University of Glasgow | School of Computing Science

THE AWARDS 2020 | UNIVERSITY OF THE YEAR

EHR System in UK and USA

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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

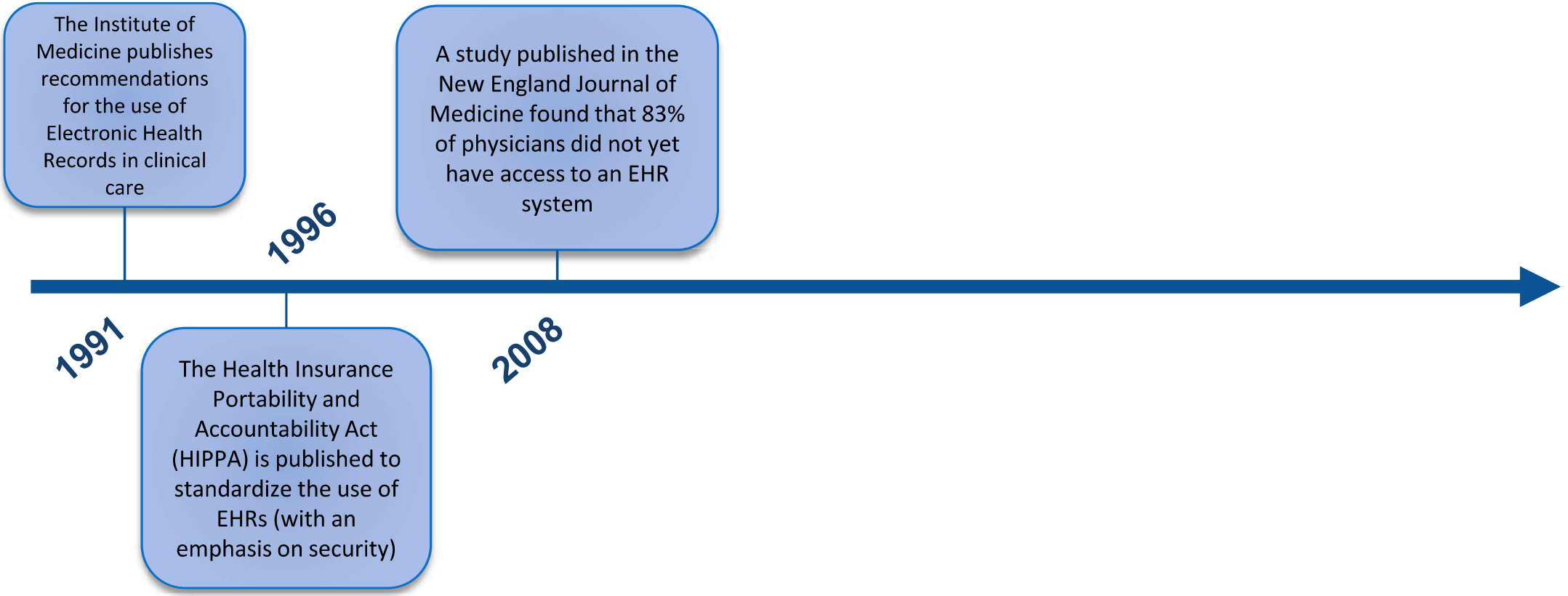
- Establishes how electronic health records are to be protected
- Uses National Institute of Standards and Technology's (NIST) Cybersecurity Framework
- Requires both physical and electronic security of patient records
- Requires each organization to create their own HIPPA-compliant policy

Health Insurance Portability and Accountability Act (HIPPA)

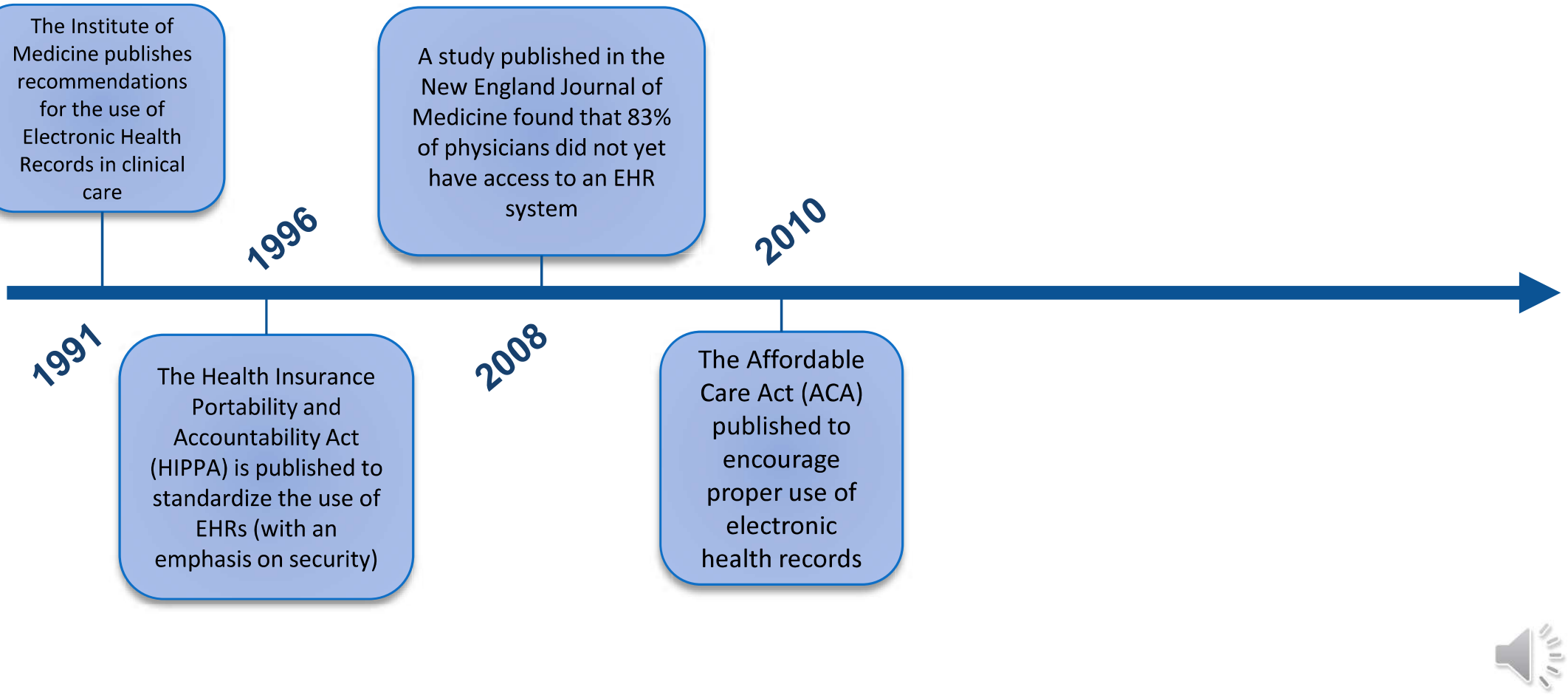
- BUT this doesn’t apply to de-identified information
- In de-identified information names, addresses and birth dates are removed or obscured
- Simply removing direct identifiers does not guarantee the privacy of the subjects

EHR System in USA

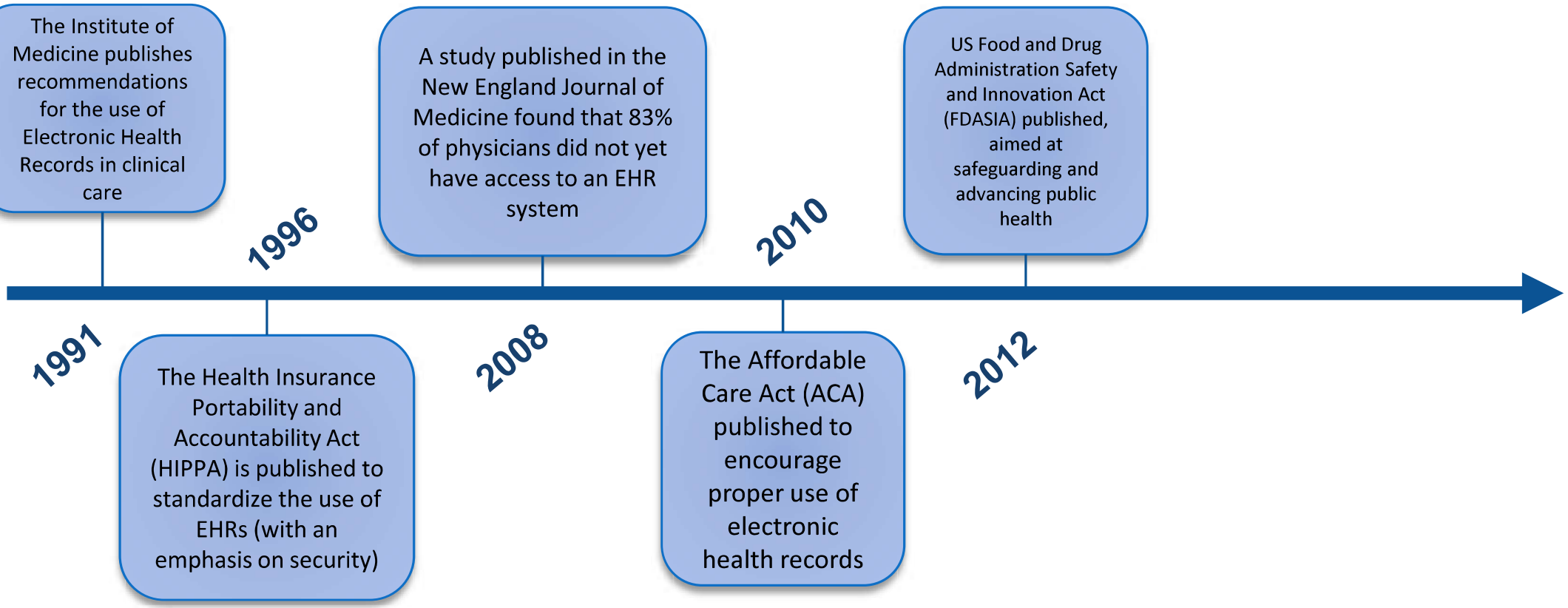
EHR System in USA



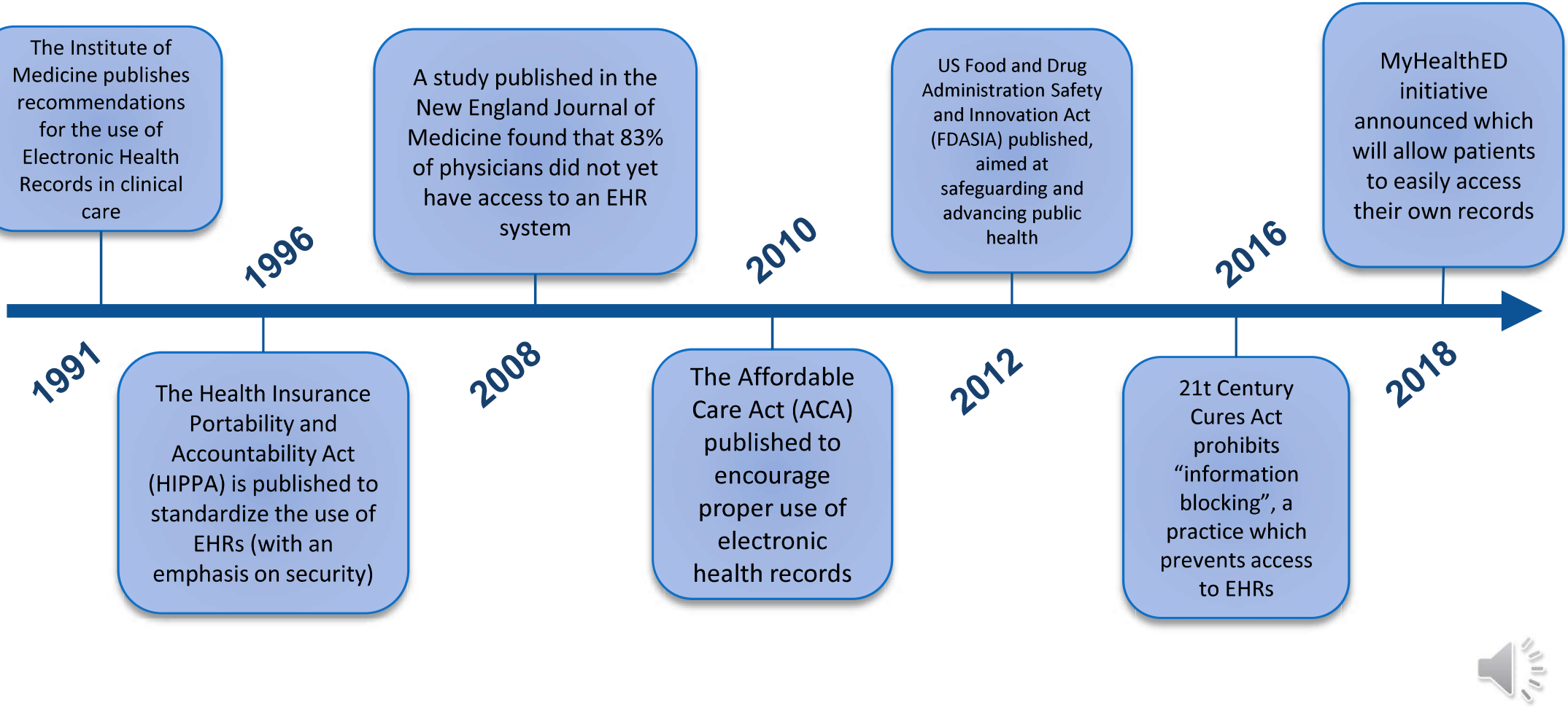
EHR System in USA



EHR System in USA



EHR System in USA



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

2002

NHS National Programme for IT (NPfIT)

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2011

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

Costs over $14.1 billions

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

2002

NHS National Programme for IT (NPfIT)

2011

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

Costs over $14.1 billions

2014

Personalized Health and Care 2020 (PHC2020)

2019

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

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- Ozair et al. ‘Ethical issues in electronic health records: A general overview’, Perspectives in Clinical Research, 2015.