

Privacy and Security Issues of a National Health Information Network (NHIN)

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NHIN

- Achieve nationwide interoperability of electronic health records (EHRs)
- Improve quality care
 - As many as half receive inappropriate care
- Reduce errors
 - Tens of thousands of deaths each year
- Cut costs
 - Estimated \$77 - 300 billion (30% of costs)
- Improve public health
 - Disease control, medical research, medical best-practices, insurance cost

Outline

- Need for Public Support
- Privacy Issues
- Security Issues
- Role of the Federal Government
- Recommendations

Need for Public Awareness and Confidence

- Adoption of Health Information Technology (HIT) lags 5-10 years behind
- NHIN benefits patients
- Adoption requires public support
- Public support requires confidentiality
- Privacy
 - Prevent health insurance and employment discrimination and identity theft
- Security
 - Protect privacy and data

Privacy Regulations

- HIPAA Privacy Rule
 - Protects “individually identifiable health information” held or transmitted by health care providers, health plans, or business associates
 - Details individual rights, permitted uses and disclosures with and without consent
 - Notice of Acknowledgment

Privacy Issues of a NHIN

- Ownership, control, maintenance of EHRs
 - Plans and providers maintain EHRs
 - Stolen information not protected
 - No market for privacy
 - Patient ownership of information
- Opt-in vs. Opt-out System
 - Opt-out is cheaper, but public disagrees
 - Opt-in gives patient control, but may take longer

Privacy Issues of a NHIN

- Role-based access
 - Minimum Data Set
 - Health Level 7 (HL7) EHR standard
 - Continuity of Care Record (CCR)
- Individual privacy settings
 - Gives additional patient control
- Access notification
 - Holds users accountable

Privacy Issues of a NHIN

- Patient identification
 - National Identifier vs. Algorithmic
- De-identification
 - Allows use of data without intruding on confidentiality
- Additional disclosure limits
 - In instances when consent cannot be obtained or is not needed, how long does the user have access?

Security Regulations

- HIPAA Security Rule
 - Creates set of administrative, physical, and technical safeguard requirements that apply to all electronic protected health information, stored or transmitted
 - Includes access controls, audit controls, integrity controls, person/entity authentication, and transmission security

Security Issues of a NHIN

- Interoperability
 - Lack of implementation specifications for credentialing, authentication, software, hardware, encryption, etc.
- Evolving technology
 - Setting technology specifications could leave a NHIN outdated
- Shift to outpatient setting
 - E-prescriptions, at home monitoring
- High costs of maintenance
- No oversight

Role of the Federal Government

- Standards and oversight
 - Interoperability for hardware and software
- System maintenance
 - Large costs and public interest

Veterans Health Administration

- 20 years experience developing and maintaining a health information network
- Works with DOD to develop privacy and security standards
- VistA –automated patient information system
 - Computerized Patient Record System, VistA Imaging, Bar Code Medication Administration
- HealtheVet-VistA
 - Role-based access, audit trails, modular design
- My HealtheVet Personal Health Record System

Consolidated Health Informatics (CHI) Initiative

- A collaboration between Departments of Health and Human Services (HHS), Defense (DOD), and Veterans Affairs (VA) to establish health information interoperability standards
- 20 sets of standards developed by private Standard Development Organizations (SDOs)
- Focused on narrow aspects of health information exchange such as pharmacy transactions and exchange of lab results
- Standards do not yet apply to all storage and transmission of EPHI

Recommendations

- Patient ownership of health information
- Opt-in system
- Role-based access with minimum data set
- Individual privacy settings
- Access notification
- Voluntary Health Care Identifier
- De-identification
- Additional disclosure limits

Recommendations

- Continue CHI initiative to develop standards for every aspect of security
- HHS to review and update standards periodically
- HHS evaluation and certification of compliance
- Track consequences

Questions?