CAQH CORE

CAQH CORE Attachments Webinar Series Part 1

Laying the Foundation for Electronic Healthcare Attachments

Thursday, March 2, 2017

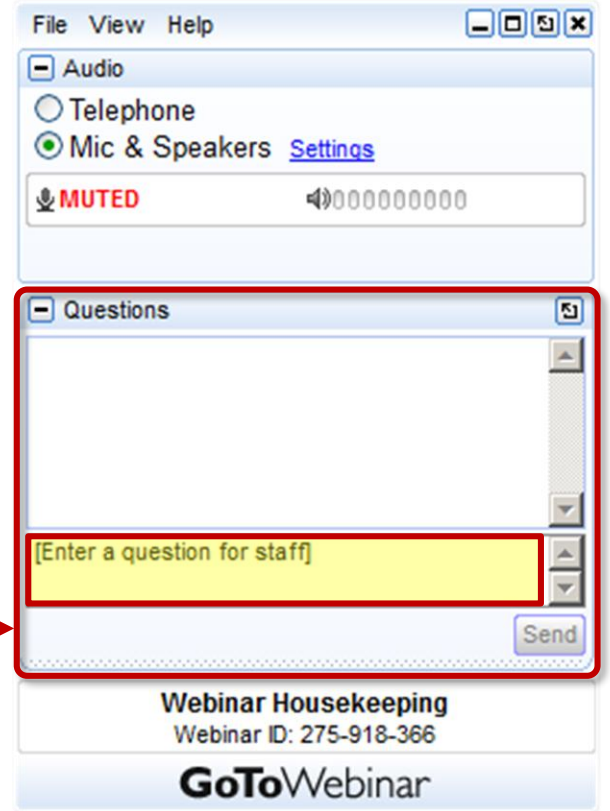
2:00 – 3:00 pm ET

Logistics

Presentation Slides & How to Participate in Today's Session

- **Download a copy of today's presentation slides at www.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 in the next 1-2 business days.
- The phones will be muted upon entry and during the presentation portion of the session.
- At any time throughout the session, you may communicate a question via the web.

Questions can be submitted ***at any time*** with the **Questions panel on the right side of the GoToWebinar desktop.**



CAQH CORE

Thank You Speakers!

CAQH CORE would like to thank our guest presenters for today's webinar.

Lantana
CONSULTING GROUP

Liora Alschuler, CEO
Lantana Consulting Group

Rick Geimer, CTO
Lantana Consulting Group

Session Outline

- CAQH CORE Overview
- Definitions and Overview of Industry Standards
- Virtual Dialog
- Audience Q&A

CAQH CORE Overview

Robert Bowman
CAQH CORE Associate Director

Attachments Background & CAQH CORE Activities

- The lack of electronic attachments remain a massive pain point for providers and health plans. Resolving this pain point remains a critical goal for CORE given the CORE mission.
  - Electronic attachments should be a work-flow friendly reality for our healthcare system
  - This CORE goal holds true whether there are mandates in the area of Attachments, and/or solely industry-led change
- Regulations for administratively-focused attachments have yet to be issued.
  - The initial HIPAA regulation called for an 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 for health claims attachments or indicated what standard(s) it might consider for the transaction. No HHS timeline is available on when a mandate may occur.
- There has been some regulatory activity related to clinically-focused attachments.
  - Connecting clinical and administrative efforts will be critical to developing a meaningful roadmap to reach the stated goal.

Attachments Background & CAQH CORE Activities

- The 2016 CAQH Index report – which is based on data from over 5.4B transactions – reported on adoption and cost of electronic claim transactions for the first time. Key findings:
  - Only six percent of healthcare claim attachments are submitted to medical health plans electronically, with the remaining sent either via fax or mail.
  - The adoption of electronic claim attachments is isolated, as most medical health plans report 100% of claim attachments are submitted manually.
  - In labor along, over a half-billion dollars could be saved by the industry by claim attachment adoption.
  - Only use of the X12 standard for claim attachments was reported by participating health plans; no use of the HL7 standard for claim attachments was reported.
- There remains a wide range of opinions on what standards would serve the industry best with regard to electronic 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.

Attachments Background & CAQH CORE Activities

- Over the past several years, CAQH CORE has conducted extensive research to understand the current environment and where stakeholders are in the adoption of electronic attachments.
  - Regularly attend and monitor standard setting organization meetings.
  - Helped support the evolution of the CAQH Index to track Claim Attachments.
  - Conducted an assessment to identify business needs, data content and format requirements, technical infrastructure, and priorities for the exchange of administrative attachments/additional information.
  - Held listening sessions with over 300 participants to continue dialogue, discuss trends, and obtain data from current industry activities and experience. The findings of this research indicate that the vast majority of entities are still using paper to provide clinical data on a claim or other administrative transactions, and, when attachments are electronic, the most common formats are PDF, JPG, TIF, and Word.
- CORE was designated by HHS as the operating rule author for claims attachments.
  - Operating rules always support recognized standards. To date, CORE has appropriately waited to formally move forward with this role given the pending expectation that a mandated standard would issued.
  - The opportunity areas for operating rules related to Attachments are significant – and vary a bit depending on the attachment standard(s).

CAQH CORE Operating Rules on Attachments

Development Status

- Based on its initial environmental scan, CAQH CORE has stated its public support for an incremental, flexible use of operating rules to move attachments from paper to electronic documents
  - This same concept was recommended by the National Committee on Vital and Health Statistics (NCVHS), a federal advisory committee to HHS, in its June 21, 2013 letter. NCVHS did recommend that HHS adopt the HL7 standard for claim attachments.
- Based on CAQH CORE research, it is evident that industry-wide education will be key given the current level of knowledge of specific attachment-related standards such as HL7 C-CDA.
  - CAQH CORE will support such industry education and coordinate with key stakeholders.
  - CAQH CORE decided to partner with Lantana Consulting Group on a series of educational/listening sessions during 2017 to gain current and specific insights into industry knowledge/use.
  - **NOTE**: Lantana's position on specific standards do not represent CAQH CORE.
- After these sessions and using other data points, CORE will be assessing how to move the needle forward in this area via industry-led efforts.

Relationship of Operating Rules to Attachment Standards

- Operating rules can provide business directions:

to better use *HIPAA and other healthcare standards, including,*	**requiring use and recognizing *industry neutral standards, including,***
ASC X12, DICOM, and HL7.	PDF, TIF, HTTPS, and WC3.

- CAQH CORE key criteria for development of attachment operating rules include:
  - Ensuring operating rules work in unison with the HIPAA-mandated financial and administrative transactions; do not repeat or contradict standards.
  - Aligning operating rules for administrative standards with those for clinical standards (e.g., federal incentives for meaningful use of EHR).
  - 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.

Audience Poll #1

Do you process attachments for claims today? If so, what methods of submission do you use/support? (Select all that apply.)

1. Mail
2. Fax
3. Upload through a payer portal
4. Electronic submission by a clearinghouse or vendor solution
5. Other

Audience Poll #2

Do you process attachments for referrals and prior authorizations today? If so, what methods of submission do you use/support? (Select all that apply.)

1. Mail
2. Fax
3. Upload through a payer portal
4. Electronic submission by a clearinghouse or vendor solution
5. Other

Definitions and Overview of Industry Standards

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Definitions and Use Cases of Attachments in the Industry

- Definitions:
  - Informally: That which you need to know which was not supplied in the claim.
  - CMS*: “Claim attachments are supplemental documents providing additional medical information to the claims processor that cannot be accommodated within the claim format. Common attachments are Certificates of Medical Necessity (CMNs), discharge summaries, and operative reports.”
- Uses:

	% current usage**
1. Claims/Reimbursement	83%
2. Prior authorization	3%
3. Referral	3%
4. Audit	11%

Uses 1-3 may include unsolicited or solicited; audit consists of solicited only.

*https://www.cms.gov/Medicare/Billing/ElectronicBillingEDITrans/ClaimsAttachments.html

**Cooperative Exchange, June 2016 NCVHS testimony

Public Discussion on Attachments

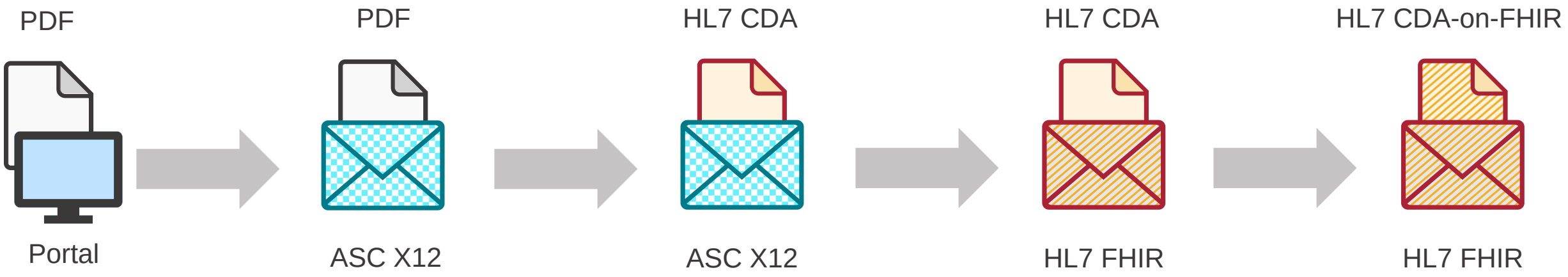
This Overview is based on consensus emerging via NCVHS testimonies, letters to the HHS Secretary, and developments within the SDOs:

- Adopt standards for Attachments Request, Response, Electronic Clinical Document, and Acknowledgments.
- Utilize incremental adoption and implementation approach.
- Ensure alignment with:
  - Electronic Health Record (EHR) Incentive Program
  - Medicare Access CHIP Reauthorization Act of 2015 (MACRA)/Merit-Bases Incentive Payment System (MIPS)

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 (Clinical Document Architecture)
- Messaging standards can evolve independently from the attachment standard
- Potential end-state unifies the syntax and semantics under HL7 FHIR



Relevant X12 Standards

Relating to Attachments/Additional Documentation

- 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

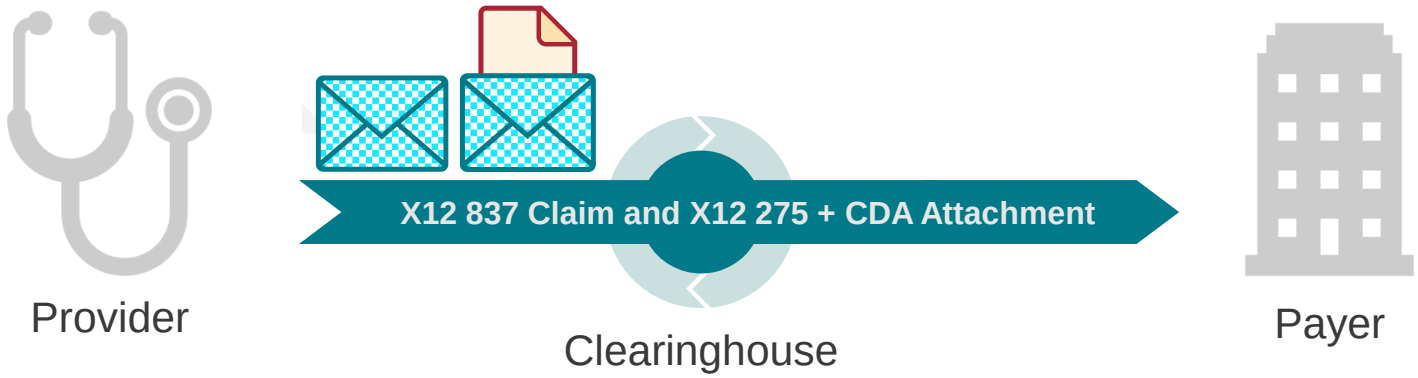
Anticipated Attachment Standards

HL7 Electronic Documents

- Base Standard: HL7 Clinical Document Architecture (CDA Release 2.0, 2005)
- HL7 CDA Implementation Guides
  - Consolidated CDA (C-CDA)
  - Quality Reporting Document Architecture (QRDA)
  - National Healthcare Safety Network Healthcare Associated Infection Reports
- HL7 Attachment Implementation Guide:
  - Additional rules for using CDA as attachments
  - Constrains set of allowable attachments
    - Must use common metadata set (US Realm Header)
    - Includes Consolidated CDA (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

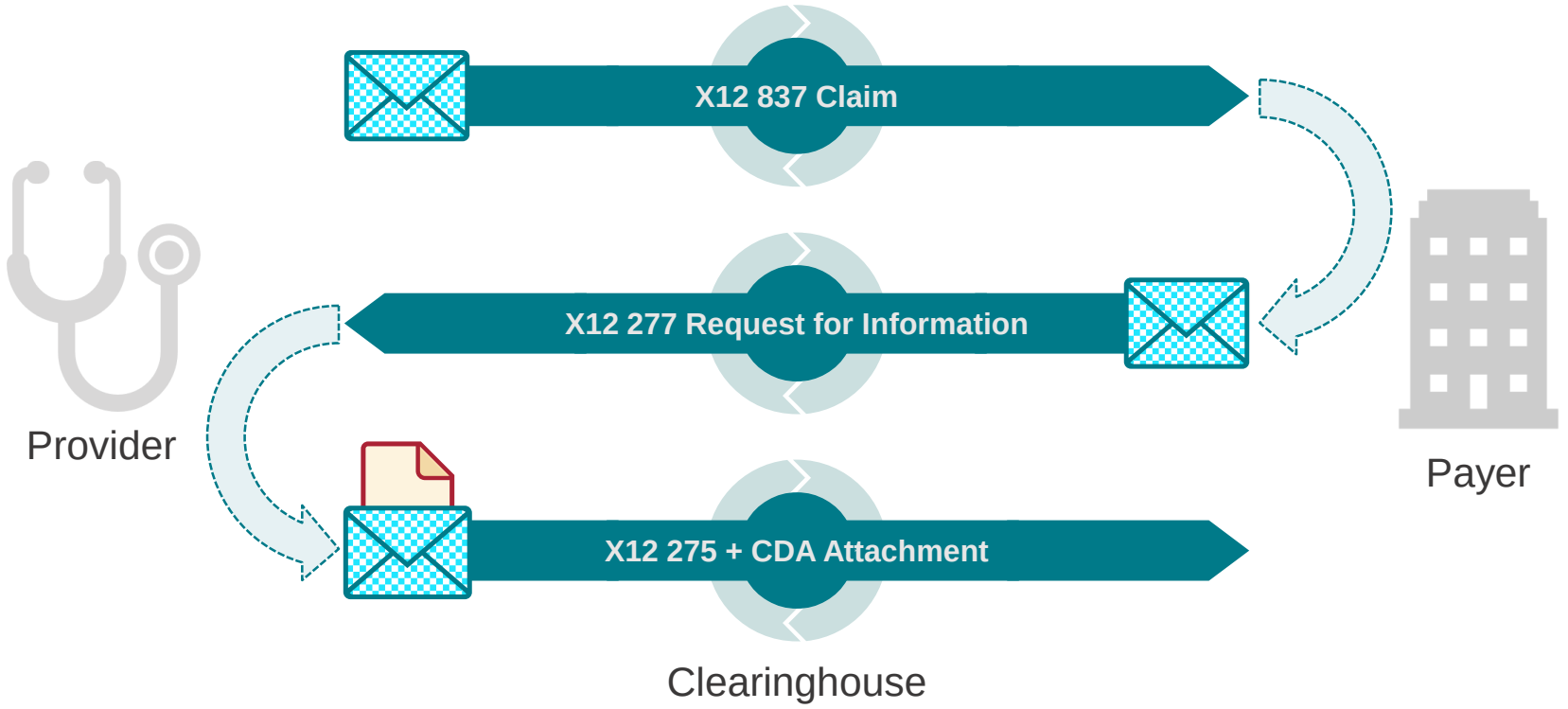
Key Components and Basic Workflow

- Idealized orchestration: Unsolicited Claims Attachment



Key Components and Basic Workflow

- Idealized orchestration: Solicited Claims Attachment



Attachment Standards

Unstructured Body – PDF vs. CDA

- ***Why not just send PDF and rely on the X12 275 envelope for required metadata?***

- Pro PDF:
  - Format standard under ISO
  - Scan-to-PDF for paper attachments available off-the-shelf
  - Large scale use today
  - Ease of use – simple
  - No standard semantics for health information

- Pro CDA:
  - Standard under ISO, ANSI
  - Scan-to-Unstructured CDA, also available off-the-shelf
  - Supplies metadata unavailable in the PDF+275
    - Globally unique document identifier (ID)
    - Authentication status and authenticator
    - Document completion date
    - Optional: Rich patient, provider demographics, effective time of encounter/service, etc.
  - Required for Meaningful Use certification
  - Consistent with health exchanges, EHR interoperability, and reporting requirements
  - Piloted as an electronic attachment for over ten years
  - Evolutionary step to structured and coded CDA which support automated processing

Attachment Standards

HL7 CDA

- Header + Body = metadata + clinical report
- Header is simple XML
- Required for all CDA:
  - Document metadata (document id, type code, title, creation date, confidentiality, language)
  - Patient
  - Author
  - Provider organization (custodian)
- Required for all CDA attachments:
  - Legal authenticator
  - Note: Some attachment types may require additional information on participants.
- Body may be unstructured or structured

```
<ClinicalDocument xmlns="urn:hl7-org:v3">
    <id root="c2aa3f41-9b28-4dc8-acd4-aa9090f40c6a"/>
    <code code="34133-9”
          codeSystem="2.16.840.1.113883.6.1”/>
    <title>Patient Chart Summary</title>
    <effectiveTime value="201308151030-0800"/>
    <confidentialityCode code="N"
          codeSystem="2.16.840.1.113883.5.25"/>
    <recordTarget>
          <patientRole>
              <addr use="HP">
                    1357 Amber Drive, Beaverton, OR 97867
              </addr>
              <telecom value="tel:+1(555)555-2003"/>
              <patient>
                  <name>
                      <given>Eve</given>
                      <family>Everywoman</family>
                  </name>
                                  ...
</ClinicalDocument>
```

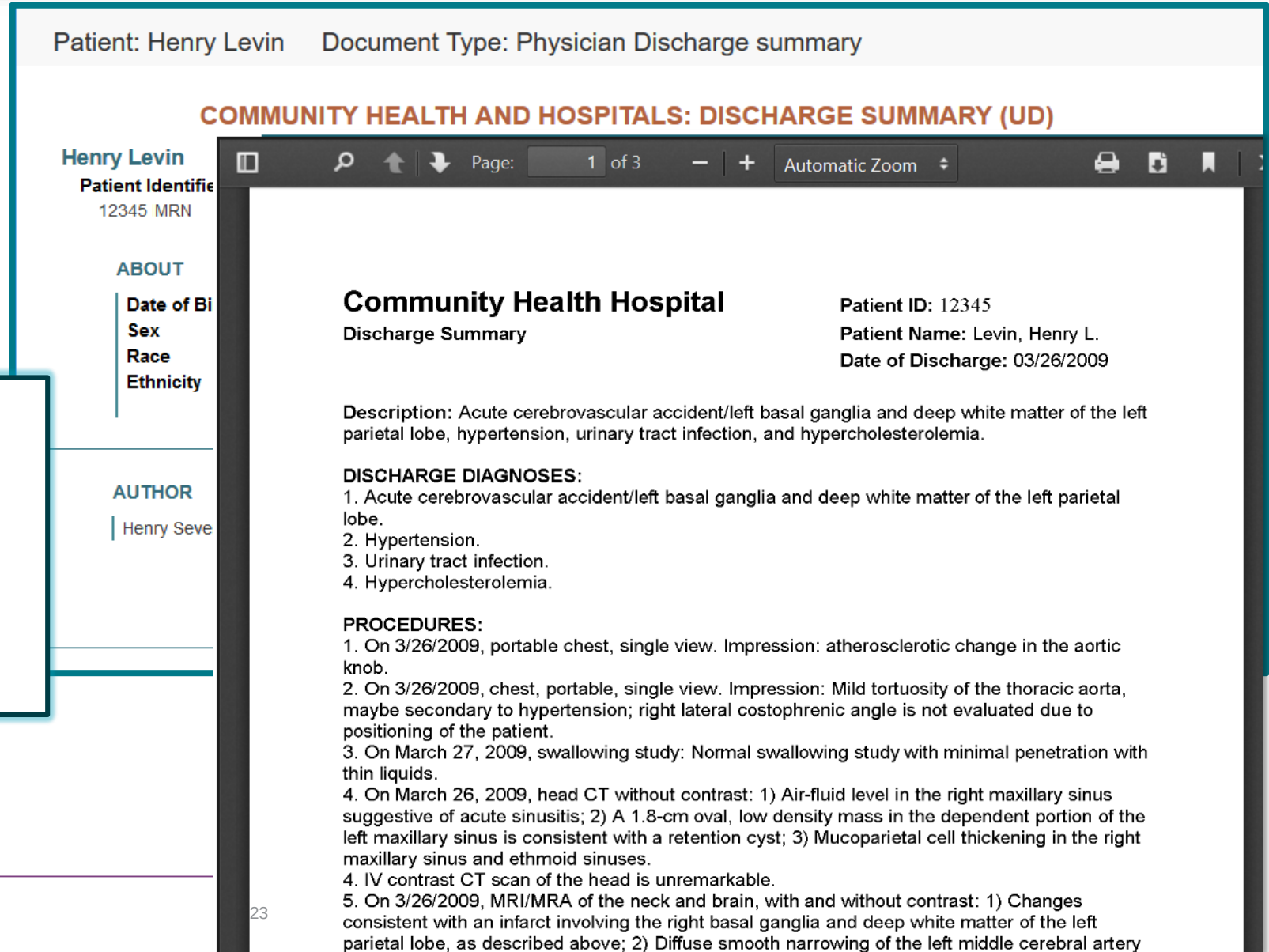
Attachment Standards

Unstructured CDA

- XML Header
- Unstructured CDA Body
  - Text: DOC/DOCX, PDF, Text, RTF, HTML
  - Image: GIF, TIF, JPEG, PNG

```
[CDA Header]
        +
<component>
    <nonXMLBody>
      <text>
        <reference value="UD_sample.pdf"/>
      </text>
    </nonXMLBody>
  </component>
```

- 95% of electronic attachments are unstructured today

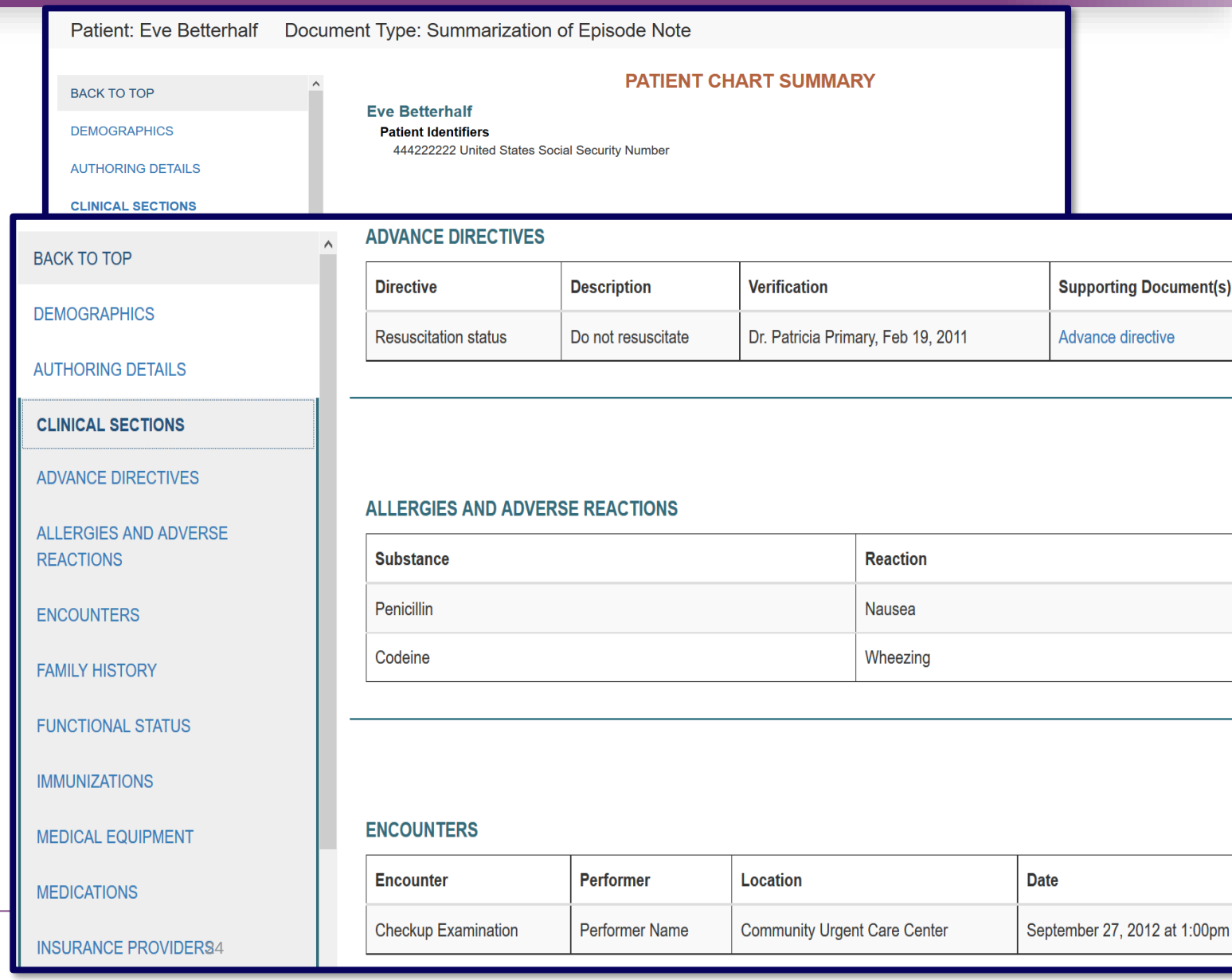


Attachment Standards

Structured CDA

- Structured = XML
  - May be simple HTML-like markup
  - Variable degree of structure
  - Optional standard or local terminologies

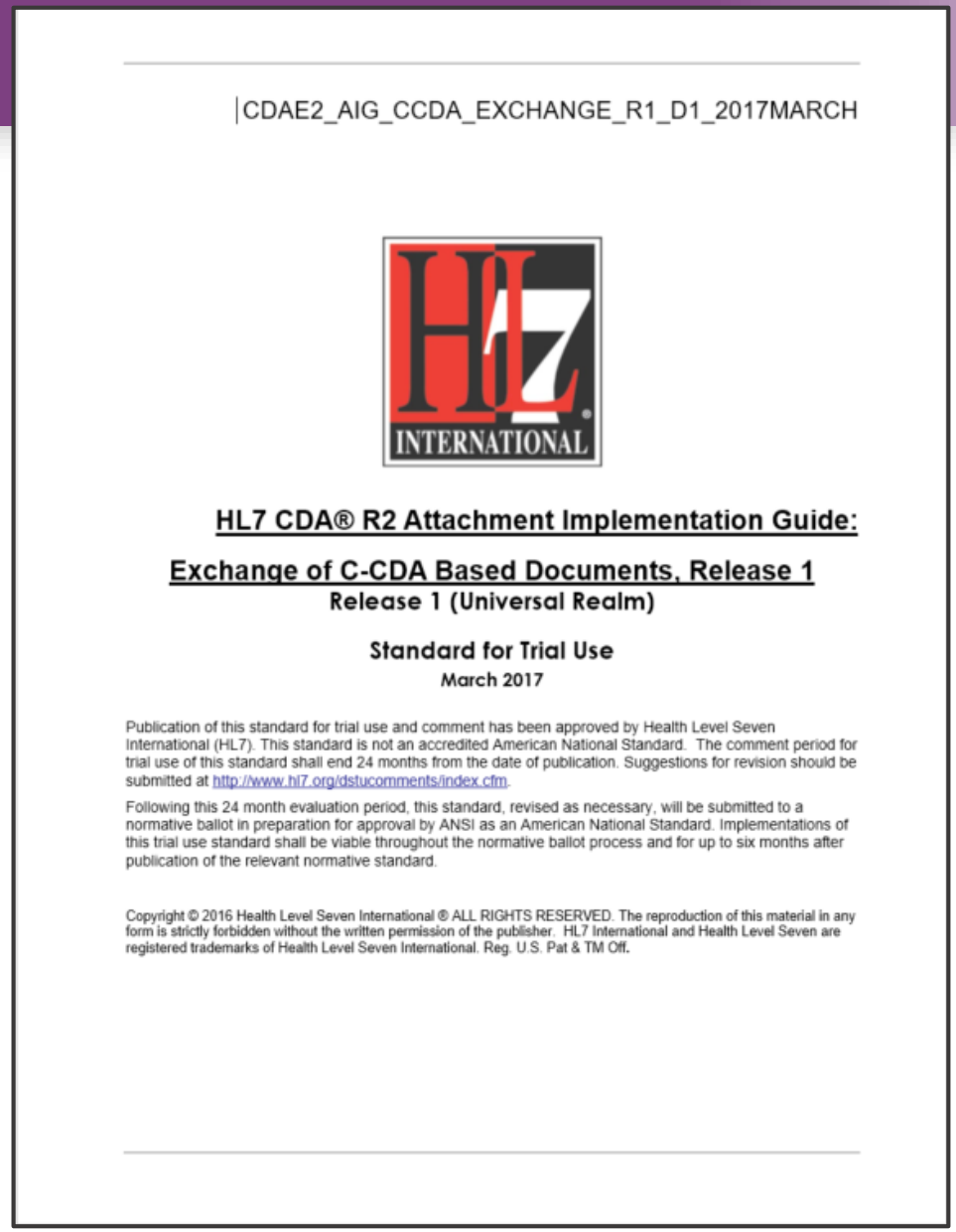
```
<section>
 <code code="48765-2" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
 <title>ALLERGIES AND ADVERSE REACTIONS</title>
 ...
 <observation classCode="OBS" moodCode="EVN">
  ...
  <value code="419199007"
  displayName="Allergy to substance"
  codeSystem="2.16.840.1.113883.6.96"
  codeSystemName="SNOMED CT"/>
  ..
  <playingEntity classCode="MMAT">
    <code code="70618"
    displayName="Penicillin"
    codeSystem="2.16.840.1.113883.6.88"
    codeSystemName="RxNorm"/>
  </playingEntity>
 </observation>
</section>
```



Attachments Guidance

for Standard Electronic Attachments

- HL7 CDA Attachment Implementation Guide:
  - Exchange of C-CDA Based Documents, Release 1 (Universal Realm)
  - Standard for Trial Use
  - ***Targeted*** for release in April, 2017
- The Attachment Guide Documents:
  - Approach to standard electronic attachments
  - Background on CDA and key concepts
    - > Structured/unstructured documents
    - > ISO Object Identifiers (OIDs)
    - > Base64 Encoding for Unstructured CDA
    - > Document Succession (tracking versions)
  - Classifying electronic documents using LOINC
  - Business requirements and orchestration
  - Rules (conformance requirements)



CDAE2_AIG_CCDA_EXCHANGE_R1_D1_2017MARCH

HL7 INTERNATIONAL

HL7 CDA® R2 Attachment Implementation Guide:

Exchange of C-CDA Based Documents, Release 1

Release 1 (Universal Realm)

Standard for Trial Use

March 2017

Publication of this standard for trial use and comment has been approved by Health Level Seven International (HL7). This standard is not an accredited American National Standard. The comment period for trial use of this standard shall end 24 months from the date of publication. Suggestions for revision should be submitted at http://www.hl7.org/dstucomments/index.cfm.

Following this 24 month evaluation period, this standard, revised as necessary, will be submitted to a normative ballot in preparation for approval by ANSI as an American National Standard. Implementations of this trial use standard shall be viable throughout the normative ballot process and for up to six months after publication of the relevant normative standard.

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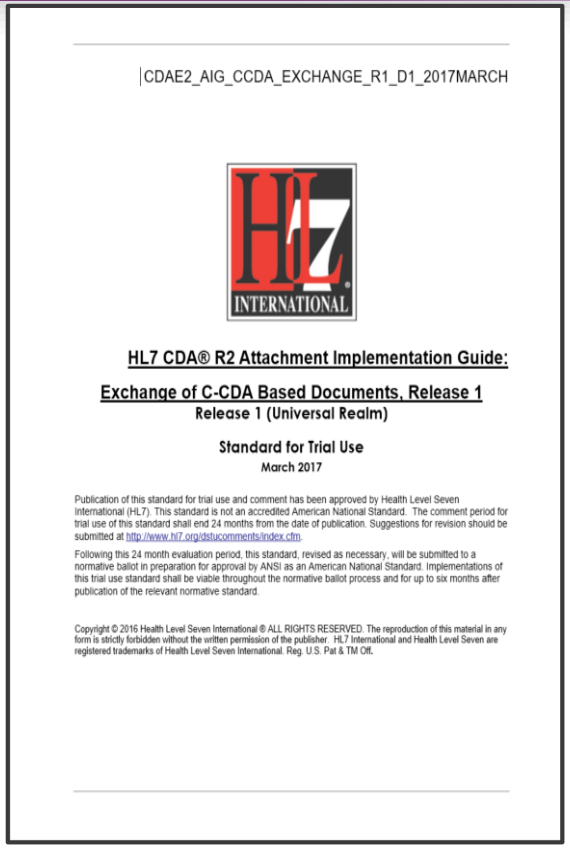
HL7 CDA for Attachments

Guidance for Standard Electronic Attachments

- Consolidated CDA (C-CDA)
  - > Care Plan
  - > Consultation Note
  - > Continuity of Care Document (CCD)
  - > Diagnostic Imaging Reports (DIR)
  - > Discharge Summary
  - > History and Physical (H&P)
  - > Operative Note
  - > Procedure Note
  - > Progress Note
  - > Referral Note
  - > Transfer Summary
  - > Unstructured Document
  - > Patient Generated Document (US Realm Header)
- Oncology Treatment Plan and Summary
  - > Designed for adjuvant care
  - > Breast cancer, colon cancer, and survivorship care plan
- EMS Patient Care Report
- Complete Documentation for Payers (CDP1)
- Periodontal Report (pre-publication)
- Any future guides that uses the CDA US Realm Header



CDAE2_AIG_CCDA_EXCHANGE_R1_D1_2017MARCH

HL7 INTERNATIONAL

HL7 CDA® R2 Attachment Implementation Guide:

Exchange of C-CDA Based Documents, Release 1

Release 1 (Universal Realm)

Standard for Trial Use

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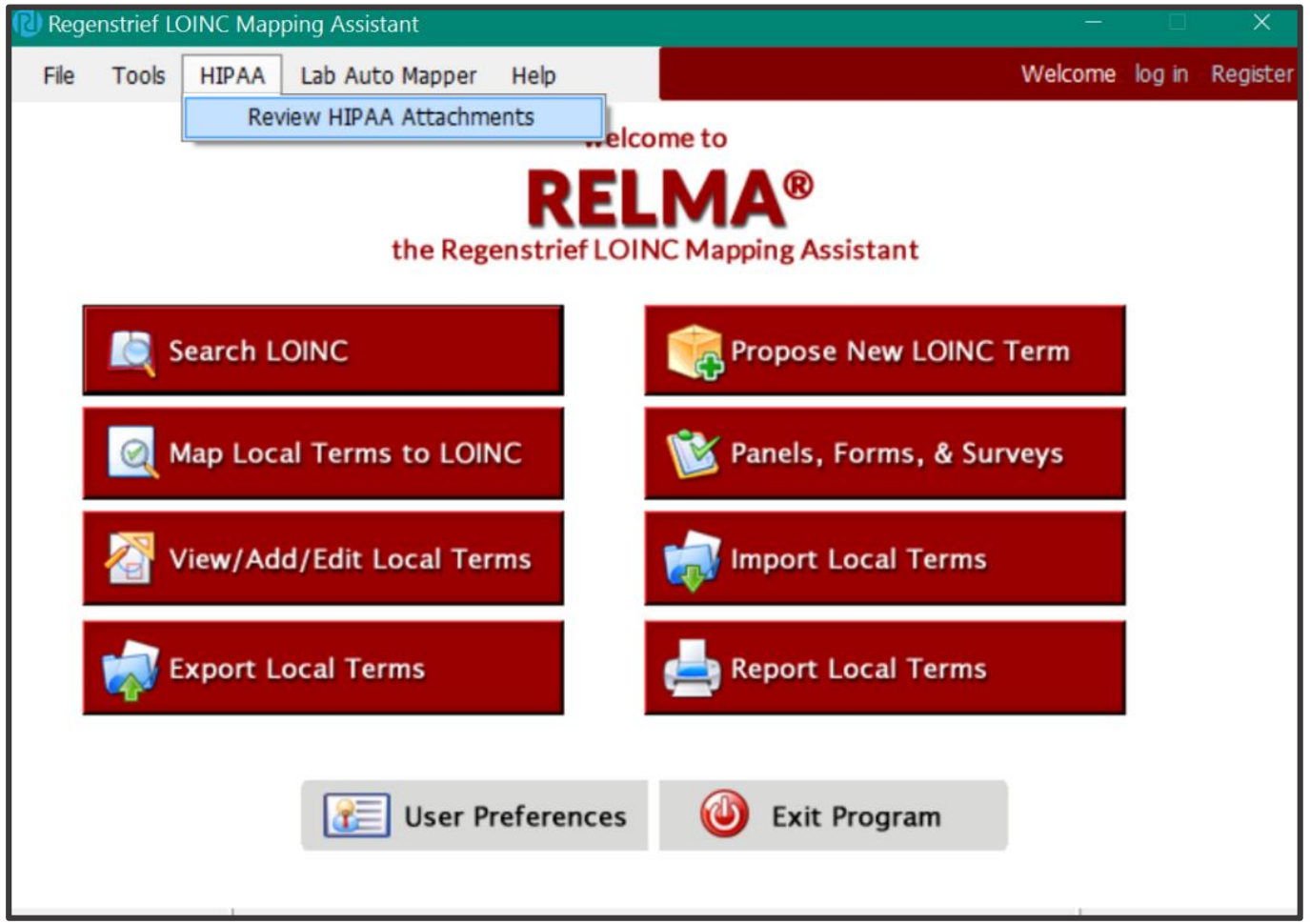
HL7 CDA for Attachments: LOINC Codes

Guidance for Standard Electronic Attachments

- HL7 CDA requires LOINC Document type code
  - Classifies electronic documents
  - Indicates expected content
- HL7 Attachment Implementation Guide defines allowable LOINC Document type code
  - Rules for requests
  - Rules for submissions (unsolicited, solicited)
- Three methods to access allowable document type codes:
  - RELMA
  - search.loinc.org
  - Download full LOINC database
  - See www.LOINC.org



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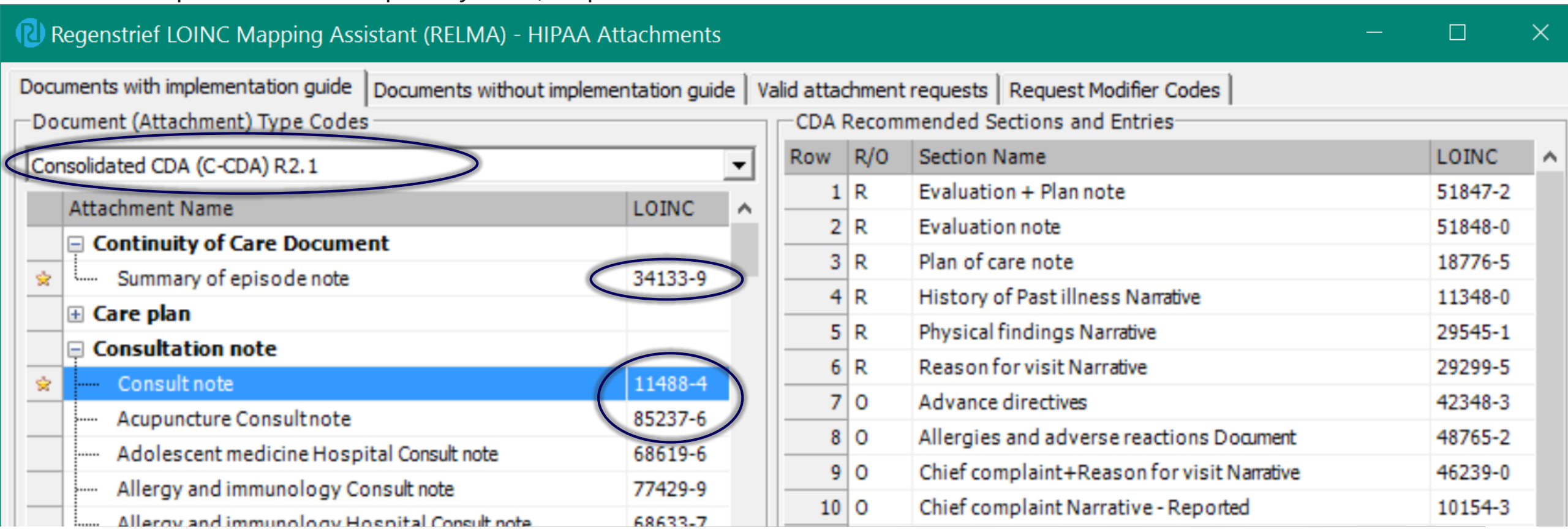
HL7 CDA for Attachments

Guidance for Standard Electronic Attachments

- Documents with implementation guide
  - CCD: one document type code (34133-9)
  - Consultation Note: one ***primary*** code (11488-4) and many ***specialized*** codes (85237-6, 68619-6, etc.)
  - Requests should use primary code; response should use closest match.



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Challenges in Adopting Attachment Standards

- For the industry as a whole
  - Uncertainty around regulation
  - Limits to consensus
    - > Message (X12, FHIR, other)
    - > Attachments (CDP-1; PDF)
  - Concern over impact on workflow when introduced for prior authorization
  - Inclusion/exclusion of audit use case
  - Adapting to new workflow
  - Competing priorities
  - SDO timelines, capacity to adapt to change
- Regulators
  - Balancing flexibility with stability
  - Low barrier to entry with room to grow
- Providers
  - Requires comprehensive, indexed electronic record
  - Administrative and clinical system integration
- Payers
  - X12: New transactions
  - CDA: New syntax, data types, code systems
- Clearinghouses
  - New translations
  - CDA: New syntax, data types, code systems
- Vendors
  - Indexing by document type code
  - Validating against the standards
  - X12 / HL7 translations

Opportunities in Adopting Attachment Standards

- One method across the industry
- Systematic index to full record
- Cost savings:
  - Reduced time to payment
  - Could reduce number of claim denials
  - More protection of protected health information (PHI) – less likely to be lost, misplaced, misdirect, or unanswered
  - Reduce administrative waste and cost across stakeholders:
    - No need for physical storage (secure rooms, file cabinets, boxes)
    - Eliminate cost of materials (paper, envelopes, postage)
    - Reduce use of scanner / Fax machines
    - Reduce man hours to locate and submit the information requested
    - Reduce man hours for mail room handling
    - Reduce man hours monitoring claims status
    - Reduce need for staff trained in the manual process which may vary per payer
- Savings distributed across all stakeholders

Virtual Dialogue

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CAQH CORE Senior Manager
MODERATOR

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Lantana CTO

Emerging Standards and Connectivity Methods

- How we define payload vs. messaging standards
  - Payload standards represent the clinical content of an attachment (the actual clinical report)
  - Messaging standards contain the attachment, as well as metadata for associating the attachment with a claim, etc.
- HL7 FHIR RESTful services is emerging as an alternative to X12 messaging for payload transport
- HL7 CDA-on-FHIR documents as the attachment payload

What is FHIR?

The Acronym

- **F**ast
- **H**ealthcare
- **I**nteroperability
- **R**esources
- Pronounced “FIRE”

The FHIR Manifesto

- Focus on **implementers**
- Keep **common scenarios** simple
- Leverage **existing technologies**
- Provide **human readability**
- Make content **freely available**
- Demonstrate best practice **governance**

Areas of Application

Advantages & Cautions: HL7 FHIR

- Immediate areas of application:
  - Between providers and clearinghouses (clearinghouse continues to use X12 as payer interface; provider has single, consistent interface to clearinghouse)
  - Internal to provider integrating clinical and administrative systems
- Advantages:
  - Lightweight to implement
  - Flexible
  - Unified syntax, semantics across API (application program interface), persistent documents
  - Consider for areas where no current integration
- Cautions:
  - Not yet a normative standard, although core components reasonably stable
  - Not yet recognized by regulation, either under Meaningful Use or reimbursement
  - Unlikely to replace legacy (aka “existing systems that work”)

High Level Approach to Transitional Strategies

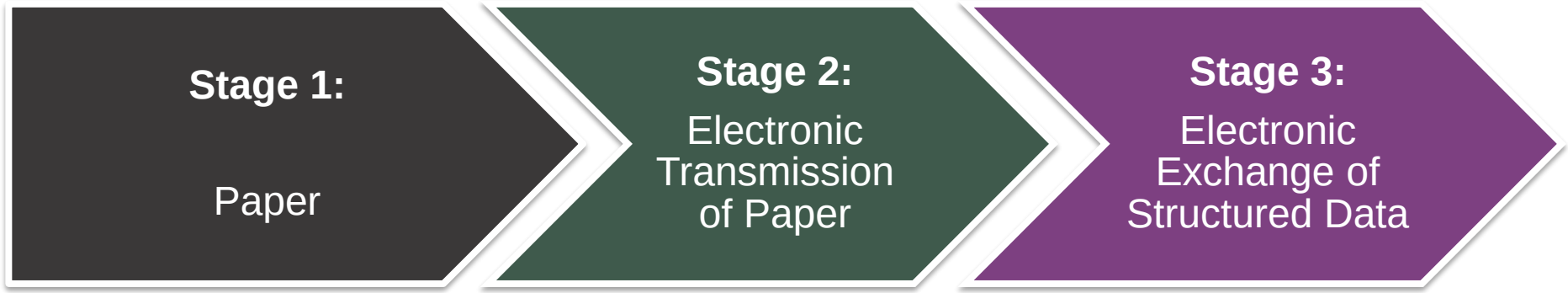
- X12 messaging to FHIR APIs:
  - Currently exploring FHIR RESTful APIs as alternative to X12. for payload transport
  - HIPAA calls out X12, but alternatives can be explored between business partners.
  - 277 RFI: CommunicationRequest resource with LOINC request code
  - 275: Communication resource with attachment as payload
  - Other supporting resources: Claim, Patient, Practitioner, Organization
  - Goal: Clean mapping between X12 and FHIR so that conversion is possible.
    - > Example use case: Provider with no X12 infrastructure sends attachment via FHIR APIs to clearinghouse, which converts the data to X12 and forwards to payer.

- C-CDA to C-CDA on FHIR:
  - C-CDA on FHIR is new, not yet published (expected Q2 2017).
  - Now: Convert from C-CDA to FHIR.
  - Near future: Create native FHIR documents where no CDA infrastructure exists (and convert back to CDA to comply with current regulations).
  - Less near future: Query EHRs for discrete data via FHIR APIs (sandboxes currently available, but just for testing).

CAQH CORE Activities on Attachments

Attachments Migration Path will be Key

- Ultimate goal is to reduce the paper burden and automate functions with structured data, while:
  - Accommodating the ability to more automatically review narrative documents, and
  - Ensuring a smooth transition.
- Key considerations include:
  - What are the business drivers for adoption?
  - Where to begin?
  - How quickly to move?
  - How to accommodate innovation?



CAQH CORE Activities on Attachments

Next Steps

Continue CAQH CORE education sessions to ensure that the industry is keeping abreast of the latest developments

Request organizations supply data on attachments usage that exists, or that organizations would be willing to help collect for a limited time.

Wrap up knowledge from research, dialogue series, other analyses, and report out to industry.

There are complex relationships between attachments and other transactions, such as claims, prior authorization, and electronic remittance advice. These must be included in environmental scan analysis and carefully considered.

Audience Poll #3

What would you like to see in future webinars related to this topic (Select all that apply.)

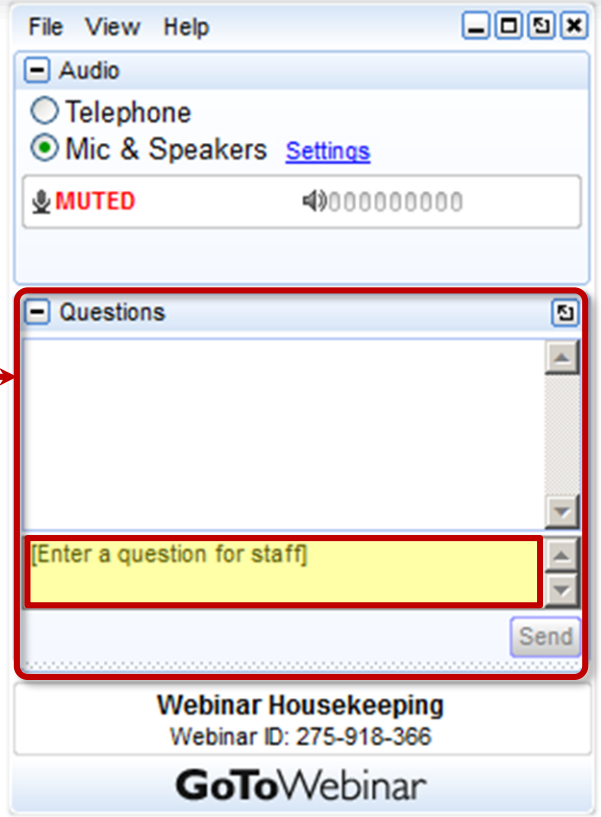
1. Case studies on successful claim attachment implementations
2. Technical details on standards such as the HL7 CDA, HL7 FHIR or X12
3. Drill-down on content versus transport standards
4. Work flow examples of where electronic attachments are essential
5. Please submit other topics in post webinar survey.

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



Reminder - Download a copy of today’s presentation slides at 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

CAQH CORE

Upcoming CAQH CORE Education Sessions

Voluntary CORE Certification National Webinar with Texas Medicaid
THURSDAY, MARCH 30TH, 2017 – 2 PM ET

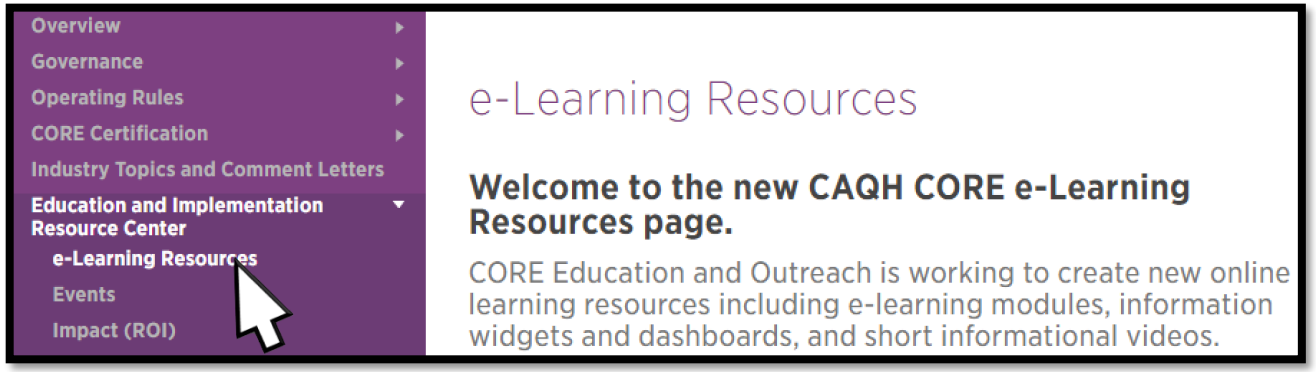
Use and Adoption of Attachments in Healthcare Administration – Part II
WEDNESDAY, APRIL 19TH, 2017 – 2 PM ET

CAQH CORE Town Hall National Webinar
WEDNESDAY, JUNE 14TH, 2017 – 2 PM ET

To register for these, and all CORE events, please go to **www.caqh.org/core/events**

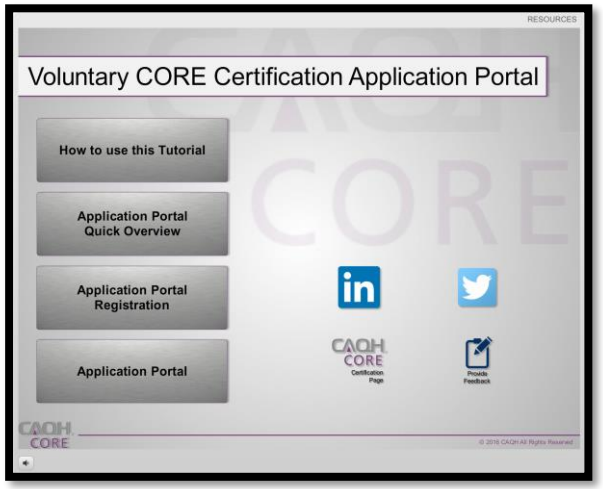
E-Learning Resources from CAQH CORE

www.caqh.org/core/elearning-resources

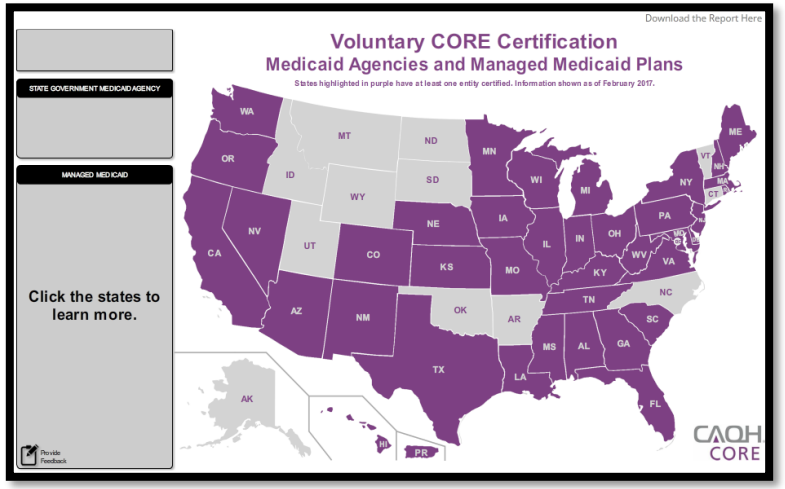


Understand the four components needed to complete voluntary CORE Certification.

Learn about the new CORE Certification Application Portal.



Explore an interactive map to see which Medicaid entities around the country have achieved CORE Certification.



Thank you for joining us!

 @CAQH

Website: www.CAQH.org/CORE

Email: 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.

Acronyms

- ACA Affordable Care Act of 2010
- ANSI American National Standards Institute
- API application program interface
- ASC Accredited Standards Committee
- CAQH Council for Affordable Quality Healthcare, Inc.
- C-CDA Consolidated CDA
- CDA Clinical Data Architecture
- CDP-1 Clinical Documents for Payers, Set 1
- CHIP Children's Health Insurance Program
- CMN Certificate of Medical Necessity
- CORE Committee on Operating Rules for Information Exchange
- EHR electronic health record
- FHIR Fast Healthcare Interoperability Resources
- GIF Graphics Interchange Format (image file type)
- HIP High Impact Pilots
- HIPAA Health Insurance Portability and Accountability Act of 1996
- HIT health information technology
- HL7 Health Level Seven International
- MRM Medical records management
- HTML Hypertext Markup Language
- ID identifier
- ISO International Organization for Standardization
- JPEG Joint Photographic Experts Group (image file type)
- LOINC Logical Observation Identifiers Names and Codes
- MACRA Medicare Access CHIP Reauthorization Act of 2015
- MIPS Merit-Bases Incentive Payment System
- MU Meaningful Use
- NCVHS National Committee on Vital and Health Statistics
- NHSN National Healthcare Safety Network

Acronyms

- NPRM Notice of Proposed Rule Making
- ONC Office of the National Coordinator for Health Information Technology
- OTPS Oncology Treatment Plan and Summary
- PDF Portable Document Format
- PNG Portable Network Graphics (image file type)
- QRDA Quality Reporting Document Architecture
- RELMA Regenstrief LOINC Mapping Assistant
- RESTful representational state transfer
- RTF Rich Text Format
- SDO Standards development organization
- TIF Tagged Image File Format (image file types)
- TR3 Technical Report Type 3
- XML Extensible Markup Language

Example

Unsolicited, Unstructured Submission of Surgical Note

- Provider sends attachment of a surgical note directly to the health plan.
  - Pre-conditions:
    - No clearinghouse; using existing X12 structure
    - Surgery performed; surgical note dictated and converted to PDF; stored in medical records management system via HL7 V2 MRM message
    - Claim prepared in practice management system (837)
  - 1. Pull Surgical Note according to patient name, date, document type code (may be manual or automated query)
  - 2. Create CDA: Base64 encode PDF, create CDA Header using information from MRM system (V2 message) plus unique ID
  - 3. Create ASC X12N 275 Additional Information to Support a Health Care Claim or Encounter:
    - Required data
    - Optional data
  - 4. Send 837 + 275
  - 5. Actions of the health plan:
    - Parse 275 to match attachment with claim
    - Extract CDA from BIN segment and decode Base64 content
    - Insert CDA into system that manages claims documents
    - Augment work queue for review of claim
    - Display CDA for review:
      - Directly if text or pdf or HTML
      - With stylesheet if XML

Example
Solicited; Using Clearinghouse

- Provider sends attachment of a surgical note to the health plan via a clearinghouse.
  - Pre-conditions:
    - Surgery performed; surgical note dictated and converted to PDF; stored in medical records management system
    - Claim prepared in practice management system (837)
  - 1. Payer requests more information:
    - Sends 277 RFI to clearinghouse
    - Requests Surgical note (LOINC doc type code =11504-8)
  - 2. Clearinghouse queries provider for surgical note:
    - Query format: undefined (proprietary, FHIR, other)
    - Assume identification of claim, type of document (LOINC optional)
  - 3. Provider administrative system pulls note – manual or automatic; at most basic, could be paper to fax back to clearinghouse
  - 4. Clearinghouse assembles Unstructured CDA:
    - Information on claim
    - Requestor LOINC code (and response LOINC code if different)
    - Base64 encodes note
  - 5. Create 275: same process and requirements as unsolicited, plus electronic stable binding the request to the response
  - 6. Sends 275
  - 7. Processed by payer as unsolicited