

Webinar Series: Share-Listen-Act, COVID-19: The potential of Digital Health and Information Systems for Health (IS4H) in the fight against the pandemic

| DIGITAL TRANSFORMATION TOOLKIT
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Webinar Series: *Share-Listen-Act, COVID-19: The potential of Digital Health and Information Systems for Health (IS4H) in the fight against the pandemic.*

Responses to participants' questions

IMPORTANT NOTE: Keep up to date with the latest information on the coronavirus disease (COVID-19), available from the PAHO and [WHO](#) websites, and from national and local public health authorities.

I. Introduction

On June 1, 2020, in collaboration with several partners and networks (mentioned at the end of this document), and 990 registered attendees, the Pan American Health Organization (PAHO) and the Inter-American Development Bank (IDB) launched the webinar series **Share-Listen-Act, COVID-19: The potential of Digital Health and Information Systems for Health in the fight against the pandemic.**

This factsheet contains responses to the questions that received the most votes¹, as well as other questions posed, and additional information derived from interaction with the attendees.

II. Responses to the attendees' questions

The questions that received answers below were selected and voted on by participants in the event. They are presented in order from highest to lowest in terms of number of votes, and were answered by the organizers and the speakers as part of an agreement with the attendees:

How important are geolocation tools in this pandemic?

Countries have used geolocation tools during quarantine management to carry out contact tracing, identify risk areas, and track social mobility and adherence to preventive isolation measures. Additionally, integration of these tools with self-testing applications it makes it possible to estimate potential outbreaks and levels of contagion risk².

How important is the public's participation in self-assessment through applications on mobile data networks?

Self-assessment, as it is often called, is a questionnaire that varies in length depending on who designed it. It consists of a series of questions on various symptoms associated with COVID-19 and can also include sociodemographic questions or questions about past travel. Its purpose is to identify people who run a greater risk of contracting the disease, which helps to speed up access to diagnosis and adjust mass testing strategies and health care for those who test positive. As a result, it helps slow down the spread of the infection in a given population group³.

Has there been a change in the IS4H goals due to the coronavirus pandemic?

No. The goals of the IS4H initiative (<http://www.paho.org/ish>) are more urgent than ever, as it is essential to act on: 1) governance, 2) information and data technology, 3) knowledge management and sharing, and 4) innovation. However, priorities have been adjusted to respond to situations that require short-term and medium-term actions.

¹ Some responses contain additional information that was not shared during the event.

² <https://bidlab.org/en/node/1517>

³ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7200852/>

How could we regulate news or publications on social media that spread disinformation and cause panic?

It is always difficult to strike a balance between regulating and restricting freedom of expression, which is included in most constitutions throughout the world. It is also very difficult to regulate information on global computer networks; however, the response must be based on awareness and early education so that academic institutions can teach the concepts of “infodemics”, disinformation, and “infoxication” at all levels of vocational training. Considering the current pandemic situation, the main concern is to focus on reliable sources of information and monitor social media accounts that respect standards for sharing evidence-based information.

Other recommended actions include the following ([see the infodemic factsheet](#)):

- Rely on information published by PAHO and WHO and their partners
- Acknowledge scientific data
- Avoid fake news
- Support open science
- Determine whether the information really makes sense, even if it originates from a trusted source and has previously been shared
- Report harmful rumors
- Do not share information if its source or usefulness cannot be determined, or if it is not clear whether it has been previously shared
- Confirm that the information has been previously shared by other trustworthy individuals
- Participate responsibly in social conversations
- Share information responsibly
- Confirm sources, particularly in WhatsApp threads
- Do not share unconfirmed information
- Continue learning

What will be the role of telemedicine in the post-COVID-19 world?

Telemedicine is a service that existed before the pandemic for several decades; however, this pandemic has created a situation in which the use of telemedicine, as well as other technologies, services, and digital applications, has been strengthened and encouraged for countless reasons. Among the most important of these is to prevent a collapse of health services due to in-person appointments and, at the same time, to encourage people with adequate connectivity to stay home and follow their treatments remotely, safely, and sustainably.

How can we stay up to date on future webinars?

Go to the following webpages:

- <http://www.paho.org/ish> - socialdigital.iadb.org

Subscribe to the following mailing lists:

- [IS4H](#) - [RELACSIS](#)

How can countries determine the condition of their information systems and whether they are prepared to fight this pandemic?

PAHO, in collaboration with the Inter-American Development Bank and other partners, has developed and implemented a tool that measures the maturity level of different information systems, emphasizing the following strategic areas: 1) data management and information technology, 2) governance and management, 3) knowledge management and sharing, and 4) innovation. The

maturity level is analyzed by considering the key capacities in each strategic area and at each level of the maturity model. An organization could present different maturity levels in each strategic area. In addition, complementary tools developed by the Inter-American Development Bank and other partners exist to measure progress in the implementation of electronic medical record systems. More information at: www.paho.org/ish

How can we offer digital platforms to people who have no internet access?

It is important to identify existing channels and then analyze options to use them effectively. Additionally, it must be clarified that digital health is not intended only for devices with internet access. Although internet access is very important, it is not the only means available. Digital health and digital health platforms can and should be designed to include other types of access, for example, cellular telephone networks. In Latin America and the Caribbean, approximately 37% of people do not have internet access; however, there are 109 subscriptions to cellular telephone plans per every 100 people.⁴ Digital health platforms can use SMS and voice messages to remain in contact with those who lack internet access. Geolocation tools are also a possibility. For more information, go to the following link:

<https://publications.iadb.org/en/detect-prevent-respond-recover-digitally-effective-use-of-digital-tools-to-interact-with-the-population-about-public-health-emergencies-in-latin-america-and-the-caribbean>

How can we establish a region-wide epidemiological virtual room on a single digital platform for analysis and prediction of future epidemics?

The focus should be on adopting standards that ensure interoperability between information sources and digital applications. However, it is advisable to perform a review of processes and information flows before making changes to digital platforms. For more information on this subject:

- [eHealth in Latin America and the Caribbean: interoperability standards review](#)
- [COVID-19 Factsheets: Electronic Health Records \(EHR\) and Interoperability: Understanding two key concepts for a better Public Health response](#)
- [eHealth Conversations](#)
- <https://publications.iadb.org/en/detect-prevent-respond-recover-digitally-effective-use-of-digital-tools-to-interact-with-the-population-about-public-health-emergencies-in-latin-america-and-the-caribbean>

How can we achieve secure digital platforms that decision-makers and governments trust?

Beyond the decision on digital platforms, the most essential step is to know and to apply international standards on safety, confidentiality, and privacy, including unauthorized access to and improper use of patient information, data integrity, and noncompliance with data protection standards and regulations. Reference standards exist, such as ISO standards 27001, 27002, and 27799, and the European Union data protection regulation:

<https://eur-lex.europa.eu/eli/reg/2016/679/oj>

Is it possible to provide personalized and comprehensive care through virtual platforms?

Different strategies exist to humanize care, namely:

- Health providers, patients, and their caregivers should participate in the development of digital health initiatives designed for them, so that the focus on human beings is not lost.
- Evaluation of success should focus not only on improving efficiency and reducing costs, but also on analyzing the impact on relationships between users and providers of health services.

⁴ <https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>

- There should be a clear emphasis on data security and confidentiality, in order to establish users' trust.
- People who participate in the development of digital health technologies should receive training on the ethical implications and undesired consequences of these products.⁵

Will digital health help decision-makers to implement better local health policies?

Digital health itself is not a solution, but rather a mechanism to address current challenges and problems. For digital health to help improve health policy design, it is necessary to have appropriate evidence-based digital health policies with open databases, ethical criteria, and humanized approaches, focused on creating inclusive networks and reducing inequity. Health policies and digital health policies are mutually beneficial if the latter are well-designed from the start.

Will there soon be platforms that present health metrics on diseases of regional concern, similar to the Johns Hopkins platform during the pandemic?

PAHO has the PLISA Platform (<http://www.paho.org/plisa>), which presents additional information on core indicators for countries in the Region of the Americas.

Which technological applications (games, simulations) are available or can be created to raise public awareness of the impact of their actions (distancing, hygiene, etc.)

*The Impact of Information Technology on Patient Engagement and Health Behavior Change: A Systematic Review of the Literature*⁶ is a potentially useful document. Additionally, *The history and future of digital health in the field of behavioral medicine*⁷ is a non-systematic review of previous interventions and trends in behavioral changes.

More information on this subject:

- <https://www.bhub.org/> & <https://publications.iadb.org/en/lessons-behavioral-economics-improve-treatment-adherence-parenting-programs-application-sms>

How should clinical engineers participate in decision-making in the health sector and as part of epidemiological teams?

Today more than ever, an interprogrammatic and intersectoral pandemic response must be implemented, making space at the table for all sectors and disciplines to define actions, investments, and other required activities during the emergency. Clinical engineering, information technology, science and technology, data science, and health informatics are among the key sectors that should be included.

What role should the chief healthcare technology officer play in order to improve digital health in their organization?

Health systems need interdisciplinary teams in which the role of the chief technology officer (CTO) shifts from being focused exclusively on operations, networks, infrastructure, and computer support to participating in decision-making processes on data analysis, information technology security, disaster recovery, mobile technology, telehealth, connectivity, electronic health records, and patient portals, among other areas.

Do official applications or systems exist that authorize the movement of people within the Americas (based on COVID-19 test results, interactions, or risk exposure)?

⁵ <https://www.nature.com/articles/s41746-018-0060-2>

⁶ https://medinform.jmir.org/2016/1/e1/?utm_source=TrendMD&utm_medium=cpc&utm_campaign=JMIR_TrendMD_0

⁷ <https://link.springer.com/article/10.1007/s10865-018-9966-z>

WHO has published guidelines on the adaptation of social and public health measures for the next phase of the COVID-19 response. Some governments have suggested that the presence of antibodies against SARS-CoV-2 (the virus that causes COVID-19) could be the basis for an “immunity passport” or “certificate of absence of risk” that would permit people to travel or return to work based on the assumption that they are protected against reinfection. There is currently no scientific data that indicates that people who develop antibodies after recovering from COVID-19 are protected against a second infection.

For more information, see: <https://www.who.int/news-room/commentaries/detail/immunity-passports-in-the-context-of-covid-19>.

The ITC development index published by the International Telecommunication Union (ITU) indicates that the countries of the Americas still have a long way to go to establish a more robust internet infrastructure. Will we see a change after COVID-19?

The countries of the Americas have made major efforts to strengthen information systems for health, including the required technological infrastructure support. Furthermore, by approving the *Plan of Action for Strengthening Information Systems for Health* during the 57th Directing Council in 2019, they have made a regional commitment with PAHO. More information at the following link:

<https://iris.paho.org/handle/10665.2/51617>.

What role will telemedicine play in the post-COVID-19 world?

Telemedicine, telehealth, teleconsultation, and telepresence will remain common practice in both health and population services, especially for strengthening the first level of care.

More information on this subject:

- [COVID-19 Factsheets: COVID-19 and role of information systems and technologies at the first level of care](#)
- [COVID-19 Factsheets: Teleconsultations during a pandemic](#)

What role do the WHO Regional Offices play in generally increasing the use of digital health in health systems, and specifically to fight the pandemic?

The regional offices work in coordination with global headquarters through a network of experts focused on digital health solutions. One of their functions is contextualizing measures according to the circumstances on each continent, ensuring that appropriate international evidence-based standards and models are applied to each situation.

Will the shift towards digital health care continue after the pandemic ends?

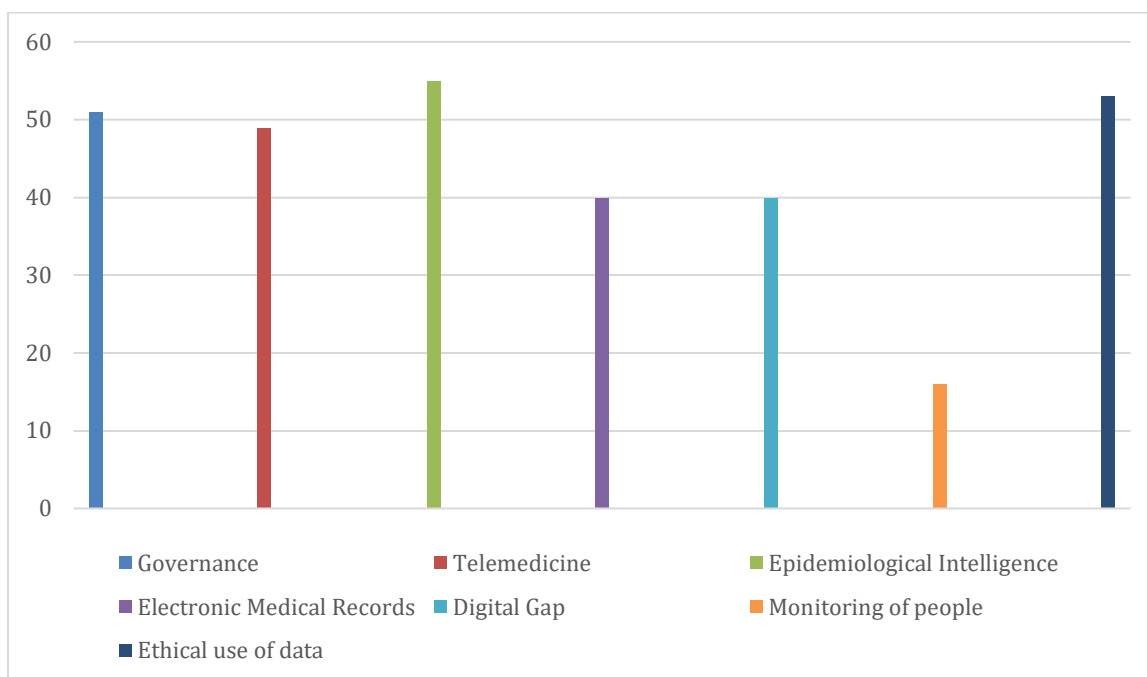
In 2017, in its flagship publication *Health in the Americas*, PAHO defined its vision of public health in the information society. Additionally, a high-level panel on digital cooperation organized by the United Nations Secretary-General was held to advance international dialogue with multiple stakeholders on how to take advantage of the potential of digital technologies to improve human well-being and mitigate risks.

For more information, see:

- [Public Health in the Information Society - Health in the Americas](#)
- [The Age of Digital Interdependence: Report of the UN Secretary-General's High-level Panel on Digital Cooperation](#)

III. Selected topics

During the seminar the participants expressed their opinion on the topics that they would like to see addressed during future seminars. The results of the real-time survey are presented below:



IV. Additional information

- [Link to the recording](#)
- [Link to digital health factsheets prepared by PAHO](#)

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- PAHO expert network on Information Systems for Health (IS4H)

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