

## Med Inf 405

### Session 2 - Study Questions and Answers

**1. What must be in place to achieve health information exchange?**

Patient Identifier; Technology Infrastructure; A working business model; Participants; Funding; Policies; Consent Management; Community Buy-In and Scalability.

**2. What information is typically available to participants of a health information exchange?**

E-Prescribing; Laboratory results; Pathology results; Radiology results; Diagnostic images; Physician's dictation, including history and physical progress notes, and discharge summaries; Inpatient medication treatments; Nursing care documentation; Client demographic information; Client healthcare insurance information; Names of primary and consulting physicians; Long-term health records; Ambulatory care/clinic visits; Public health records; Home health information; Decision support; Quality measurement and reporting services; Telehealth consults; Immunization records; Prescribed medications; vitamins and supplements; and homeopathic remedies.

**3. What benefits are associated with a health information exchange?**

Saves money; Improves outcomes; Improves provider-patient relationships; Streamlines workflow; and provides a positive perception.

**4. What are the different models for a health information exchange?**

- *Community based*. The type is comprised of multiple, unrelated stakeholders.
- *Proprietary*. All stakeholders are either owned by, or affiliated with, a single corporate entity.
- *Federation*. Multiple independent enterprises in a region agree to allow access to information that they maintain, often developing a system to index or locate data. This arrangement affords more direct control over security but with the challenge of dealing with multiple systems.
- *Co-op*. Multiple enterprises agree to share technology, a common data repository, and administrative overhead to create a central utility. This choice is generally favored by smaller enterprises.
- *Hybrid*. This combines federation and co-op networks to allow exchange within and across organizations.

**5. What are the primary features of a community health information network?**

Open communications (interface engine connection between databases, information access; Clinical data repository; Integrated provider & payer decision support; Mechanisms for cost, outcome & utilization analysis.

- 6. What are the obstacles to the long-term success of a health information exchange?**  
Governance; Funding; Competition; Internal policies; Consumer privacy concern; Trust; Legal & regulatory issues; Technology; Scarce human resources.
- 7. What groups will receive the largest annual dollar savings from Level 4 interoperability?**  
Individual hospitals & group practices – 31.8 billion annually
- 8. How will clinical care be improved by improving interoperability between providers and laboratories?**  
By giving clinicians better access to patients' longitudinal test results, eliminate errors associated with verbally reporting results, optimize ordering patterns by making test cost information readily available to clinicians, and make testing more convenient for patients.
- 9. What is a benefit of improved interoperability between outpatient providers and radiology centers?**  
Improves ordering by giving radiologists access to relevant clinical information, thereby enabling them to recommend optimal testing and reduce errors of commission on the part of ordering physicians. It improves patients safety by alerting both the provider and the radiologist to test contraindications. It improves coordination of care for both providers and patients and helps prevent errors of omission by enabling automated reminders to both clinicians and patients when follow-up studies are indicated. It helps the environment by reducing the use of chemicals and paper used in film processing. Reduces redundant tests and saves time and costs associated with paper and film-based processes.
- 10. What is a benefit of improved interoperability between outpatient providers and pharmacies?**  
It enables the formation of complete medication lists; Formulation of complete medical lists (reduce duplicate therapy, drug events, adverse drug therapy, & medical abuse); Drug interactions; Other adverse drug events (ADE); Medical abuse; Automated refill alerts supports medication adherence, insurance forms & drug notifications (recalls); Formulary management & guidelines.
- 11. What is a potential benefit of health care information exchange and interoperability?**  
Patient safety and clinical quality are improved, as systems bring medical record information to the point of care, integrate health information from multiple sources and providers, and integrate DSS tools with guidelines and research results; Patients can gain access to PHI and empower them to better manage their health; Public health system benefits from improved reporting of communicable diseases and real time aggregation of data for bio surveillance and detection of emerging disease patterns; aggregating electronic billing and payment data will facilitate better understanding of healthcare costs; financial benefit from decreasing human involvement in information exchange and reducing redundant procedures.

**12. What are the components of the CITL Healthcare IT Value Framework?**

Financial: cost reduction, revenue enhancement, improved productivity; Clinical: Care advances, improved outcomes; Organizational: stakeholder satisfaction, risk mitigation.

**13. What harmonization issues do implementation guides help address?**

Reduce or eliminate optionality/variability; Reduced or eliminate point-to-point; Improved consistency; Improved security, privacy

**14. Who is involved in IHE?**

Users – Clinicians, Staff, Administrators, CIOs, Gov't Agencies (e.g. NIST, VA, DoD, CDC, CMS)

Professional Societies representing 270,000 individual members: HIMSS, RSNA, ACC, ACP, AAO, ACCE, ASTRO, etc.

Standards Development Orgs (SDOs) – HL7, DICOM, ISO, CDISC, ASTM, W3C, IEEE, IETF, etc.

Vendors & Consultants (e.g., imaging, EHRs, cardiology, medical devices)

**15. Who benefits from IHE's work?**

Patients – Enhanced care, Clinicians–Enhance workflow & reporting; reduce error & rework, Contractors–support interoperability; reduce cost & complexity, Standards Orgs– Immediate feedback; build critical mass & increase adoption, Government–Reduce costs & increase interoperability of EHRs.

**16. What are the IHE domains?**

Pathology, Cardiology, Eye Care, IT Infrastructure, Laboratory, Patient Care Coordination, Patient Care Devices, Quality, Research & Public Health, Radiation Oncology, Radiology (Mammography, Nuclear Medicine).