

Working with Health IT Systems

Unit 3: Understanding Information Exchange in HIT Systems



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Objectives

- Identify entities that are commonly involved in HIT system data exchange
- Explain the need for standards and why they exist
- Define and differentiate between vocabulary, content exchange, and privacy and security standards
- Compare current efforts to facilitate health information exchange between providers, communities, regions and nation (NHIN, HIEs, NHIN Direct)

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Types of Information Exchange



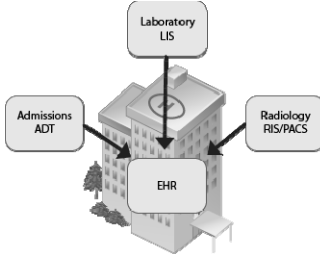
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- Exchange of information between systems used by a single health care organization
- Exchange of information between HIT systems of 2 or more different organizations/entities

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Types of Information Exchange

- Exchange of information between systems used by a single health care organization



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Types of Information Exchange

- Exchange of information between HIT systems of 2 or more different organizations/entities

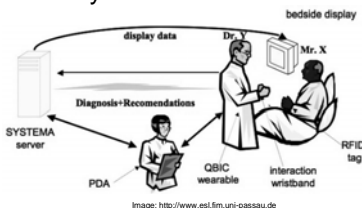
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Information Exchange Use Case

- Picture or animation here showing a journey of an individual through the healthcare system



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"Meaningful Use" and HIT Information Exchange

- Incentive program will require:
 - Demonstration of interoperability
 - Share electronic data with patients
 - eRx
 - Quality measures reporting to CMS/States
 - Drug formulary checks
 - Medication reconciliation
 - Summary of care records for transfers/referrals
 - Immunization reporting to registries
 - Syndromic surveillance reporting to public health agencies
 - Lab results reporting to public health agencies
 - Patient reminders
 - Direct patient access to their record in an EHR



Image: www.nyacp.org

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Interoperability of Systems

- Proprietary vs. standard methods of exchange
- Why are standards important?

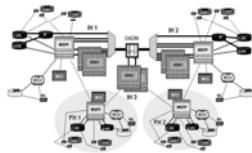


Image: <http://jtc.fhu.disa.mil>

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Types of Standards

- Vocabulary, content exchange, and privacy and security standards (including transport standards)
 - Vocabulary: code sets, ICD-10-CM, SNOMED CT, LOINC
 - Content exchange: HL7, CDA R2, CCD, ASTM, CCR
 - Privacy/security: AES encryption, IPsec, TLS, Transport: SOAP, REST

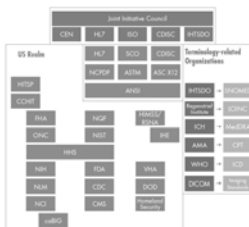


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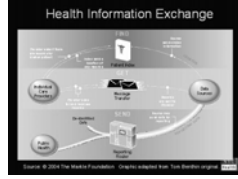
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HIE Initiatives

- Health Information Exchange (HIE)
"The electronic movement of health-related information among organizations according to nationally recognized standards."¹
- HIO, RHIO
- Examples: HealthBridge, Indiana HIE, CareSpark, MedVirginia
- NHIN



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Unit 3 Summary

- Entities that are commonly involved in HIT system data exchange
- The need for standards and why they exist
- Vocabulary, content exchange, and privacy and security standards
- Health information exchange between providers, communities, regions and nation (NHIN, HIEs, NHIN Direct)



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References

- National Alliance for HIT Report to the ONC on Defining Key Health Information Technology Terms (April 28, 2008)
http://www.hhs.gov/healthit/documents/m20080603/10_2_hit_terms.pdf
- National Library of Medicine HIT standards
<http://www.nlm.nih.gov/healthit.htm>

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