COVID-19 Factsheet Digital Health

Electronic Health Records and Interoperability:
Understanding two key concepts for a better public health response

IMPORTANT NOTE: Stay informed with the latest information on the Coronavirus Disease (COVID-19), available on the PAHO and WHO websites and through your national and local public health authorities.

Why are Electronic Health Records (EHRs) key during a pandemic?

It is critical to have immediate access to patient data in one place, at the right time, and in the right format for quick responses and coordinated actions and decisions, especially for the most vulnerable. Complete and interoperable EHRs allow access and data sharing across the public health system, facilitating better monitoring and reporting of suspected and confirmed cases, treatment regimens, abnormal conditions, and so on. This way of exchanging information is more agile and accurate than a paper-based or “non interoperable” system. It also permits a quicker understanding of a pandemic’s behavior within a given population, and therefore, faster and more comprehensive containment and/or mitigation interventions are possible.

EHRs facilitate the use of telemedicine to monitor positive COVID-19 patients in their homes and continuity of care for patients who are negative and can be treated remotely.

I don’t have that info here. I need to ask my physician. I think I may have a copy.

I have some copies on paper & some pdfs in the cloud. I can ask my physician by phone.

Sure, we can access my personal “patient portal” for information on recent doctor visits, discharge summaries, medications, immunizations, allergies, and lab results.

Most recent laboratory tests? List of current medications?
Allergies?
Vaccines?
Any other relevant information?

OK FOR NOW (a transitory measure, not cyber-secure nor easily shared with health care worker/system)

RECOMMENDED
What are Electronic Health Records (EHRs)?
EHRs are individual records residing in an electronic system that is specifically designed to collect, store, and analyze patient data, and to provide safe access to complete patient information. An EHR system also offers clinical decision support tools and important clinical information for patient care. EHRs offer many benefits over paper records: accessibility, support for multiple views, improved communication between providers, communication with patients, data aggregation, access to knowledge databases, and integration with decision support tools.

What is Interoperability and why is it critical for success?
Interoperability is the ability of different information technology systems and networks to communicate with one another; to exchange data accurately, effectively, and consistently; and to use that information. Simply put, interoperability is being able to access and share a patient’s clinical information no matter where it is stored or how it is formatted. EHR interoperability gives health care workers a holistic view of the patient, and therefore, a much better understanding of their symptoms. It also means that the most appropriate diagnosis can be made according to a patient’s specific health situation, especially important for those in vulnerable situations.

Are countries prepared to use Electronic Health Records during a pandemic?
All Member States of the Region of the Americas endorsed the “Plan of Action for the Strengthening of Information Systems for Health” in October 2019. This plan is based on a collaborative effort between PAHO and the Inter-American Development Bank to promote the adoption of international standards for the exchange of information, knowledge, and data. Although many country systems are not yet ready, all are taking important steps toward interoperability in health.

Considerations of confidentiality and security of Electronic Health Records
Confidentiality, security, and privacy concerns, including unauthorized access and misuse of patient information, data integrity, and failure to comply with protection norms and regulations, should be addressed holistically by health experts, legal authorities, and information technology specialists.

Where can I find technical information about Electronic Health Records?
- PAHO/WHO eHealth Conversations (Pp. 310)
- IDB - Electronic Health Record Systems: Definitions, Evidence, and Practical Recommendations for Latin America and the Caribbean
- What are Electronic Health Records?
- Security Techniques for the Electronic Health Records
- Confidentiality and Privacy of Personal Data

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Acknowledgement: This factsheet was prepared in collaboration with the Inter-American Development Bank (IDB) Social Protection and Health Division; Hospital Italiano de Buenos Aires, Department of Medical Informatics (PAHO/WHO Collaborating Center for Information Systems and Digital Health); Universitat Oberta de Catalunya (PAHO/WHO Collaborating Center for eHealth); Center for Health Informatics, University of Illinois, (PAHO/WHO Collaborating Center for Information Systems and Digital Health); and PAHO Information Systems for Health (IS4H) Network of Experts.