

HIE in EMS Summit

NEMSIS V3 Implementation/Interoperability and HL7

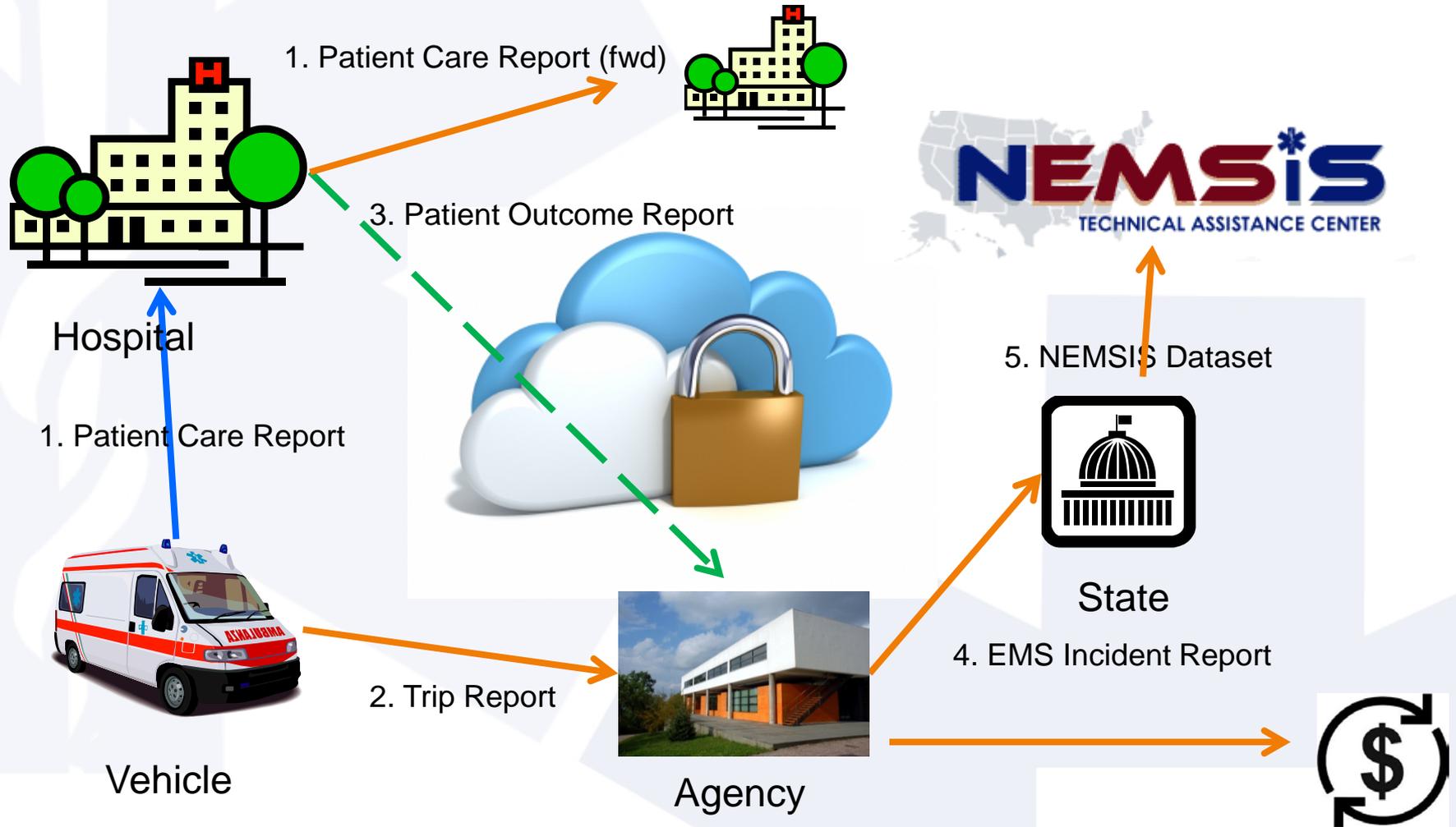


What we will Cover

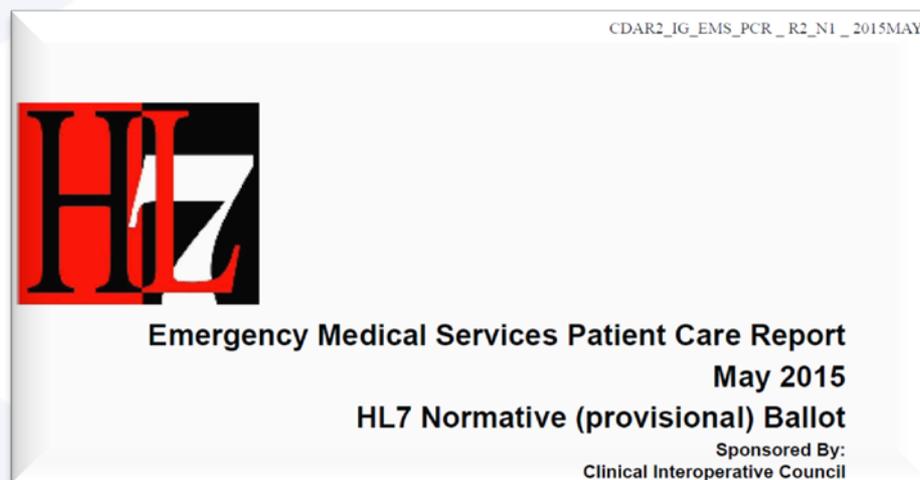
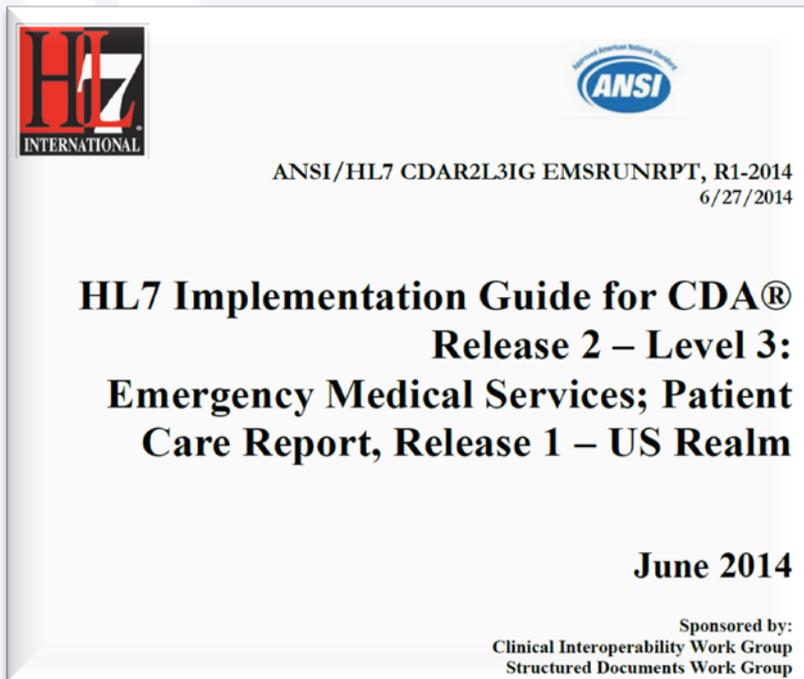
- **Field Data Exchange (Alert, File)**
- **Hospital Outcomes Exchange (Reconcile)**
 - **Reworking V3 eOutcomes**
- **Questions?**



NEMSIS HI7 Exchange Standard!



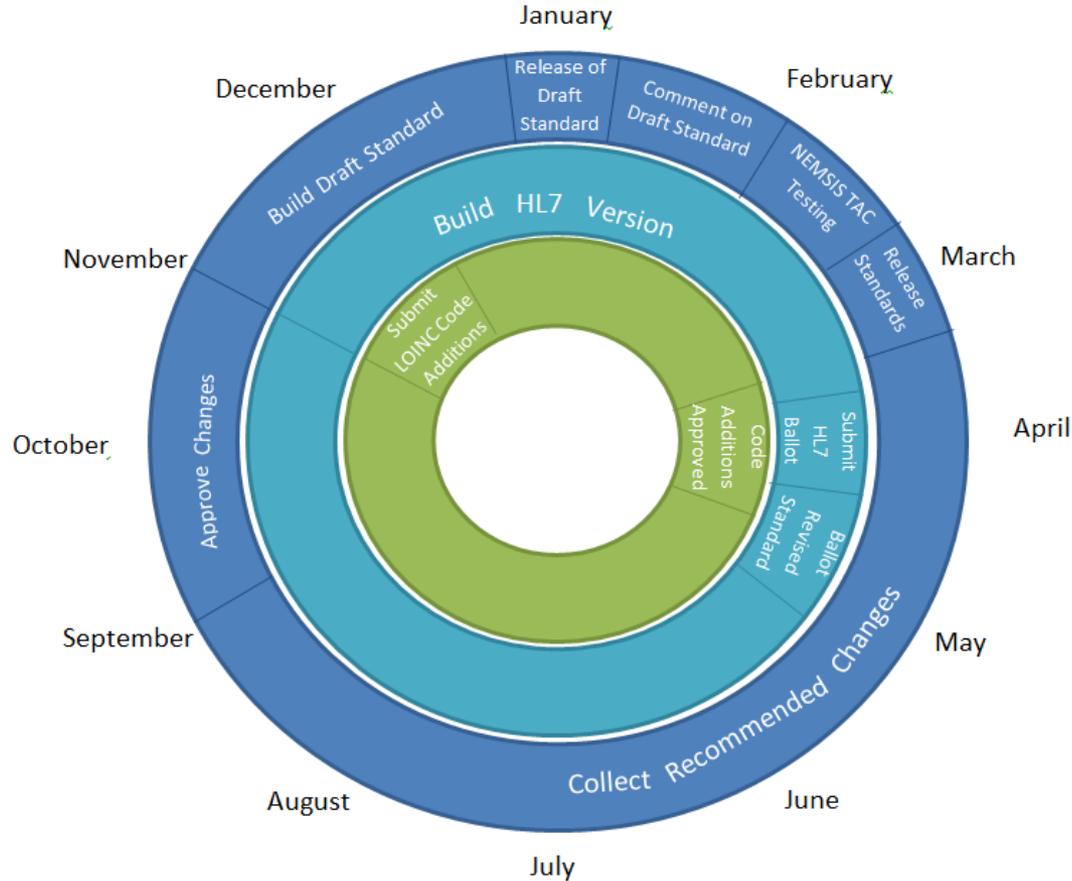
NEMSiS Field CDA!



http://www.hl7.org/implement/standards/product_brief.cfm?product_id=276

Revision Process

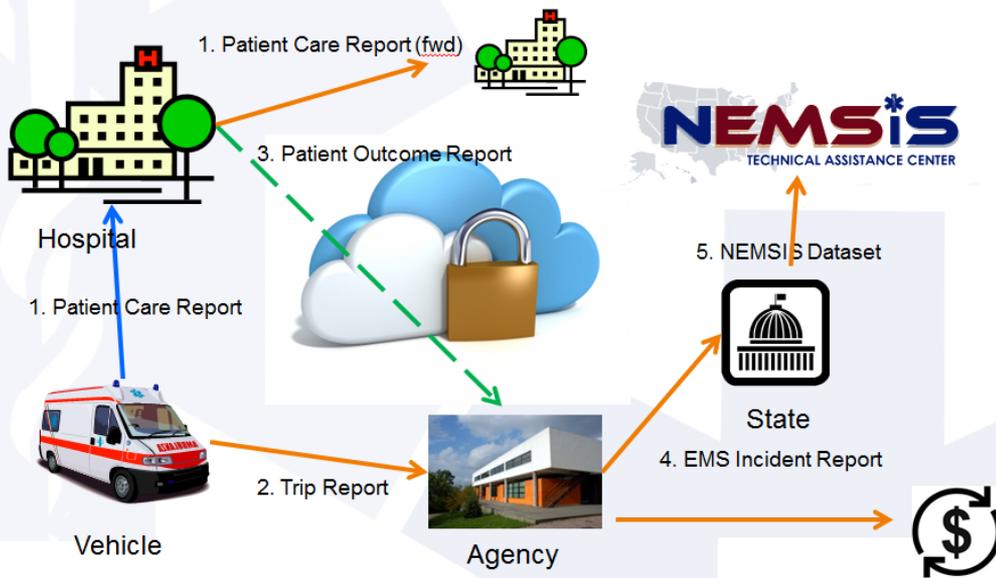
NEMSiS Development Cycle



- NEMSiS
- HL7
- SNOMED, LOINC

Reworking eOutcomes

- Submitted C-CDA (Hospital Outcomes)
 - Passed...EMRs said would never use it!
- Back to the Drawing Board?



CDAR2_IG_EMS_HOSPOUTCOMESRPT_R1_D1_2016JAN



HL7 CDA® R2 Implementation Guide: Emergency Medical Services Hospital Outcomes Report, Release 1

January 2016

HL7 DSTU Ballot

Sponsored by:
 Clinical Interoperability Work Group
 Emergency Care Work Group
 Structured Documents Work Group

Legend	Dataset Level: N National S State D Deprecated
	Usage: M = Mandatory , R = Required , E = Recommended, or O = Optional
	Attributes: N = Not Values , P = Pertinent Negatives , L = Nilable, and/or C = Correlation ID

eOutcome

1 : 1	eOutcome.01 - Emergency Department Disposition	N	S	R	N, L
1 : 1	eOutcome.02 - Hospital Disposition	N	S	R	N, L
0 : M	eOutcome.ExternalDataGroup				C
0 : 1	eOutcome.03 - External Report ID/Number Type			O	
0 : 1	eOutcome.04 - External Report ID/Number			O	
0 : 1	eOutcome.05 - Other Report Registry Type			O	
0 : 1	eOutcome.06 - Emergency Department Chief Complaint			O	
0 : 1	eOutcome.07 - First ED Systolic Blood Pressure			O	
0 : M	eOutcome.08 - Emergency Department Recorded Cause of Injury			O	
0 : M	eOutcome.09 - Emergency Department Procedures			O	C
0 : M	eOutcome.10 - Emergency Department Diagnosis			O	C
0 : 1	eOutcome.11 - Date/Time of Hospital Admission			O	
0 : M	eOutcome.12 - Hospital Procedures			O	C
0 : M	eOutcome.13 - Hospital Diagnosis			O	C
0 : 1	eOutcome.14 - Total ICU Length of Stay			O	
0 : 1	eOutcome.15 - Total Ventilator Days			O	
0 : 1	eOutcome.16 - Date/Time of Hospital Discharge			O	
0 : 1	eOutcome.17 - Outcome at Hospital Discharge			O	

eOutcome

The Office of the National Coordinator for
Health Information Technology



Implementing Consolidated-Clinical Document Architecture (C-CDA) for Meaningful Use Stage 2

ONC Implementation and Testing Division
April 5, 2013

Scenario: A patient is experiencing severe knee pain and is referred to a Orthopedist by their Primary Care Provider (PCP). The PCP needs to generate a summary document to provide to the Orthopedist.

- The Continuity of Care Document (CCD) Document Template was the **best fit for the clinical workflow** in this scenario
- Many of the Transition of Care data requirements were met using the C-CDA document template.
- Additional sections were added as necessary to meet outstanding data requirements.

CDA Document Header

CDA Document Body

US Realm Header

Sections

Allergies
Encounters
Functional Status
Immunizations
Medications
Plan of Care
Problem
Procedures
Results
Social History
Vital Signs



Potential Focus

- 2016 Software Meeting
 - Use of CCD (or Discharge Summary)
 - Suggested set of elements?
 - National, State and Optional?
- Vendor Examples
- Available Structures
- EHR Representation



Adding Terms

V3 Nat'l DMC Comments	V3 Procedure SNOMED (Background) Term	V3 SNOMED (New) Code	DMC Suggested Labels with Categories	DMC Suggested Labels with Procedure Name Only
<p>ADD THIS TERM TO SNOMED: Request new procedure "Insertion of esophageal tracheal single lumen supraglottic airway" This is for King and any other single Lumen devices on the market now</p>	NEED ADDITION IN SNOMED	Pending Creation	Respiratory: Supraglottic Airway Insertion (Single Lumen)	Supraglottic Airway Insertion (Single Lumen)
<p>ADD THIS TERM TO SNOMED: Request new procedure "Intubation using Bougie Device" This is a techniques EMS does and we have specified for LMA and Stoma</p>	NEED ADDITION IN SNOMED	Pending Creation	Respiratory: Intubation (Orotracheal Using Bougie Device)	Intubation (Orotracheal Using Bougie Device)
<p>ADD THIS TERM TO SNOMED: Request new procedure " External ventricular defibrillation using automated interpretation device" Other Automatic Defibrillator Procedure seemed to be referring to an AICD specifically</p>	NEED ADDITION IN SNOMED	Pending Creation	Cardiac: Defibrillation (AED)	Defibrillation (AED)

Injury Risk Factor

Value Set	InjuryRiskFactor
Code System	LOINC - 2.16.
Definition	Circumstance affecting likelihood of injury

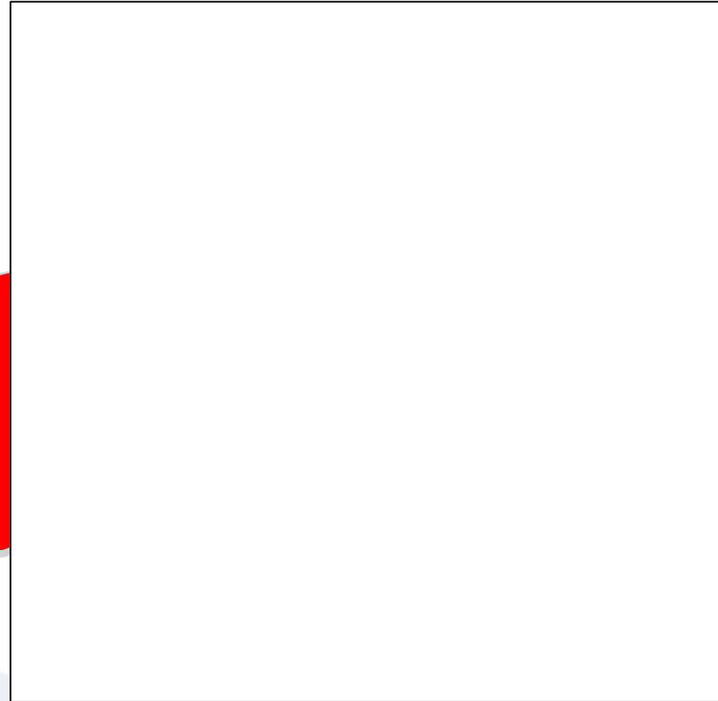
Code	Code System	Print Name
LA17348-6	LOINC	Fall adults: > 20 ft. (one story is equal to 10 ft.)
LA17349-4	LOINC	Fall children: > 10 ft. or 2-3 times the height of the child
LA17350-2	LOINC	Motorcycle crash > 20 mph
LA17352-8	LOINC	Crash death in same passenger compartment
LA17353-6	LOINC	Crash ejection (partial or complete) from vehicle

Barriers to Exchange Implementation

- **ePCR: Field to Hospital- Hospital to Agency**
 - **Slow uptake by varied hospital EMRs**
 - **Interest only in consumer requests**
 - **Interpretations of HIPAA Privacy Rule**
 - **What is a “covered entity”**
 - **State privacy rules/interpretation**

Barriers to Exchange Implementation

- **NEMSIS with Out-of-Hospital Datasets**
 - Differences among SDOs (Oasis vs. HL7)
 - Harmonization through versioning
 - Absence of national standards
 - Commercial interests
 - Lack of Momentum among Professional Orgs
 - State focus on linkage
 - “Safety in Silos”
 - State privacy rules/interpretation



Beyond Health Level 7

- **Harmonization with other Standards**

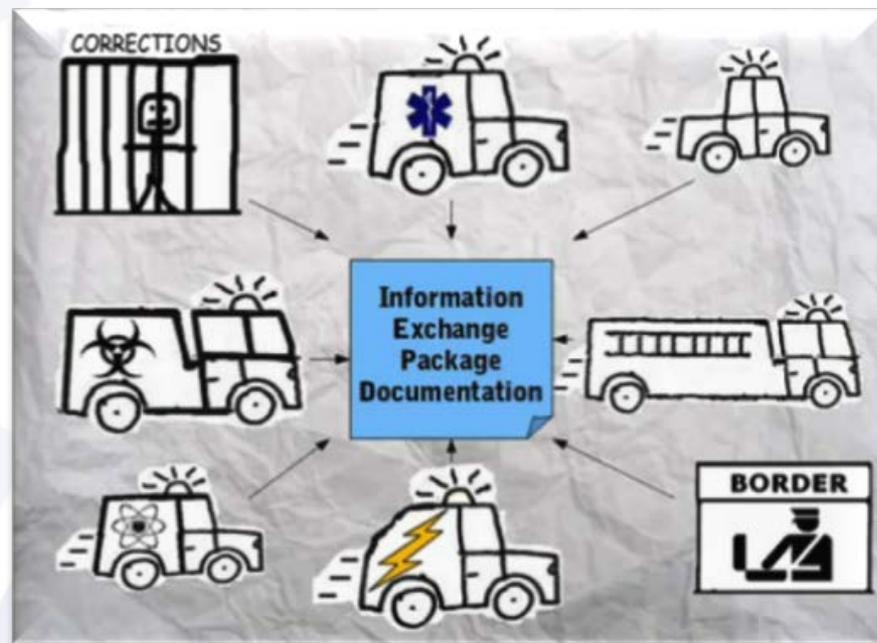
- Justice Domain
- EDXL-TEP
- NIEM

- **Facilitate Standards**

- CAD
- Medical Devices
- AACN (VEDS)

- **Additions?**

- Air Medical
- Critical Care
- Community Paramedicine & Mobile Integrated Healthcare



Questions

