

Electronic Health Records

Advantages, Privacy Concerns and Growing Patient Responsibility

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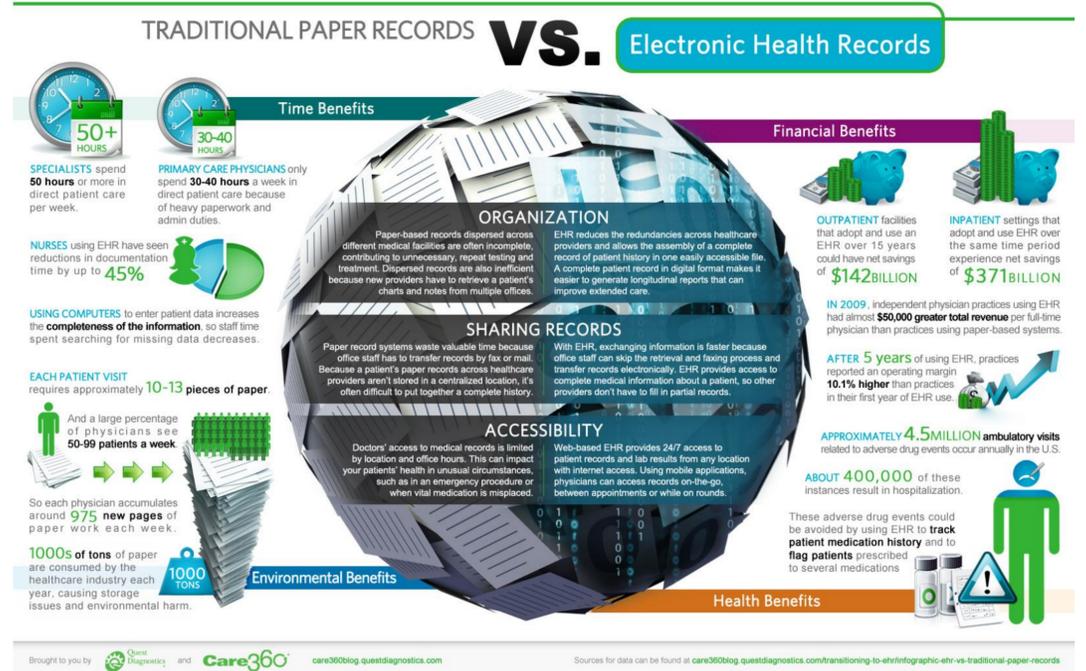
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Electronic Health Records (EHRs) – From Paper to Screen

In health care accurate documentation is essential. The reasons are manifold: Improved quality of care, meeting legal requirements and providing controlling with data are just few of them.

This all used to happen with pen and paper. An endless stream of pages, cryptic handwriting, coffee-stained folders and inscrutable filing systems. Digitalizing the whole process is a natural conclusion.

Implementing an electronic record-keeping system provides challenges: Interoperability between systems, introduction of standard terminologies interpretable by both humans and machines, and highly available networks accessible around the clock.



Advantages of Digital Documentation

For Care Providers	For Patients	For Administration
<ul style="list-style-type: none"> Access to accurate, up-to-date and complete records Secure sharing of information with patients and clinicians Reduction of medical errors and provision of safer care Compliance with legal documentation requirements Vital information can be accessed in case of emergency 	<ul style="list-style-type: none"> Higher accessibility of personal medical history Complete documentation in one, secure space Services, e.g. e-prescriptions, can be called upon remotely Enjoy better care Reduced risk of medical errors 	<ul style="list-style-type: none"> Improved coordination between departments Better quality of care Superior outcomes Easy billing Availability of key data Smoother Process- and Quality-Management

Current Issues

For Care Providers

- User Friendliness

Acceptance for EHRs among medical staff is lacking. The big issue is usability. Too much time is invested by highly trained specialists in filling out forms. Less time is spent in direct contact with patients.

EHRs were built with technical issues in mind, ease of use was a minor concern. Compared to the intuitive use of smartphones, EHRs are severely lacking.

- Varying Interfaces

Medical devices run different software from a range of providers.

For Patients

- Privacy and Data Security

In any digital environment, data security and privacy are a major concern. This is especially true for sensitive patient data. Take a look on the right to find out how Austrian ELGA worked out a solution.

For Administration

- High maintenance
- Investments in IT-infrastructure
- Growing costs

Patient Maturity

As digitalization in health care evolves, more and more data is created by various sources - some of it highly sensitive. Think for example EHRs, health-apps or fitness devices. Patients and app-users are becoming exceedingly aware of the value and delicateness of their created data.

Questions about data responsibility and management are becoming more and more prevalent. Users are getting interested in who is collecting their data and why. Concerns about privacy and data-ownership are voiced.

With the introduction of EHRs patients gain access to their information. Records leave the governance of doctors and hospitals and enter the control of patients, who enjoy more accessibility but who are also met with more responsibility concerning their data.

ELGA – Austrian EHR-Approach

• Legal Framework

- General Data Protection Regulation (EU Reg. 2016/679)
- DSG (Datenschutzgesetz, National Level, BGBl. I Nr. 165/1999)

• Technical Aspects

- Data Storage**
Health data must be stored by the HSP creating it. Technically, ELGA manages the network for data exchange between different HSPs, not storage itself.
- Data Exchange**
Is only done encrypted and via specified medical networks (e.g. Healix, eHlnet, GIN)
- IT-Security Management (ISMS)**
Adapts international security standards and provides safety regulations for different departments

• Privacy Regulations

- ELGA-Data and ELGA-Health-Service-Providers (HSPs)
Strict legal definition of what ELGA-Data constitutes of, and who serves as an ELGA-HSP
- Data-Access Limitation**
ELGA-HSPs can access patient's data only during a limited time frame

• Patient Rights

- Opt-Out**
Opting out of all services connected to ELGA is possible at any time
- Control over accessible Data**
Patients can lock extra sensitive data, e.g. medication lists or single medical reports
- Access Supervision**
Any interactions with ELGA-Data are recorded, logged and fully traceable by patients.

Future Ideas

An adaptable EHR

Many patients track their data voluntarily, e.g. fitness goals or nutrition. An adaptable EHR could offer one place for all health data, and ways to draw relevant conclusions without privacy concerns. Diseases could be detected in early stages.

Usability

Documentation should be automated as far as possible. Virtual assistants can help improve and streamline workflow – imagine documentation happening while doctors are treating patients.

Telemedicine

The ongoing Covid-19-Pandemic showed the need for care being provided remotely. Consultations and routine Check-Ups can happen at home. Medication is already prescribed from distance. Consultations with experts and second opinions are possible with a Skype-call.

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