

ELECTRONIC HEALTH RECORD

Opportunities to harness this technology locally?

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DEFINITION

Definition of EHR

- An **electronic health record (EHR)** is an evolving concept defined as a systematic collection of electronic health information about individual patients or populations. It is a record in digital format that is theoretically capable of being shared across different health care settings. In some cases this sharing can occur by way of network-connected enterprise-wide information systems and other information networks or exchanges. EHRs may include a range of data, including demographic, medical history, medication and allergies, immunization status, laboratory test results, radiology images, vital signs, personal stats like age and weight, and billing information.

http://en.wikipedia.org/wiki/Electronic_health_record

Synonyms

- Electronic Medical Record
- Personal Health Record
- Personal Health Information
- e-Health record

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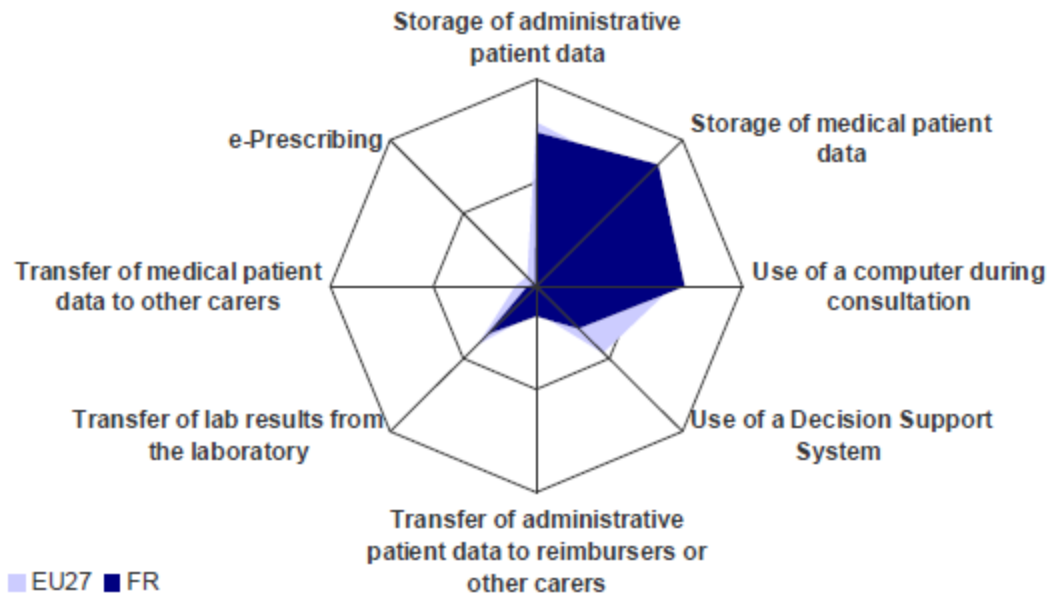
PRIMARY PURPOSE

Primary Purpose

- Store patient data
- Clinical decision support tool
- Electronic Prescribing
- Billing
- Clinical data analysis
- Hospital order form
- Medico-legal record
- Inter-practice communication
 - e.g. radiology, pathology

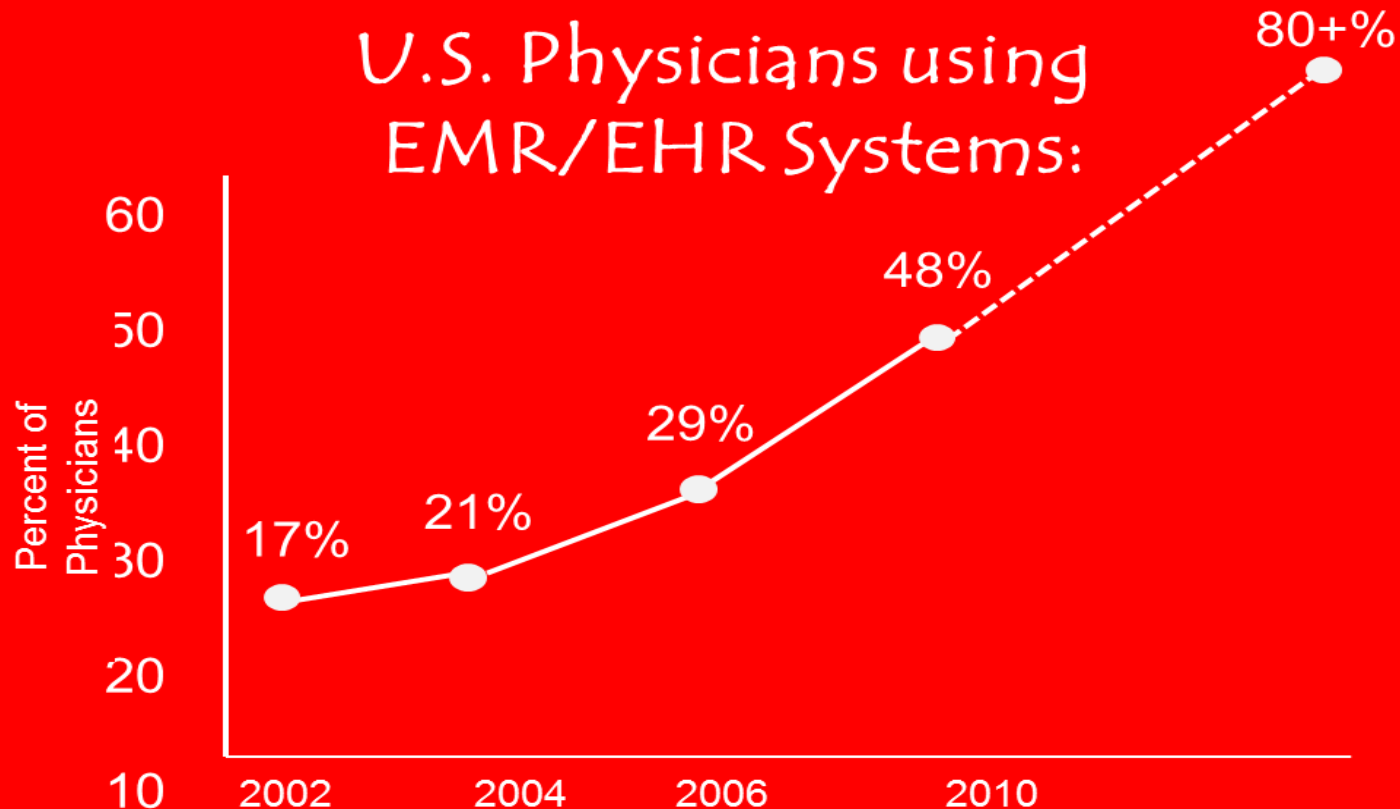


e-Health uses by GPs in France



Indicators: Compound indicators of eHealth use (cf. annex for more information), % values. Source: empirica, Pilot on eHealth Indicators, 2007.

e-Health utilization in the USA



NOTES: “An EMR/EHR system” is a medical or health record system that is all or partially electronic (excluding systems solely for billing). Data for 2001-2007 are from the in-person National Ambulatory Medical Care Survey (NAMCS). Data for 2008-2009 are from combined files (in-person NAMCS and mail survey). Data for 2010-2011 are preliminary estimates (dashed lines) based on the mail survey only.

SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

Voluntary vs Mandatory EHR

- USA regulatory push linked to health reform
- EU directive on e-Health records and patient mobility
- Australian Department of Health and ageing PCEHR

What about RSA?

- Purely voluntary
- Bespoke business solutions
- Driven by commercial needs
- Medico-legal “push”

Advantages

- Efficiency
- Data accuracy
- Real-time claims
- Data portability



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APPLICATIONS IN INSURANCE

Medical underwriting

- Calling for past medical history
 - ✓ Comprehensive record
 - ✓ Habits
 - ✓ Verbatim - not a typed up opinion
- Requirements
 - ✓ BMI
 - ✓ ECGs
 - ✓ Lipograms
 - ✓ Liver function tests
- Individual consideration
 - ✓ Disease progression
 - ✓ Treatment compliance
 - ✓ Quality of care

Insurance Claims

- Non-disclosure
- Pre-existing conditions
- Case management
 - Treatment plans
 - Patient progress
 - Adherence to treatment

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CHALLENGES

Challenges

- Affordability
- Slow adoption
- Interoperability
- Data security
- Incompatibility
- Too much data
- Fragmented records across different providers
- Unrealistic expectations

Challenges

- No regulatory/industry position
- Clinical coding standards
- Development independent of insurance

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EHR IN SOUTH AFRICA

EHR in South Africa

- Well developed
- High penetration (100% pharmacies)
- Exist throughout the healthcare system both private and state
- Data held by:
 - ✓ Hospitals
 - ✓ Pharmacies
 - ✓ Doctors
 - ✓ Switches
 - ✓ Funders

EHR in South Africa

- Fragmented
- Predominantly for billing
- Data ownership challenges
- Demarcation

EHR in South Africa

- RGA is exploring the possibility of mining data from EHR from two independent data switches
- Rationale being:
 - ✓ Well established players with mature systems
 - ✓ Complete claims data by unique claimant ID
 - ✓ Well people do not claim
 - ✓ ICD-10 coding
 - ✓ Benchmarkable with RGA USA study
 - ✓ State of health vs Severity of illness
- Response has been a lot of interest but legal and regulatory concerns

EHR in South Africa

Regulatory and legal concerns

- Who owns the data?
- Individual consent vs group
- POPI
- What benefit accrues to the study subject?
- Commercial gain at other party's expense
- Regulatory body to give the go ahead
 - FSB
 - CMS
 - ?? Who else

WHERE TO FROM HERE?

EHR in South Africa

Current status

- Initial small dummy sample very encouraging
- Still navigating the legal minefield
- Requires “real” business case to outline:
 - Benefit to applicant
 - Benefit to insurer
 - Commercial advantage for data holder
- Any takers?
- Call to action for the entire industry?
- What will happen if this develops further without insurers?

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Thank you for your attention.

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The security of experience.
The power of innovation.