HL7 Mobile Health WG
Review of ONC ISA 2016

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What is ISA and Why does it Matter?

- ISA = Interoperability Standards Advisory
- ONC’s list of “best available standards and implementation specifications” for various “interoperability needs” (not all functionality)
- Includes items in regulation/certification
- Forward-looking to items that may be required in the future (e.g., FHIR)
- Can influence in the industry to move in a direction
- Written from a platform-agnostic viewpoint (very little is said about MH at this time)
MH-Specific Themes

- cMHAFF raises MH-app-specific interoperability needs not otherwise included in ISA
  - Level 2 – Device-connected wellness app, where PHI may flow from device (e.g., BP) to phone to PHR (or EHR?)
  - Level 3 – EHR-integrated app (e.g., disease management), where PHI may flow from device to phone to EHR for physician monitoring

- MFHAST
  - There is a need for greater consideration toward the development of standards related to interventions that utilize text messaging mediums.
  - “Short message” almost certainly excludes certain standards, e.g., CDA, v2

- FHIRFrame
  - Seeks to address the lack of interoperability across mobile apps.
Revisions to ISA - 1

- Do “adoption level” and “implementation maturity” ratings need to be adjusted for MH separately from overall adoption level? -- Yes

- Assume that vocabulary standards are equally valid in MH space? But are there new vocabularies needed (e.g., device types, protocols)? Need to add consumer-friendly vocabularies

- Does UDI apply to mobile medical devices (if not smartphones)? Is unique device identification needed for non-implanted devices? Yes, needed

- Is e-prescribing over mobile devices real, or a future need? Can it use existing NCPDP standard?
Revisions to ISA - 2

- How should data provenance from mobile devices be handled, especially if data flows from device into EHR/PHR? Is CDA DPROV applicable? FHIR Provenance resource? **Very important**

- Are there special Usability considerations or standards for MH that differ from EHR usability, due to device type or consumer users? **Yes, but Usability is not the focus of ISA**

- ONC’s request for interoperability needs (Question 7 on p.68) is focused on PCHA/Continua devices using IEEE 11073. What about needs for other device types (e.g., smartphones and tablets?) **Need to add!**
Security considerations for smartphones

- Overall, how is the trust relationship established?
- Data at rest
- Access to smartphone services (camera, mail, messaging, contacts, location)
- Download/install apps,
- Built-in strong authentication
- Are there changes to ISA’s “security patterns?” e.g., p.23 – secure communication, secure message router, authentication enforcer, authorization enforcer, etc.
- Note: ISA does not purport to select best available security standards, though stakeholders have requested it

General question for each standard: “How does this apply (or not) in MH space(s)?”
Conclusion

- Is there sufficient consensus to submit a MHWG response to HL7? **Yes!**