CAOH CORE



Phase IV CAQH CORE 470 Connectivity Rule v4.0.0

> Wednesday, February 24th, 2016 2:00 – 3:00 PM ET

© 2016 CAQH, All Rights Reserved

Logistics How to Participate in Today's Session

- Download a copy of today's presentation on the <u>CAQH.org website</u>
 - Navigate to the CORE Education Events page and access a pdf version of today's presentation under the list for today's event
- 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

File View Help		1
Mic & Speaker	rs Settings	
MUTED	4000000000	
 Questions 		
	[4
		7
[Enter a question for	staff]	4
		7
	Ser	10
Webina Webina	Ir Housekeeping Ir ID: 275-918-366	
പ	N /Webinar	



Session Outline

- Background on the Phase IV CAQH CORE 470 Connectivity Rule
- Key Technical Concepts
 - Problem Description
 - Scope and Applicability
- Technical Requirements
 - Envelope Requirements
 - Security Requirements
 - Payload Processing Mode Requirements
 - Message Interactions
 - Conformance Requirements for Stakeholders
- CAQH CORE Resources for Implementers
- Q&A/Commonly Asked Questions
- Appendix





Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 *Overview*

Purpose

 This presentation will provide technical details and review the requirements for implementing the Phase IV CAQH CORE 470 Connectivity Rule v4.0.0

Audience

 The intended audience consists of technical implementers of CAQH CORE Connectivity Rules for Claims, Prior Authorizations, Benefit Enrollment and Premium Payment transactions in your organization

Prerequisites

- Basic understanding of CAQH CORE mission, vision and Guiding Principles; click <u>HERE</u> for an overview
- Conceptual understanding of Connectivity Rules that are part of the federally mandated Operating Rules set. CAQH CORE general background information is available by clicking <u>HERE</u>
- Working knowledge of technical concepts such as client/server connectivity and SOAP+WSDL, X.509 Digital Certificates, SSL and TLS

Required Materials

- This PowerPoint and a copy of the CAQH CORE Connectivity Operating Rules for reference
 - Phase II Connectivity Rule click HERE
 - Phase IV Connectivity Rule, click <u>HERE</u>



Background on the Phase IV CAQH CORE 470 Connectivity Rule v4.0.0

Robert Bowman CAQH CORE Senior Manager



ACA Mandated Operating Rules and Certification Compliance Dates

Phases I-II COMPLIANCE	Phase III COMPLIANCE	ACA-Mandated HHS Health Plan Certification	Phase IV
January 1, 2013	January 1, 2014	TBD	TBD
Health plan eligibility Claim status transactions HIPAA covered entities conduct these transactions using the CAQH CORE Operating Rules	Electronic funds transfer (EFT) Health care payment and remittance advice (ERA) HIPAA covered entities conduct these transactions using the CAQH CORE Operating Rules	ACA mandates health plans must certify to HHS compliance with Eligibility/ Claim Status/ EFT/ERA operating rules and underlying standards Applies only to health plans and includes potential penalties for incomplete certification	Health claims or equivalent encounter information Referral, certification and authorization Enrollment/ disenrollment in a health plan Health plan premium payments Health claims attachments (HHS Standard not yet mandated)
Mandated Requirements	Mandated Requirements	New HHS proposed rule expected April, 2016	Phase IV Op Rules approved for voluntary implementation by CAQH CORE Part Org and CORE Board

СЛОН

CORE

Phase IV CAQH CORE Operating Rules Regulatory Next Steps





© 2016 CAQH, All Rights Reserved

Scope of Phase IV CAQH CORE Rule Requirements

Reminder: Health Claims Attachments transaction not included; there is no formal HIPAA Health Claims Attachments standard(s).

Infrastructure Requirement	Prior Authorization	Claims	Enrollment/ Disenrollment	Premium Payment
Processing Mode	Batch OR Real Time Required	Batch Required; Real Time Optional	Batch Required; Real Time Optional	Batch Required; Real Time Optional
Batch Processing Mode Response Time	If Batch Offered	X	X	X
Batch Acknowledgements	If Batch Offered	X	X	X
Real Time Processing Mode Response Time	If Real Time Offered	If Real Time Offered	If Real Time Offered	If Real Time Offered
Real Time Acknowledgements	If Real Time Offered	If Real Time Offered	If Real Time Offered	If Real Time Offered
Safe Harbor Connectivity and Security	X	X	X	X
System Availability	X	X	X	X
Companion Guide Template	X	X	X	X
Other	N/A	Include guidance for COB in companion guide	Timeframe requirements to process data after successful receipt and verification of transaction	Timeframe requirements to process data after successful receipt and verification of transaction

X = Required



Phase IV CAQH CORE 450 Health Care Claim (837) Infrastructure Rule v4.0.0

Phase IV CAQH CORE 452 Health Care Services Review – Request for Review and Response (278) Infrastructure Rule v4.0.0

Phase IV CAQH CORE 454 Benefit Enrollment and Maintenance (834) Infrastructure Rule v4.0.0

Phase IV CAQH CORE 456 Premium Payment (820) Infrastructure Rule v4.0.0

Phase IV CAQH CORE 470 Connectivity Rule v4.0.0

Focus of This Presentation

© 2016 CAQH, All Rights Reserved



Phase IV CAQH CORE Connectivity Rule v4.0.0 Development Philosophy

Based on CAQH CORE Mission and Vision of improving administrative simplification through operational uniformity and interoperability

 Developed by industry using a consensus-based approach

Consistent with CORE Guiding Principles; e.g.,

- Builds on existing standards (e.g., HTTP/S, SOAP, MTOM, SSL/TLS)
- Aligns with national initiatives in healthcare information exchange, including clinical domain

Consistent with CORE Connectivity technical and security principles; e.g.,

- Payload agnostic
- Language and platform neutral
- Supports real-time and batch transactions
- Safe Harbor Connectivity

Developed based on

- Foundation established by previous CORE Connectivity phases
- Implementer feedback from previous phases
- Industry-wide environmental scan
- Extensive list of evaluation criteria



Phase IV CAQH CORE Connectivity Rule Development Process





CAQH CORE Connectivity Rule Phases & Applicability to ASC X12 Transactions





Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 CORE Safe Harbor Principle

The Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 is the "CORE Safe Harbor" connectivity method that a HIPAA covered entity or its agent must implement, and **MUST use if requested by a trading partner**

> Trading partners always have systems that are interoperable between them



Enables trading partners to use different communications and security methods than what is specified in rule:

- HIPAA covered entities must support CAQH CORE Operating Rule requirements for real time and batch processing modes
 - Can offer other communications and security methods
 - Does not require trading partners to discontinue any existing connectivity methods not conformant with CAQH CORE Operating Rules



- All message payload processing modes specified for the transactions must be supported
 - See Phase IV Connectivity Rule <u>§4.4.3.1</u> and <u>Phase IV CAQH CORE-Required Processing Mode</u> and Payload Type Tables v4.0.0



Rate your understanding of the CORE Safe Harbor principle on a scale of 1-5.

- 1. Very Strong
- 2. Somewhat Strong
- 3. Neither strong nor weak
- 4. Somewhat Weak
- 5. Very Weak



Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 Key Technical Concepts

Raja Kailar BNETAL, CEO



Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 *Enhancements*

Problem: Multiple connectivity methods are utilized across the industry

 Various connectivity methods for exchanging Claims, Prior Authorization, Benefit Enrollments and Premium Payment transactions both manually and/or electronically drive elevated transaction costs and increase operational complexity

Solution: Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 enhances interoperability, efficiency and security by defining technical requirements for the exchange of the above electronic transactions between trading partners; entities can be assured of a common connectivity method



Clearinghouse/Switch

Applicability of Phase IV CAQH CORE 470 Connectivity Rule v4.0.0

Using the Internet as a delivery option, establishes a Safe Harbor connectivity method that application vendors, providers, and health plans can be assured <u>will be supported</u> by any HIPAA covered entity, meaning that the entity is capable and ready at the time of a request by a trading partner to exchange data using the Phase IV CAQH CORE Connectivity Rule

- Phase IV Connectivity Rule builds on Phase II Connectivity Rule to include more prescriptive submitter authentication, envelope specifications, etc.
- CORE Safe Harbor applies when an entity conducts Claims, Prior Authorization, Benefit Enrollments and Premium Payment transactions

Applies to information sources performing the role of an HTTP/S server and information receivers performing the role of an HTTP/S client

- Applies to <u>both</u> batch and real time transactions
- <u>Does not</u> require trading partners to remove existing connections that do not match the rules



Technical Scope What the Rule Applies To – OSI Model

Scope is described in terms of the network layers in the Open Systems Interconnection Basic Reference Model (OSI model) (See Rule §3.1)

The scope of the Phase IV CAQH CORE Connectivity rule is specific to:

- OSI Layers 3 and 4 (Transport and Network layers)
- OSI Layers 5 and 6 (Session and Presentation layers, also called Message Encapsulation layers)



OSI Model		Messaging Infrastructure Model
Application Layer	OSI 7	Application Layer
Presentation Layer	OSI 6	Message
Session Layer	OSI 5	(envelope)
Transport Layer	OSI 4	Message Transport
Network Layer	OSI 3	Layer



Figure Notes:

- CAQH CORE Phase IV Connectivity Rule addresses Layers 5 and 6 of the OSI Model
- Layer 3 and 4, the Transport Layer and Network Layer, was established as HTTP/S over the public internet in the CAQH CORE Phase I Connectivity Rule
- Layers 1 and 2 are not applicable to CORE because they are not items that could be included in a rule as these layers are so specific to the internal IT systems of every organization.



Technical Scope What the Rule Applies To – Layered View

- The Message Envelope is *outside* the Message Payload (content), and *inside* the Transport Protocol envelope (See Rule <u>§3.1</u>)
- The Transport Protocol Envelope corresponds to OSI Model Layer 3 and 4
- The Message Envelope corresponds to OSI Model Layers 5 and 6
- The Message Payload (content) corresponds to OSI Model Layer 7



Technical Scope What the Rule Applies To – Business to Business Connection Models

Interoperability and efficiency is enhanced by the Phase IV CAQH CORE Connectivity Rule's defined technical requirements for exchange of administrative transactions between trading partners, also known as a Business to Business (B2B) relationship

- The Connectivity Rule can be applied independently of the communication architecture or model (e.g., two models are shown below)
- The Connectivity Rule does not apply to Direct Data Entry (DDE) systems









Stakeholder Conformance Requirements Specified in Phase IV Infrastructure Rules

The Phase IV CAQH CORE Connectivity Rule applies to health plans (*HTTP/S server*) and health care providers (*HTTP/S client*) or their agents, and Clearinghouses (*HTTP/S client*)

- The rule defines conformance requirements for stakeholders based on a typical role (client, server) for message envelope and authentication standards
- The diagram illustrates the typical *(minimal)* roles played by stakeholders (e.g., providers and submitters are typically clients, health plans and TPAs are typically servers, and clearinghouses can act as client or server)





Technical Scope Synchronous and Asynchronous Message Interactions/ Real Time and Batch Processing Modes

The Phase IV CAQH CORE Connectivity Rule addresses synchronous and asynchronous message interaction patterns:

 Message Interaction Patterns describe how connections are established and used for handling requests and responses

Message Interaction Patterns	Description
Synchronous	 Entity initiates a new connection to send a request; the same connection is used to receive the response for the request Typically associated with a Real time mode of processing the message payload
Asynchronous	 Connection is established to send a request; response is sent on a separate connection Typically associated with a Batch mode of processing the message payload





Message Encapsulation Layer Envelopes and Metadata

The Message Envelope

- Provides a container for electronic documents (e.g., electronic claims) to be transmitted from the sender to receiver
- Keeps the contents intact, supports auditing/tracking, and provides other critical details
- Needs to include information to identify the sender/receiver (i.e., Message Envelope Metadata) and ensure documents (i.e., Message Payloads) are delivered to the receiver
- Examples of Message Payloads include the HIPAA administrative transactions (ASC X12), HL7 clinical messages and zipped files



The CORE Connectivity Rules define:

- Message Envelope and Message Envelope Metadata
 - Used primarily to conduct administrative transactions using administrative Message Payloads (e.g., ASC X12 administrative transactions)
- The Message Envelope consists of a well-defined structure for organizing and formatting Message Envelope Metadata
- The Message Envelope Metadata is normative, and helps message receivers route messages for internal processing without opening the envelope, reducing costs and improving response time
- The Message Envelope and Metadata can also be used for non administrative Message
 Payloads



CORE Connectivity Moving the Industry Forward

CORE Connectivity common transport and envelope standards reduce implementation variations and improve interoperability and efficiency of administrative transactions

· Greater online access due to

uniformity in transport

protocols



lealthpla

CORE

time

· Costly management of multiple protocols, many proprietary

© 2016 CAQH, All Rights Reserved

standards, and metadata

implementations and transaction

Reduced time spent on

processing time

Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 Technical Requirements

Kevin Castellow BNETAL, Senior Consultant



Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 Key Features





CAQH CORE Connectivity Rule Features Detailed View & Comparison of Phases

Features	Phase II CAQH CORE Connectivity Rule Mandated under ACA	Phase IV CAQH CORE Connectivity Rule	
Payload(s)	ASC X12 Administrative Transactions NCPDP, HL7 v2.x or v3 Messages Other	ASC X12 Administrative Transactions NCPDP, HL7 v2.x or v3 Messages Other	
Submitter (Client) Authentication	Username/Password (WS-Security Token) X.509 Digital Certificate	X.509 Digital Certificate over SSL v3.0/ TLS v1.1 or Higher	
Message Interactions	Real Time and Batch Interactions	Real Time, Batch, Generic Push and Pull Interactions	
Message Envelope Metadata	CORE Specified Message Envelope Metadata	CORE Specified Message Envelope Metadata	
Message Envelope(s)	MIME Multipart SOAP + WSDL	SOAP + WSDL	
Transport Security	Secure Sockets Layer - (SSL v3.0)	Secure Sockets Layer (SSLv3.0 with optional use of TLS1.1 or higher. Entities needing higher security can use TLS1.1 in lieu of SSLv3.0)	
Transport Layer	HTTP over TCP	HTTP over TCP	
Network	Public Internet	Public Internet	Revised from Phase II

CORE

Message Transport Layer: Envelope Standard

SOAP+WSDL

- Your Name Return Address Line 1 Stamp Return Address Line 2 Recipient Name Recipient Address Line 1 Recipient Address Line 2
- The Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 supports one envelope standard to attach and send files
- SOAP (Simple Object Access Protocol) is a protocol specification for exchanging structured information based on XML using web services
 - XML (Extensible Markup Language): a meta-language that allows users to define their own customized way to describe data; the language used in CORE Connectivity to create CORE specific metadata
- Web Services Description Language (WSDL) is a document written in XML to describe a Web service (the software system to support machine-to-machine interactions over a network)
- Note: HTTP+MIME is not required in Phase IV CAQH CORE Connectivity Rule v4.0.0

Envelope Standard SOAP + WSDL Real Time Request Message Structure (Non-normative– Instructional)





Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 Security

The security aspects of the Rule are intended to assure:

- A message is not altered traveling between trading partner systems
- The message came from a known trading partner





Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 Security Improvements





Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 Processing Modes for Transactions

Processing Mode:

• Refers to how the payload of the connectivity message envelope is processed by the receiving system, in Real Time or Batch mode

Transaction	Processing Modes
ASC X12N 837 Version 5010 Health Care Claim (Institutional, Professional, Dental)	Batch Mode RequiredReal Time Mode Optional
ASC X12N Version 5010 278 Health Care Services Review – Request for Review and Response	Either Real Time Mode or Batch Mode Must be implementedBoth modes may be implemented
ASC X12N Version 5010 820 Payroll Deducted and Other Group Premium Payment for Insurance Products	 Batch Mode Required Real Time Mode Optional
ASC X12N Version 5010 834 Benefit Enrollment and Maintenance	Batch Mode RequiredReal Time Mode Optional

Note: The processing modes for the transactions are specified in a separate external document: <u>Phase IV CAQH CORE 470 Connectivity Rule CAQH CORE-Required Processing Mode and Payload Type Tables v4.0.0</u> §2 Processing Mode Table



Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 *External Documents*





Message Interactions Batch Claims (ASC X12 v5010 837) Batch Processing Mode Example





Message Interactions Real Time Prior Authorization (ASC X12 v5010 278) Real Time Processing Mode Example

The payload for a Real Time message interaction consists of a single ASC X12 transaction





Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 Enhancements to Message Interactions: Generic "Push" and "Pull" Models

The Generic Push and Generic pull message interactions

- The Phase II CAQH CORE Connectivity Rule defined message interactions for conducting Real Time and Batch
 interactions
- Phase IV CAQH CORE Connectivity Rule keeps the Real Time and Batch interactions and added message interactions that could be used as generic building blocks for supporting current and future transactions
- The Generic Push and Pull Batch Interaction requirements support the conduct of the ASC X12N v5010 834 and the ASC X12N 5010 820 transactions

Benefits:

- Provides flexibility to support common industry message interactions for the ASC X12N v5010 820 and ASC X12N v5010 834 where:
 - A Health Plan Sponsor (Client), can "Push" a Batch to a Health Plan (Server)
 - A Health Plan (Client) can "Pull" a Batch from a Health Plan Sponsor (Server)





Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 Error Handling Enhancements

- Error Handling occurs at HTTP, SOAP, CORE Envelope Metadata, and Payload Processing Layers
- CORE Connectivity Rules provides normative error codes and definitions for CORE Envelope Metadata processing
 - ✓ Error handling at HTTP, SOAP and Payload Processing Layers are not defined by CORE
- Phase IV CAQH CORE Connectivity Rule builds on error handling of Phase II CAQH CORE Connectivity Rule:
 - ✓ Addition of error codes based on implementer feedback
 - ✓ Removal of error codes that were required for HTTP+MIME based envelope metadata processing
 - ✓ Added examples and clarified the presentation of the error handling



Error Codes Added	Error description in Rule 470	Reason for Addition	
<fieldname>UnSupported</fieldname>	Value is a legal value, but is not supported by the end p Guide should indicate where to find specific SOAP Operati IV CAQH CORE Connectivity.	Implementer feedback from previous phases	
NotSupported	A request was received at this server with a valid <i>PayloadType</i> or <i>ProcessingMode</i> but is currently not implemented by this server (e.g., it may be implemented at a different server within this organization)		Implementer feedback from previous phases
Error Codes Removed	Error description in Rule 270	Reason for Removal in Rule 470	

<fieldname>Required</fieldname>	The field <fieldname> is required but was not provided</fieldname>	This is handled by SOAP Fault. Since Rule 470 does not have HTTP+MIME envelope, this error code is longer needed
<fieldname>NotUnderstood</fieldname>	The field <fieldname> is not understood at the receiver.</fieldname>	Same reason as above



What CAQH CORE Connectivity topics would you like to learn more about in future CAQH CORE educational webinars?

(Check all that apply)

- 1. CORE Safe Harbor Principle
- 2. CORE Connectivity Methods, i.e. SOAP, WSDL
- 3. Authentication Methods, i.e. digital certificates
- 4. Batch/Real Time Interaction Models

Resources and Additional Information

Robert Bowman CAQH CORE Senior Manager



Phase IV CAQH CORE Analysis & Planning Guide Assists in Understanding Applicability of Rules to Various Trading Partners

As with previous Phases, CAQH CORE now has an <u>Analysis & Planning</u> <u>Guide</u> for the Phase IV CAQH CORE Operating Rules



Planning Guide should be used by project staff to:

Understand applicability of the Phase IV CAQH CORE Operating Rule requirements to organization's systems and processes that conduct the transactions

Identify all impacted external and internal systems and outsourced vendors that process the transactions

Conduct detailed rule requirements gap analysis to identify system(s) that may require remediation and business processes which may be impacted

Planning Guides includes three tools to assist entities in completing analysis and planning:

- 1. Stakeholder & Business Type Evaluation
- 2. Systems Inventory & Impact Assessment Worksheet
- 3. Gap Analysis Worksheet





Phase IV CAQH CORE Operating Rules Frequently Asked Questions (FAQ)

New CAQH CORE FAQ Website

Includes more than 100 Phase IV FAQs addressing five Operating Rules and general concepts/questions



Newly revamped CAQH CORE FAQ website with *searchable*, web-based FAQs

(NO MORE PDFs!)

New FAQ format will:

- Enable users to more quickly find answers to their questions
- Allow users to search only the CAQH CORE FAQs for keywords
- View in one place all FAQs available for a given Operating Rule



New CAQH CORE FAQ Website



CAQH CORE Connectivity Rules Frequently Asked Questions - Examples

Questions	
Basic Conformance Requirements for Key Stakeholders (Rule Section 4)	The Phase IV CAQH CORE Operating Rules define minimum technical roles for a
I am a Healthcare Provider. Do I need to support a Client or Server roles or both for exchanging the HIPAA-mandated transactions?	HIPAA-covered health plan or its agent. The <u>CAQH_CORE_470 Rule</u> defines message interactions between providers and health plans which require that at a minimum a provider support a Client role as described in the CAQH CORE 470 Rule for exchanging the HIPAA-mandated transactions addressed in the Phase IV CAQH CORE Operating Rules.
Submitter Authentication / X.509 certificate authentication (Rule Section 4.1.2) Does the Phase IV CAQH CORE 470 Connectivity Rule have any requirements for the digital certificates used for authentication; e.g., an acceptable Certificate Authority, Certificate Version, Key Length, Public Key Expiration Date, etc.?	No. The <u>CAQH CORE 470 Rule</u> does not specify any security requirements for administering and managing the X.509 Digital Client Certificate. Section 4.3, <i>Publication of Entity-Specific Connectivity Companion Document</i> , of the Rule recommends that server organizations specify their X.509 Digital Certificate requirements in their Connectivity Companion Document.
SOAP+WSDL Envelope Standard (normative) (Rule Section 4.1.3)	Non-normative descriptions are informational and educational descriptions only on
Why are non-normative descriptions provided?	the use of the normative SOAP+WSDL envelope specifications, and are not intended to be part of the specification.



Audience Q & A







Thank you for joining us!

Website: www.CAQH.org/CORE

Email: CORE@CAQH.org









Appendix



Final versions of each rule are available for free on our website (www.CAQH.org/CORE):

Phase IV CAQH CORE 450 Health Care Claim (837) Infrastructure Rule Version 4.0.0

<u>Phase IV CAQH CORE 452 Health Care Services Review – Request for Review</u> and Response (278) Infrastructure Rule Version 4.0.0

<u>Phase IV CAQH CORE 454 Benefit Enrollment & Maintenance (834)</u> <u>Infrastructure Rule Version 4.0.0</u>

Phase IV CAQH CORE 456 Premium Payment (820) Infrastructure Rule Version 4.0.0

Phase IV CAQH CORE 470 Connectivity Rule Version 4.0.0

- XML Schema Specification (normative)
- Web Services Definition Language (WSDL) Specification (normative)
- Phase IV CAQH CORE-Required Processing Mode and Payload Type Tables Version 4.0.0



Server Requirements

Server: An entity that receives a message from a Client, which it may process, or relay to another Server

- Ability to receive incoming connections over the public Internet
- Ability to authenticate the incoming connections using the X.509 Client Digital certificate based authentication over SSL Version 3 or TLS 1.1 or higher
- Ability to parse and process the message envelope using the SOAP+WSDL standard as specified in the v4.0.0 <u>XSD</u> and <u>WSDL</u>
- Ability to process the 3rd set of ACA mandated transactions with the processing modes as specified in the <u>Phase IV CAQH CORE-Required Processing Mode and Payload Type</u> <u>Tables v4.0.0</u>
- Ability to receive the payload types specified in the Phase IV CAQH CORE-Required Processing Mode and Payload Type Tables Version 4.0.0 and process the payload types
- Perform error processing
- Track the date, time and payload ID of messages
- Meet the Availability and Response time requirements specified in the <u>CAQH CORE</u>
 <u>Phase IV Infrastructure Rules</u>
- Publish an Entity-Specific Connectivity Companion Document



Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 Security Across the Layers - Improved Support for Security and Compliance

Transport Security: Security (e.g., authentication, integrity) for electronic transactions conducted over a common medium

- Security requirements:
 - <u>Secure Socket Layer (SSL) Version 3.0</u> is a standard security technology for establishing an encrypted link between two servers
 - Provides "over the wire" (or transport level) confidentiality and integrity of the data sent over the SSL/TLS session
 - Servers are authenticated using SSL Server Certificates
 - Requires SSL Version 3.0 or optionally TLS 1.1 or higher for transport level security
 - Entities that must also be <u>FIPS 140-2</u> compliant or whose security policies require enhanced security may implement TLS 1.1 or higher in lieu of SSL Version 3.0.
 - For <u>authenticating clients</u> (i.e., "Submitters"):
 - X.509 Certificates over SSL (optionally TLS 1.1 or higher)
 - For payload integrity verification:
 - SHA-1 A Checksum of the payload is sent as part of the message envelope.
 - Entities requiring FIPS 140-2 compliance may use <u>SHA-2</u> instead of <u>SHA-1</u>.
 - If SHA-2 is used, then the entity's Connectivity Companion Document can specify that SHA-2 is expected in incoming messages from trading partners.
 - For <u>reliability of transport</u>:
 - <u>UUID</u>* is used for Payload ID (for detecting duplicates)
 - · Timestamp is used for ensuring that the data is recent

Related Trends:

- SSL Version 3.0 is commonly used in the industry
- TLS 1.1 or higher is used for securing connections with Federal government trading partners
- HealtheWay eHealth Exchange (formerly NwHIN Exchange) (included in Meaningful Use-2) uses TLS
- ONC S&I Electronic Submission of Medical Documents (esMD) and Electronic Determination of Coverage (eDoc) use TLS



Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 X.509 Digital Certificate: A Single Submitter Authentication Method

Submitter Authentication

- X.509 digital certificate as the single authentication standard
 - Username + password was removed

Benefits:

- X.509 Client Certificate based authentication over SSL/TLS is stronger than username + password
- Reduced implementation cost and complexity having one standard
- Client certificate based authentication requires the submitter to access its cryptographic key (private key) to use its public key certificate
- Digital Certificates
 - expire and need to be renewed, the potential for a successful brute force attack is low
 - can be revoked through a Certificate Revocation List (CRL) or Online Certificate Status Protocol (OCSP) mechanism
- Aligned with clinical initiatives and industry trends (e.g., NwHIN Exchange) that use SOAP over HTTP for clinical data exchanges, and use client certificate based authentication for Business-to Business authentication

Background:

The CAQH CORE Connectivity Rule Version 2.2.0 has two submitter authentication standards:

- X.509 Client Authentication over SSL Version 3.0 or TLS 1.0 (FIPS 140)
- Username-Password



Scope ASC X12 Transactions Addressed by the Phase IV CAQH CORE Connectivity Rule, Relationship to Previous Phases

Phase I & II	Phase III	Phase IV
ASC X12 005010X279A1 Eligibility Benefit Request and	ASC X12 005010X221A1 Health Care Claim	 ASC X12N 005010X223 Health Care Claim Institutional (837) ASC X12N 005010X222 Health Care Claim Professional (837) ASC X12N 005010X224 Health Care Claim Dental (837) (collectively referred to as ASC X12N 837 v5010 Claim)
Response (270/271) • ASC X12	Payment/Advice (835)	ASC X12N 005010X217 Health Care Services Review – Request for Review and Response (278) (generally referred to as Prior Authorization)
005010X212 Health Care Claim Status Request and		ASC X12N 005010X218 Payroll Deducted and Other Group Premium Payment for Insurance Products (820) (generally referred to as Health Plan Premium Payment)
Response (276/277)	Note: the CAQH	ASC X12N 005010X220 Benefit Enrollment and Maintenance (834) (generally referred to as Benefit Enrollment)
	Rules <i>do not apply</i> to the Health Care Electronic Funds Transfers transaction	Note: Although the Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 addresses the transactions above all transactions addressed by all phases of CAQH CORE Operating Rules can be conducted under the Safe Harbor provisions of the either the Phase IV CAQH CORE 470 Connectivity Rule v4.0.0 or the HIPAA-mandated Phase II CAQH CORE 270 Connectivity Rule v2.2.0. Entities must still implement the HIPAA-mandated Phase II CAQH CORE Phase II Connectivity Rule v2.2.0.

Note: References to ASC X12 transactions also include all associated errata



Technical Requirements and the Relationship to the Phase I-III Requirements

Connectivity Rule Area	CORE Phase I Connectivity Rule Requirements	CORE Phase II & III Connectivity Rule Requirements	CORE Phase IV Connectivity Rule Requirements
Network	Internet	Internet	Internet
Transport	HTTP	НТТР	НТТР
Transport Security	SSL	SSL 3.0 with optional use of TLS 1.x	 SSL 3.0, or optionally TLS 1.1 or higher. Entities that must also be FIPS 140-2 compliant or that require stronger transport security may implement TLS 1.1 or higher in lieu of SSL 3.0
Submitter (Originating System or Client) Authentication	Name/Password	 UserName + Password or X.509 Digital Certificate 	X.509 Digital Certificate based authentication over SSL/TLS Removed Username + Password
Envelope and Attachment Standards	Unspecified	SOAP 1.2 + WSDL 1.1 and MTOM (for Batch) or HTTP+MIME	SOAP 1.2 + WSDL 1.1 and MTOM (for both Real Time and Batch) Removed HTTP+MIME
Envelope Metadata	Unspecified	Metadata defined (Field names, values) (e.g., PayloadType, Processing Mode, Sender ID, Receiver ID)	 Metadata defined (Field names, values) (e.g., <i>PayloadType, Processing Mode, Sender ID, Receiver ID</i>) SHA-1 for Checksum FIPS 140-2 compliant implementations can use SHA-2 for checksum.
Message Interactions/ Routing	 Real-time Batch (Optional if used) 	Real-timeBatch (Optional if used)	 Batch and Real-Time processing requirements defined for each transaction Push and Pull Generic messages for 820/834 transactions
Acknowledgements, Errors	Specified	Enhanced Phase I, with additional specificity on error codes	Errors Codes updated
Basic Conformance Requirements for Client and Server Roles	Minimally specified	Well specified	Well specified
Response Time	Specified	Maintained Phase I time requirements	Maintained Phase I time requirements
Connectivity Companion Guide	Specified	Enhanced Phase I, with additional recommendations	Enhanced Phase I, with additional recommendations

