

# HL7 EHR Interoperability WG Projects in Progress

Co-Facilitators:

Gora Datta, Gary Dickinson

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## 1B – EHR Interop Projects

# ISO TC215

- ISO 16223 – “Standards Convergence to Promote EHR Interoperability”
- ISO TC215 New Work Item Proposal
  - Target: ISO Technical Report
- Status:
  - Approved as Preliminary Work Item by TC215 Plenary, Rio de Janeiro, Brazil, May 2010
  - Experts Identified: Australia, Japan, Korea, Spain, US
  - Ready for 90 day NWIP ballot, starting on or about 1 July 2010
- EHR Interop Leads: Gary Dickinson, Gora Datta

## 2A – EHR Interop Projects

# HL7 EHRS Functional Model R2

- In Kyoto (May 2009) EHR WG agreed to incorporate EHR Interoperability and EHR Lifecycle Models into EHR System Functional Model Release 2
- Status:
  - EHRS/FM Release 2 Draft Revisions Underway
  - Proposed Strategy and R2 Inserts Posted on EHR Interop Wiki
- EHRS/FM R2 Leads: Don Mon, John Ritter, Pat Van Dyke
- EHR Interop Leads: Gora Datta, Gary Dickinson

## 2C – EHR Interop Projects (Tracking)

# RM-ES Profile to EHRS FM R2

- Incorporate Records Management – Evidentiary Support Functional Profile into EHRS Functional Model Release 2
- Explicitly to include Action, Action Record paradigm as per EHR Interoperability and Lifecycle Models
- Status: In Progress
- RM-ES Leads: Michelle Dougherty, Harry Rhodes
- EHR Interop: Tracking Only

## 2D – EHR Interop Projects

# EHR Record Meta-Data

- Discussions underway between EHR RM-ES WG, EHR Interop WG and Structured Documents WG
  - Align EHR Record meta-data between EHR Interop and Lifecycle Models, RM-ES Profile and CDA R3
  - Apply RM-ES Use Cases
  - Ensure EHRS Functional Model R2 = CDA R3 Meta Data
- Leads
  - Structured Docs WG: Calvin Beebe
  - RM-ES: Michelle Dougherty, Harry Rhodes
  - EHR Interop: Gary Dickinson

## 2E – EHR Interop Projects

# Clinical Doc Architecture Release 3

- Proposal to resolve five (5) remaining EHR/IM requirements to CDA R3
  - Result of mapping EHR Interoperability Model requirements to CDA R2 Attributes
  - As Detailed in Implementation Guide for CDA R2, Reference Profile for EHR Interoperability DSTU, published Feb 2008
- Status
  - Proposals Posted to CDA R3 Wiki
  - Potential Incorporation in v3 “Medical Records” Messages
- SDWG Lead: Calvin Beebe
- EHR Interop Lead: Gary Dickinson

## 2F – EHR Interop Projects

# Use Case Alignment Recommendations

- Incorporate Use Case Alignment Recommendations in EHRS FM R2
  - Year 1: Biosurveillance, Consumer Empowerment, Lab Results Reporting
  - Year 2: Quality Reporting
  - Year 3: Remote Monitoring
- Status: Review underway
- Next: Detail in R2 Comparison Spreadsheet
- EHR Interop Leads: Gora Datta, Kim Salamone, Sherry Selover

## 2G – EHR Interop Projects

# Paper/Electronic – Legal Record Continuity

- Show Legal Characteristics of Paper Record and Continuity in Electronic Form
  - Content, Context
  - Continuity over Record Lifespan
  - Method of Replication: Paper vs. Electronic
  - Method of Content Verification
- Status: Draft in Development
- Lead: Gary Dickinson

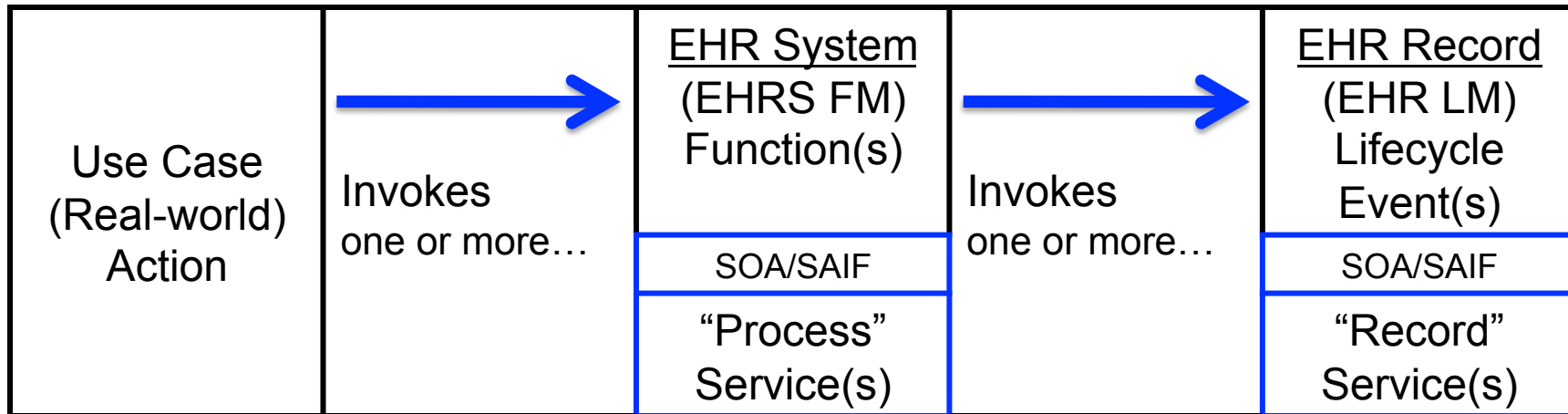
## 3A – EHR Interop Projects

# HL7 SAIF

- To incorporate EHR, EHRS and PHRS Models in HL7 Services-Aware Interoperability Framework (SAIF)
  - EHR and PHR System Functional Models
  - EHR Interoperability and Lifecycle Models
- Collaboration between Technical Steering Committee, Architectural Review Board, EHR and EHR Interoperability WGs
- Status: In Progress
- Next: Develop integration plan as appropriate
- TSC/ARB Leads: Charlie Mead, Paul Boyes
- EHR Interop Leads: Gora Datta, Gary Dickinson

Real-World to EHR System to EHR Record

# Use Case > Function > Event



Process Services	Persistent Record Services			
Action	Action Record Lifecycle Event (per EHR/LM)	Record Instance	State of Action Record Instance	
			Pre-Event	Post-Event
Order Medication	Originate/Retain	1	----	New Instance
Check Interactions Verify Med Order	Verify		Existing Instance	Instance noted as "Verified"
Transmit Med Order (copy to Pharmacy)	Transmit		Existing Instance	Instance noted as "Transmitted"
Order Received (copy in Pharmacy)	Receive/Retain		Existing Instance	Instance noted as "Received"
Dispense Med	Originate/Retain	2	----	New Instance
Administer Med (without incident)	Originate/Retain	3	----	New Instance
Administer Med (after 5 minutes, patient upchucks)	Originate/Retain	4	----	New Instance
	Amend		Existing Instance	Instance noted as "amended" with original + new content

## 3B – EHR Interop Projects – 2011 “Meaningful Use”

# Quality Reporting

- Based on US EHR Incentive Program requirements for quality and performance measurement and reporting
- As per Alignment Analysis, show coverage & gaps WRT
  - Functions of EHR and PHR System Functional Models
  - Relevant requirements of EHR Interop and Lifecycle Models
  - EHR Record content requirements
- Status: Review Underway
- Next
  - Review collection, capture, filtering, analysis and reporting requirements for each proposed measure
  - Identify gaps in process and information
- Leads: Kim Salamone, Gora Datta

## 3C – EHR Interop Projects

# HL7 Diabetes Use Case

- Collaboration between HL7 EHR and Patient Care WGs, Clinical Interoperability Council and others
- Agreed Project Scope specifies EHR Interoperability Use Case Templates (as employed in ONC/AHIC Use Case analysis) in parallel with HL7's DAM, DIM approach
- Status: Use Case Templates and examples offered to Diabetes Team and discussed on several Team calls
- Next: Build Out Use Case Scenarios, Events and Actions in Template, associating Data (elements, templates) with each (Action)
- Leads: Don Mon, PhD (EHR WG), Crystal Kallem (Clinical Interoperability Council)
- EHR, EHR Interop Leads: Pat Van Dyke, Gary Dickinson

## Global Interoperability Standards Projects

1B ISO TC215 – “Standards Convergence” Work Item

## EHR/PHR Record & System Level Interoperability

2A EHRS Functional Model Release 2 – Incorporate Interoperability and Lifecycle Models

2C Records Management/Evidentiary Support

2D Record Meta-Data

2E HL7 Clinical Document Architecture Release 3

2F EHRS FM R2 – Incorporate Use Case Alignment Recommendations

2G Paper vs. Electronic – Legal Record Continuity

## Implementation Projects

3A HL7 Services-Aware Interoperability Framework (SAIF)

3B Quality Reporting – 2011 Meaningful Use Criteria

3C HL7 Diabetes Use Case

EHR Interoperability WG

# Reference Point

[http://wiki.hl7.org/index.php?title=EHR Interoperability WG](http://wiki.hl7.org/index.php?title=EHR_Interoperability_WG)