Contents

1. Overview

1.1 Background

The CSWG launched in February 2020 to evaluate opportunities to strengthen existing CAQH CORE Connectivity Rules and move the industry towards a common set of Safe Harbor connectivity methods that address existing and emerging connectivity standards and security protocols to support the intersection of administrative and clinical data exchange.

On its 02/26/20 call, CSWG participants reviewed and discussed six potential opportunity areas to update the CAQH CORE Connectivity Rules in preparation to complete the first CSWG Feedback Form:

- **Opportunity Area #1:** Potential Updates to CAQH CORE Connectivity Safe Harbor Requirements
- **Opportunity Area #2:** Single, Uniform CAQH CORE Connectivity Rule
- **Opportunity Area #3:** Potential Updates to CAQH CORE Connectivity Transport Security Requirements
- **Opportunity Area #4:** Potential Updates to CAQH CORE Connectivity Submitter Authentication Requirements
- **Opportunity Area #5:** Potential Updates to CAQH CORE Connectivity Message Interactions Requirements
- **Opportunity Area #6:** Potential Updates to CAQH CORE Connectivity API/Web Service Requirements

The first feedback form evaluated potential updates to the existing CAQH CORE Connectivity Rules and provided further insight into the feasibility and impact of potential updates to existing connectivity rule requirements being considered by the Work Group.

On its 04/01/20 call, the CSWG reviewed the results of the feedback form and discussed substantive comments and points of clarification submitted by Work Group participants. Given the high support for pursuing all six opportunity areas presented on the feedback form, the Work Group decided to move forward with drafting updated scope and requirement sections to the existing *CAQH CORE Connectivity Rule vC3* (formerly known as CAQH CORE Phase IV Connectivity Rule) and to further scope opportunity areas for potential REST requirements to include in the rule update. ***NOTE****: The existing CAQH CORE Connectivity Rule vC3 supports the transport of SOAP messages only*.

On its 04/29/20 call, the CSWG reviewed draft substantive updates to the existing *CAQH CORE Connectivity Rule vC3* (which pertains to the transport of SOAP messages) and opportunity areas for REST requirements, in preparation for the upcoming straw poll.

On its 06/03/20 call, the CSWG reviewed the results of the first straw poll and discussed substantive and point of clarification comments submitted by straw poll respondents. Given the high support for pursuing all REST opportunity areas presented on the straw poll, the Work Group decided to move forward with drafting scope and requirement sections for each REST opportunity area presented. Additionally, each updated draft scope section of the *CAQH CORE SOAP Connectivity Rule* received high support and all proposed updates were agreed upon during the call. One requirement section in the SOAP Rule pertaining to submitter authentication and submitter authorization was determined to require additional research and feedback from the Work Group and was included on this straw poll for further Work Group feedback.

On its 06/24/20 call, the CSWG reviewed the draft REST requirements and the select SOAP requirement options, in preparation for the upcoming straw poll.

1.2 Format of Straw Poll

Items reviewed, listed in the order as they appeared in the straw poll:

- **PART A: Options for DRAFT SOAP Requirements for Submitter Authentication and Authorization**
  - *Draft Submitter Authentication and Submitter Authorization Requirement Options*
- **PART B: Question(s) Pertaining to Draft CAQH CORE REST Connectivity Rule – Scope**
  - *Section 3: Scope*
- **PART C: Question(s) Pertaining to Draft CAQH CORE REST Connectivity Rule – Requirements**
  - *Section 4.1 Basic Conformance Requirements for Stakeholders*
  - *Section 4.2 CAQH CORE REST API Interface Format, Submitter Authentication and Submitter Authorization Requirements*
  - *Section 4.3 General Specifications Applicable to REST APIs*
  - *Section 4.4 Specifications for REST API Uniform Resource Identifiers (URI) Paths*
    - *Table 4.4.1 Specifications for REST API URI Path Versioning*
    - *Table 4.4.2 Specifications for REST API URI Endpoints for Payload Types*
  - *Section 4.5 REST HTTP Method Requirements*
  - *Section 4.6 REST HTTP Metadata, Descriptions, Intended Use and Values*
    - *Table 4.6 REST HTTP Request and Response Metadata*
  - *Section 4.7 REST POST Message Structure (Example)*
  - *Section 4.8 Publication of Entity-Specific Connectivity Companion Document*
  - *Section 5 Safe Harbor*
  - *Section 6 Conformance Requirements*
- **PART D: Question(s) Pertaining to Draft CAQH CORE REST Connectivity Rule – Appendix**
  - *Section 7.1 Sequence Diagrams*

Part A of the straw poll asked respondents to read the requirement options listed for the Draft SOAP Submitter Authentication and Authorization Requirement and select *either* 'Option A' or 'Option B' for inclusion in the *Draft CAQH CORE SOAP Connectivity Rule*. Given all other sections of the *Draft CAQH CORE SOAP Connectivity Rule* received at least 90% support on the CSWG's first straw poll, this was the only question pertaining to the SOAP Rule included on the straw poll.

Part B asked respondents to read *Section 3 Scope* of the *Draft CAQH CORE REST Connectivity Rule*, including all sub-sections and indicate their "support" or "non-support" for the draft language. Given *Section 3 Scope* of the *Draft CAQH CORE REST Connectivity Rule* aligns with *Section 3 Scope* of the CAQH CORE SOAP Connectivity Rule, which received at least 90% support during the CSWG's first straw poll, sub-sections were not individually straw polled.

Part C asked respondents to read each requirement in the *Draft CAQH CORE REST Connectivity Rule* and indicate their "support" or "non-support" for the draft language. Several sections included tables with questions specific to the layout and content of the table. Given several of the REST requirement sections mirror the requirements included in prior CAQH CORE Connectivity Rules, individual sub-sections that do not reflect new REST requirements were not straw polled.

Part D asked respondents to review *Section 7.1 Sequence Diagrams* in the Appendix of the *Draft CAQH CORE REST Connectivity Rule* and indicate their "support" or "non-support" for the draft language and associated sequence diagrams.

NOTE: In all parts of the straw poll, respondents were given the opportunity to provide comments relating to their responses, if applicable.

2. Summary of Straw Poll Respondents

Responses were received from **18** respondents representing **72%** of Connectivity & Security Work Group participating organizations.

Total Number of Individual Responses	18 (72% of the CSWG)
Number of Provider / Provider Association / Provider-Facing Vendor Responses	2 (12% of respondents)
Number of Health Plan / Health Plan Association / Health-Plan Facing Vendor Responses	8 (44% of respondents)
Number of Dual-Facing Vendor / Clearinghouse Responses	4 (22% of respondents)
Number of Government / 'Other' Responses	4 (22% of respondents)

3. Percent Support for *Draft CAQH CORE SOAP Connectivity Rule*: Submitter Authentication and Authorization Requirement Options (Part A)

When the straw poll closed on Friday, 07/17/20, Option B (X.509 OR OAuth 2.0) had least **93% support**, as shown in Table 1 below.

Table 1. Percent Support for *Draft CAQH CORE SOAP Connectivity Rule*: Submitter Authentication and Authorization Requirement Options

#	CSWG Straw Poll #2: Support for Submitter Authentication and Authorization Requirement Options for the Transport of SOAP Messages.	Option A (X.509 over TLS 1.2 only)	Option B (X.509 OR OAuth 2.0 over TLS 1.2)	Abstain
PART A: Options for DRAFT SOAP Requirements for Submitter Authentication and Authorization				
1	Support for submitter authentication and authorization options for the transport of SOAP messages.	1 (7%)	14 (93%)	3

4. Percent Support for *Draft CAQH CORE REST Connectivity Rule*: Scope, Requirements and Appendix (Parts B – D)

4.1 Support for *Draft CAQH CORE REST Connectivity Rule* (Specific Endpoint Names listed in Table 3)

When the straw poll closed on Friday, 07/17/20, each straw polled section of the *Draft CAQH CORE Connectivity REST Rule* had least **80% support**, as shown in Table 2 below.

Table 2. Percent Support for *Draft CAQH CORE REST Connectivity Rule*: Scope, Requirements and Appendix

#	CSWG Straw Poll #2: *Draft CAQH CORE REST Connectivity Rule*	Support (%)	Do Not Support (%)	Abstain #
PART B: Support for *Draft CAQH CORE REST Connectivity Rule*: Scope				
Section 3 Scope				
1	*Section 3 Scope*	14 (93%)	1 (7%)	3
PART C: Support for *Draft CAQH CORE REST Connectivity Rule*: Requirements				
Section 4.1 Basic Conformance for Stakeholders				
2	*Section 4.1 Basic Conformance for Stakeholders*	15 (100%)	0 (0%)	3
Section 4.2 CAQH CORE REST API Interface Format and Submitter Authorization Requirements				
3	*Section 4.2.1 REST API Interface Format Requirement*	15 (100%)	0 (0%)	3
4	*Section 4.2.2 Submitter Authorization Requirement*	13 (93%)	1 (7%)	4
Section 4.3 General Specifications Applicable to REST APIs				
5	*Section 4.3 General Specifications Applicable to REST APIs*	14 (93%)	1 (7%)	3
Section 4.4 Specifications for REST API Uniform Resource Identifier (URI) Paths				
6	*Section 4.4.1 Specifications for REST API URI Path Versioning*	15 (100%)	0 (0%)	3
7	Support for including CAQH CORE Connectivity Rule Versioning and REST API Versioning.	15 (100%)	0 (0%)	3

#	CSWG Straw Poll #2: *Draft CAQH CORE REST Connectivity Rule*	Support (%)	Do Not Support (%)	Abstain #
8	*Section 4.4.2 Specifications for REST API URI Path Endpoints for Payload Tables*	14 (93%)	1 (7%)	3
9	Support for *Table 4.4.2 Specifications for REST API URI Path Endpoints for Payload Tables*	13 (87%)	2 (13%)	3
Section 4.5 REST HTTP Request Method Requirements				
10	*Section 4.5 REST HTTP Request Method Requirements*	14 (100%)	0 (0%)	4
11	Support for requiring both POST and GET HTTP Methods in the draft rule.	15 (100%)	0 (0%)	3
Section 4.6 REST HTTP Metadata, Descriptions, Intended Use and Values				
12	*Section 4.6 REST HTTP Metadata, Descriptions, Intended Use and Values*	15 (100%)	0 (0%)	3
13	Support for *Table 4.6 REST HTTP Request Metadata*	13 (87%)	2 (13%)	3
14	Support for *Table 4.6 REST HTTP Response Metadata*	14 (93%)	1 (7%)	3
Section 4.7 REST POST Message Structure				
15	*Section 4.7 REST POST Message Structure*	14 (100%)	0 (0%)	4
Section 4.8 Publication of Entity-Specific Connectivity Companion Document				
16	*Section 4.8 Publication of Entity-Specific Connectivity Companion Document*	12 (80%)	3 (20%)	3
Section 5 Safe Harbor				
17	*Section 5 Safe Harbor*	14 (93%)	1 (7%)	3
Section 6 Conformance Requirements				
18	*Section 6 Conformance Requirements*	15 (100%)	0 (0%)	3
PART D: Draft CAQH CORE REST Connectivity Rule – Appendix				
Section 7 Appendix				
19	*Section 7.1 Sequence Diagrams*	14 (100%)	0 (0%)	4

4.2 Support for Draft REST API Endpoint Names

When the straw poll closed on Friday, 07/17/20, each draft endpoint name had least **73% support**, as shown in Table 3 below.

Table 3. Percent Support for Specific REST API Endpoint Names

Transaction	Endpoint Names	Support (%)	Do Not Support (%)	Abstain #
Eligibility Benefit Inquiry/Response	eligibility	14 (93%)	1 (7%)	3
Additional Information to Support Health Care Claim or Encounter	claimAttachment	13 (93%)	1 (7%)	4
Additional Information to Support Health Care Services Review	paAttachment	13 (93%)	1 (7%)	4
Claim Status Inquiry/Response	claimStatus	14 (93%)	1 (7%)	3
Health Care Claim Request for Additional Information	claimStatus	11 (73%)	4 (27%)	3
Claim Acknowledgement	claimStatus	11 (73%)	4 (27%)	3
Services Review – Review Request/Response	servicesReview	14 (93%)	1 (7%)	3
Services Review – Inquiry and Response	servicesReview	11 (73%)	4 (27%)	3
Services Review – Notification and Announcement	servicesReview	11 (73%)	4 (27%)	3
Payroll Deducted & Other Group Premium Payment for Insurance Products	payrollDeducted	14 (93%)	1 (7%)	3
Benefit Enrollment and Maintenance	benefitEnrollment	14 (93%)	1 (7%)	3
Health Insurance Exchange Enrollment	exchangeEnrollment	14 (93%)	1 (7%)	3
Health Plan Member Reporting	memberReporting	13 (93%)	1 (7%)	4
Remittance Advice	remittanceAdvice	14 (93%)	1 (7%)	3
Claim – Institutional	claimInstitutional	14 (93%)	1 (7%)	3
Claim – Professional	claimProfessional	14 (93%)	1 (7%)	3
Claim – Dental	claimDental	14 (93%)	1 (7%)	3
Functional Acknowledgement	ackNack	14 (93%)	1 (7%)	3
Interchange Acknowledgement	iaAckNack	14 (93%)	1 (7%)	3
HL7_CDA_R2 **OR** HL7_CCDA **OR** PDF **OR** Doc **OR** Text **OR** Image, etc.	nonX12	13 (87%)	2 (13%)	3

5. Summary of CSWG Straw Poll Comments Received

Respondents were given the opportunity to provide comments on each of the questions asked on the straw poll. Three categories of comments were received:

1. **Points of Clarification** – Pertain to areas where more explanation for the Work Group is required*; may* require adjustments to the Draft CAQH CORE SOAP Connectivity Rule or Draft CAQH CORE REST Connectivity Rule, which do not change rule requirements.
2. **Substantive Comments** – May impact rule requirements; some comments require Work Group discussion on suggested adjustments to the potential opportunity areas and draft substantive updates.
3. **Non-substantive Comments** – Pertain to typographical/grammatical errors, wordsmithing, clarifying language, addition of references; do not impact rule requirements*.* **NOTE:** Non-substantive comments do not require Work Group discussion, CAQH CORE staff will make these adjustments to the requirements, as necessary. We will not be reviewing these comments on today's call, but they are available in the Appendix of this document for offline review. Please be sure to review these comments as there are several adjustments for clarity included in this section.

The tables below summarize substantive comments and points of clarification submitted by CSWG Straw Poll respondents. For substantive comments, the table includes CSWG Co-Chair and staff recommendations, but discussion on these comments is encouraged.

6. Comments Received on CSWG Straw Poll #2 Part A: *Draft CAQH CORE SOAP Connectivity Rule*: Submitter Authentication and Authorization Requirement Options (Part A)

6.1 Comments Received on Part A: Submitter Authentication and Authorization Requirement Options (Part A)

Table 4 below summarizes points of clarification and substantive comments received from CSWG Straw Poll respondents pertaining to Part A: Submitter Authentication and Authorization Requirement Options, along with CAQH CORE CSWG Co-chair and staff responses. Non-substantive comments are available in Appendix A of this document for offline review.

Table 4. Comments Received on Part A: Draft CAQH CORE SOAP Connectivity Rule - Submitter Authentication and Authorization Requirement Options

#	Section	Summary of Comments	CAQH CORE CSWG Co-Chair & Staff Response
Points of Clarification			
1	Submitter Authentication & Authorization Requirement Options	One entity asked for clarification that Health Plans/Severs would need to support **both** X.509 Digital Certificate and OAuth 2.0, while providers could choose to support either option.	• Given the *Draft CAQH CORE SOAP Connectivity Rule* is a Safe Harbor and in order to ensure that X.509 will continue to be supported, as determined by the Work Group on previous straw polls and feedback forms, Health Plans/Servers will be required to support both X.509 and OAuth 2.0. Providers must also support X.509 Digital Certificate and may optionally choose to support OAuth 2.0. This will allow OAuth 2.0 to be optionally used under the Safe Harbor. **NOTE**: This Safe Harbor requirement is specific to the *Draft CAQH CORE SOAP Connectivity Rule.*
Substantive Comments			
2	Submitter Authentication & Authorization Requirement Options	One entity suggested that both X.509 Digital Certificate **AND** OAuth 2.0 should be required, rather than X.509 Digital Certificate **OR** OAuth 2.0, since entities should both authenticate and authorize data exchanges.	• **Adjust for clarity.** CAQH CORE CSWG Co-chairs and staff will adjust the requirement language to clarify the use and support of OAuth 2.0 as an optional requirement in addition to the continued requirement for the support of X.509 Digital Certificates under the CAQH CORE SOAP Connectivity Rule. To maintain the existing *CAQH CORE Connectivity vC3* SOAP Requirements, and in accordance with Work Group feedback on prior feedback forms and straw polls, all HIPAA-covered entities will continue to be required to support X.509 Digital Certificate. Additionally, since this rule is a CORE Connectivity Safe Harbor, Health Plans/Servers will be required to support OAuth 2.0 for use in addition to X.509 Digital Certificates.

7. Comments Received on Parts B – D: *Draft CAQH CORE REST Connectivity Rule:* Scope, Requirements and Appendix

Table 5 below summarizes comments received from CSWG Straw Poll respondents pertaining to the *Draft CAQH CORE REST Connectivity Rule*, along with CAQH CORE CSWG Co-chair & staff responses. Non-substantive comments are available in Appendix A for offline review.

Table 5. Comments Received on Parts B – D: Draft CAQH CORE REST Connectivity Rule

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
Points of Clarification			
1	*Section 3 Scope*	One entity asked for clarification as to how the Connectivity Rule Update relates to the proposed *CAQH CORE Connectivity Rule vC3* that is currently under consideration by NCVHS. Specifically, what the timeline for implementation of *CAQH CORE Connectivity vC4* will be and how the updated requirements may differ from *CAQH CORE Connectivity Rule vC3* under consideration by NCVHS in August 2020.	• Existing CAQH CORE Operating Rules, including the recent prior authorization infrastructure and data content rules, provide a strong foundation for the industry in terms of guidelines for administrative data exchange. *CAQH CORE Connectivity vC3* supports the connectivity and security of the prior authorization administrative transactions. Additionally, CAQH CORE has proposed vC3 for federal mandate to replace *CAQH CORE Connectivity vC1 and vC2* for all HIPPA-mandated transactions. This will establish a base on which to build the next set of planned CORE Operating Rules, which focuses more on clinical data exchange. As the industry looks towards the next set of CAQH CORE Operating Rules in development, which will support medical documentation (Attachments – claims and prior authorization use cases – and VBP Rule Set), CORE Connectivity must align to support clinical and administrative data exchange. Therefore, this *Draft CORE Connectivity vC4* contains requirements that align CAQH CORE connectivity & security to support REST and other API technology that will build a bridge between administrative and clinical data exchange and will be paired with the Draft CAQH CORE VBP Rule Set and Attachments Rules including Claims and Prior Authorization. The CAQH CORE Board may propose future updates to the federally mandated connectivity requirements to align with vC4. Should the any Connectivity Rule become mandated in the future, there would be an implementation period for the industry to mitigate systems and business processes to meet the requirements.

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
2	*Section 3.3 When the Rule Applies*	Two entities recommended adjustments to sub-sections within *Section 3 Scope*: • One entity suggested using the official X12 name of the transactions listed in *Section 3.3. When the Rule Applies*. • The same entity recommended adding the 6020 version of the 278 transaction since the Attachments standard may specify the 6020 version. • Another entity recommended including an explanation for the process used to determine which non HIPAA-mandated transactions fall within the scope of this rule.	• **Adjust for clarity.** CAQH CORE CSWG Co-chairs and staff will adjust *Section 3.3 When the Rule Applies* to use the official name of the X12 transactions, as suggested by the straw poll respondent. • **Do not adjust.** Under *Section 3.7 Rule Maintenance*, maintenance to the rule is triggered when published Federal regulation or Federal notices to the industry impact the transactions, standards or technology addressed by this rule. Therefore, since v5010X217 278 is currently specified in the CAQH CORE Prior Authorization Rules and is the HIPAA-mandated version, we recommend continued support for v5010 for consistency across existing CORE Operating Rules. • **Do not adjust.** To create a single, uniform CAQH CORE Connectivity Rule that applies across all CORE Operating Rules, *Section 3.3 When the Rule Applies* of the *Draft CAQH CORE REST Connectivity Rule* includes all X12 transactions addressed by voluntary and mandated CAQH CORE Operating Rules and Operating Rules that are in development. Similar to the approach taken in the existing *CAQH CORE Connectivity Rule vC3*, *Section 3.3* references the *CAQH CORE Connectivity Rule vC2* to clarify that while the requirements in the *Draft CAQH CORE REST Connectivity Rule* support the listed X12 transactions, HIPAA-covered entities must continue to support the requirements established in the ACA-mandated *CAQH CORE Connectivity vC2*. Additionally, while the *Draft CAQH CORE REST Connectivity Rule* specifies requirements for the X12 transactions addressed in CAQH CORE Operating Rules (those listed in *Section 3.3),* the connectivity and security requirements can optionally be applied to additional payload types (e.g., C-CDA, .pdf, .doc, etc.).

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
3	*Section 3.7 Rule Maintenance*	One entity suggested that the CSWG develop an expected or ideal maintenance schedule to include in *Section 3.7 Rule Maintenance.*	• **Do not adjust.** CAQH CORE started as a voluntary effort. As such, before any CAQH CORE Operating Rules were mandated, CAQH CORE drove voluntary adoption and maintenance of the CAQH CORE Operating Rules using a transparent approach that addressed both substantive and non-substantive updates. The mandated CAQH CORE Operating Rules support this maintenance process, and the ability for CAQH CORE to conduct routine, periodic maintenance of specific federally adopted operating rule requirements, based on ongoing use, need and lessons learned. This model has proved successful for industry by allowing these three types of updates to complement one another, yet not overload the industry with constant updates or unnecessary overhauling. CAQH CORE believes that a cycle of maintenance for mandated operating rules and standards helps drive the CAQH CORE vision of an ever-evolving improving system of electronic transactions. Additionally, the maintenance process is cited and linked in this section of the rule.
4	*Section 4.1 Basic Conformance for Stakeholders*	One entity asked for clarification as to when a provider system would act as both a client and a server, and therefore need to comply with the requirements for both REST **and** SOAP exchanges rather than either REST **or** SOAP.	• In the instance that a provider or provider vendor implements a server (e.g. message receiver), it must support both exchange methods specified by *Draft CAQH CORE Connectivity vC4* (SOAP **and** REST). However, the provider and provider vendors will most often act as a client (e.g. message sender), meaning they do not have a server implemented. When a provider or provider vendor does not have a server implemented, they only are required to implement one of the two *CAQH CORE Connectivity vC4* exchange methods (SOAP **or** REST).
5	*Section 4.2.1 REST API Interface Format Requirement*	One entity asked if some submitters would want to use the XML format instead of JSON to exchange data using REST.	• **Do not adjust.** Given 100% of CSWG Straw Poll Respondents agreed to support JSON as the REST API Interface Format Standard, CSWG Co-chairs and staff recommend not adjusting the requirement to include XML. Additionally, JSON is commonly identified as the industry standard for REST. The draft rule does not preclude entities from supporting XML format for REST implementations; however, they would not be conformant to these rule requirements.

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
6	*Section 4.3 General Specifications Applicable to REST APIs*	Three entities provided recommended adjustments to *Section 4.3 General Specifications Applicable to REST APIs*: • One entity noted that *Section 4.3.5 Asynchronous Batch Response Pick-Up* is ambiguous in terms of what implementer should do with Responses that were picked-up. They recommended either removing *Section 4.3.5* or adding verbiage to describe when Responses could be removed from the system. • Another entity suggested *Section 4.3.6 Error Handling* specify that error messages should include detailed information on the cause of the error and information to assist in determining who the sender should contact or notify for a resolution. They also recommended including guides that provide clear descriptions of Status Codes and to standardize the use of specific error codes when providing additional text is not possible. • Another entity recommended adding an optional provision to *Section 4.3.8 Tracking of Date and Time and Payload* that allows unique identifiers to be used and exchanged, in addition to timestamps.	• **Do not adjust.** CAQH CORE does not specify what implementers must do with picked up responses. However, this information should be agreed upon in the trading partner agreement. • **Do not adjust.** Given the list of Status Codes for errors is a normative reference tool, not a comprehensive list, the CAQH CORE REST Connectivity Rule does not intend to specify the codes required, only provide examples of codes that could be used. However, organizations should be prepared to accept the error codes included in the rule. Additionally, Status Codes for errors are defined by standards organizations and maintained by these organizations (e.g., Internet Assigned Numbers Authority). Information to determine who to contact for a resolution and guides providing clear descriptions of the codes is out the scope for this rule. • **Adjust for clarity.** CAQH CORE CSWG Co-chairs and staff will adjust line 296 in *Section 4.3.8 Tracking of Date and Time and Payload* to clarify that other elements may be elected (e.g., identifiers) and that these are minimally required elements. Similar to prior versions of CAQH CORE Connectivity Rules, the requirements in this rule represent a floor and not a ceiling in terms of what organizations can implement. Entities may choose to collect additional metadata for tracking and auditing purposes.
7	*Section 4.4.1 Specifications for REST API URI Path Versioning*	One entity commented that the rule language in *Section 4.4.1 Specifications for REST API URI Path Versioning (normative)* should indicate whether both versioning specifications are used in the same URI. They also noted that an example would be helpful to include in the rule.	• **Adjust for clarity.** CAQH CORE CSWG Co-chairs and staff will adjust *Section 4.4.1* as recommended by the straw poll commenter.

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
8	Table 4.4.2 Specifications for REST API URI Path Endpoints for Payload Types (normative)	Three entities provided recommendations for updating Table 4.4.2 Specifications for REST API URI Path Endpoints for Payload Types (normative): • Three entities suggested that endpoint names should uniquely identify implementations of the same transaction. • One of these entities provided recommended adjustments for the unique endpoint names: – Health Care Claim Request for Additional Info = **claimStatusAI** – Claim Acknowledgement = **claimStatusCA** – Services Review – Inquiry and Response = **servicesReviewIR** – Services Review – Notification and Announcement = **servicesReviewNA** • Another entity commented that the official X12 name should be used for the transactions (e.g., Claim Status Request instead of Claim Status Inquiry) • Another suggested that for non-X12 payloads, the payload type should be more granular and asked whether the requirement recommends the transaction name for process routing.	• **Adjust for clarity.** CAQH CORE CSWG Co-chairs and staff will adjust the endpoint names that pertain to multiple implementations of the same transaction so that each has a unique endpoint name, as suggested by the straw poll respondents. • **Adjust for clarity.** CAQH CORE CSWG Co-chairs and staff will adjust the X12 transaction names listed in the table to reflect the official X12 name used for the transaction (e.g., Claim Status Request instead of Claim Status Inquiry). ***NOTE:*** *This adjustment will also be made in the CAQH CORE SOAP Connectivity Rule for consistency.* • **Adjust for clarity.** CAQH CORE CSWG Co-chairs and staff will adjust the row pertaining to non-X12 payloads to indicate that the transactions listed reflect a non-comprehensive list of non-X12 payload examples (e.g., HL7_CDA_R2, HL7_C-CDA, .pdf, .doc, .txt, .jpeg, etc.). Additionally, a footnote will be added to the row containing non-X12 payloads to indicate that the table is payload agnostics. CAQH CORE staff will also develop FAQs for further industry education on the topic.

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
9	*Section 4.4.2 Specifications for REST API URI Path Endpoints for Payload Types (normative)*	One entity asked for further explanation as to why 278 transactions that are not listed in *Section 3.3 When the Rule Applies* are listed in the payload table. For example, Notification and Announcements is included in *Section 4.4.2 Specifications for REST API URI Path Endpoints for Payload Types (Normative)*, but not in *Section 3.3 When the Rule Applies*. They also questioned why CDA-R2 was included in the list of non-X12 payload types when it is not a document type.	• **Do not adjust.** Similar to previous versions of CAQH CORE Connectivity Rules, the rule applies when entities use the specific transactions listed in *Section 3.3 When the Rule Applies.* However, implementers may use these Draft CAQH CORE REST Connectivity Rule Requirements for transactions that are not listed in *Section 3.3 When the Rule Applies* and providing endpoint names for these transactions provides support for implementing these REST requirements for additional transactions. • **Do not adjust.** HL7 Version 3 Clinical Document Architecture (CDA) is a document markup standard that specifies the structure and semantics of clinical documents. CDA-R2 is an acronym for CDA Release 2.
10	*Section 4.5 REST HTTP Request Method Requirements*	One entity recommended adding language to *Section 4.5 REST HTTP Request Method Requirements* describing the potential security implications for using POST when used by the server responding back to the client.	• **Do not adjust.** Given the *Draft CAQH CORE REST Connectivity Rule* already requires OAuth 2.0 for security, independent of the REST HTTP Request Method (GET, POST, or otherwise), CAQH CORE CSWG Co-chairs and staff recommend not adjusting *Section 4.5 REST HTTP Request Method Requirements.* Additionally, the *Draft CAQH CORE REST Connectivity Rule* does not specify which HTTP Request Method to utilize, nor the technical detail for use, only that the rule supports POST and GET methods.
11	*Section 4.8 Publication of Entity-Specific Connectivity Companion Document*	Two entities commented that Companion Document information should be available to contracted entities and trading partners, as applicable, but not necessarily to the public. • One of these entities further explained that publishing a list of URLS on a public site may weaken the security of some companies by publishing attack vectors publicly.	• **Do not adjust.** Similar to previous versions of CAQH CORE Connectivity, the *Draft CAQH CORE REST Connectivity Rule* does not specify what must be included in an organization's Companion Document, as the specific details of a trading partner relationship are outside the scope of the CAQH CORE Operating Rules. *Section 4.8 Publication of Entity-Specific Connectivity Companion Document* only specifies that servers must publish a Connectivity Companion Document on the entity's public website. It is at the discretion of each entity to determine what is included in the Companion Document. The list of recommendations included in *Section 4.8 Publication of Entity-Specific Connectivity Companion Document* is not intended to be exhaustive or prohibitive, only representing suggestions of what to include.

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
Substantive Comments			
12	*Table 4.6 HTTP Request Metadata*	Two entities suggested adjustments to Table 4.6 HTTP Request Metadata: • One entity suggested including 'levels' as a mandatory metadata element to indicate the number of levels of lineage output to return. They recommend the default number of levels should be 10. • Another recommended adding a 'destination ID' for cross intermediary communication (e.g., through clearing houses).	• **For CSWG Discussion.** Given 87% of CSWG straw poll respondents support *Section 4.6 HTTP REST HTTP Metadata, Descriptions, Intended Use and Values* and the associated tables as written, CAQH CORE CSWG Co-chairs and Staff recommend not adjusting Table 4.6 HTTP Request Metadata to include the suggested additional elements. Additionally, Table 4.6 HTTP Request Metadata minimally specifies metadata elements to establish a foundation for the industry. Entities may go above and beyond to implement or require support for additional metadata elements to support specific business needs as agreed upon by trading partners.

8. Next Steps

- **CAQH CORE CSWG Co-Chairs and Staff will:**
  - Draft a call summary for today's call and post it on the CAQH CORE Calendar for participant review.
  - Adjust the Draft CAQH CORE REST Connectivity Rule and the Draft CAQH CORE SOAP Connectivity Rule in accordance with Work Group discussion on today's call.
  - Prepare grey-highlighted draft versions of each rule for the official CAQH CORE Work Group Ballot.
  - Distribute the CAQH CORE Work Group Ballot by **Wednesday, 08/12/20, end of day.**

- **Connectivity & Security Work Group participants will:**
  - Review the updates to the Draft CAQH CORE REST Connectivity Rule and Draft CAQH CORE SOAP Connectivity Rule and submit their organization's response to the CAQH CORE Work Group Ballot by **Wednesday, 09/02/20, end of day.**

9. Appendix A: Non-Substantive Comments

Appendix A consists of tables summarizing non-substantive comments received on each Part of the CSWG Straw Poll for offline review.

9.1 Non-Substantive Comments Received on Part A: *Draft CAQH CORE SOAP Connectivity Rule:* Submitter Authentication and Authorization Requirement Options

Table 6 below summarizes non-substantive comments received from CSWG Straw Poll respondents pertaining to Part A: *Draft CAQH CORE SOAP Connectivity Rule*: Submitter along with CAQH CORE CSWG Co-chair and staff response, if applicable.

Table 6: Non-Substantive Comments Received on Part A: Draft CAQH CORE SOAP Connectivity Rule

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
1	Submitter Authentication & Authorization Requirement Options	One entity noted that they would need additional information concerning the specifications before providing their level of support.	N/A
2	Submitter Authentication & Authorization Requirement Options	One entity recommended that the group conduct more research and analysis on specific use cases for OAuth and evaluate the current market for OAuth availability to more fully understand if the industry is ready to include an OAuth requirement in the rule. They also urged the Work Group to consider including language stating that the connectivity mechanism must support patient privacy and the sharing of only 'minimum necessary' patient health information. Finally, they asked how OAuth would support data segmentation for sensitive health information and how it could be implemented to ensure adherence to patient choice.	• **Do not adjust**. CAQH CORE CSWG Co-chairs and staff conducted extensive research on the topic prior to the launch of the CSWG and throughout the Work Group process. On the first CSWG Feedback Form, 76% of Work Group respondents voted to pursue the development of OAuth as an authorization standard. CAQH CORE CSWG Co-Chairs and staff noted that on future straw polls, CSWG participating organizations would have the opportunity to provide feedback as to whether OAuth 2.0 should be required *in addition* to the base requirement (X.509 Digital Certificate). After the fourth Work Group Call, CAQH CORE CSWG Co-chairs and staff will continued to conduct research on the use of OAuth 2.0 with messages transmitted using both SOAP and REST in order to capture appropriate Work Group feedback on CSWG Straw Poll 2. The results of the CSWG Straw Poll 2 revealed that 93% of respondents support including OAuth 2.0 as an authorization standard. Finally, since the *Draft CAQH CORE REST Connectivity Rule* only addresses connectivity and security, adding language pertaining patient privacy and data content is outside the scope of this CORE Operating Rule.

9.2 Non-Substantive Comments Received on Parts B - D: *Draft CAQH CORE REST Connectivity Rule*: Scope, Requirements, and Appendix

Table 7 below summarizes non-substantive comments received from CSWG Straw Poll respondents pertaining to Parts B – D: *Draft CAQH CORE REST Connectivity Rule*: Scope, Requirements and Appendix

Table 7: Non-Substantive Comments Received on Parts B - D: Draft CAQH CORE REST Connectivity Rule: Scope, Requirements, and Appendix

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
1	All Draft Rule Sections	One entity noted that they would need additional information concerning the specifications before providing their level of support.	N/A
2	*Section 3 Scope*	Two entities recommended wordsmithing and/or adding clarifying language to *Section 3 Scope*: • One entity suggested removing the word 'Further' from line 104. • Another entity recommended adding the following two points to *Section 3.5 What the Rule Does Not Require:* – 'Does not require that trading partners must condition a contractual business relationship on or use a CAQH CORE-compliant method for all new connections' – 'Does not require that trading partners conduct transactions or establish connections that conflict with state or federal laws or regulations.' • They also recommended rewording *Section 3.6 Outside the Scope of this Rule* for clarity but did not provide recommended adjustments. • The same entity suggested adding the following language to *Section 3.8 Assumptions*: Trading partners will notify each other in a reasonable time prior to implementing new standards, versions, or adopting additional or new industry best practices to promote transparency and adoption. • They also suggested that estimates should be provided to providers and payers of the expected cost of complying with rule updates.	• **Adjust for clarity.** CAQH CORE CSWG Co-chairs and staff will remove the word further, as suggested by the straw poll respondent. • **Do not adjust.** CAQH CORE Connectivity Safe Harbor does **not** require entities to remove existing connections that do not match the rule, nor does it require that all covered entities use this method for all new connections. • **N/A** • **Do not adjust.** *Section 3.8 Assumptions* is consistent with prior versions of CAQH CORE Connectivity Rules. • **N/A**

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
3	*Section 4.1 Basic Conformance for Stakeholders*	One entity suggested adding language that instructs health plans, health plan vendors, clearinghouses, HIEs and other intermediaries to conduct an impact analysis using REST and SOAP requirements with estimations for providers and provider vendors on potential cost, time and other resource requirements to assist in choosing an exchange method to adopt.	**N/A**
4	*Section 4.2 REST API Interface Format & Submitter Authorization Requirements*	One entity noted that *Section 4.2 REST API Interface Format & Submitter Authorization Requirements* is confusing as written because submitter authentication is included in the first paragraph of the section but does not have its own sub-section.	• **Adjust for clarity.** CAQH CORE CSWG Co-chairs and staff will adjust line 206 to remove submitter authentication.
5	*Section 4.3 General Specifications Applicable to REST APIs*	In *Section 4.3.9 Capacity Plan,* one entity recommended specifying that trading partners affected by a denial, service event or other disruption, should be notified of any temporary waiver with an estimation of the system downtime. They also recommended adding language to *Section 4.3.10 Synchronous Real-Time Response, Timeout and Retransmission Requirements* to specify that any trading partner affected by asynchronous batch downtime should be notified within 24 hours with an estimation of the system downtime. They further suggested that system availability requirements and downtime communication should be standardized within *the Draft CAQH CORE Connectivity Rule vC4*.	• **Do not adjust.** The CAQH CORE REST Connectivity Rule only addresses connectivity and security; therefore, potential updates to system availability requirements are outside the scope of this CAQH CORE REST Connectivity Rule. However, rather than placing the potential requirement update out of scope entirely for rule development, CAQH CORE staff will forward the proposed update to system availability requirements to the appropriate subgroup/work group for consideration within a future CAQH CORE Infrastructure Rule.
6	*Section 4.6 HTTP Request & Response Metadata*	One entity recommended the use of UTC instead of GMT since UTC is a time standard where GMT is a time zone. They noted that if the example in *Section 4.6* is changed, the example in *Section 4.7 REST POST Message Structure* must also reflect the change.	• **Adjust for clarity.** The example included Table 4.6 HTTP Request & Response Metadata will be adjusted to UTC instead of GMT, as recommended by the straw poll respondent. However, as a reminder, the content included in the *Example* column of Table 4.6 HTTP Request & Response Metadata is a non-comprehensive example of what could be included as the specific metadata value – other values may apply.

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
7	*Section 4.8 Publication of Entity-Specific Connectivity Companion Document*	One entity made several suggestions to *Section 4.8 Publication of Entity-Specific Connectivity Companion Document* including*:* • Adding details about versioning for REST APIs including, but not limited to, version history and dates of version change. • Adding error code descriptions and system failure contact information. • Include a requirement that servers develop companion guides within a timeframe that coincides with when these rules go into effect and update them in accordance with rule maintenance as well as specify that when server policy or implementation decisions change, companion guides should be updated.	• **Adjust for clarity.** CAQH CORE CSWG Co-chairs and staff will include the following language: '*(e.g., dates, version number, etc.)*' to further clarify the bullet pertaining to versioning in *Section 4.8 Publication of Entity-Specific Connectivity Companion Document*. • **Do not adjust.** Status Codes for errors are defined by standards organizations and maintained by these organizations (e.g., Internet Assigned Numbers Authority). Information to determine who to contact for a resolution and guides providing clear descriptions of the codes is out the scope for this connectivity rule. • **Do not adjust.** Should the draft rule be approved by CAQH CORE Participating Organizations and the CAQH CORE Board, the published *CAQH CORE Connectivity Rule vC4* would be available to industry for voluntary adoption. If an organization decided to pursue voluntary CORE Certification on the *CAQH CORE Connectivity Rule vC4*, they would have a maximum timeframe of 180 days to complete certification testing on the rule requirement after submission of a pledge to adopt the rule.
8	*Section 5 Safe Harbor*	One entity suggested adding "and there are no known or published security vulnerabilities" to line 462 for clarity.	• **Adjust for clarity.** CAQH CORE CSWG Co-chairs and staff will adjust line 462 in *Section 5 Safe Harbor,* as recommended by the straw poll respondent.

#	Section	Summary of Comments	CAQH CORE CSWG Co-chair & Staff Response
9	*Section 7.1 Sequence Diagrams*	One entity asked why the 278 transaction was chosen for the example in *Section 7.1 Sequence Diagrams*.	• The diagrams included in *Section 7.1 Sequence Diagrams* provide an example of a synchronous real-time interaction and an asynchronous batch interaction using the X12 v5010 278 transaction, though other HIPAA-mandated transactions could be substituted into the example diagram. The 278 transaction was identified as an area where potential REST requirements could add value, particularly as we look ahead to future CAQH CORE Operating Rules in development such as the Attachments Operating Rule – Prior Authorization Use Case.