



Session 1.2 Additional Standards Needs for the NHIN Initiative



Moderator: John D. Halamka, MD, MS
Presenter: Lee Jones



Background

The first three national use cases detailed some needs for standards for the overall NHIN infrastructure as well as for specific functionality related to

- **Electronic Health Record - Labs**
- **Biosurveillance – Aggregate data transferred to public health entities**
- **Consumer Empowerment – Registration and Medications**

As the Health Information Technology Standards Panel did its work, and as the NHIN prototype architectures become more apparent, inevitable gaps have been identified where additional standards are needed to support the NHIN



Charge to the group

To help achieve the NHIN vision for interoperability, what are some specific, functional needs for standardization?

- **Technical standardization (how to transmit problem lists among providers)**
- **Semantic standardization (how to prevent redundancy on problem lists i.e. Hypertension, High Blood Pressure and Elevated Blood Pressure are reduced to one concept)**
- **Process standardization (how to activate a treatment protocol for all patients with a blood pressure greater than 140/90)**



Technical Standards needed

- **Security standards including audit logging and a means to transmit audit logs to those who request them**
- **Secondary uses of clinical data**
 - Clinical Research/Trials (emphasized by many participants)
 - Adverse Event reporting
 - Post market surveillance
 - Population Health
 - Recruitment for trials
 - Outcomes/Health Services research
- **Quality Measures**



Technical Standards Needed

- **Transition of Care documents, including problem lists, text notes such as discharge summaries, and medication reconciliation**
- **Data capture from Clinical Devices**
- **Image capture, storage and exchange**



Semantic Interoperability

- **Implementation Guides which reduce variation and optionality in**
 - Demographics (i.e. Gender)
 - Laboratory
 - Medications
 - Personal Health Records
- **Need more granular diagnostic vocabulary than ICD9 provides and need it used properly by medical records professionals**
- **Need to raise the level of awareness among all stakeholders for the need to capture data consistently and use controlled vocabularies wherever possible. Consider an AHIC/ONC Working group on vocabularies**



Process Interoperability

- **Escalation workflow i.e. if an outbreak is detected, how is it communicated and what are the vocabularies and visual cues used to indicate danger, risk and safety**
- **Non-Use case based security workflow such as federated trust models, role-based access control**



Summary

- **Complete standards needed for the basics of clinical care – problems, meds, allergies, notes, labs, images**
- **Ensure as much semantic interoperability as possible given the nature of the data captured in source systems and technology limitations**
- **Enable secondary uses of this data for clinical research, quality/outcomes transparency, and population health**
- **Continue work of HITSP, NCVHS and AHIC to provide standards and processes which cross all use cases such as security**