



# CAQH CORE Attachments Webinar Series Part 3

## Clinical Document Metadata

Thursday, November 2, 2017

2:00 – 3:30 pm ET

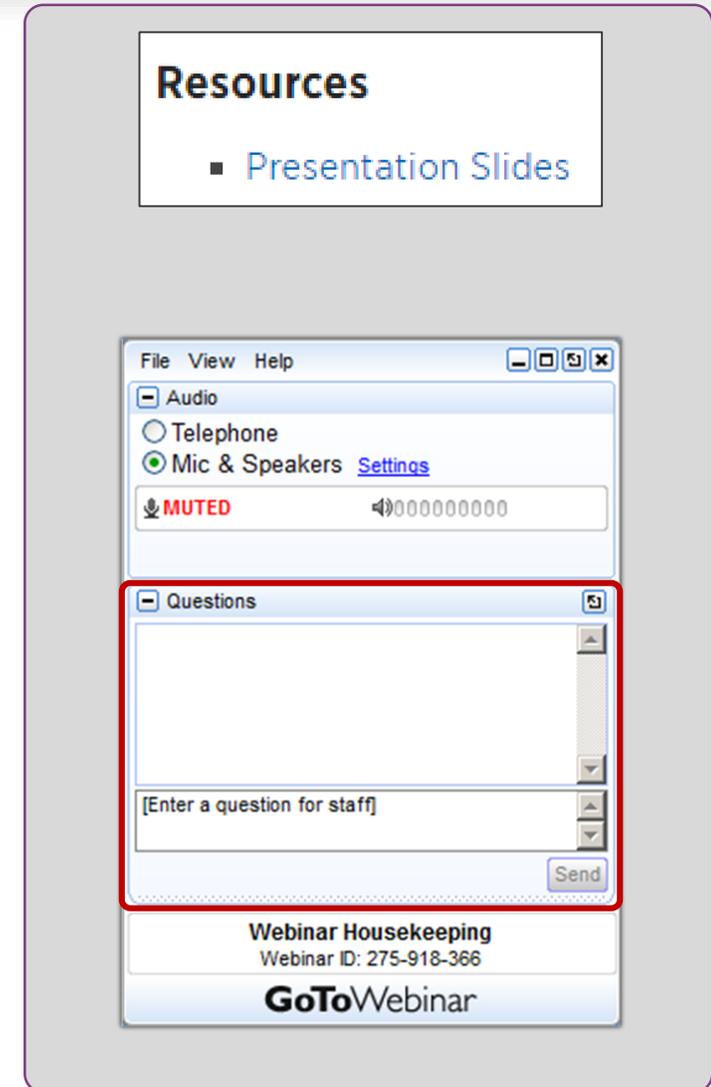
# Logistics

## Presentation Slides & How to Participate in Today's Session

Download the presentation slides at [www.caqh.org/core/events](http://www.caqh.org/core/events).

- Click on the listing for today's event, then scroll to the bottom to find the Resources section for a PDF version of the presentation slides.
- Also, a copy of the slides and the webinar recording will be emailed to all attendees and registrants in the next 1-2 business days.

Questions can be submitted *at any time* with the **Questions panel** on the **GoToWebinar dashboard**.



# Session Outline

- CAQH CORE Overview.
- CDA Header and Metadata.
  - CDA Overview.
  - CDA Header Details.
- Audience Q&A.

# Thank You Speakers



**Rick Geimer**  
Chief Innovation Officer

CAQH  
CORE

# CAQH CORE Overview

**Robert Bowman**  
CAQH CORE Director

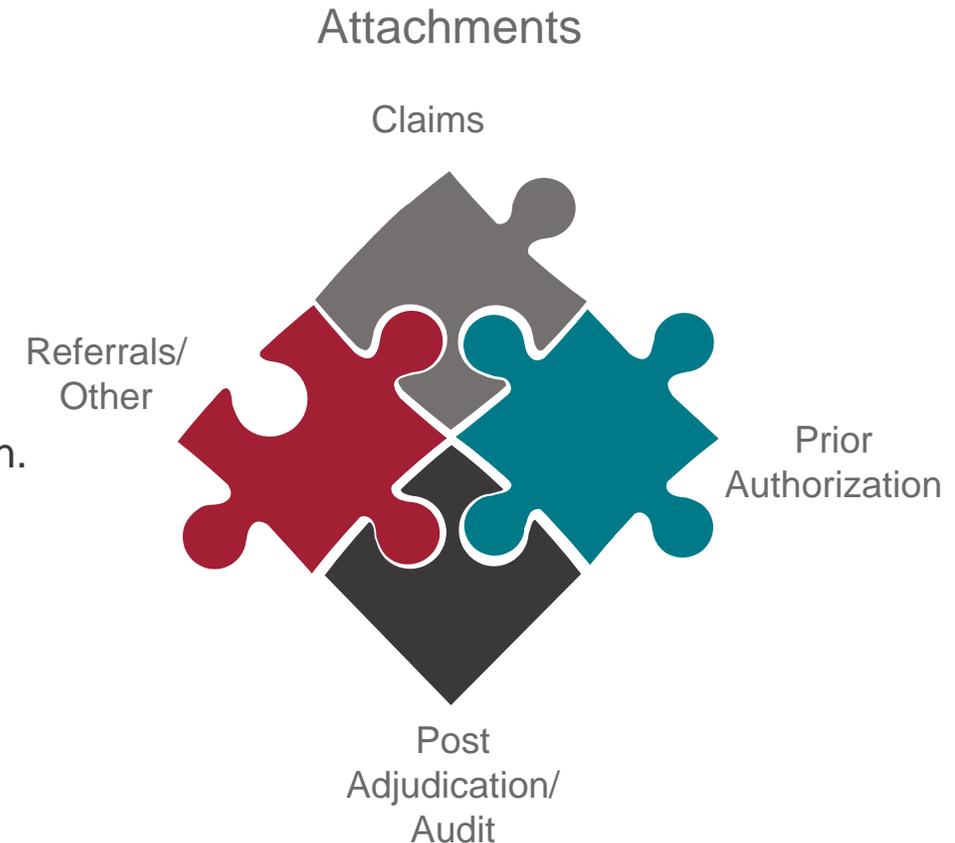
# CAQH CORE Attachments Webinar – Clinical Document Metadata

## Purpose:

Support industry education on technical components of transmitting electronic attachments in order to save time and improve efficiencies.

## Learning Objectives:

- Learn how efficient usage of an electronic attachment, such as the Clinical Document Architecture (CDA), can reduce administrative burden.
- Recognize the key standards that are impacting the adoption of electronic attachments – the X12 275 and HL7 CDA – and get an overview of the next generation standards framework created by HL7, FHIR® (*Fast Healthcare Interoperability Resources*).
- Understand the Clinical Document Metadata for Attachments, including the key characteristics of the header.



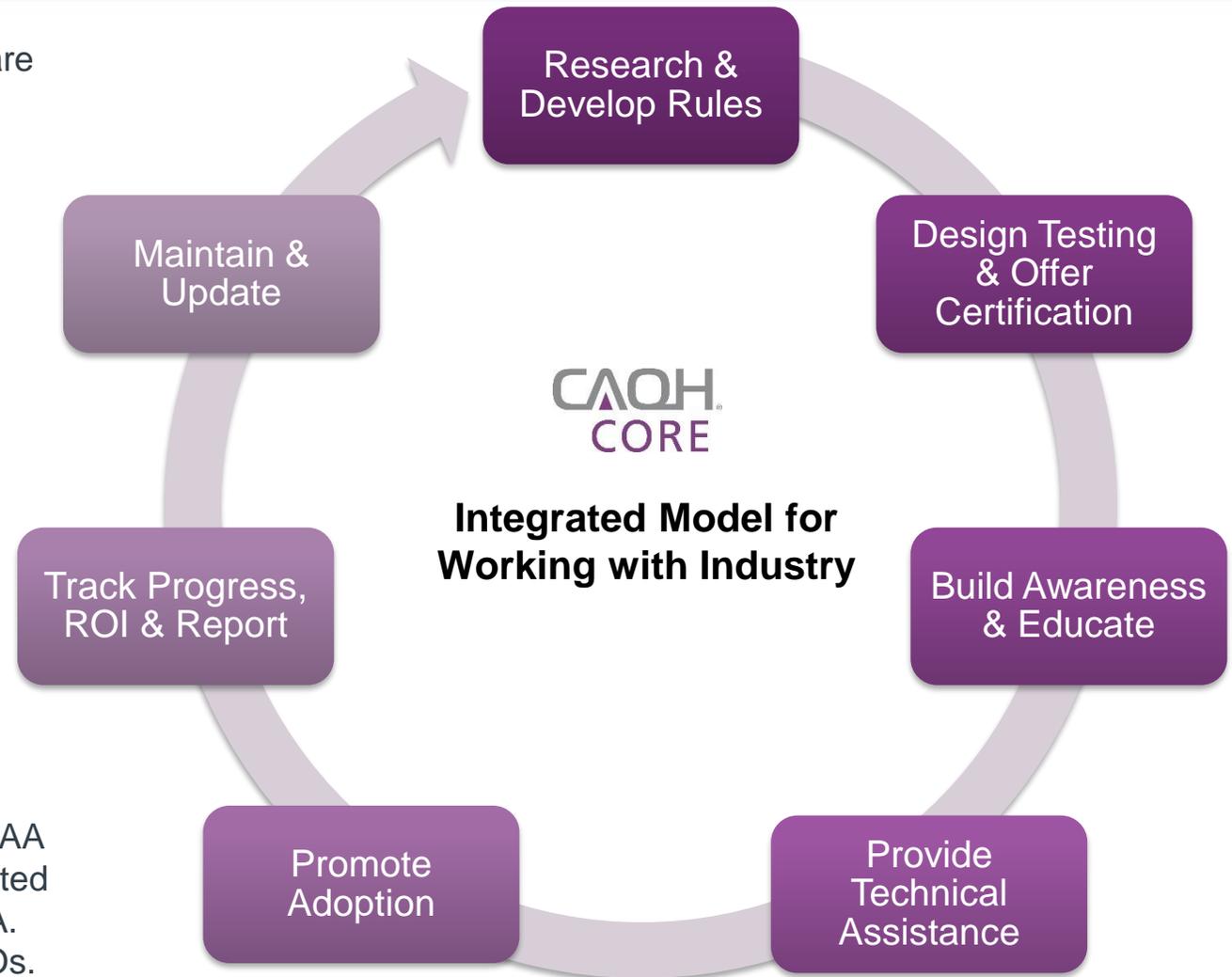
# CAQH CORE Mission and Vision

**MISSION** Drive the creation and adoption of healthcare operating rules that support standards, accelerate interoperability and align administrative and clinical activities among providers, payers and consumers.

**VISION** An industry-wide facilitator of a trusted, simple and sustainable healthcare data exchange that evolves and aligns with market needs.

**DESIGNATION** Named by Secretary of HHS to be national author for three sets of operating rules mandated by Section 1104 of the Affordable Care Act.

**BOARD** Multi-stakeholder. Voting members are HIPAA covered entities, some of which are appointed by associations such as AHA, AMA, MGMA. Advisors are non-HIPAA covered, e.g. SDOs.



# Role of Operating Rules

- Developed to facilitate administrative interoperability and encourage clinical-administrative integration by building upon recognized standards and ensuring benefit for each critical stakeholder.
- Complements and supports healthcare and industry neutral standards – they do not repeat or reiterate standards.
- Used by other industries with high volume transactions and multiples parties, e.g. financial services.

INFRASTRUCTURE RULES	CONTENT RULES
Connectivity & Security	Supports use of recognized standards that can deliver valuable structured data or require access to unstructured data.
Response Time (Batch/Real-time)	
System Availability	
Exception Processing Error Resolution	
Roles & Responsibilities	
Companion Guides	
Acknowledgements	

**Infrastructure rules** apply across transactions – establishing basic expectations on how the US data exchange “system” works, e.g. ability to track response times across all trading partners. *Infrastructure rules can be used with any version of a standard.*

**Content rules** support the exchange of valuable data that allow stakeholders to access information needed to manage an identified process; rules can address ongoing maintenance, setting expectation of evolution.

# CAQH CORE Operating Rules on Attachments

## *Relationship of Operating Rules to Attachment Standards*

Operating rules can provide business directions:

**Better use *HIPAA/other healthcare standards.***

ASC X12    DICOM    HL7

**Recognize *industry neutral standards.***

PDF    TIF    HTTPS    WC3

CAQH CORE key criteria for development of attachment operating rules include:

Ensuring operating rules work with the transactions; do not repeat or contradict standards.

Aligning operating rules for administrative standards with those for clinical standards.

Addressing most common business scenarios that would improve return on investment.

Filling gaps created by flexibility in standards.

Building off existing momentum to encourage feasible progress, not least common denominator.

# Attachments Background & CAQH CORE Activities

## *Alignment with CAQH CORE Mission and Goals*

Electronic attachments should ease workflow in our healthcare system.  
The lack of an electronic attachment standard is a challenge for providers and health plans.

Given CAQH CORE's mission and vision, solving this challenge is a critical goal. CAQH CORE Participants are working to provide solutions regardless of federal government mandates.

Regulations for administratively-focused attachments have yet to be issued.

The initial HIPAA regulation called for a claim attachment standard almost twenty years ago.

[ACA Section 1104](#) requires the Secretary of Health and Human Services (HHS) to adopt a standard, and applicable operating rules, for the health claims attachments transaction. **HHS has not adopted a standard or indicated what standard(s) it might consider for the transaction.**

There has been some regulatory activity related to clinically-focused attachments, but little action on the administrative side.

Work is moving forward by HL7, a standards development organization, on a standard for claims attachments. However, there is a wide range of opinions on what standards would serve the industry best.

# Meaningful Use Requirements and Attachments

Meaningful Use requires electronic health records (EHRs) to use the HL7 standard used for clinical attachments; currently no authoritative benchmark data is available on the adoption of this standard for EHRs.



Meaningful Use Stage 2 objectives are the measurable benchmarks that eligible professionals and hospitals must meet in adopting and using electronic health record (EHR) technology to qualify for Medicare and Medicaid incentive payments.



Providers must show that they are using EHR technologies in certain measurable ways. Electronic attachments can improve this process by providing a simple way for supporting documentation to be submitted with the medical claim.



Meaningful Use data requirements can be layered on top of CDA document templates, such as the CDA Header.

# Attachments Background

## *Federal Activities on Attachments*

### 2012-2014

The National Committee on Vital and Health Statistics (NCVHS) sent letters to the HHS Secretary supporting an incremental, flexible use of operating rules to move attachments from paper to electronic documents.

- ✓ March 2, 2012
- ✓ June 21, 2013
- ✓ September 23, 2014

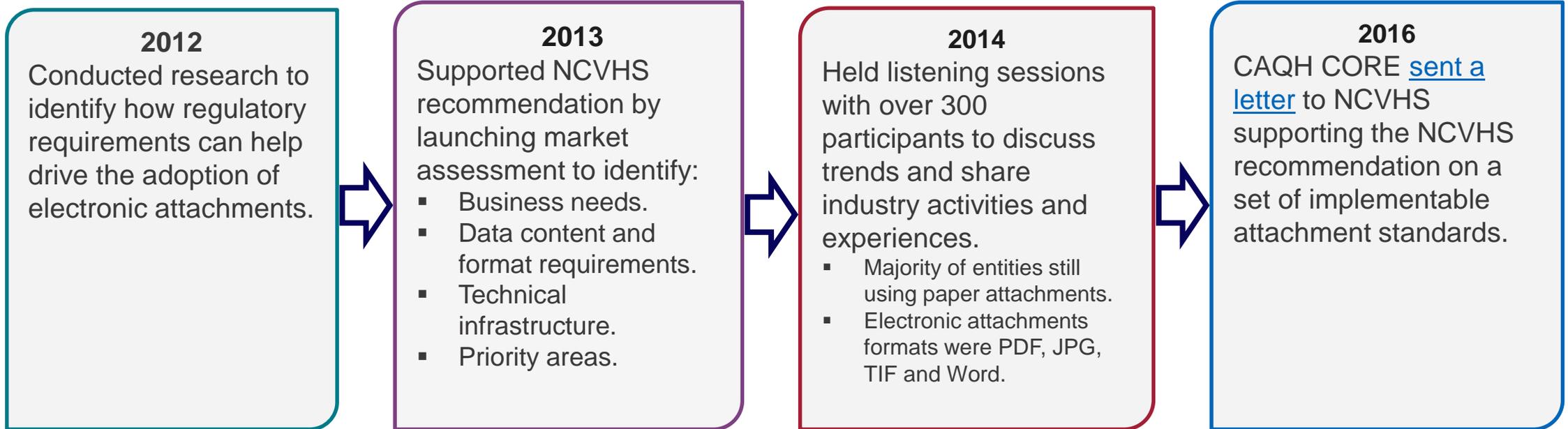
### 2016

- On February 16, 2016, NCVHS held a hearing on the Electronic Health Care Attachment Standard.
- On July 5, 2016, NCVHS sent a letter to the HHS Secretary summarizing its hearing findings and reiterating a [recommendation](#) on a set of implementable attachment standards.

Despite the original HIPAA regulations, a mandate for administratively-focused attachments has yet to be issued.

# Attachments Background

## *Evolving Role of CAQH CORE in Attachments*



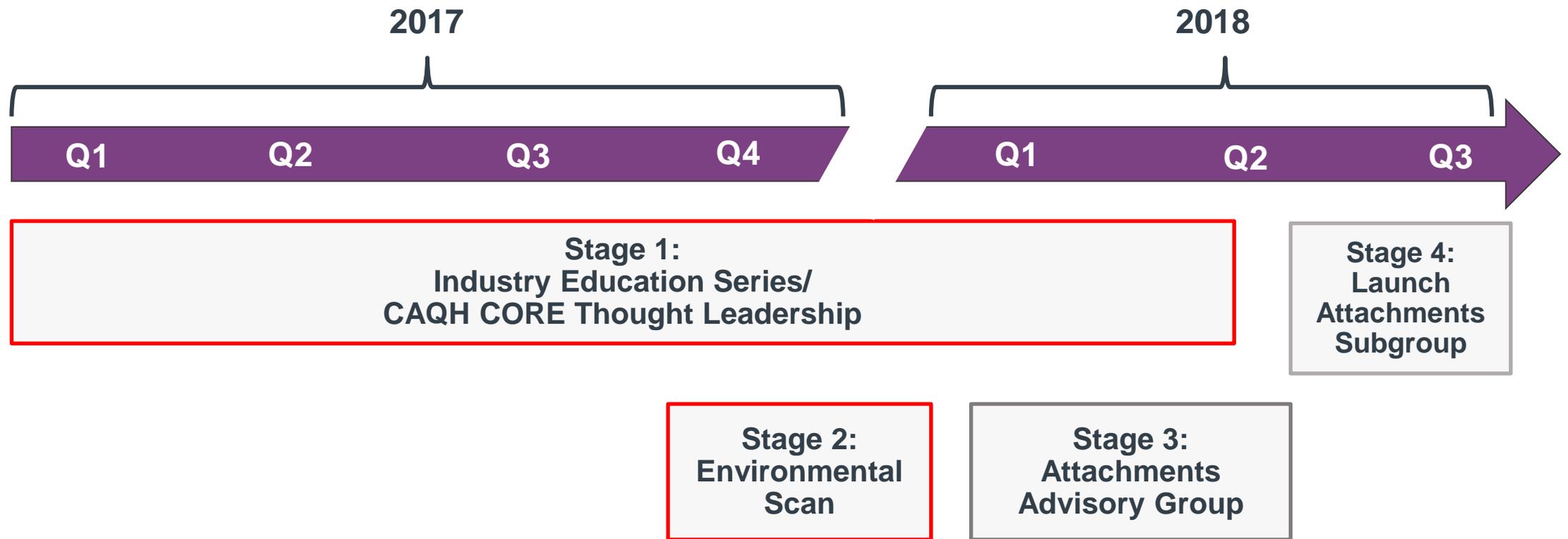
CAQH CORE was designated by HHS as the operating rule author for HIPAA transactions.

- Operating rules support recognized standards.
- CAQH CORE has appropriately waited to write operating rules given the expectation that a mandated standard would be issued by HHS.
- However, opportunity areas for operating rules related to attachments are significant.

# CAQH CORE Attachments

## Timeline

CAQH CORE is utilizing a four stage approach to identify opportunities for operating rules to streamline the electronic attachments process.



The Environmental Scan is a multi-staged approach to engage with providers, health plans and vendors.

# CAQH CORE Attachments

## Scope of Work

### 1 Industry Education Series

- CAQH CORE hosting webinar series to address industry need for comprehensive knowledge on use and successful adoption of electronic attachments.
- Topics so far have focused on electronic attachments basics ([Part I](#)) and best practices from claims attachments case studies ([Part II](#)).
- Future topics will include the preliminary results of CAQH CORE environmental scan as well as next generation standards.

### 2 Environmental Scan

- CAQH CORE conducting environmental scan to monitor trends in transition to electronic attachments, estimate cost savings of automation and identify opportunity areas to support provider adoption.
- Scan will include provider site visits, stakeholder interviews and vendor product assessment.
- Currently undergoing preliminary interviews with various stakeholders:
  - CAQH CORE Participants.
  - Stakeholders that have provided feedback during prior attachments (PA) webinars.
  - CAQH Index participating providers.

### 3 Advisory Group/Subgroup

#### Advisory Group:

- CAQH CORE will form Advisory Group of organizations experienced with electronic attachments; small, subset of CAQH CORE Participants.
- Advisory Group will review environmental scan findings to develop list of high priority opportunity areas to recommend to an Attachments Subgroup.

#### Subgroup:

- Subgroup, which is open to all CAQH CORE Participants, will review Advisory Group recommendations to identify areas to be addressed in attachment rule writing.

# CAQH CORE Attachments

## Environmental Scan Scope

### Scan Goal

- To inform development of draft attachments opportunity areas:
  - Key components, drivers and frequency of various attachments (Claim, Prior Authorization, Audits, Post Adjudication, Referrals).
  - Volume of attachments, challenges in processing various forms of attachments and barriers to fully automated submission process.
  - Common requirements for attachments and any key variances among formats, data content or business needs.
  - Utility of various IT products, such as Practice Management Systems (PMS), within the attachments workflow.

### Interview & Site Visit Objectives

- By end of Q4 2017, conduct a combination of phone interview and site visits with representatives from implementer and provider organizations.
  - Structured interviews with stakeholders. Specific interview guides/questions distributed prior to interview.
  - Anticipate collecting quantitative and qualitative ROI data on attachment workflow types.
  - Understand attachment workflow/best practices.

### CAQH CORE Action

- CAQH CORE has conducted preliminary interviews with different stakeholders and have others scheduled through the end of 2017, but we are continuing to recruit additional organizations to participate. Participation will include:
  - A one hour phone interview or half day site visit.
  - Time to query colleagues and solicit input on the technical questions seen in the interview guide.
  - Time to collect applicable data or business case for support.

**If your organization is interested in participating in this important work, contact [CORE@caqh.org](mailto:CORE@caqh.org).**

# Polling Question 1

**Are you interested in participating in the CAQH CORE Environmental Scan on attachments?**

1. Yes.
2. No.
3. Need more information.

## Polling Question 2

CAQH CORE Operating Rules are developed to facilitate administrative interoperability and encourage clinical-administrative integration by building upon recognized standards and ensuring benefit for each critical stakeholder.

Of the infrastructure requirements currently established in the Phase I-IV CAQH CORE Operating Rules, **which requirement is most applicable in addressing attachments?**

1. Connectivity & Security.
2. Response Time.
3. System Availability.
4. Acknowledgements.
5. Companion Guide.

# CLINICAL DOCUMENT METADATA FOR ATTACHMENTS—CDA HEADER

**Rick Geimer**

Chief Innovation Officer, Lantana Consulting Group

**Introduction**

**CDA Overview**

**CDA Header Details**

**Wrap Up**

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# INTRODUCTION

## Technical implementers in Provider, Payer, and Clearinghouse settings

- Software architects
- Software developers
- Information analysts
- Information technology (IT) staff
- Information managers
- Vendors
- Others needing technical details of HL7 CDA use in attachments

## ASC X12 Standards and Technical Reports

- Base Standards:
  - ASC X12 277 Health Care Information Status Notification
  - ASC X12 275 Patient Information
  - ASC X12 278 Health Care Services Review Information
- Technical Report Type 3 (TR3):
  - ASC X12N 277 Health Care Claim Request for Additional Information
  - ASC X12N 275 Additional Information to Support a Health Care Claim or Encounter
  - ASC X12N 278 Health Care Services Review – Request for Review and Response
  - ASC X12N 275 Additional Information to Support a Health Care Services Review

## Base Standard:

- HL7 Clinical Document Architecture (CDA Release 2.0, 2005)

## HL7 CDA Implementation Guides:

- Consolidated CDA (C-CDA)
- Exchange of C-CDA Based Documents; Periodontal Attachment, Release 1
- Others

## HL7 Attachments Implementation Guides:

- Additional rules for using CDA as attachments
- Constrains set of allowable attachments
  - Must use common metadata set (US Realm Header from C-CDA)
  - Includes C-CDA, other clinical documents
  - Includes any content as C-CDA Unstructured Document
  - Set can be extended without revision to rules, if using US Realm Header

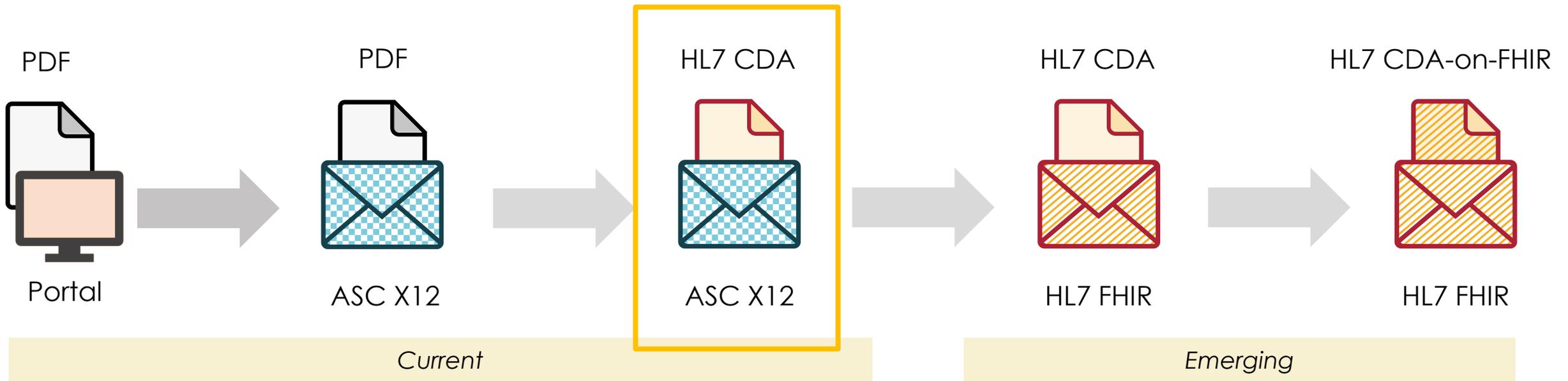
# Overview of Standards Big Picture

## Message & attachment

- Message is considered the envelope
- Messaging standards: ASC X12, HL7 FHIR® (Fast Healthcare Interoperability Resources)
- Attachment is the clinical content: PDF, HL7 CDA

**Messaging standards evolve independently from attachment standard**

**Potential end-state unifies syntax and semantics under HL7 FHIR**



## X12 275 is the envelope

- Ties attachment to
  - Patient
  - Claim
  - Attachment request (solicited scenario)

## CDA Contains

- Detailed demographics
- Author/Attester information
- Detailed clinical information
  - Structured (coded data) or unstructured (embedded PDF, etc.)

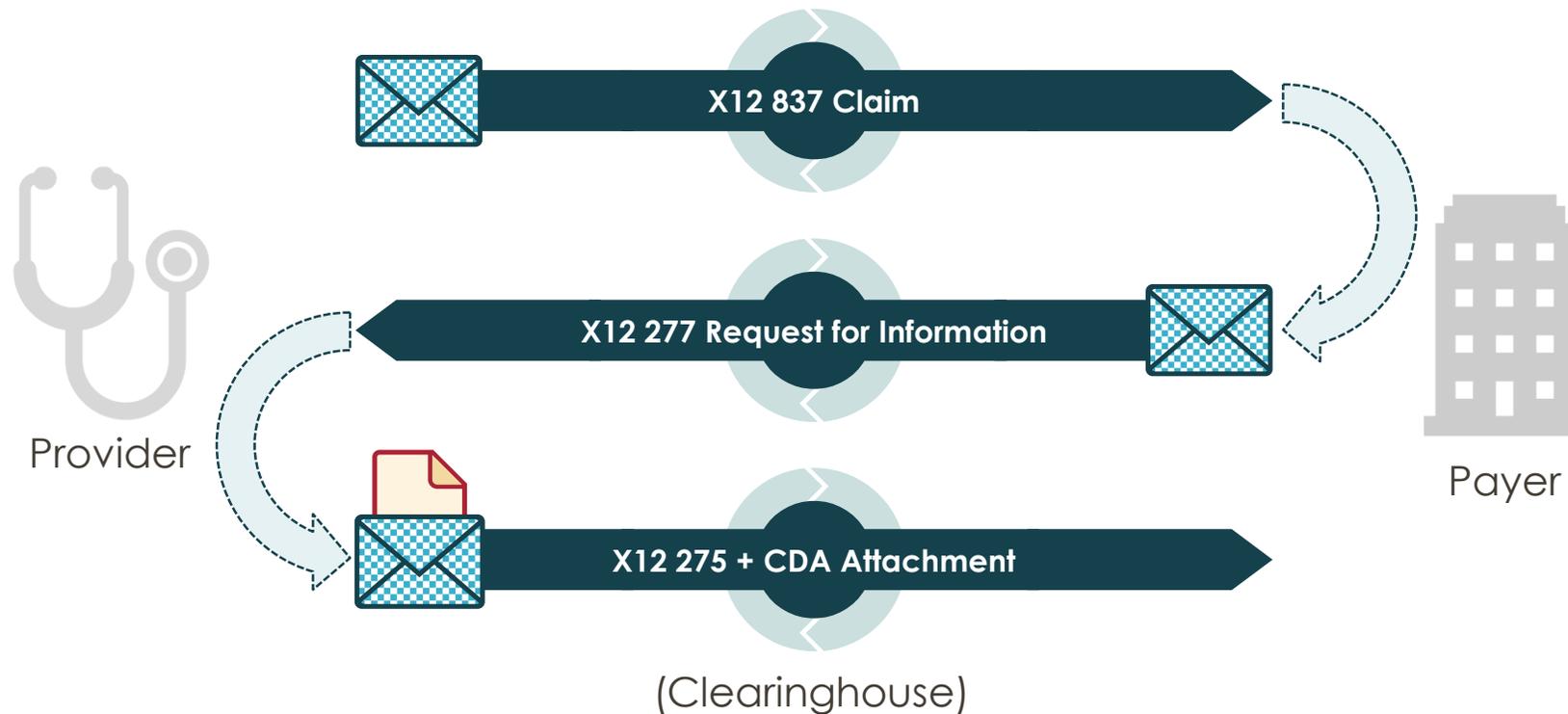
## Payload in 275 envelope

- Base64 encoded
- Binary Data Segment (BDS)

## Idealized orchestration: Unsolicited Claims Attachment



## Idealized orchestration: Solicited Claims Attachment



# X12 275

## Base 64 Encoded CDA Document

```
ST*275*1001*006020...
BGN*11*0001*201201...
NM1*PR*2*ABC INSUR...
NM1*41*2*XYZ SERV...
NM1*1P*HOLY HILLS...
NX1*1P~
... .
```

```
N3*2345 WINTER BLVD~
N4*MIAMI*FL*33132~
NM1*QC*1*JACKSON*JACK*J***MI*9876543210~
REF*EJ*JACKSON123~
REF*EA*STHHL12345~
DTP*472*D8*20111229~
LX*1~
TRN*2*1822634840~
STC*R4:11490-0:20120103:LOI*20120103~
DTP*368*D8*20120110~
CAT*AE*MB~
OOI*1*47*ATTACHMENT~
BDS*ASC*6289*..... <BASE 64 ENCODED CDA...
SE*27*1001~
```



### Unencoded CDA XML Document

```
<ClinicalDocument xmlns="urn:hl7-org:v3">
  <realmCode code="US"/>
  <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
  <templateId root="2.16.840.1.113883.10.20.22.1.2" extension="2015-08-01"/>
  <templateId root="2.16.840.1.113883.10.20.22.1.2"/>
  <templateId root="2.16.840.1.113883.10.20.22.1.1"/>
  <id extension="TT988" root="2.16.840.1.113883.19.5.99999.1"/>
  <code code="34133-9" displayName="Summarization of Episode Note"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
  <title>Patient Chart Summary</title>
  <effectiveTime value="201308151030-0800"/>
  <confidentialityCode code="N" displayName="normal"
    codeSystem="2.16.840.1.113883.5.25"
    codeSystemName="Confidentiality"/>
  <languageCode code="en-US"/>
  ...
</ClinicalDocument>
```

# CDA OVERVIEW

## Clinical Document Architecture (CDA)

- A specification for exchange of clinical documents, defining their structure and semantics
- ANSI standard developed by HL7's Structured Documents Work Group (SDWG)
- ISO standard

## Clinical documents

- Defined: authenticated part of clinical record, less like EDI and more like a contract
- Human readable: required
- Machine readable (coded data): optional, defined by templates, per use case

## “Architecture”: constrain for specific use cases

- Implementation guides such as C-CDA
- Document types for primary care and transfer of care in the US
- C-CDA cited under Meaningful Use

**Persistence**

**Stewardship**

**Potential for authentication**

**Context**

**Wholeness**

**Human readability**

## CDA Header

- Identifies:
  - Patient
  - Author
  - Custodian
  - Type of document (e.g., Discharge summary)
- Sufficient for:
  - Medical records management
  - Document management
  - Enable clinical document exchange across and within institutions

## CDA Body

- Contains the clinical content
- Supports StructuredBody and NonXMLBody
  - StructuredBody includes:
    - Sections – human-readable
    - Entries – discrete clinical statements for machine processing
  - NonXMLBody
    - PDF
    - JPEG
  - Simple XML Body
    - Proposed Jan 2018

***This webinar focuses on the header***

## C-CDA: US Realm Implementation Guide for CDA Common Meaningful Use (MU) Data Set Covered by C-CDA Header

- Patient name
- Sex
- Date of birth
- Race
- Ethnicity
- Preferred language
- Care team member(s)

## Other MU items addressed in the C-CDA Structured Body (discussed in a future webinar)

CDAR2\_IG\_CCDA\_CLINNOTES\_R1\_DSTU2.1\_2015AUG\_  
Vol1\_Introductory\_Material



**HL7 Implementation Guide for CDA® Release 2:  
Consolidated CDA Templates for Clinical Notes  
(US Realm)  
Draft Standard for Trial Use Release 2.1**

**Draft Standard for Trial Use**

August 2015

**Volume 1 — Introductory Material**

Sponsored by:  
Structured Documents Work Group  
Patient Care Work Group  
Child Health work Group

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# CDA Header Example

```
<effectiveTime value="201308151030-0800"/>
<confidentialityCode code="N" displayName="normal" codeSystem="2.16.840.1.113883.5.25" codeSystemName="Confidentiality"/>
<languageCode code="en-US"/>
<setId extension="sTT988" root="2.16.840.1.113883.19.5.99999.19"/>
<!-- Version of this document -->
<versionNumber value="1"/>
<recordTarget>
  <patientRole>
    <id extension="444222222" root="2.16.840.1.113883.4.1"/>
    <!-- Example Social Security Number using the actual SSN OID. -->
    <addr use="HP">
      <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
      <streetAddressLine>2222 Home Street</streetAddressLine>
      <city>Beaverton</city>
      <state>OR</state>
      <postalCode>97867</postalCode>
      <country>US</country>
      <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
    </addr>
    <telecom value="tel:+1(555)555-2003" use="HP"/>
    <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
    <patient>
      <name use="L">
        <given>Eve</given>
        <!-- The "SP" is "Spouse" from HL7 Code System EntityNamePartQualifier 2.16.840.1.113883.5.43 -->
        <family qualifier="SP">Betterhalf</family>
      </name>
      <administrativeGenderCode code="F" displayName="Female" codeSystem="2.16.840.1.113883.5.1" codeSystemName="Administrative Gender Code"/>
      <!-- Date of birth need only be precise to the day -->
      <birthTime value="19750501"/>
      <maritalStatusCode code="M" displayName="Married" codeSystem="2.16.840.1.113883.5.2" codeSystemName="MaritalStatusCode"/>
      <religiousAffiliationCode code="1013" displayName="Christian (non-Catholic, non-specific)" codeSystem="2.16.840.1.113883.5.1013" codeSystemName="Religious Affiliation Code"/>
      <!-- CDC Race and Ethnicity code set contains the five minimum race and ethnicity categories defined by OMB Standards -->
      <raceCode code="2106-3" displayName="White" codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race & Ethnicity - CDC" codeSystemName="Race & Ethnicity - CDC"/>
      <!-- The raceCode extension is only used if raceCode is valued -->
      <sdtc:raceCode code="2076-8" displayName="Hawaiian or Other Pacific Islander" codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race & Ethnicity - CDC" codeSystemName="Race & Ethnicity - CDC"/>
      <ethnicGroupCode code="2186-5" displayName="Not Hispanic or Latino" codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race & Ethnicity - CDC" codeSystemName="Race & Ethnicity - CDC"/>
    </patient>
  </patientRole>
</recordTarget>
```

Patient Chart Summary x Patient C

file:///C:/Users/rickg/OneDrive - Lantana Consulting Group/OneDrive - Lantana Consulting Group/Documents/201308151030-0800/201308151030-0800.cda

EVE BETTERHALF  
PATIENT CHART SUMMARY

BACK TO TOP

DEMOGRAPHICS

AUTHORING DETAILS

CLINICAL SECTIONS

ADVANCE DIRECTIVES

ALLERGIES AND ADVERSE REACTIONS

ENCOUNTERS

FAMILY HISTORY

FUNCTIONAL STATUS

IMMUNIZATIONS

MEDICAL EQUIPMENT

MEDICATIONS

INSURANCE PROVIDERS

TREATMENT PLAN

PROBLEMS

PROCEDURES

# CDA HEADER DETAILS

# Required vs. Optional Metadata for Attachments

## Required

- Template ID
- Document ID
- Document Type Code
- Document Title
- Document Date
- Patient Demographics
- Author
- Provider Organization
- Signing Clinician

## Optional

- Versioning Info
- Encounter Date
- Orders and Procedures
- Consents

***Details on following slides ...***

## Objectives:

- Understand the C-CDA header
- Comply with the HL7 Attachments Implementation Guide
- Show where to go for more information

## Following slides provide:

- Minimum data to satisfy each required field
- HL7 V3 datatype peculiarities, as they are encountered
- Variable data shown in **blue**

**Asserts conformance to a set of rules**

**US Realm Header template asserts MU metadata conformance**

```
<templateId root="2.16.840.1.113883.10.20.22.1.1"/>
```

**Globally unique ID for the document**

**Typically a UUID (universally unique identifier)**

**<https://tools.ietf.org/html/rfc4122>**

```
<id root="038323a1-1673-401f-ab20-6393b53d1052"/>
```

### Type of document (Ex.: Diagnostic Imaging Report) Represented with LOINC codes

```
<code  
  code="18748-4"  
  codeSystem="2.16.840.1.113883.6.1"  
  codeSystemName="LOINC"  
  displayName=  
  "Diagnostic Imaging Report"  
>
```

## Many coding systems in health IT

- Ex: LOINC, SNOMED, ICD-9/10, etc.
- Code is meaningless unless you know its definition

## CDA uses OIDs to identify code systems

- LOINC = 2.16.840.1.113883.6.1
- SNOMED = 2.16.840.1.113883.6.96

## Find code system OIDs in the HL7 OID Registry

- <http://hl7.org/oid/>
- More on this later...

### **Payers request attachments using the HIPAA tab in RELMA (Regenstrief LOINC Mapping Assistant tool)**

- Generic document types like Consult Note, etc. preferred

### **Providers may respond with:**

- The code from the request
- A specific type such as Anesthesiology Consult Note
- Any code they feel is appropriate from the LOINC document ontology (LOINC codes where SCALE=DOC)

# Request Attachment Types in RELMA (HIPAA Tab)

## Clinical Document types (Structured)

## Clinical & Administrative Document Types (Unstructured & Structured)

Structured Attachments			Unstructured Attachments	Request Modifier Codes
Document (Attachment) Type Codes				
Row	Attachment Name	LOINC		
1	<input type="checkbox"/> Continuity of Care Document			
2	<input type="checkbox"/> Summary of episode note	34133-9		
3	<input checked="" type="checkbox"/> Consultation Notes			
122	<input checked="" type="checkbox"/> Discharge Summaries			
168	<input checked="" type="checkbox"/> Diagnostic Imaging Reports			
5358	<input checked="" type="checkbox"/> History and Physical Notes			
5410	<input checked="" type="checkbox"/> Surgical Operation Notes			
5434	<input checked="" type="checkbox"/> Progress Notes			
5532	<input checked="" type="checkbox"/> Procedure Notes			
<input type="button" value="Wrapped Text"/> <input type="button" value="Expand"/> <input type="button" value="Collapse"/> <input type="button" value="Print Preview"/>				

Structured Attachments			Unstructured Attachments	Request Modifier Codes
Row	Attachment Name	LOINC		
1	Advanced beneficiary notice	53243-2		
2	Appeal denial letter	52032-0		
3	Automobile liability	52065-0		
4	Blood glucose monitors	52041-1		
5	Charge ticket or encounter form	53242-4		
6	Continuous positive airway pressure (CPAP)	52042-9		
7	Dental X-rays and other images (not DICOM)	52040-3		
8	Eligibility acknowledgement	53247-3		
9	Employee assistance program	52071-8		
10	Enteral nutrition	52043-7		
11	Explanation of benefits	52030-4		
12	Explanation of benefits to subscriber	52031-2		
13	External infusion pump	52044-5		
14	First report of injury	52064-3		
15	Gait trainers	52045-2		
16	General correspondence	52033-8		

# Finding Response Attachment Types in RELMA

## Using the search tab in RELMA

- Add search term (Ex.: "note")
- Add scale: Doc after search term to limit to document type codes

The screenshot shows the Regenstrief LOINC Mapping Assistant (RELMA) interface. The search tab is active, and the search term 'note scale:Doc' is entered in the search box. The search results are displayed in a grid view, showing a list of LOINC terms with their scores, LOINC codes, components, properties, timings, systems, scales, and methods.

Row	Score	LOINC	Component	Property	Timing	System	Scale	Method	ExUCUM...
1	7.7147	51851-4	Administrative note	Find	Pt	{Setting}	Doc	{Role}	
2	7.7147	75440-8	Administrative note	Find	Pt	{Setting}	Doc	Mental health	
3	7.7147	75485-3	Administrative note	Find	Pt	{Setting}	Doc	Primary care	
4	8.936	67851-6	Admission evaluation note	Find	Pt	{Setting}	Doc	{Role}	
5	8.936	34744-3	Admission evaluation note	Find	Pt	{Setting}	Doc	Nurse	
6	8.936	34873-0	Admission evaluation note	Find	Pt	{Setting}	Doc	Surgery	
7	8.936	68552-9	Admission evaluation note	Find	Pt	Emergency...	Doc	Emergency medicine	
8	8.936	67852-4	Admission evaluation note	Find	Pt	Hospital	Doc	{Role}	
9	8.936	68471-2	Admission evaluation note	Find	Pt	Hospital	Doc	Cardiovascular...	
10	8.936	68483-7	Admission evaluation note	Find	Pt	Hospital	Doc	Cardiovascular...	
11	8.9929	64058-1	Admission evaluation note	Find	Pt	Hospital	Doc	Critical CareMedicine	
12	8.9929	64070-6	Admission evaluation note	Find	Pt	Hospital	Doc	Critical care...	
13	8.9929	64053-2	Admission evaluation note	Find	Pt	Hospital	Doc	General medicine	
14	8.9929	64054-0	Admission evaluation note	Find	Pt	Hospital	Doc	General...	
15	8.936	34862-3	Admission evaluation note	Find	Pt	Hospital	Doc	General...	
16	8.9929	64062-3	Admission evaluation note	Find	Pt	Hospital	Doc	Pulmonary disease	

**Human readable title of the document  
Should not conflict with the LOINC code**

```
<title>Diagnostic Imaging Report: MRI</title>
```

### Time the document was created

#### For scanned documents:

- When the original paper document was created
- Not the time it was scanned

```
<effectiveTime value="20170929171504-0500"/>
```

## Format

- YYYYMMDDHHMMSS.UUUU[+ | -ZZZZ]
- [+ | -ZZZZ] specifies time zone as the difference from Coordinated Universal Time (UTC)

**Omit digits from right to left to express less precision**

## Most common formats:

- YYYYMMDD
- YYYYMMDDHHMMSS-ZZZZ

## Examples:

- **20170910**  
*Sept 10, 2017*
- **20170910103000-0500**  
*Sept 10, 2017 at 10:30am EST*

## Requires the following for C-CDA/MU compliance:

- Patient ID(s)
- Address
- Contact information
- Name
- Gender
- Race/Ethnicity

## Record Target Example

```
<recordTarget>
  <patientRole>
    <id extension="12345" root="2.16.840.1.113883.19.5"/>
    <addr>
      <streetAddressLine>17 Daws Rd.</streetAddressLine>
      <city>Blue Bell</city><state>MA</state><postalCode>02368</postalCode>
      <country>USA</country>
    </addr>
    <telecom value="tel:(781)555-1212"/>
    <patient>
      <name>
        <given>Adam</given><family>Everyman</family>
      </name>
      <administrativeGenderCode code="M" codeSystem="2.16.840.1.113883.5.1"/>
      <birthTime value="19541125"/>
      <raceCode code="2106-3" displayName="White" codeSystem="2.16.840.1.113883.6.238"/>
      <ethnicGroupCode code="2186-5" displayName="Not Hispanic or Latino"
        codeSystem="2.16.840.1.113883.6.238"/>
    </patient>
  </patientRole>
</recordTarget>
```

## C-CDA/MU require certain value sets

- Gender
- Race/Ethnicity
- Many others...

## Use the Value Set Authority Center (VSAC)

- Search or download C-CDA value sets
- Requires a free UMLS License to access
- <https://vsac.nlm.nih.gov/>

# VSAC Search Example (Gender)

Welcome Search Value Sets Download Browse Code Systems Help

Search the NLM Value Set Repository

Query:  Search

[Apply Filters](#) [Clear Filters](#)

Narrow search results by selecting from pull-down menus below:

CMS eCQM Releases  
Select

CMS eCQM ID (NQF Number)  
 EP  EH  
Select

Quality Data Model Category  
Select

C-CDA  
R2.1

Search Results Value Set Details

Export Search Results

Select a hyperlinked OID to see its value set details.

Matched Value Sets

Download View Toggle Clear
Page 1 of 1 | 20 | View 1 - 4 of 4

	Name	Code System	Type	Steward	OID	Code Count <sup>?</sup>
<input type="checkbox"/>						
<input type="checkbox"/>	Administrative Gender (HL7 V3)	AdministrativeG	Extensional	HL7 Terminology	<a href="#">2.16.840.1.113883.1.11.1</a>	3
<input type="checkbox"/>	EncounterTypeCode	CPT	Extensional	HL7 Terminology	<a href="#">2.16.840.1.113883.3.88.12.80.32</a>	176
<input type="checkbox"/>	Problem	SNOMEDCT	Extensional	HL7 Terminology	<a href="#">2.16.840.1.113883.3.88.12.3221.7.4</a>	115898
<input type="checkbox"/>	Procedure	SNOMEDCT	Extensional	HL7 Terminology	<a href="#">2.16.840.1.113883.3.88.12.80.28</a>	57058

Download View
Page 1 of 1 | 20 | View 1 - 4 of 4

# VSAC Search Results (Example)

## Value Set Members

Expanded Code List				
Code	Descriptor	Code System	Version	Code System OID
<input type="text"/>				
<u>F</u>	Female	AdministrativeGen	HL7V3.0_2016	2.16.840.1.113883.5.1
<u>M</u>	Male	AdministrativeGen	HL7V3.0_2016	2.16.840.1.113883.5.1
<u>UN</u>	Undifferentiated	AdministrativeGen	HL7V3.0_2016	2.16.840.1.113883.5.1

```
<administrativeGenderCode code="M" codeSystem="2.16.840.1.113883.5.1"/>
```

## Represents author(s) of a document

### Typically includes the following:

- Authoring Time
- ID
- Name
- Address
- Contact information
- Organization

```
<author>
  <time value="20170929171504-0500"/>
  <assignedAuthor>
    <id extension="123456" root="2.16.840.1.113883.19.5"/>
    <addr>
      <streetAddressLine>21 North Ave.</streetAddressLine>
      <city>Burlington</city>
      <state>MA</state>
      <postalCode>02368</postalCode>
      <country>USA</country>
    </addr>
    <telecom value="tel:(555)555-1003"/>
    <assignedPerson>
      <name>
        <given>Henry</given>
        <family>Seven</family>
      </name>
    </assignedPerson>
  </assignedAuthor>
</author>
```

IDs are mostly meaningless if you don't know what kind of ID it is

**Example: what kind of ID is this?**

```
<id extension="SMITHL321OG"/>
```

- Mayo Clinic Medical Record Number?
- Colorado Driver License Number?
- Ireland Voter Registration ID?

# Identifier Example

## Can you tell now?

```
<id  
extension="SMITHL325OF"  
root=  
"2.16.840.1.113883.4.3.53"  
>
```

Use the HL7 OID Registry to look up common OIDs (free), or to get an OID for your organization (for a fee)

OID Information	
Composite OID / GUID:	2.16.840.1.113883.4.3.53
Replace By OID:	
OID Status:	OID review is complete
OID Type:	4 - OID for a Registered Namespace
V2.x Linkage	
Assigning/Registration Authority:	
* Full Name for Object (Title):	
Entry Timestamp:	
Description of the Object identified by the OID (Be as comprehensive as you wish):	Washington Motor Vehicle Bureau
External OID SubType	
Preferred_Realm:	(UV) Universal
* Desired Symbolic Name (short):	WashingtonDLN

# The HL7 OID Registry

Search for OIDs

Download all known OIDs as a spreadsheet

Obtain your own OID:

<http://www.hl7.org/oid>

The screenshot displays the HL7 OID Registry website. The browser address bar shows [www.hl7.org/oid/index.cfm](http://www.hl7.org/oid/index.cfm). The page features a navigation menu on the left with options like Home, Obtain or Register an OID, and Search for an OID. The main content area includes an introduction to the HL7 Object Identifier (OID) Registry, defining an ISO Object Identifier (OID) and explaining its structure and usage. A sidebar on the right contains links for HL7 OID Resources, OID Registry Help, and Other OID Resources. The page also includes an 'Admin Login' link and a prominent red button labeled 'Obtain or Register an OID'.

**Represents the organization responsible for the document**

**Typically includes the following:**

- ID
- Name
- Address
- Contact Information

```
<custodian>
  <assignedCustodian>
    <representedCustodianOrganization>
      <id root="2.16.840.1.113883.19.5"/>
      <name>Good Health Clinic</name>
      <telecom value="tel: (555) 555-1212"/>
      <addr>
        <streetAddressLine>
          17 Daws Rd.
        </streetAddressLine>
        <city>Blue Bell</city>
        <state>MA</state>
        <postalCode>02368</postalCode>
        <country>USA</country>
      </addr>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>
```

## Signing Clinician (Legal Authenticator)

**Clinician with the legal authority to sign the document**  
**Typically the same as the author, but can be a different person**

# Legal Authenticator Example

```
<legalAuthenticator>
  <time value="20170929171504-0500"/>
  <signatureCode code="S"/>
  <assignedEntity>
    <id extension="123456" root="2.16.840.1.113883.19.5"/>
    <addr>
      <streetAddressLine>21 North Ave.</streetAddressLine>
      <city>Burlington</city>
      <state>MA</state>
      <postalCode>02368</postalCode>
      <country>USA</country>
    </addr>
    <telecom value="tel:(555)555-1003"/>
    <assignedPerson>
      <name>
        <given>Henry</given><family>Seven</family>
      </name>
    </assignedPerson>
  </assignedEntity>
</legalAuthenticator>
```

URI (Uniform Resource Identifier) format for phone numbers and email addresses

Coded as in a web page hyperlink

Examples:

```
<telecom value="tel:+1-555-555-5003"/>
```

```
<telecom value="mailto:user@example.com"/>
```

## CDA “escape hatch” = nullFlavor

States why you don't have a piece of required information

### Examples:

- NI: no information (default)
- UNK: unknown
- MSK: masked (for privacy)

```
<id nullFlavor="NI"/>
```

```
<telecom nullFlavor="UNK"/>
```

## Fields in a CDA document that can typically be defaulted for attachments in the US:

- realmCode (fixed)
- typeId (fixed)
- confidentialityCode
- languageCode

```
<ClinicalDocument xmlns="urn:hl7-org:v3">
  <realmCode code="US"/>
  <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
  ...
  <confidentialityCode code="N" displayName="normal"
    codeSystem="2.16.840.1.113883.5.25" codeSystemName="Confidentiality"/>
  <languageCode code="en-US"/>
  ...
</ClinicalDocument>
```

**Versioning Info**

**Encounter Date**

**Orders and Procedures**

**Consents**

---

## WRAP UP

## Clinical Document Architecture (CDA) R2

- [http://www.hl7.org/implement/standards/product\\_brief.cfm?product\\_id=7](http://www.hl7.org/implement/standards/product_brief.cfm?product_id=7)

## Consolidated CDA (C-CDA)

- [http://www.hl7.org/implement/standards/product\\_brief.cfm?product\\_id=408](http://www.hl7.org/implement/standards/product_brief.cfm?product_id=408)

## HL7 Attachments IG

- [http://www.hl7.org/implement/standards/product\\_brief.cfm?product\\_id=464](http://www.hl7.org/implement/standards/product_brief.cfm?product_id=464)

## RELMA (Regenstrief LOINC Mapping Assistant)

- <http://loinc.org>

## The HL7 OID registry

- <http://hl7.org/oid>

## The CDA Examples Task Force

- [http://wiki.hl7.org/index.php?title=CDA\\_Example\\_Task\\_Force](http://wiki.hl7.org/index.php?title=CDA_Example_Task_Force)

## VSAC (Value Set Authority Center)

- <https://vsac.nlm.nih.gov/>

## Previous CAQH Attachments Webinars

- Part I – <https://www.caqh.org/about/event/use-and-adoption-attachments-healthcare-administration-part-i>
- Part II -- <https://www.caqh.org/about/event/use-and-adoption-attachments-healthcare-administration-part-ii>

## Polling Question 3

**If you represent a provider organization planning to implement electronic attachments, which, if any, of the following are true? (Check all that apply)**

1. Currently using X12.
2. Have a Meaningful Use-certified EHR.
3. Have administrative and clinical documents that exist only on paper.
4. Have administrative and clinical documents outside the EHR in electronic format.
5. Have a document management system or are using LOINC to index our documents.

## Polling Question 4

**If you are waiting to implement electronic claims attachments, what is the main reason?**  
(Check all that apply)

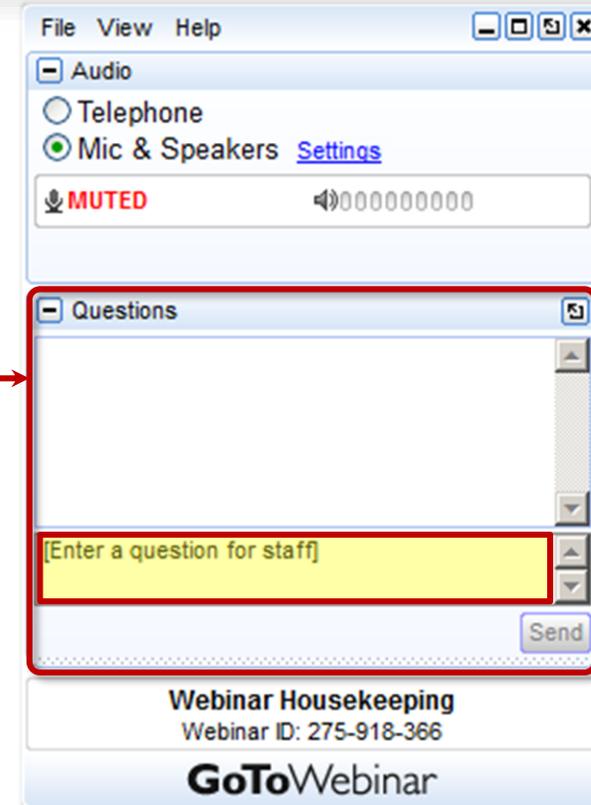
1. Waiting on regulatory direction.
2. Waiting on industry direction.
3. Waiting due to budgetary constraints.
4. Waiting to see how Value-based Care impacts claims.

# Audience Q&A

**Please submit your questions**

Enter your question into the “Questions” pane in the lower right hand corner of your screen.

**You can also submit questions at any time to [CORE@caqh.org](mailto:CORE@caqh.org)**



**Download a copy of today's presentation slides at [caqh.org/core/events](http://caqh.org/core/events)**

- Navigate to the Resources section for today's event to find a PDF version of today's presentation slides.
- Also, a copy of the slides and the webinar recording will be emailed to all attendees and registrants in the next 1-2 business days.

**Resources**

- [Presentation Slides](#)

# Upcoming CAQH CORE Education Sessions

**CAQH CORE and eHealth Initiative Webinar: Data Needs for Successful Value-based Care Outcomes**

**MONDAY, NOVEMBER 20<sup>TH</sup>, 2017 – 2 PM ET**

**CAQH CORE Town Hall National Webinar**

**TUESDAY, DECEMBER 12<sup>TH</sup>, 2017 – 2 PM ET**

To register for these, and all CAQH CORE events, please go to [www.caqh.org/core/events](http://www.caqh.org/core/events)

# Key Takeaways

- Efficient usage of an electronic attachment, such as the Clinical Document Architecture (CDA), reduces administrative burden.
- Key standards are impacting the adoption of electronic attachments.
- CDA Header is sufficient for medical records management, document management and clinical document exchange across and within institutions.
- Required versus optional metadata for attachments.

# Thank you for joining us!



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Website: [www.CAQH.org/CORE](http://www.CAQH.org/CORE)

Email: [CORE@CAQH.org](mailto:CORE@CAQH.org)

## **The CAQH CORE Mission**

Drive the creation and adoption of healthcare operating rules that support standards, accelerate interoperability and align administrative and clinical activities among providers, payers and consumers.