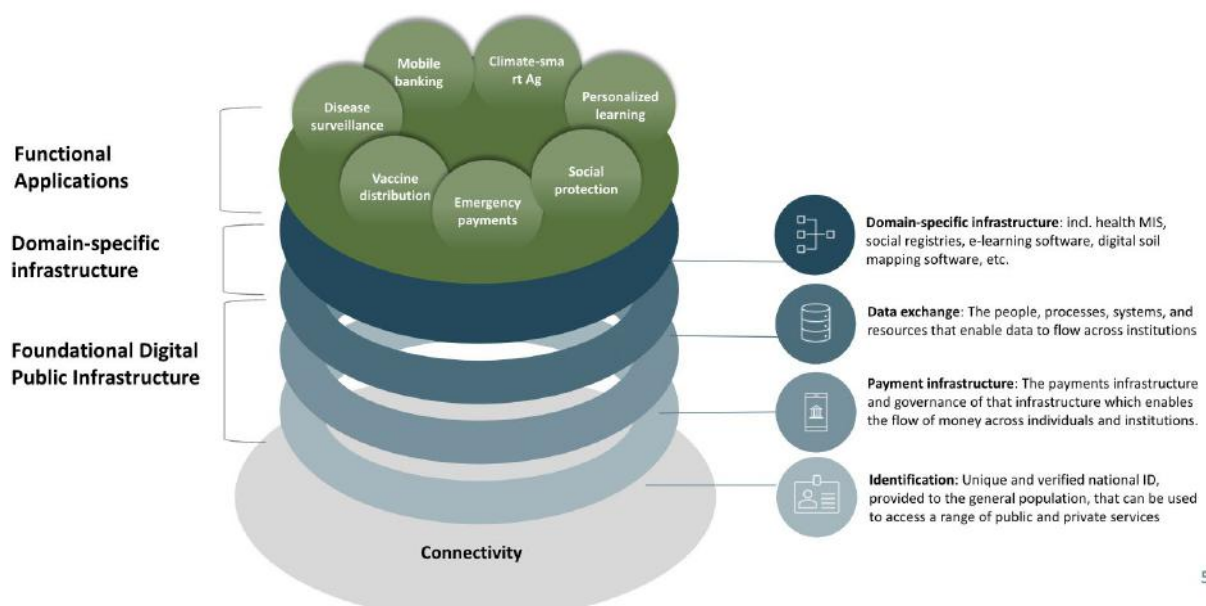
COVID-19 exposed the disparities in basic healthcare coverage and a human's ability to thrive. While it affects everyone on the planet, the disparity across countries is stark due to inequitable access to vaccines (Gill, I., Routa, M. 2022), basic health systems (Gates, B., Gates, M. 2021), fragmented digital technology solutions and the ability to protect and use the resulting data (Fast, L., Waugaman, A., 2016). This inequity lies both within G7 countries- among rural, vulnerable and marginalised communities (Lin, Q., et al, 2022) - as well as throughout the world. G7 countries have an opportunity to lead in closing the equity gaps that currently put G7 and all global citizens at risk for future pandemics and disasters.

- **Lack of data visibility among health care workers**, harming their ability to close the health equity gap. This includes providing health workers with information about social determinants of health, many of which are often collected and managed by other sectors.
- **Lack of equitable access to digital technologies**. A recent University of Chicago study observed a statistically significant difference in COVID-19 mortality depending on access to Internet, which reinforces the Lancet/Financial Time's assertion that digital access is indeed a major social determinant of health (Kickbusch, I., et al 2021).
- **Lack of equitable access to digital skill-building opportunities**. In many developing countries, no teaching, learning, telework or telemedicine took place at all during COVID 19 due to insufficient or costly Internet access, lack of computers or laptops, and lack of remote teaching facilities and abilities, among others. However, a large majority of the global population (93 per cent) lives in an area covered by at least a 3G mobile signal/service, the lack of skills is a barrier for many to use the Internet's full potential (McDonald, M., et al 2020).
- **Lack of trust**. With misinformation and lack of clarity on how sensitive individual data is stored, managed, and used, vulnerable communities within G7 and outside in particular may lose confidence in health systems and institutions without a very strong policy foundation, like the GDPR, to protect individual data and the curation of quality health information.

Proposals

Two landmark documents: the December 2020 G20 Minister’s Declaration (G20 Health Ministers 2020) and the G7 Patient Access to Health Records (G7, UK 2021), lay the groundwork to begin addressing these issues. By collectively endorsing the formation of Digital Public Goods for health, countries can improve data visibility, equitable access, equitable skill-building and ultimately the trust of constituents. Without this endorsement by G7, as well as technical and financial support, some countries could implement low-quality or poorly-governed DPIs, exposing their constituents to significant risks, including cyber-attacks, leaks of personal information, and human rights abuses. These risks could erode trust, subvert efforts to contain global pandemics and ultimately impact the health of citizens in those countries, placing at risk the health of communities throughout the world, including those in G7 countries.

Figure 1. Digital public goods enable secure data exchange for health



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Source: SEEK Consulting 2021

G7 governments have an opportunity to ensure that the DPIs underpinning global pandemic preparedness and recovery efforts are built in a manner that is inclusive, secure, interoperable, and protects privacy and human rights.

Implementation

We recommend that G7 countries do the following three actions:

- (1) **Formally endorse the Charter for Digital Public Goods** as an affordable means of securing citizen data while enabling information to flow in health systems.
- (2) **Establish a pooled financing platform of \$260M per year to support the establishment of Digital Public Goods** and consider nominating representatives from key G7 members to the Board. This platform would finance the following:
 - (a) **Maintenance of a set of 20 Digital Public Goods (\$40M/year)**, many of which are housed in G7 countries and provide support to 80+ countries throughout the world. A reliable annual investment into these DPGs would enable them to strengthen their security, ensure their software remains up to date as the broader eco-systems evolve, incorporate feedback from users and align to architectural approaches such as the German-supported GovStack initiative.
 - (b) **Partnering with digital governing bodies on skill-building, policy alignment and Digital Public Goods implementation (\$110M/year)** by leveraging UN forums to craft a shared technical approach towards protecting the privacy and security of citizens while enabling the data-sharing that is so critical to health service delivery and the pandemic response. This approach should include improving access to digital learning programs for government staff in G7 and beyond, sharing approaches in digital policymaking as well as architectural approaches to establishing robust digital platforms supporting health.
 - (c) **Establish deep bilateral partnerships with five countries pursuing digital transformation, including of their health system (\$110M/year)** by co-financing the scale-up of secure DPGs in support of a country's digital transformation strategy in contexts where the country may need financial partnership in the setup of the digital transformation, is willing to assume ongoing operational costs and has a citizenship whose health outcomes could significantly improve due to this effort.
- (3) **Build on existing financing platforms rather than create a new one.** As many potential options exist for a pooled financing mechanism, we urge the G7 to undertake a due diligence process to identify the right host for the platform and commit to funding it.

Disclaimer:

All authors are responsible for the content and recommendations contained within this policy brief. The policy brief has been written as part of a consultation process for the T7 Taskforce for Global Health, led by Taskforce's Co-Chairs Ilona Kickbusch, Anna-Katharina Hornidge and Githinji Gitahi, but it does not represent the official position of the Taskforce or the authors' employers.

Endnotes

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About the Authors

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Sarah is the Head of the GovStack Flagship project at Gesellschaft für Internationale Zusammenarbeit (GIZ). Prior to leading the GovStack Flagship she worked as a policy advisor for the Sector Programme Digital Development, advising on and implementing the German Federal Ministry of Economic Development and Cooperation's (BMZ) digital strategy, focusing specifically on cyber security, gig-economy and e-government. She is passionate about leveraging the potentials of technology and supporting public sector innovation.

Yolanda Martinez - Overall Lead for GovStack Initiative, ITU Development Bureau



Yolanda is a Digital Government and Development Expert, passionate about public sector innovation, digital inclusion, #ICT4SDG's, govtech, the convergence use of emerging technologies for social good, girls & women in tech. She works for the International Telecommunications Union (ITU) as overall lead for GovStack Initiative, helping governments accelerate the digitization of government services and #ICT4SDGs.

Skye Gilbert Yoden - Executive Director, Digital Square & Strategy Director, PATH's Programs & Innovation



Skye leads Digital Health's strategy, business development, adaptive management and data use efforts. Digital Health's portfolio in this space includes the Data Use Partnership in Tanzania, which is supporting end-to-end digital transformation of Tanzania's health system, digital support to BID Initiative—which is analysing Tanzania's >200K patient dataset to improve medical supply chains and clinical outreach, and Digital Square, which aims to strengthen the digital ecosystem by providing high-quality, sustainable digital global goods to countries that need them. Prior to joining PATH, Skye worked on health and information systems, first as an academic researcher living in Senegal and China, then as a consultant at the Boston Consulting Group, and finally as a program and strategy officer at the Bill & Melinda Gates Foundation.

Kate Wilson - CEO of Digital Impact Alliance



Kate believes that digital technology products, new technology policies and updated business model practices are required to make transformative change in the lives of the underserved and decrease the growing digital divide. Kate joined DIAL in February 2016 as its CEO to fulfil this vision. She has committed the past 26 years to bringing diverse stakeholders together to find common ground in business, technology and policy, holding leadership roles in both the corporate and non profit sectors. Prior to DIAL, Kate co-founded and led the Digital Health Solutions Group at PATH, the Seattle-based international health organisation driving transformative innovation to save lives. During her eight years at PATH, Kate designed and led several global projects, in both Africa and Asia, most notably those using digital technology to improve the delivery of immunisation services and health information systems for universal health coverage. Prior to PATH, Kate held diverse senior roles in the commercial software sector and international trade. At Microsoft, Intel, and General Electric, Kate held roles in ICT product development and launch, strategic planning, and business development, including launching Xbox Live in Europe and leading deal negotiations with telecom providers in 25 markets worldwide. In the non-profit sector, Kate led policy efforts as the President of the Washington Council on International Trade and the Director for Indonesia Affairs at the U.S. ASEAN Council.

Mei Lin Fung - Chair of the People Centred Internet



Mei Lin is Chair of the People Centred Internet which she co-founded in 2015 with Vint Cerf. She is one of the early pioneers of CRM at Oracle, building on her earlier work at Intel, and studies at MIT under future Nobel Economics winners, Modigliani, and Merton. Socio-Technical lead (2011-13) for the US Government Future of Health initiative she began as subject matter expert for Networked Improvement Communities (2009-10). She is the convenor of the Digital Cooperation and Diplomacy network.

Hani Eskandar - Senio Advisor, Digital Services, BDT, ITU



Hani Eskandar is the Digital Services Senior Coordinator at the Digital Society Division of the Telecommunication Development Bureau of ITU. Mr. Eskandar is currently involved in providing assistance to several developing countries by advising on digital applications and services strategies and policies, assisting in implementing technical cooperation projects in areas of digital health, agriculture, governance and education.

Sherman Kong - Head of GovStack Initiative and Senior Advisor, Digital Impact Alliance, UN Foundation



Sherman Kong is currently at UNF-DIAL, working with its partners incl. ITU, UNICEF, and other parts of the UN system, EC and other coop. agencies of EU member states, and other development actors and partner countries in the AU to make coordinated investments and cross-sectoral strategies in digital a reality by contributing to global policy interventions and ecosystem-level convergence efforts. He has been based in Canada (citizen), US, Philippines, Hong Kong (citizen) and Spain (current resident) with overall exp. in informing global policies and digital innovation in global health, streamlining research policy priorities at an ecosystem level (in malaria), and empowering businesses and governments with actionable data.

Garrett Mehl - Unit Head, World Health Organisation



Garrett is head of the Public Digital Health Technology Unit at WHO, focused on ensuring countries have technical guidance and evidence of what works in digital health, digitalizing WHO clinical guidelines and data recommendations into interoperable content packages, and helping to ensure governments fully benefit from their digital health investments. He led the development of the first WHO Guidelines on digital health, the Digital Health Atlas, the WHO Digital Health Classifications, and the Digital Implementation Investment Guide; and oversees the teams responsible for SMART Guidelines and the upcoming Digital Clearinghouse.

Derrick Muneene – Unit Head, World Health Organization



Derrick is the Unit Head of the Capacity Building and Collaboration Team of the Digital Health and Innovation Department at WHO Headquarters, Geneva. He has 22 years of progressive experience in public health informatics, digital health literacy, digital health capacity building and project management. His background is in computer science and public health, with two master's degrees in information systems management and public health policy, along with various project management certifications such as PRINCE2 and project+. Previously, he served as mHealth and eHealth technical officer for the WHO regional office for Africa where he supported 47 countries with the adoption of eHealth strategies and eHealth solutions. Before this, he served with the US Centers for Disease Control and Prevention as acting branch chief for Health Informatics and Health Systems Analysts / Health Applications Manager.

Max Schumann - GovStack, Gesellschaft für Internationale Zusammenarbeit (GIZ)



Max works on innovation and digital health, as well as providing policy advice to the German development cooperation on topics in the context of resource mobilisation and donor convenings on digital public goods, digital public infrastructure and GovStack. Before joining GIZ, Max worked in strategy consulting with a focus on technology.

Jake Watson - Senior Director of Technical Programs at Digital Impact Alliance



Jake seeks to maximise the positive impact technology can have in support of humanitarian and international development programs and projects. He believes that technology is only one piece of the puzzle and that a deep understanding of context and local ownership are the keys to success. Jake joined DIAL in May of 2018 as Senior Director of the Platforms and Services group and is a member of the Governance Board for Digital Square. At VillageReach, he worked with ministries of health to solve healthcare delivery challenges in East and Southern Africa and led the re-architecture of OpenLMIS, an open-source logistics management information system. At the International Rescue Committee, he supported education projects in Haiti and served as a Regional Coordinator for the Syria Refugee Response, overseeing myriad ICT4D projects that support the IRC's programs. Prior to his non-profit career, Jake spent more than 15 years developing large-scale enterprise, cloud and mobile software systems in the private high-tech sector. He has also worked as a teacher in secondary education in the U.S. public school system.



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