mHealth Security Working Group

Orientation Meeting
Oct 3
Agenda

• Background
• Subgroup Orientation
  – Problem description
  – Scope of work
  – Relevant guidance
• Discussion
  – Level of Interest
  – Focus Topics
• Resources and information links
Background

• Mobile Health Work Group
  – Mobile Health is the use of mobile devices in collecting, community and clinical health data, delivery of healthcare information to practitioners, researchers, and patients, real-time monitoring of patient’s vital signs, and direct provision of care (via mobile telemedicine)

• Mission
  – The HL7 Mobile Health Work Group creates and promotes health information technology standards and frameworks for mobile health
Logical Relationships

- EHR
- PHR
- mHEALTH

10/3/2012
Areas of Security Emphasis

• Entity Authentication
• Entity Authorization
• Entity Access Control
• Patient Access Management
• Non-Repudiation
• Secure Data Exchange
• Secure Data Routing
• Information Attestation
• Patient Privacy and Confidentiality
• Data Retention, Availability and Destruction
• Auditable Records
• Synchronization
• Extraction of Health Record Information

Ref: Electronic Health Record-System Functional Model, Release 1.1, June 2009, Chapter Five: Information Infrastructure Functions
“Mobile” Computing Differentiators

• Location Aware
• Network QoS is an issue
• Device characteristics
  – Confined screen area
  – Sensitive to power usage
  – Hand held in many cases
• User Interface
  – Touch oriented
  – Speech driven
• Variety of platforms
  – BYOD versus “hard wired’
  – Embedded medical devices
• Transactions are “interactive”
Problem Description

• Mobile health involves communication between smart phones, laptops, mobile devices and their servers.
• Devices can be BYOD or hard wired
• Mobile health will encompass medical devices as well as user held terminals
• Security and privacy are becoming critical issues for health informatics systems
• There is abundant guidance provided by government and industry, but limited deployment and examples
Scope of Work

• This subcommittee will focus on the security aspects of mobile health. Specifically:
  – Communication between devices
  – Storage and retrieval of information from endpoints
  – User protection and privacy

• Rather than developing new standards, the objective will be to capitalize on existing efforts, guidance and implementations and identify relevant standards, trends, and guidelines that affect product development

• Concentrate on US developments

Goal

• Produce product development and deployment guidelines for mobile health informatics devices and systems
mHealth Security Subgroup

Discussion Points

- Level of Interest in the group
- Focus (what do we want to work on?)
- Deliverables (what makes sense in the next 3 mo.
  6 mo.
  1 yr.

Next Steps
Relevant Guidance

• HL7 Security Working Group
• Medical
  – HIPAA
• Government
  – NIST
  – Office of National Coordinator for Health Information Technology
• Professional
  – HIMSS
• Industry Groups
  – OASIS International Health Continuum (IHC) TC
Resources and Links

• HL7
  – www.hl7.org/Special/committees/secure/index.cfm
• HHS
• NIST
  – http://healthcare.nist.gov/
• http://www.oasishc.com/
• HIPAA Audit Program: