

MINE 2020 OF THE YEAR

EHR System in UK and USA

Dr. Fani Deligianni,

fani.deligianni@glasgow.ac.uk

Lecturer (Assistant Professor)

https://www.gla.ac.uk/schools/computing/staff/fanideligianni Lead of the Computing Technologies for Healthcare Theme

WORLD CHANGING GLASGOW



EHR in the UK and USA

- UK has the largest public healthcare system
 - USA has the largest private sector system



Health Insurance Portability and Accountability Act (HIPPA)

- Sets the rules and requirements for the privacy and security of information
 - Protected Health Information (PHI)
- Rules are set in place for when and how it could be accessed and shared

Health Insurance Portability and Accountability Act (HIPPA)

- Among other things, the act standardizes the digitization of administrative health records for insurance billing
- Simply put: any information which is needed to calculate the cost of a patient hospital visit is stored digitally, to make billing easier
- In order to do this, it sets out rules on how this digital data is to be handled



HIPPA-Privacy Rule

- Healthcare staff must disclose (to the patient) when health records are shared or transferred, and what they are being shared for
- The rules were not applying to any of the businesses with which the healthcare providers were associated.



HIPPA - Security Rule

- Establishes how electronic health records are to be protected
- Uses National Institute of Standards and Technology's (NIST) Cybersecurity Framework
- Requires both physical and electronic security of patient records
- Requires each organization to create their own HIPPAcompliant policy



Health Insurance Portability and Accountability Act (HIPPA)

- BUT this doesn't apply to de-identified information
- In de-identified information names, addresses and birth dates are removed or obscured
- Simply removing direct identifiers does not guarantee the privacy of the subjects



The Institute of
Medicine publishes
recommendations
for the use of
Electronic Health
Records in clinical
care

9661

The Health Insurance
Portability and
Accountability Act
(HIPPA) is published to
standardize the use of
EHRs (with an
emphasis on security)



Medicine publishes recommendations Records in clinical Electronic Health The Institute of for the use of care

Medicine found that 83% A study published in the of physicians did not yet New England Journal of have access to an EHR

system

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(HIPPA) is published to standardize the use of The Health Insurance emphasis on security) Accountability Act Portability and EHRs (with an 1661



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The Affordable health records Care Act (ACA) proper use of published to encourage electronic

0102

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Administration Safety and Innovation Act (FDASIA) published,

safeguarding and advancing public

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0103

5/07

8002

The Health Insurance

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0102

US Food and Drug
Administration Safety
and Innovation Act
(FDASIA) published,
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advancing public

announced which will allow patients

MyHealthED initiative

2018

The Affordable
Care Act (ACA)
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EHRs (with an

21t Century
Cures Act
prohibits
"information
blocking", a
practice which
prevents access
to EHRs

9102

to easily access their own records

407

8002

The Health Insurance

1661



Further Regulations

- Disease/Wellness claims
- Medical Devices
- Clinical Decision Software
- Software Modules



EHR Adoption in UK

- Digitizing patient health records
- Promoting real-time access to EHR
- Promoting interoperability
 - Enable healthcare research

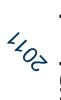


NHS National Programme for IT (NPfIT)



EHR Adoption in UK

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- Enable healthcare research



100% EHR in primary

care, hospitals, community care facilities

\$14.1 billions Costs over





EHR Adoption in UK

- Digitizing patient health records
- Promoting real-time access to EHR
- Promoting interoperability
- **Enable healthcare research**

- Taking healthcare records paperless
- Promote interoperability
- Allow patients to make more informed decisions about their care
- Improve research and enable transparency of research findings through publishing comparative data
- Aims at reducing healthcare costs and improve value

2005

NHS National

for IT (NPfIT)

Programme

40

100% EHR in primary care, hospitals, community care facilities

Costs over \$14.1 billions

×10>

6/05

Personalized Health and Care 2020 (PHC2020)





Summary

- UK followed a top-down approach with government-level contracts
- USA followed a bottom-up approach which dictated the required functionality
- Adaption of Electronic Health Records Systems Requires:
- Ensure privacy of the patient information
- Ensure security of the patient information
- Ensure interoperability

References

- Johnson et al. 'Standardized electronic health record data modeling and persistence: A comparative review', Journal of Biomedical Informatics, 2020.
- Wilson et al. 'Migrating to electronic health record systems: A comparative study between the United States and the United Kingdom', Health Policy, 2018.
- Ozair et al. 'Ethical issues in electronic health records: A general overview', Perspectives in Clinical Research, 2015.