OHIT Whiteboarding Session 1

November 28, 2011

Agenda

- Welcome – Laura Zaremba
- Introducing InterSystems – Kevin Ferriter
- Whiteboarding session – Ivan Handler
  - Outcome of today's session
  - ILHIE project Milestones
  - ILHIE Testing Strategy
  - Initial Use Cases
- Final Comment Session – Ivan Handler
- Closing Remarks – Laura Zaremba

Welcome

- Where we are today
- First step in a continuous process
- Who is missing?
- Please respect the “parking lot”
- THANK YOU

InterSystems… at a Glance

- Headquartered in Cambridge, MA
- Offices in 24 countries
- Systems in 109 countries (2010)
- Privately owned
- Consistent growth and profitability
- #23 on Healthcare Informatics 100
- Committed to Customer and Partner success for over 33 years

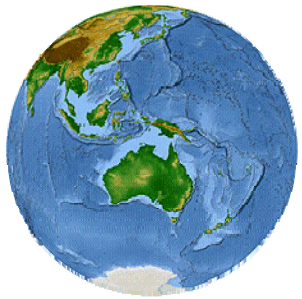
InterSystems in Healthcare

- **North America**: Principally known for core technology products, Caché and Ensemble, upon which major HIT vendors and provider systems build their HIT applications
- **International**: Provider of HIT applications at clinic, hospital, community, regional, and national levels; deployed in 90 countries, multiple languages
- **Combined**: International leader in HIT core technology and point of care applications

150,000 Systems

7,000,000 Seats

90 Countries



Environment scalability

- InterSystems' largest data repository is the European Space Agency (ESA) currently at ~100 TB, tracking 50 billion celestial objects, and is projected to grow to over a PB in the next five years
- Caché was chosen as a NOSQL database with 112k/inserts per second = 9.7 Billion inserts/day
- Healthcare-specific "Big Data" examples:
  - U.S. Veterans Administration – 38 TB database/155,000 users
  - U.S. Military Health System – 18 TB database/55,000 users
  - Partners Healthcare – 12 TB database/20,000 users
  - Kaiser-Permanente – 6 TB database/8,000 users
  - Quest Diagnostics – 8 TB database/35,000 users

What is HealthShare?

InterSystems HealthShare™ is a comprehensive software solution that provides aggregation, de-duplication, and sharing of clinical data among multiple organizations on a regional or national basis.

- ✓Scalable Service-Oriented Architecture
- ✓Rapidly deployable, Prebuilt adapters
- ✓Clinically-relevant, patient-centered data model
- ✓Powerful integration platform
- ✓Standards-based solution
- ✓Proven technology and experience

InterSystems HEALTHSHARE™

HealthShare is successfully deployed in numerous exchanges on the Regional, Statewide, and National level.

InterSystems' ILHIE Team

Ron Sullivan
Vice President Public Sector
rons@intersystems.com

Dan O'Donnell, MD
Senior Advisor for Medical Informatics
dodonnel@intersystems.com

Jeremy Derby
HealthShare Product Manager
jderby@intersystems.com

Kevin Ferriter
Program Manager
ferriter@intersystems.com

Raquel DeCandio
Project Manager
schiu@intersystems.com

Tom Lowry
Sr. Healthcare Account Manager
tlowry@intersystems.com

Dominick Bizzarro
HealthShare Business Manager
dbizzarro@intersystems.com

Mark Bolinsky
Sr. Technology Architect
bolinsky@intersystems.com

So Ling Chiu
Manager, Technical Services
schiu@intersystems.com

InterSystems Partner
CGN & Associates
Latisys

ILHIE Project Milestones

- November 2011 – Engage InterSystems
- December 2011 – ILHIE Direct
- January 2012 – Initial Project Plan
- April 2012 – Initial repository services
- November 2012 – Core Services Complete

ILHIE Testing Strategy

- Need partners to test product
  - Alpha & Beta partners are ready to test now
  - UAT testers
    - State-wide representation (geographic & provider type)
    - Just before final rollout
- Partner recruiting will start asap
- Details to follow

Initial Use Cases

- Selected because
  - OHIT must fulfill federal mandates
  - Relatively simple
  - Involve use of primary repositories
- What we are looking for
  - Impact
  - Schedule
  - Priority
  - Critical refinements

Emergency Room

- Patient arrives at the ER.
- Patient is identified in the Master Patient Index (MPI).
- The patient identifier is automatically sent to the Record Locater Service (RLS) .
- The RLS returns all discovered patient records to
  - The ER's EMR (when an interface exists to that EMR) or
  - To a special Web-based secure viewer supplied by InterSystems Corporation.
- The ER staff then act on the information provided to serve the patient.

Specialist Referral

- Provider decides to refer a patient to a specialist.
- Provider picks the specialist for the referral.
- Provider organization schedules the referral with the patient.
- Provider optionally sends data from provider's EMR to the specialist using the ILHIE.
  - Referral data is integrated into the specialist's EMR.
- Patient arrives at the specialist.
- Specialist may optionally request more data on the patient via the RLS
  - Data is returned to the specialist via specialist's EMR or InterSystems secure viewer.
- Specialist serves the patient.
- Specialist sends a summary of the encounter back to the referring provider.

Quality Reporting

- Provider sends quality report to HFS via ILHIE.
- ILHIE passes the report to the HFS PIP service.
- HFS PIP service determines whether or not the quality report satisfies meaningful use.
- HFS PIP service determines when to issue an incentive payment and notifies the Comptroller's office to issue payment.
- Comptroller's office sends an incentive payment to the provider.

Public Health Reporting

- Provider performs an immunization or determines a patient has a reportable condition.
- Provider send the immunization or reportable condition data to the Public Health Node (PHN) via ILHIE.
- ILHIE passes the data on to the PHN.
- The PHN places the data into any relevant repositories.
- The PHN sends appropriate messages to local health agencies, CDC and/or other authorized organizations via ILHIE.

Discharge/Transition of Care

- Alliance of Chicago Community Health Services

Final Comments

- Other use cases or refinements

Closing Remarks