THE POTENTIAL OF FREQUENTLY USED INFORMATION TECHNOLOGIES DURING THE PANDEMIC

DEPARTMENT OF EVIDENCE AND INTELLIGENCE FOR ACTION IN HEALTH

OFFICE OF THE ASSISTANT DIRECTOR

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Pan American Health Organization

World Health Organization

REGIONAL OFFICE FOR THE Americas

PAHO

The potential of *frequently used* information technologies during the pandemic

IMPORTANT NOTE: Keep abreast of the latest information on coronavirus disease (COVID-19) through the PAHO and WHO websites, and through national and local public health authorities.

Why are information technologies the main means of social interaction during the pandemic?

Over three billion people in the world are quarantined or in social isolation, and border closings and restrictions on transportation are in place, among other measures. As a result, widely used information technologies—cell phones in particular—have become the main way that people, governments, and health institutions work, interact, share information, exchange and generate knowledge, and communicate.
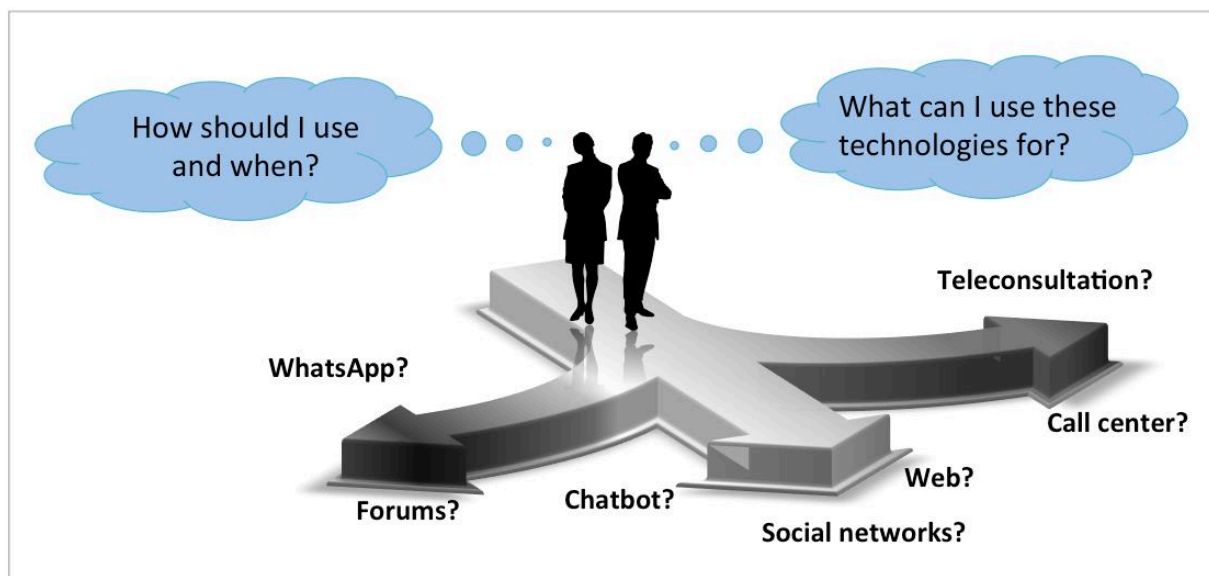
Of these, the following are of particular note:

The Worldwide Web	Chatbots	Dashboards		Mobile applications (*Apps*)	
Social media	Call centers			Virtual campuses	
Text messaging (*SMS*)	Internet-based text, video, and voice services	Monitoring and tracing platforms		Wikis	Forums

What are some of the opportunities provided by information technology?

Technologies widely used in everyday life prior to the pandemic—many of them accessible on mobile devices—provide an ideal platform for mass use. In the current context, these tools can offer real-time access to reliable data and information, and to personalized recommendations on COVID-19, as well as:

Answering questions	Monitoring patients (See teleconsultation factsheet)	Providing therapeutic assistance
Interacting with health professionals and services	Continuing to work	Availability of second opinions from professionals worldwide
Support for self-diagnosis	Contributing knowledge	Access to reliable data and information — Ongoing learning
Participating in social media	Maintaining interpersonal relations	Verifying the veracity of information — Prevention

What are the existing challenges?

- **Leaving no one behind**, reaching those who lack connectivity or knowledge
- Managing **information overload** and the **large number of available technological tools**
- Managing **false expectations** about achieving solutions
- Taking account of **cybersafety**, including issues of privacy, ethical use, and confidentiality of personal data (see factsheet)
- Understanding **new technological concepts** that have become increasingly important (band width, chatbots, telepresence, etc.)
- Having the **judgment** needed to select the tool that is most effective for the purpose at hand
- Having the **skills needed** to use the tools properly

What are the ideal technological skills in the current context?

- **Critical thinking** for well-informed, balanced decision-making that distinguishes between content and presentation
- **Ability to search** for information using multiple sources, including social networks
- Reading, writing, and comprehension in the **current digital context,** which is dynamic and increasingly hyperconnected
- **Active participation** in virtual communities in order to contact other people, discuss issues, share lessons learned, and ask for help

What are some examples to consider?

Some technologies are used more than others for specific purposes, while others have fallen into disuse or are not being exploited to their full potential. In the current context, the most-utilized technologies are those focused on people's need for interaction and information, such as:

Possible questions	Possible tools	Possible technologies
General information on COVID-19		
There is a great deal of information everywhere, and I want to know exactly what the symptoms of coronavirus are. Where can I find that?	Government websites, apps, chatbots, forums, SMS, call centers	● WHO: Chatbot ● PAHO: Website ● Uruguay: Telephone number 0800 1919 ● Paraguay: Ministry of Health tweets ● Mexico: COVID-19 app ● Trinidad and Tobago: Website , etc.
How do I access real-time information on what is happening in my country and around the world?	Dashboards, websites, apps	● WHO: Interactive dashboard ● PAHO: Interactive map ● Humanitarian response: Interactive map ● HealthMap: Novel Coronavirus (COVID-19) ● Johns Hopkins: Interactive dashboard ● Brazil: Interactive map ● Jamaica: Control panel
I have a lot of general questions. Where do I go?	Government websites	● PAHO: COVID-19 web page ● WHO: COVID-19 web page ● USA CDC: Coronavirus web page ● IDB: COVID-19 web page
Support for self-diagnosis		
I feel like I have a symptom, but I'm not sure and want to be sure. Is there a way or some tool for me to self-diagnose?	Apps, chatbots, websites	● WHO: Chatbot ● PAHO: Website ● Peru: COVID-19 coronavirus evaluation ● USA: CDC & Apple screening tool
I want my questions answered by a real person, not a machine. What do I do?	Apps, call centers	● Argentina: National call center: 0800-222-1002 ● Uruguay: Chatbot for general questions
Teleconsultation and patient monitoring		
How to monitor and follow up on patients?	Apps, call centers, teleconsultations	● Brasil: Monitora COVID19 ● Uruguay: Coronavirus UY
How can I communicate with a health professional?	Apps, call centers, teleconsultations	● Guatemala: Online doctor app ● Peru: 113 phone line
I am in quarantine as a suspected case. How do I follow up safely?	Apps, call centers, teleconsultations	● Bolivia: Bolivia coronavirus app ● Colombia: CoronApp ● Costa Rica: COVID-19 app

Learning and training		
I want to expand my knowledge so that I can contribute to research. Where can I find scientific evidence?	Websites with evidence, specialized sites for interaction with scientists	● PAHO/WHO COVID repository ● Virtual Health Library – COVID-19 ● Cochrane Library on COVID-19 ● USA: National Library of Medicine ● ELSEVIER Information Center ● USA.: Ask a scientist
How can I get training if I am in quarantine?	Virtual campuses, web talks, interactive platforms	● OpenWHO Virtual Campus ● PAHO: Virtual Campus ● Mexico: COVID-19 courses ● Zoom, Webex, Teams, Skype, Adobe connect
Where can I contribute my knowledge?	Scientific journals, wikis	● PAHO: Pan American Journal of Public Health ● Lancet: Resource center ● Coronapedia ● Wikipedia: COVID-19
Social interaction		
How can I contribute appropriately to the social dialogue?	Social media, forums, wikis	● Linkedin official update on COVID-19 ● Ibero-American Forum on COVID-19 ● *Reflexiones ecosociales COVID-19* forum

Where can I find more information on this subject?

General information
- PAHO: links to all ministry and government websites in America devoted to COVID-19
- IDB: Coronavirus: resources and open knowledge to collaborate in response to the pandemic
- General information from the CDC (United States)
- Detect, Prevent, Respond, Recover Digitally: Evidence from Applying Digital Interventions to Past, Present, and Future Public Health Emergencies

Digital solutions
- Go data: COVID-19
- DHIS 2: COVID-19
- RapidPro COVID-19

Contact information
- Tel.: +1 (202) 974 3531 ● Fax: +1 (202) 775 4578 ● Email: emergencies@paho.org