

Digital technologies: a new determinant of health

The *Lancet* and *Financial Times* have published a Commission with recommendations for successful integration of digital technologies in health. The bottom line of the Commission is that weak governance of digital technologies is causing health inequities and compromising human rights. This finding is compounded by the fact that many companies are expanding their reach into the health sector, collating and analysing health and personal data. The future governance of digital technologies in health care “must be driven by public purpose, not private profit”. But how can this be achieved when private corporations have such a large and vested interest in health data?

One of the key recommendations of the Commission is the need for data solidarity, an approach to the collection and use of health data with the aim of “building a culture of data justice and equity”. Horn and Kerasidou explored a similar approach in the context of the UK national health system and data solidarity principles were echoed at the WHO Health Data Governance Summit. The summit highlighted that the use of health data as a Global Public Good requires consensus building, investment and, multisectoral partnerships. The Commission adds that a solidarity-based approach requires regulation of health data within the private sector, agreement on public health goals that can be achieved using data, and transparency on how data sharing and secondary use of data will improve public and individual health. Key to this approach is establishing data institutions to govern the exchange and storage of health data and provide a forum for an appeal process for those potentially disadvantaged by health data use.

These recommendations are already in progress in some countries. A 2021 report by the Open Data Institute suggested that the digital maturity of European countries to support secondary use of health data is increasing but they point to an urgent need to develop common data standards and data models. Global efforts to share data to accelerate effective COVID-19 responses are also underway, for example, the Data Sharing Working Group convened to enable effective, ethical, and equitable data sharing across geographies.

The commissioners focus many of their key recommendations on the health future of children to

emphasise the need to reduce socioeconomic burdens of diseases such as COVID-19. The authors highlight that 2.2 billion youths aged 25 years or younger are offline and there is a digital gender divide, especially in low-income and middle-income countries. Youth consultations revealed there is no universal experience of growing up in a digital world and those children with access to digital technologies, the “digitally immersed”, are subject to “datafication” by which people’s use of digital technologies leaves behind a digital trail of personal information. The Commission calls for this data to be used ethically to support longitudinal multicountry studies to assess how digital technologies might affect young people’s health and wellbeing over time. However, a narrative review, published in January, 2021, highlights that there are an increasing number of these types of studies among high-income countries and bias in health data collection towards those with digital access will only serve to widen health care inequities. To address health data equity, the Commission calls for recognition of digital technologies as a key determinant of health, similar to income, education, or sex and gender. This action would help to measure and determine the effect of digital inequality on health outcomes.

The commissioners acknowledge there are substantial gaps in the current evidence base, for example, there are few studies on the societal effects associated with digital transformation. These gaps in evidence could affect the results of the report, however, commissioners argue that this analysis cannot wait for more data to become available. The urgency of this Commission has been heightened by the COVID-19 pandemic, during which the unequal effect of digital technology on health is clear and increased transparency on health data sharing is crucial. *The Lancet Digital Health* calls for action to redistribute power and agency by increasing regulation of private companies as they continue to dominate health data collection. Governments must provide comprehensive governance and leadership to define globally agreed rules on the sharing of health data for the future of equitable health care.

■ [The Lancet Digital Health](#)

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For more on **The Lancet and Financial Times Commission** see *Lancet* 2021; published online Oct 24. [https://doi.org/10.1016/S0140-6736\(21\)01824-9](https://doi.org/10.1016/S0140-6736(21)01824-9)

For the **study by Horn and Kerasidou** see *BMC Med Ethics* 2020; 21: 110

For more on the **WHO Health Data Governance Summit** see <https://www.who.int/data/events/health-data-governance-summit/introduction>

For the **Open Data Institute report** see <https://secondary-use-health-data.theodi.org/explore-report/>

For more on the **Data Sharing Working Group** see **Correspondence** *Lancet Digit Health* 2021; 3: e6

For the **narrative review on young people’s use of digital health technologies** see *J Med Internet Res* 2021; 23: e18286