LEGAL DIMENSIONS OF COVID-19 SERIES

PAPER #1

DIGITAL TECHNOLOGY AND COVID-19 IN THE WESTERN PACIFIC REGION

World Health Organization

Western Pacific Region

IN COLLABORATION WITH:

THE UNIVERSITY OF MELBOURNE

Legal Dimensions of COVID-19 Series: Paper #1

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This publication is part of a series developed in collaboration with the University of Melbourne. The main authors of the series of publications are the following: Jonathan Liberman (Associate Professor, University of Melbourne) and Ben Lilley and Darryl Barrett (WHO Regional Office for the Western Pacific).

The named authors alone are responsible for the views expressed in these publications.

Key points

- Digital technology plays a critical role across all aspects of health and has the potential to accelerate progress in attaining the Sustainable Development Goals related to health and well-being.
- The coronavirus disease 2019 (COVID-19) pandemic is highlighting the potential benefits of digital technology as well as its risks and limitations, including the so-called digital divide within the Western Pacific Region.
- Legal frameworks are essential for harnessing digital technologies, minimizing their risks and ensuring benefits are shared.
- COVID-19 presents an opportunity for Member States to build lasting legal and regulatory infrastructure that helps bridge the digital divide and realize the benefits of digital technology for health.

Purpose

To support WHO Member States in the Western Pacific Region in developing legal frameworks and related regulatory capacity to effectively use digital technologies in the COVID-19 response, as well as for health beyond the COVID-19 pandemic.

Background

Digital technology plays a critical and growing role across all aspects of health.

The 2018 World Health Assembly resolution on digital health recognized:

> *the potential of digital technologies to advance the Sustainable Development Goals, and in particular to support health systems in all countries in health promotion and disease prevention, and by improving the accessibility, quality and affordability of health services*

The resolution urged Member States to "develop, as appropriate, legislation and/or data protection policies around issues such as data access, sharing, consent, security, privacy, interoperability and inclusivity consistent with international human rights obligations".

The adoption of the resolution has stimulated increased global, regional and national activity towards harnessing the power of digital technologies for health. WHO has issued the new *WHO Guideline: Recommendations on Digital Interventions for Health System Strengthening*, the *Global Strategy on Digital Health 2020–2025* and a *Digital Implementation Investment Guide (DIIG): Integrating Digital Interventions into Health Programmes*. In *For the Future: Towards the Healthiest and Safest Region*, laying out the vision for its work in the Western Pacific, WHO has highlighted innovation, including the use of digital technologies, as a key enabler to meet current and future health challenges. Vast disparities exist in countries' access to digital technologies and capacity to make use of them. These disparities – or "digital divide" – extend well beyond health and health systems. The Secretary-General of the United Nations recently issued a *Roadmap for Digital Cooperation*, which aims to "accelerate global digital cooperation, seizing on the opportunities that are presented by technology – while mitigating the risks – so that progress towards achieving the [Sustainable Development] Goals by 2030 can be made collectively".

The digital divide also manifests disparities between the legal frameworks and regulatory capacities of countries to advance digital technology for health and manage its risks. For example, in 2015, WHO found that 91% of high-income countries (HICs), 81% of upper-middle-income countries (UMICs), and 79% of lower-middle-income countries (LMICs) reported general privacy legislation to protect personally identifiable information. This contrasted with only 45% of low-income countries (LICs) reporting the same protection. Regarding the more specific protection of the privacy of individuals' health-related data in electronic health records, over 80% of HICs, 53% of UMICs, 28% of LMICs, and 30% of LICs reported such legislation. Of the six WHO regions, the Western Pacific had the lowest percentage of countries with general privacy legislation to protect personally identifiable information and the third highest percentage of legislation to protect the privacy of individuals' health-related data in electronic health records.

The digital divide has significant impacts on all aspects of the COVID-19 response, including, for example, preparedness, surveillance, contact tracing and the delivery of health services. Yet, for all of the challenges it poses, COVID-19 also offers opportunities for digital development and capacity-building in all countries, including lower-resource countries.

Discussion

Digital technology and COVID-19

The COVID-19 pandemic has underscored the value and risks of digital technology for health and the implications of the digital divide between and within countries. These realities have been dramatically underlined by the speed with which SARS-CoV-2 – the virus that causes COVID-19 – spreads, the need for rapid interventions to control its spread, and the vulnerability of many health systems in the face of the pandemic. As the United Nations Secretary-General recently said, "the digital divide is now a matter of life and death for people who are unable to access essential health-care information. It is threatening to become the new face of inequality".

Digital technology is playing an important role across virtually all aspects of the COVID-19 response, including collecting and analysing population data to drive decision-making, communicating vital information to and with the public, enabling and supporting contact tracing, monitoring population-level and individual responses to public health measures (such as quarantine, isolation and lockdowns), and delivering health services.

The urgency and exceptional nature of the COVID-19 pandemic also amplifies risks associated with the use of digital technology. Many of these risks are not unique to digital technology, but manifest differently and are exacerbated by technology, in particular due to the volumes and scale of data now

Building digital technology capacity for COVID-19 and beyond

Countries have greatly varying capacities to make use of digital technologies, including infrastructure (such as internet connectivity and mobile/broadband), availability of the technologies (for the country as a whole, and among population groups and subgroups), effective and interoperable data systems, workforce capability, digital literacy, trust in technology, capacity to fix problems when they arise and enabling legal frameworks.

This digital divide is apparent in the Western Pacific Region, for example, in the differences between a number of countries in Asia, Australia, New Zealand and Pacific island countries. Divides also exist within countries, such as between central islands/capital cities and outer islands/remote areas, which are less likely to have reliable and consistent digital access.

Despite this and all the challenges that COVID-19 presents, there are opportunities in all settings to build capacity in digital technology. Efforts to take advantage of these opportunities need to move at an appropriate pace, driven by national (and subnational) governments in accordance with local needs, cultures and values. Wherever possible, efforts should build on existing strategies and investments in digital health. These opportunities should be pursued in partnership with the community, including through co-design, to develop lasting participation and trust.

Responses should take into account