



The Road to Meaningful Use: An Alternate View

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HIMSS13 Interoperability Showcase
Tuesday, March 5, 2013
11:30 AM – 12:00 PM
Session IS20

Meaningful Use?



Meaningful Use!



EXECUTIVE SUMMARY

Big data, incrementally structured

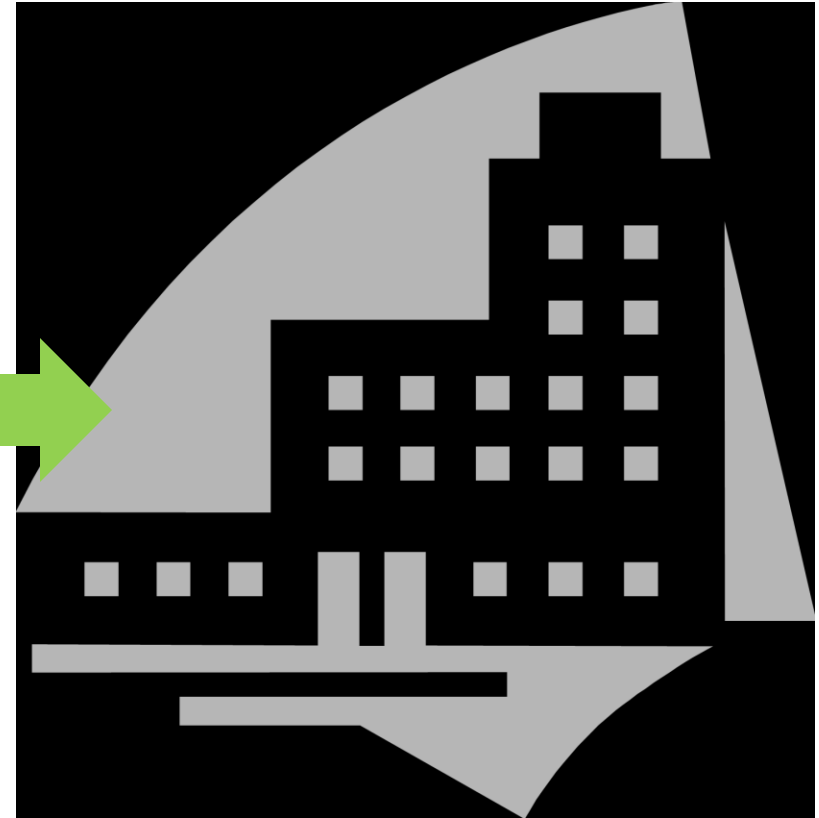


THE CHALLENGE

The Health Story Challenge



A physician's practical need for fast and easy (30 sec) methods of creating clinical documentation



The enterprise need for structured and coded information capture to support meaningful use

THE SOLUTION

There is Structure in All Clinical Notes

Discharge Summary	
Patient	Ned Nuclear
Date of birth	Novemb
Contact info	6666 Ho Ann Arb Tel: (78
Document Id	999021
Document Created:	March 3
Author	Henry S
Contact info	1002 H Ann Arb Tel: (78

Hospital Course

The patient was admitted and ruled out for myocardial infarction on the Cardiolite scan. The report is not available at this time. The

Hospital Discharge Diagnosis

Unspecified chest pain

Hospital Discharge Medications

Medication	Dosage
Lisinopril	5 mg
Atenolol	25 mg

I note that this patient has been on Prednisone for adrenal insufficiency in the past.

```

*****
Hospital Course - Required
*****
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nitroglycerin paste. The patient had serial cardiac enzymes and
was ruled out for myocardial infarction. The patient underwent a
dual isotope stress test. There was no evidence of reversible
ischemia on the Cardiolite scan. The patient has been ambulated.
The patient had a Holter monitor placed but the report is not
available at this time. The patient has remained hemodynamically
stable. Will discharge.</text>
- <entry>
- <observation classCode="OBS" moodCode="EVN">
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Incrementalism Works for the Internet



Google

HL7 CDA: Incrementalism

1. Get the data flowing, get the data flowing, get the data flowing
2. Incrementally add structure, where valuable to do so

THE MEDQUEST HOSPITAL
DISCHARGE SUMMARY

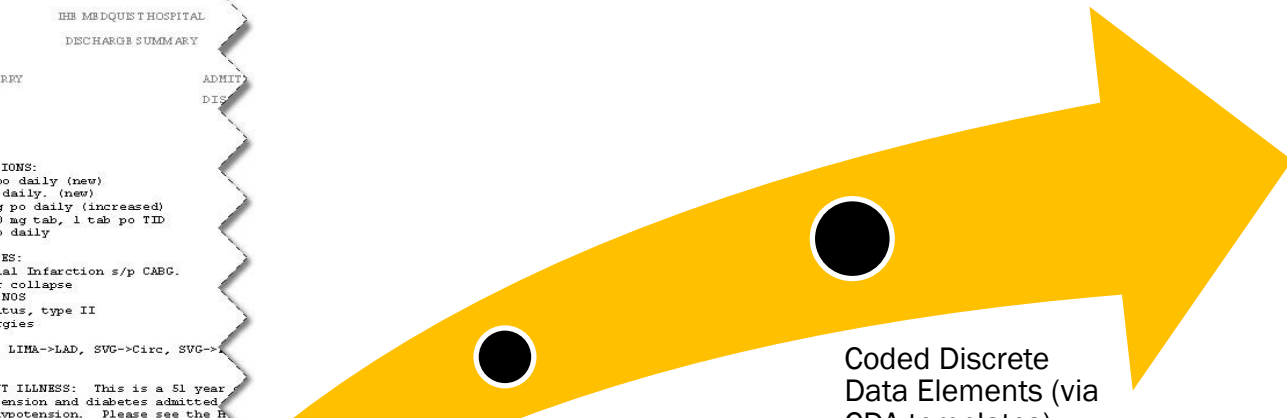
PATIENT: DOGOOD, LARRY ADMITTED:
MR#: A1234567 DISCHARGED:
ACCOUNT #: 1234567

DISCHARGE MEDICATIONS:
1. ECASA 325 mg po daily (new)
2. Zocor 40mg po daily. (new)
3. Atenolol 100mg po daily (increased)
4. Glucophage 850 mg tab, 1 tab po TID
5. Zyrtec 10mg po daily

DISCHARGE DIAGNOSES:
1. Acute Myocardial Infarction s/p CABG.
2. Cardiovascular collapse
3. Hypertension, NOS
4. Diabetes Mellitus, type II
5. Seasonal Allergies

PROCEDURE: CABG, LIHA->LAD, SVG->Circ, SVG->Circ
2/26/07.

HISTORY OF PRESENT ILLNESS: This is a 51 year old male with a history of Hypertension and diabetes admitted with a 2 day history of chest pain, and hypotension. Please see the H&A for details of admission. He was noted to have non-ST segment elevation and positive cardiac enzymes on presentation and admission to the CCU.



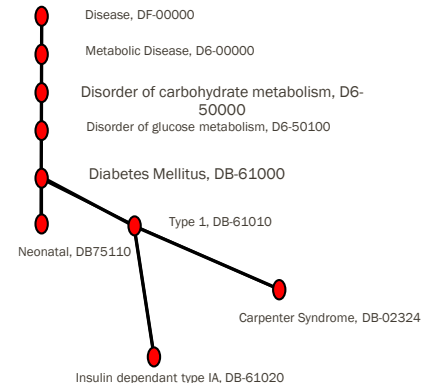
Narrative
Text

HL7 CDA Structured
Documents

Coded Discrete
Data Elements (via
CDA templates)

SNOMED CT

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            <paragraph>2. Cardiovascular collapse </paragraph>
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Quality
Reporting

Decision
Support

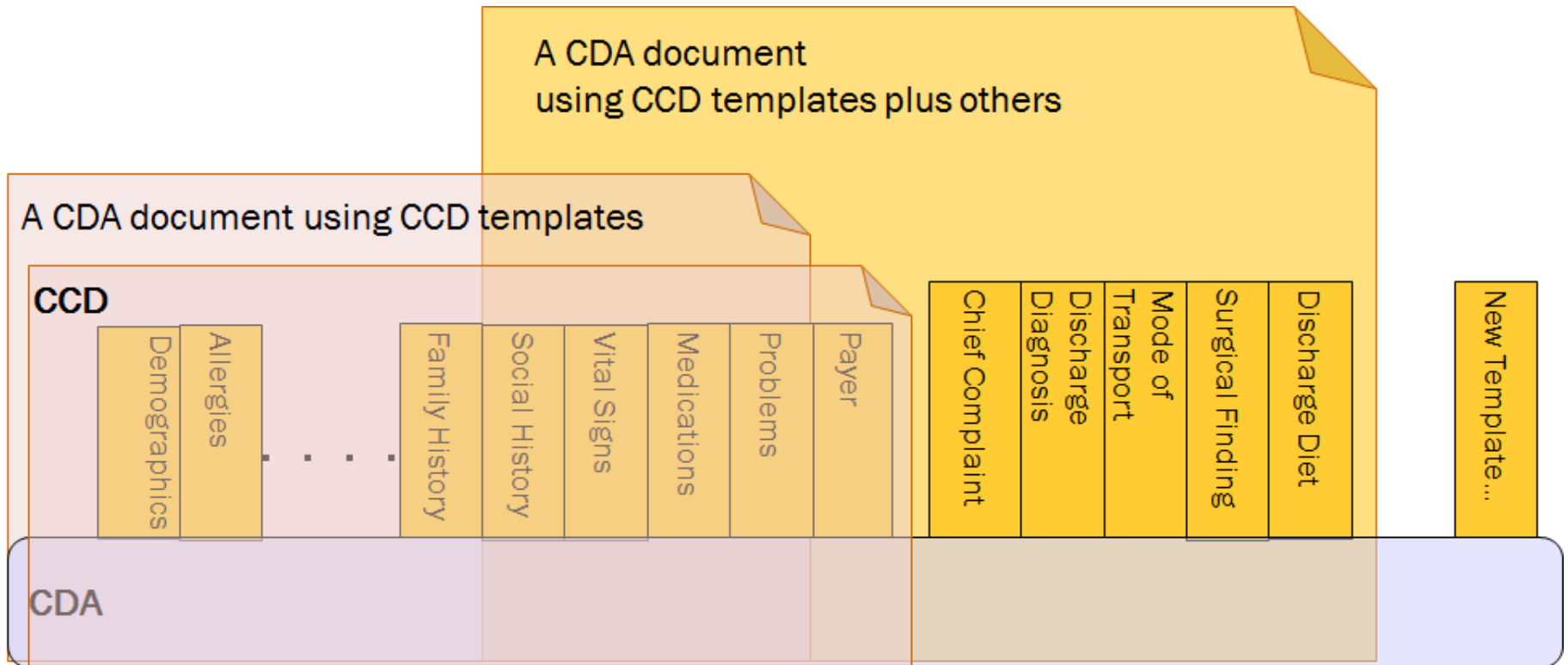
Clinical
Applications

Meaningful Use!

Templated CDA

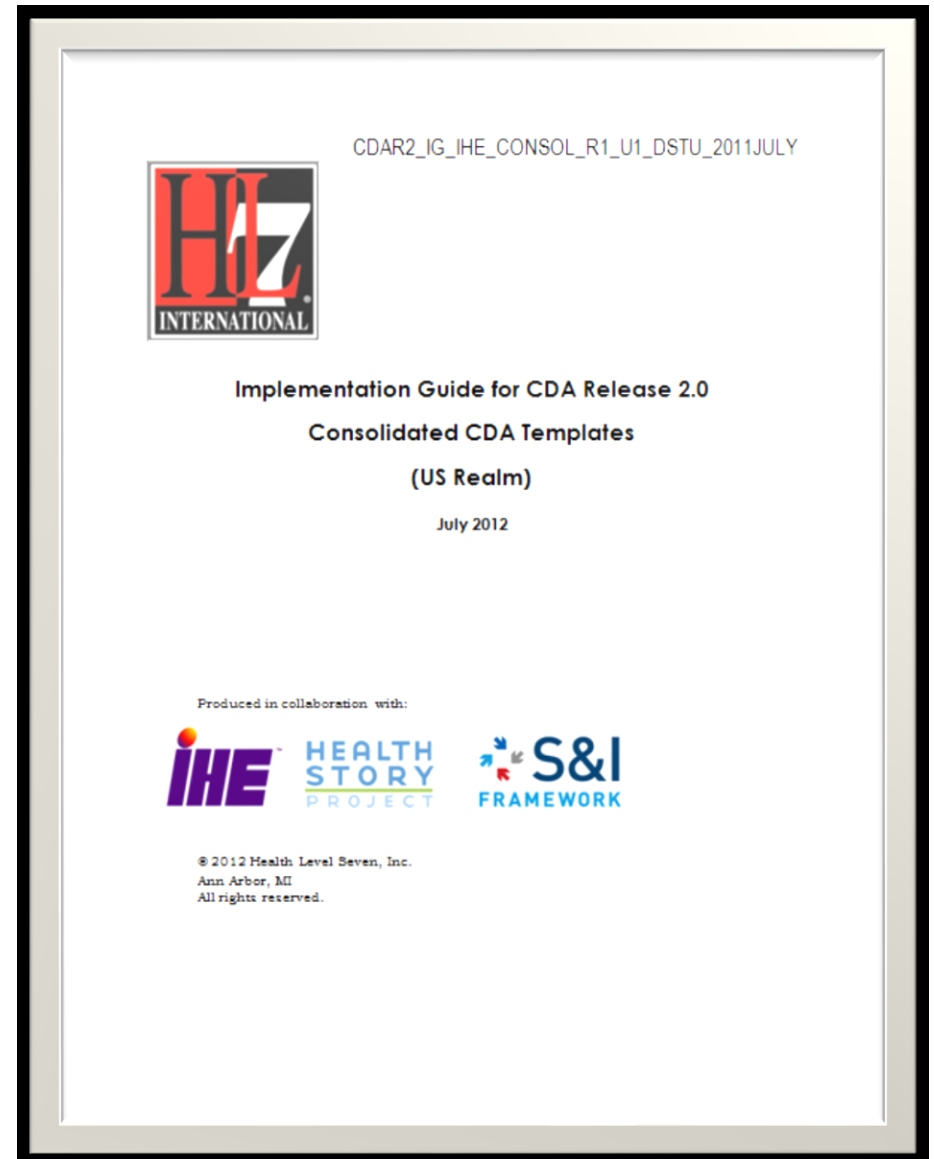
Many different kinds of documents.

A bucket of reusable templates.



Many different kinds of documents:

- CCD
- Consultation Note
- Diagnostic Imaging Report
- Discharge Summary
- H&P
- Operative Note
- Procedure Note
- Progress Note



Health Story → Meaningful Use

Meaningful Use	Health Story Interoperability Strategy
✓	Delivers common clinical documents to the point of care
✓	Standardizing document types and sections today makes it easier to agree on data elements tomorrow
✓	Incrementally adding key data elements into narrative is attractive to clinicians
✓	Partial structuring facilitates natural language processing

Health Story's path to Meaningful Use

- Hit the ground running with basic CDA, to meet the needs of front line clinicians
 - Incrementally layer discrete data elements into CDA documents

ABOUT THE HEALTH STORY SHOWCASE

HIMSS Health Story Project



- Non profit, industry alliance
- Founded 2007
- Associate Charter Agreement: HL7 
- Sponsored HL7 standards for common clinical documents (8!)
- Member organizations provide direction
- *New: Integration with HIMSS*
- www.healthstory.com
- Leverages HL7 Clinical Document Architecture / templated CDA

Care Theme: Innovations

Health Story: New Approaches for Coordinating Long-Term and Cancer Care

HIMSS

Interoperability Showcase

In collaboration with IHE

Use Case 17

Primary Goal: Cancer care is complex and crosses institutional boundaries many times. This story illustrates how innovations in interoperability for oncology and long term care can coordinate care and improve patient safety.

Key Points: Standards

- HL7 Consolidated Clinical Document Architecture standard (C-CDA)
- DRAFT standards proposed for C-CDA:
 - Clinical Oncology Treatment Plan and Summary
 - *sponsored by The American Society of Clinical Oncology (ASCO)*
 - Surrogate EHR Environment (SEE) Transfer of Care Implementation Guide
 - *sponsored by IMPACT (Improving Massachusetts Post-Acute Care Transfers), an ONC grant-funded project*

Key Points: Tools

- Full spectrum of data capture from document imaging to speech understanding to light weight editor to Meaningful Use certified EHR to NLP
- Connectivity through secure messaging and health information exchange

Meaningful Use Relevance (MU Objectives):

- Improve care coordination
- Improve quality, safety, efficiency, and reduce health disparities

HIMSS Interoperability Showcases™

In collaboration with Integrating the Healthcare Enterprise [IHE]

HEALTH
STORY
PROJECT

Care Theme: Innovations

Use Case 17: New Approaches for Coordinating Long-Term and Cancer Care

Clinical Workflow:



1. PCP



2. *Oncology, Surgery*



3. Tumor Board



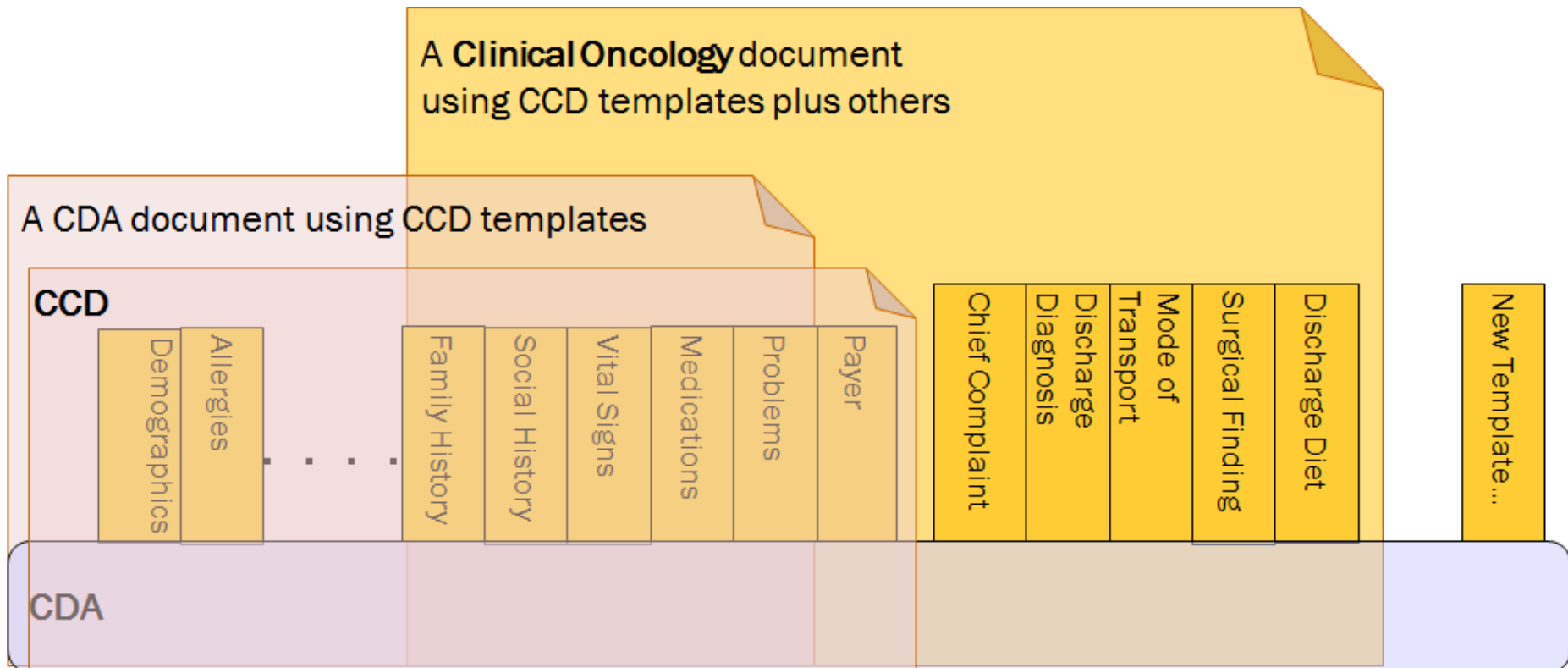
4. Visiting Nurse

1. Patient visits PCP to review Mammogram Report.
2. *Patient visits Surgeon, Oncologist; Diagnosis is made, surgery indicated, Mastectomy performed*
3. Tumor Board reviews case and documents cancer treatment summary which is distributed to PCP and Home Health Agency
4. Visiting Nurse sees patient at home, uses prior documents and produces a Long Term Care Transfer Summary

Templated CDA Revisited

Many different kinds of documents.

A bucket of reusable templates.



THANK YOU!