Actions to facilitate access to telehealth

|DIGITAL TRANSFORMATION TOOLKIT

KNOWLEDGE TOOLS

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PAHO

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Note: This knowledge capsule is based on the implementation of *COVID-19 AND TELEMEDICINE*: *A tool for assessing the maturity level of health institutions to implement telemedicine services and* has been developed to support that tool.[1]

Why is teleconsultation an essential modality for more resilient post-COVID-19 health systems?

Before the COVID-19 pandemic, telemedicine services were primarily intended to provide care to patients living in locations far from health services, where access to such services is difficult, or where, due to the size of the population, specialized health services are not available. In the wake of the health crisis, telemedicine is re-emerging as an important modality, integrated into the traditional forms of care. Its aim is to improve efficiency through patient follow-up, addressing the needs of health professionals and patients, reducing costs and travel times, and providing frequent (sometimes continuous) remote monitoring, even in cases where distance is not a factor.

*While telemedicine has known benefits, and **there** are implementation guidelines for providers – such as PAHO's Framework for the Implementation of a Telemedicine Service, and the Tool for assessing the level of maturity of health institutions to implement telemedicine services – this knowledge capsule provides additional information on accessing telemedicine services, especially for patients in situations of vulnerability.*

According to PAHO,[2] the declaration of a pandemic can cause anxiety and uncertainty in the population, and health systems may face overwhelming levels of demand. Without proper planning and mitigation measures, the vastly increased number of consultations can stress health services to the point of collapse – a situation that could be addressed by virtual means. Insufficient capacity at health facilities can make it difficult to provide adequate treatment to those most in need. Teleconsultations are a safe and effective way to evaluate suspected cases of disease and guide patients' diagnosis and treatment, thus minimizing the risk of transmission – a strategy that has been particularly useful during the COVID-19 pandemic. Such teleconsultations allow many key clinical services to operate normally, without interruption, in the lead-up to, and during, public health emergencies. These services, which were initially limited to a small group of specialties and interventions, can now encompass almost all types of health services, as well as providing access to second opinions, in-service training, etc. The vast majority of specialties can use teleconsultations while taking into consideration the patient's particular needs. Providers, patients, facilitators, and other healthcare personnel should therefore acquire

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[1] Pan American Health Organization. COVID-19 AND TELEMEDICINE: Tool for assessing the maturity level of health institutions to implement telemedicine services. Washington, DC, PAHO: 2020. Available at: **https://www3.paho.org/ish/images/toolkit/COVID-19-Telemedicine_RATool-en.pdf**.

[2] **Teleconsultation during a pandemic**

the skills required for teleconsultations. For more resilient health systems in the post-COVID-19 era – in the effort, for example, to combat chronic noncommunicable diseases – this can help ensure continuity of care, as well as facilitate monitoring and evaluation of interventions.[3]

Factors that hinder access to telehealth

To overcome potential barriers to the use of telemedicine, the needs of users and their environment need to be considered, based on PAHO's analysis of telemedicine categories in the context of COVID-19, using the *Tool for assessing the level of maturity of health institutions to implement telemedicine services* (Figure 1), which was developed jointly with the Inter-American Development Bank.

FIGURE 1: Categories to consider in assessing the maturity of health institutions to implement telemedicine services

I Organizational readiness	II Processes	III Digital environment	IV Human resources	V Regulatory issues	VI Expertise
Foundational basis to identify issues to be resolved before moving forward with telemedicine services	Set of operations and functions that must be taken into consideration	Necessary technological infrastructure, including hardware and software	Institutional capacity in the areas of health services and of IT and communications	Rules and procedures that must be considered when providing telemedicine services	Additional know-how that could benefit the effective implementation of telemedicine services

Source: Pan American Health Organization. COVID-19 AND TELEMEDICINE: Tool for assessing the maturity level of health institutions to implement telemedicine services. Washington, DC: PAHO; 2020. Available at: https://www3.paho.org/ish/images/toolkit/COVID-19-Telemedicine_RATool-en.pdf.

I.   Organizational readiness

Identifying patient needs: These data are essential when formulating telemedicine programs. Incorporating this approach from the start improves and speeds up implementation, with a corresponding benefit to patients. Patients must be satisfied with teleconsultations for them to view the services positively and to want to continue using them.

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[3] **Digital Health: A Strategy to Maintain Health Care for People Living with Noncommunicable Diseases during COVID-19**

Patient expectations: It is important to understand patients' environment and emotions, including skepticism, fear, anxiety, and the need for privacy.

Education (digital skills/literacy): What skills does the patient possess? Does the patient use technology on a regular basis? Is this the patient's first use of the service? Competent use of the technology will be vital to success. This encompasses the patient and his/her support network. If the patient lacks the necessary technological skills, alternatives should be considered, ranging from pre-consultation training in how to use the necessary teleconsultation devices, to switching to an in-person appointment.

Communication and dissemination of the service model: New processes generate uncertainty in patients. How people can most effectively be introduced to this new information must be determined. In this regard, community portals offer a good way to communicate with patients.[3]

II. Processes

Organizing the (frequent) updating process: Given the dynamic nature of these processes and the need for technological updates, an orderly scheme for accomplishing this must be established to ensure the progress of the telemedicine programs. It is important to consider the patient's experience in dealing with the technological aspect of teleconsultation so that any limitations and strengths can be identified. The following are some proposed aspects of the process:

- Secure environment
- Informed consent
- Patient satisfaction
- Contingency plans and risk management

Hidden costs: These are the costs to the patient (indirect expenses in accessing the service, such as connectivity charges) and costs of accessing a place to conduct the teleconsultation (a café, a library with internet service, etc.).

III. Digital environment

Technological infrastructure: The quality of the consultation will depend partly on the device (desktop or mobile device) that the patient uses to connect, as well as its processing capacity, operating system, and (where applicable) battery life.

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[3] **Secure, Interoperable Patient Portals with Quality Data**

Connectivity (type and quality): This refers to the type of connection the patient uses, e.g., broadband, 3G, 4G. Also important is the type of internet contract, for example, whether it is a single monthly home plan, a plan that charges based on usage, one that is shared among different families, a public connection, etc. All this information will be important when identifying possible problems in accessing the service.

Security, confidentiality, and data protection: Since multiple platforms are used by different care providers, issues regarding security, confidentiality, and data security vary, so patients should be educated on how to identify basic issues, in order to ensure that they are operating in secure environments.

Usability: The main considerations concerning usability are the design of the application, its difficulty or ease of use, whether it is intuitive or requires training, whether the required steps are well defined, and whether potential errors are easy to identify and correct.

Messaging: Having a messaging system for effective communication with patients increases the dependability of accessing telemedicine services.

IV. Human resources

Defining roles and creating new professional capacities (education and support for patients in using new technologies): In the care process, new skills (both professional and others), could help patients overcome difficulties in accessing services. These new roles should help smooth pre-consultation preparation so that on the day of the appointment, the consultation will run smoothly.

V. Regulatory issues

General regulations: Each country or region needs to consider current regulations as they relate, for example, to informed consent, bioethics, and good teleconsultation practices and guidelines. Consideration should also be given to what happens when teleconsultation occurs outside the jurisdictional limits where the health professional practices. Another important issue is the potential impact of any relevant malpractice clauses the insurer may have.

Integration: Many digital health applications lack integration. This is a common issue and can be seen in the dissemination and rapid advancement of services provided under the telemedicine modality, each with its own IT solutions, and with differing degrees of integration and

interoperability with other platforms, such as electronic medical records, patient portals, and public health subsystems (epidemiological surveillance, immunizations, cancer, etc.). People using these services can encounter different providers, different platforms, and different ways of navigating, using and accessing the services.

VI. <u>Expertise</u>

To ensure proper implementation of telemedicine services, it is critical to have advanced knowledge of the following factors: the patient's socioeconomic level, age group, gender, family composition, ethnicity, geographic location, disability, living environment, and any additional factors relevant to the particular circumstances. Consideration should be given to conditions, such as hearing loss, blindness, etc. so that the platform is suitable for use by all.

What are some of the critical factors in ensuring the success of telehealth?

Understanding, from the patient's perspective, the range of factors involved in telemedicine is important in tailoring the process to people's needs. PAHO's Telemedicine Services Implementation Framework poses a series of questions that should be considered regarding patients as end users. When designing a telemedicine program, it is important to know what specific health problems it can address, their prevalence and geographic scope, the health needs of patients, and what services patients most often seek when accessing hospital care. This information will be useful when designing the program.

What are the main ways of facilitating telehealth?

Institutional decisions and foundational bases

- Telemedicine services should be incorporated as a formal modality, subject to institutional norms, policies, and processes, to ensure that they effectively address patients' needs.

- Patients' perspectives should be considered in establishing standard operating procedures.

- Mature, clear, unified processes should be in place to facilitate interaction between the system's various users and to ensure that there is the flexibility to adapt to situations that may arise.

- Digital health applications should consider usability, navigability, and accessibility.

Communication and dissemination of the program

- The telemedicine program should be disseminated widely, and patients should be aware of the services it provides, how to access them, what platform to use, and what security regulations are in place.

- Patients should be informed of the basic requirements for accessing a teleconsultation, and,

ideally, they should be able to do a trial run before actually using the service.

- A document should also be prepared to inform patients, in simple language, about details of how the service works, and explain informed consent.

- It is important for patients to understand what a teleconsultation is *not* (emergency care, consulting on warning signs, etc.).

- Patients should perceive telemedicine as key to any consultation and be able to access the services they need from remote locations.

- In institutions that provide teleconsultations for more than one clinical service, the process for accessing a consultation should, with minimal exceptions, be standardized.

- Ideally, there should be personal health portals, to provide background information during teleconsultations. In cases where no such portal exists, it is recommended that the patient have a way of identifying the institution (a particular image, colors, logo, etc.) so that it is easy to confirm that they are in the right virtual environment.

- It is worth clarifying what we mean by a successful teleconsultation. Health professionals and patients must be able to see and hear each other clearly. The various possible ways for the provider and patient to interact should be presented (visual link only, with communication by chat; talking only, with no visual link; communicating by phone, etc.). It is also important that the patient have a clear description of the terms and conditions.

Scheduling

- Ideally, the scheduling system should largely follow the traditional patient scheduling process, thus building trust and a sense of security.

- Patients should be able to clearly distinguish whether what has been scheduled is an in-person or virtual visit (teleconsultation).

- The minimum requirements to access the service (connectivity, type of device, etc.) should be clearly stated, and the approximate length of a possible delay should be indicated.

- The patient should be informed of the times required for the teleconsultation (pre-consultation, waiting time, length of consultation).

Prior to the consultation

- The process for patients to authorize their teleconsultation should be clearly indicated and aligned with the insurer's requirements. Since insurers have different procedures for in-person visits and teleconsultations, these differences should be clarified so that this does not lead to the patient losing his/her turn on the day of the consultation.

- Once the consultation is confirmed, it is recommended that the patient be sent clear access instructions, and, if possible, an opportunity for a trial run. Information about the basic requirements, such as connectivity and the required operating system, should be provided, along with a reminder to have a sufficient battery for the entire consultation.

- Recommend that, to the extent possible, the patient choose a suitable place for the consultation, ideally where there is privacy, quiet, access to the Internet, and an electrical connection, in addition to good lighting.

- The patient should be informed of the estimated waiting and consultation times.

- In Latin America and the Caribbean, many patients pay to have internet access for the consultation. Systems should take this into account, and, for example, establish offline waiting times, with a means of notifying the patient when the health care provider is ready to begin the consultation (connection-saving mode).

- Alternative contacts should be confirmed, such as a contact telephone number or other means of communication, to allow for possible contingencies.

Consultation

- The patient identification process should be adapted to the virtual-care setting.

- Administrative procedures should also be adapted to the requirements of each health insurer.

- Once patients are entered into the system, they need to understand the concept of a virtual waiting room, know the approximate waiting times, and be ready to respond when the provider becomes available. Notification systems are ideal, as they streamline this process and avoid possible distractions.

- For teleconsultation, some patients will need help from their family members or caregivers. This situation should be anticipated so that these helpers can be involved in the care process. Their support will often be virtual and take place from a separate location. Ideally, they should be provided access to teleconsultation.

- Care should be provided in a secure and confidential environment, as similar as possible to an in-person consultation. Ideally, providers will access the system from the electronic health record (EHR); or, if the telemedicine program is not integrated with the EHR, they should at least have access to it, to have the information needed for the consultation. Patients will access the consultation from their personal health portal, or from the applications established for this purpose. Communication between EHR and portal should be tested, and proper functioning confirmed.

- If there is a problem that could occur frequently, both the provider and the patient should know in advance what steps to take. Examples include turning off the cameras and using only the audio, communicating via chat, or placing a phone call.

- The process should accommodate privacy concerns (with appropriate information provided to the patient regarding privacy- and security-related behavior, based on current ethical and legal principles).

After the consultation

- Teleconsultations are like any other consultation. The patient should have a clinical note or progress report entered in his or her clinical record, regardless of the method of communication used.

- Patients should be able to access their prescriptions and test results from their personal health portal. Some benefits are lost if patients are not also able, subsequently, to remotely access prescriptions, certificates, or instructions.

- There should be a provision for follow-ups.

- If the patient needs to be transferred to the hospital for in-person care, a coordinated process should be established, since the patient is already in the care process. Patients should not be made to start all over again when they arrive at the healthcare facility.

- There should be success indicators to assess the program and to correct potential problems.

How is this program related to the Information Systems for Health (IS4H) Initiative?
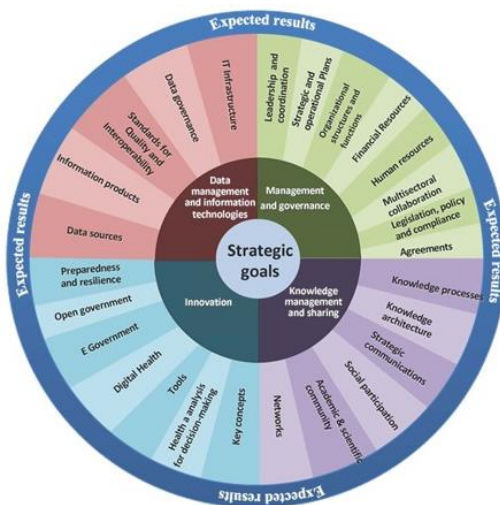
Telemedicine is innovative. The maturity model proposes the use of digital health tools to transform care models, improve patient safety and quality of care, promote people's approach to health, and focus on the way health services and health care are provided by virtual means.

Digital health technology makes it possible to manage people's health and respond quickly to incidents (crises, flare-ups, follow-ups, etc.) and to public health emergencies. It allows people to manage their own health and interact proactively with healthcare providers. At the same time, it gives health workers access to data and tools that facilitate real-time decision-making. The hope is that telemedicine will reach a state of maturity in which countries have telemedicine programs with nationwide networks.

How does this relate to PAHO's Eight Principles for Digital Transformation of Public Health?

In mid-2020, the United Nations endorsed eight areas of collaboration for establishing technical cooperation in the age of digital interdependence, based on the recommendations of the High-Level Panel on Digital Cooperation. PAHO has adopted and adapted those areas to eight principles, to reflect the imperatives of Digital Transformation of the Health Sector: (1) Universal

connectivity; (2) Digital goods; (3) Inclusive digital health; (4) Interoperability; (5) Human rights; (6) Artificial intelligence; (7) Information security; and (8) Public health architecture.

Principle 2: Digital goods

To strengthen the health and well-being of the world's population, digital goods must include open-source software, standards, algorithms, data, applications, and content designed with the appropriate architecture and licensing. These attributes should allow scaling them in diverse populations and contexts, in addition to applying the appropriate local adaptations. Responsibility and sustainability will always prevail, thinking of a user-centered design, especially in vulnerable populations with special needs in terms of technology and digital literacy. One of the measures in this principle concerns aligning different technological solutions with specific health needs. Solutions should be technologically appropriate to the social, cultural, environmental, and economic conditions of the settings in which they are to be implemented. Telemedicine is intended to be a solution that fulfills these requirements.

Principle 3: Inclusive digital health

This principle involves moving with ever greater speed towards inclusive digital health, with an emphasis on people in situations of increased vulnerability. Leaving no one behind in the digital age requires not only reaching the population groups that are the most vulnerable socially, economically, geographically, and culturally, but also people and population groups that are not digitally literate. ICTs have the potential to reduce health inequalities by giving people access to digital information and to tools for prevention and care when required and in the appropriate format. Digital inclusion involves providing appropriate access, digital skills, usability, and navigability when developing technological solutions. All of this should foster inclusion, always with respect for the autonomy of people and population groups, including those who, despite availability, actively decide not to use digital services. This principle, in its call to action, proposes the inclusion of gender criteria, intercultural perspectives, and the principles of equity and solidarity in actions related to the inclusive digital health agenda. It also supports making use of data to formulate and evaluate interventions, and to identify vulnerable people and population groups and their relation to the virtual world, consistent with the goal, as expressed in this document, of facilitating access to telemedicine.

Where can additional information be found?

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Collaboration:

PAHO/WHO Department of Evidence and Intelligence for Action in Health (EIH)

PAHO/WHO Department of Family, Health Promotion and Life Course (FPL)

PAHO/WHO Department of Noncommunicable Diseases and Mental Health (NMH)

PAHO/WHO Department of Health Systems and Services (HSS)

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