ONC
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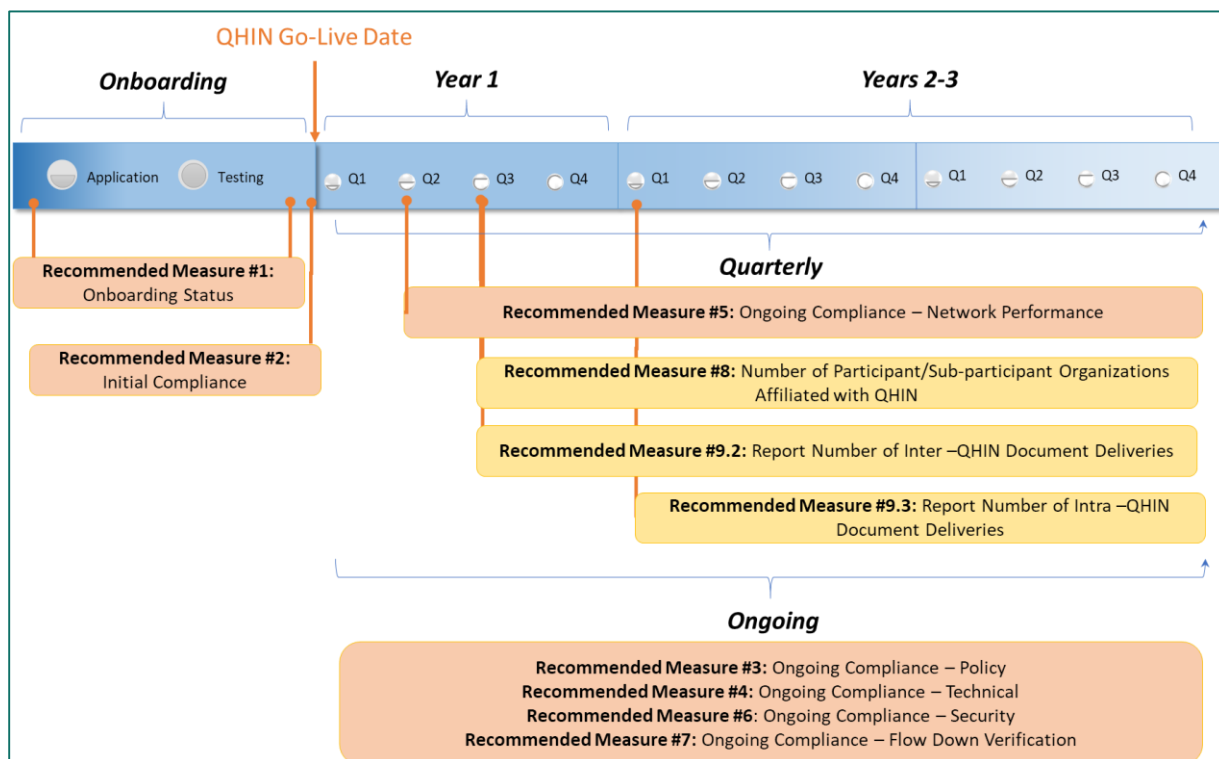
Recommended Metrics for QHIN Compliance, Process and Outcomes

Developed by: TEFCA Recognized Coordinating Entity (RCE)
Date: 10/20/2020

1   OVERVIEW

- RCE has been tasked with developing a set of metrics to be reported on a regular basis by QHINs that assess the following:

  – Compliance with the Common Agreement; and

  – Process and Outcomes measures that demonstrate compliance.

- Specific details related to reporting are expected to be included in Standard Operating Procedures (SOPs) incorporated by reference into the Common Agreement, allowing flexibility over time.

- Metrics will be submitted for review and approval to the Office of Management and Budget (OMB) through the Paperwork Reduction Act (PRA) in February 2021.

- A high-level timeline of metrics recommended for inclusion in the 2021 PRA packet is provided below. These metrics will be collected from QHIN applicants and from successful organizations within the first year of their performance as a QHIN.

- Recommendations related to compliance with the Common Agreement are shown in orange, and process/outcomes measures are shown in yellow.

2   INDIVIDUAL MEASURES

Below are the updated measures, rationale, specification and data source for each individual measure proposed for collection as part of the onboarding process and within the first year of functional status as a QHIN.

Specific feedback on these measures is requested by midnight Pacific Time on Friday November 20, 2020. Feedback can be submitted using the online platform ThinkTank or submitted in writing to the ONC RCE at rce@sequoiaproject.org.

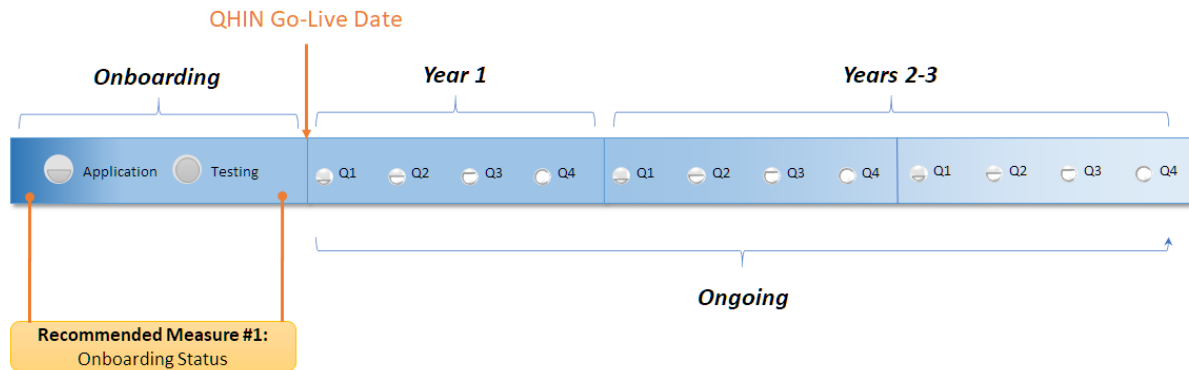If using ThinkTank, it can be accessed using the following link/password:

- https://engage.thinktank.net/sessionJoin/-MJDBvVRVf1Oa1MxFV2j
- Password: RCE20

2.1   Recommended Measure #1: Onboarding status

Proposed Measure	Outcome (Rationale)	Description/Specification	Data Source(s)
1. Onboarding status	Required under terms of RCE Cooperative Agreement with ONC	1.1: Common Agreement signed 1.2: Application Received 1.3: Application accepted/rejected 1.4: Non-production onboarding completed 1.5: Production technical go-live 1.6: Full live participation	Onboarding application

Responses to Previous Feedback:

- Feedback indicated support for a third-party accreditation process for QHINS. The RCE is supportive and plans to explore this approach, however, third-party accreditation will not on its own be sufficient to designate an entity as a QHIN.
- While onboarding will be assessed on a "pass/fail" basis, the application process is expected to be collaborative, with opportunities to correct and update requirements as appropriate.
- Definition of "full live participation" updated in specification 1.6 as Production end user go-live by at least one Participant.

Timeline:

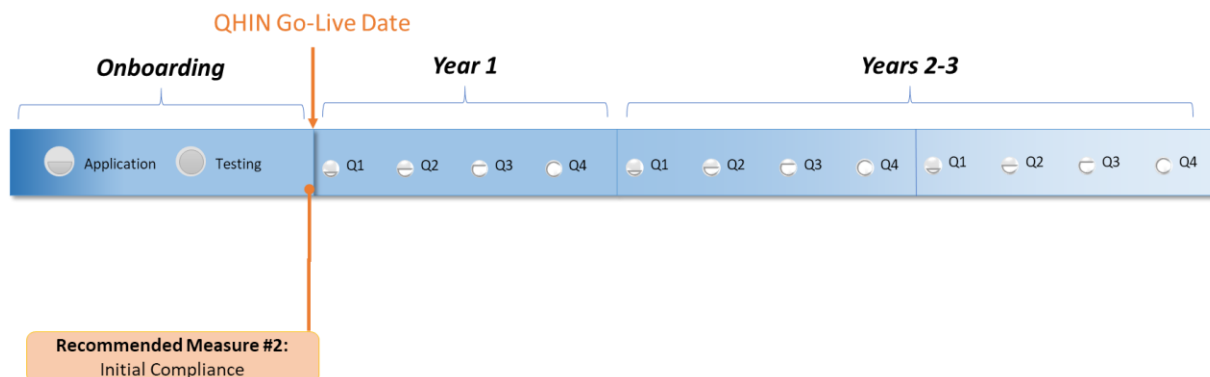**Requested Feedback:**

1. Suggestions for specification refinement.

2.2 Recommended Measure #2: Initial Compliance

Proposed Measure	Outcome (Rationale)	Description/Specification	Data Source(s)
2. Initial Compliance	Required to validate initial designation as QHIN	Specification 2.1: Pass/Fail	Combination of various methods (e.g. contractual, self-attestation, partner testing, technical testing), with pass/fail result

Responses to Previous Feedback:

- Details about what constitutes a "pass" or "fail" and specific details regarding testing will be provided in an extensive Standard Operating Procedures (SOP) document which will be developed based on the requirements of the final Common Agreement.
- SOP will include details such as use of USPS standard to support patient matching.

Timeline:

Requested Feedback:

1. Describe the level of **burden** (i.e., low/medium/high).
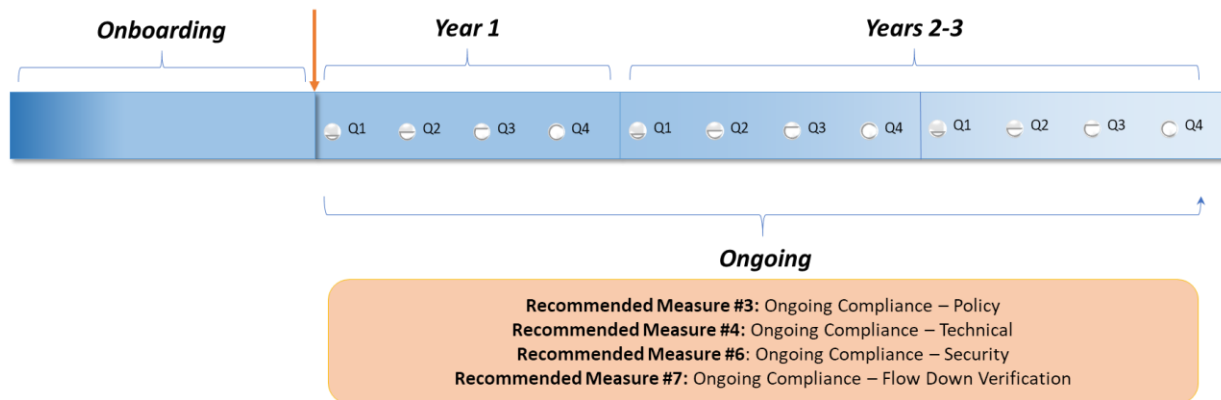2. Suggestions for specification **refinement**.

2.3   Recommended Measure #3: Ongoing Compliance - Policy

Proposed Measure	Outcome (Rationale)	Description/Specification	Data Source(s)
3. Ongoing Compliance - Policy	Requirement of RCE Cooperative Agreement; Necessary to assure trusted exchange	Specification 3.1: Retain right to request future proof of compliance	Initial and ongoing compliance assessments addressed in SOPs

Responses to Previous Feedback:

- See previous response regarding third-party accreditation.

Timeline:

Requested Feedback:

1. Describe the level of **feasibility** to reporting as specified.
2. Describe the level of **burden** (i.e., low/medium/high).
3. Suggestions for specification **refinement**.

2.4 Recommended Measure #4: Ongoing Compliance - Technical

Proposed Measure	Outcome (Rationale)	Description/Specification	Data Source(s)
4. Ongoing Compliance - Technical	Provides assurance of interoperability and compliance with RCE standards	Specification 4.1: Re-verify if substantive system changes	Initial and ongoing compliance assessments addressed in SOPs

Responses to Previous Feedback:

- None

Timeline:

Requested Feedback:

1. Describe the level of **feasibility** to reporting as specified.
2. Describe the level of **burden** (i.e., low/medium/high).
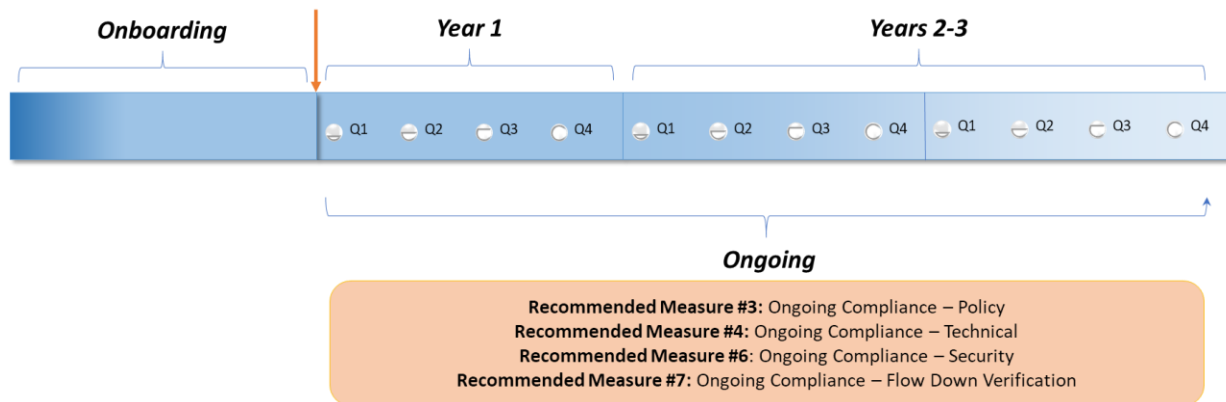3. Suggestions for specification **refinement**.

2.5   Recommended Measure #5: Ongoing Compliance – Network Performance
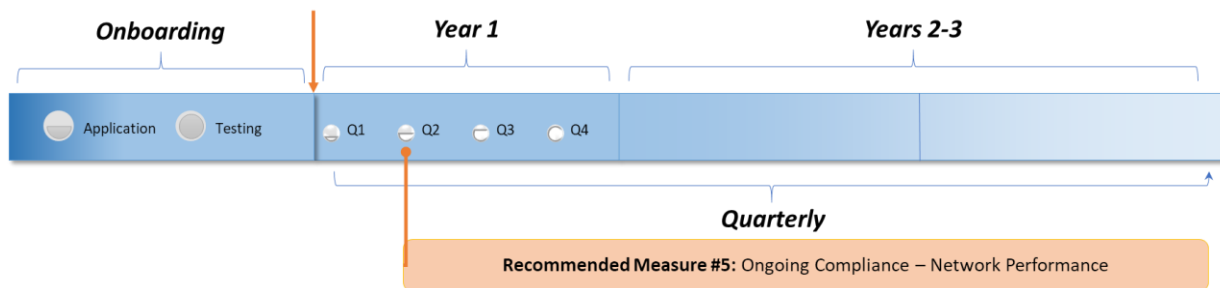
Proposed Measure	Outcome (Rationale)	Description/Specification	Data Source(s)
5. Ongoing compliance – Network performance	Establish minimum expectations that QHINs should have in place to assure high performance and integrity. Establish a benchmark for the QHIN network and to inform development of Service Level Agreements (SLAs) over time.	Specification 5.1: Downtime for the QHIN's gateway actors (e.g., Initiating Gateway, etc.) in minutes in the reporting month Specification 5.2: Average response time for each inter-QHIN message type, per Responding QHIN transacted that reporting period, including message type, average	Self-report in template provided by RCE

		response time and Responding QHIN.	

Responses to Previous Feedback:

- None

Timeline:

Requested Feedback:

1. Describe the level of feasibility to reporting as specified.
2. Describe the level of burden. (i.e., low/medium/high).
3. Suggestions for specification refinement.

2.6   Recommended Measure #6: Ongoing Compliance – Security

Proposed Measure	Outcome (Rationale)	Description/Specification	Data Source(s)
6. Ongoing Compliance – Security	Provide assurance of secure, nationwide exchange among QHINs and protect critical health IT infrastructure	Specification 6.1: The RCE is considering options for providing a sufficient level of assurance of security, such as: SOC 2 reports, third party accreditation, attestation / evidence of self-assessments according to a particular information security standard	Initial and ongoing compliance assessments addressed in SOPs

Responses to Previous Feedback:

- See previous responses regarding third-party accreditation.

Timeline:

Requested Feedback:

1. Describe the level of feasibility to reporting as specified.
2. Describe the level of burden. (i.e., low/medium/high).
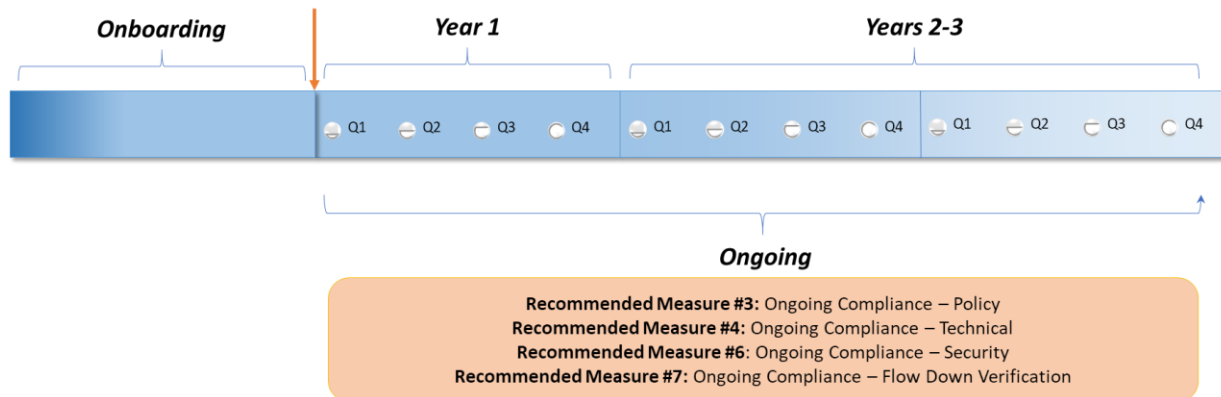3. Suggestions for specification refinement.

2.7   Recommended Measure #7: Ongoing Compliance – Flow Down Verification
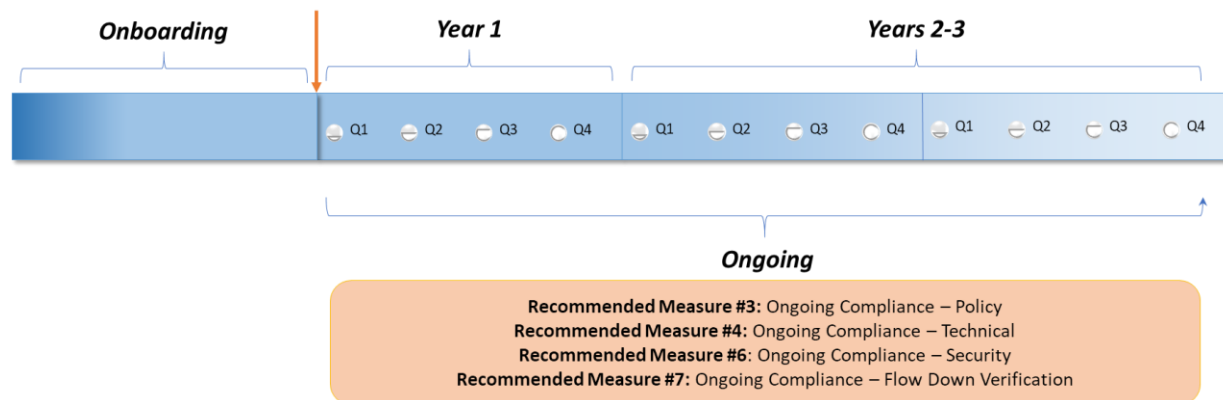
Proposed Measure	Outcome (Rationale)	Description/Specification	Data Source(s)
7. Ongoing Compliance – Flow Down Verification	Provide assurance of secure, nationwide exchange across TEFCA eco-system	Specification 7.1: Patient Matching: QHINs verify that minimum set of identity attributes / rules employed Specification 7.2: Clinical Content: Technical testing based upon sample files periodically assessed by QHIN or objective third party program	Initial and ongoing compliance assessments addressed in SOPs

		Specification 7.3: Security: Self attestation of information security risk assessment / controls	

Responses to Previous Feedback:

- Flow down of clinical content added to specification 7.2.

Timeline:

Requested Feedback:

1. Describe the level of feasibility to reporting as specified.
2. Describe the level of burden. (i.e., low/medium/high).
3. Suggestions for specification refinement.

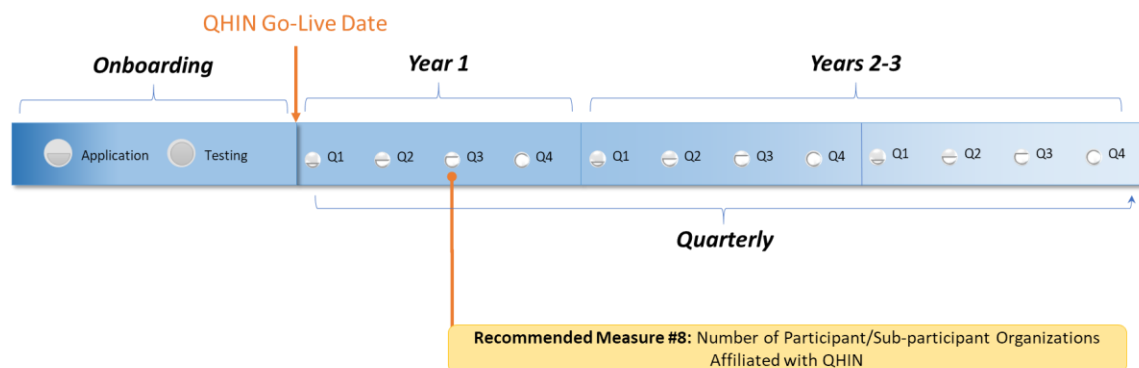## 2.8 Recommended Measure #8: Number of "member organizations" affiliated with QHIN

Proposed Measure	Outcome (Rationale)	Benefit to QHIN/RCE	Description/Specification	Data Source(s)
8. Number of "member organizations" affiliated with QHIN	Measure the proportion of the health care system capable of benefitting	Foundational for understanding the impact of HIE on quality	Specification 8.1: File with a list of each *individual participant and sub-participant organization* including health care organization	Self-report in template provided by RCE

	from HIE transactions	or cost effectiveness; Ability to track and assess gaps in connectivity related to various types of healthcare organizations (LTPAC, BH, etc.)	name, type/classification, *all affiliated Tax Identification Numbers*, start date and end date for connectivity, and total cumulative count of connected organizations. Specification 8.2: Provide updated list *quarterly* with notation of added or dropped organizations	

Responses to Previous Feedback:

- Added "start date" and "remove date".
- Definition of participant to be set by final Common Agreement.
- Organization-level identifier desired, feedback requested on use of Tax Identification Number or other.
- Quarterly collection of information proposed, beginning within 6 months after go-live date as a QHIN.

Timeline:

Requested Feedback:

1. Describe the level of **feasibility** of reporting as specified within first year.
2. Describe the level of **burden** (i.e., low/medium/high).

3. Suggestions for specification **refinement**.

2.9 Recommended Measure #9: Report to RCE number of document deliveries/healthcare organization transaction volume – near term
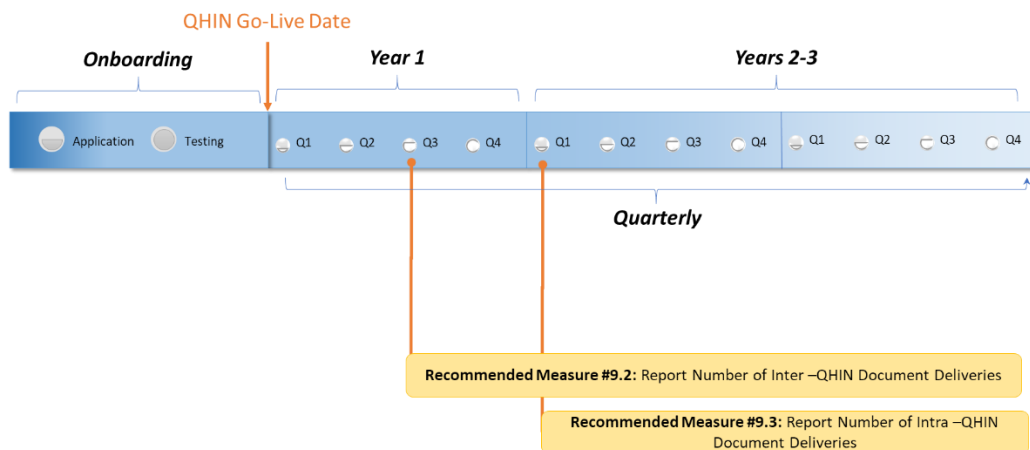
Proposed Measure	Outcome (Rationale)	Benefit to QHIN/RCE	Description/Specification	Data Source(s)
9. Report to RCE number of document deliveries/healthcare organization transaction volume - near term	Accurate measurement of transaction volume occurring at both an intra and inter HIN level	Measure increases in the amount of interoperable health data made available to support clinical decision making to highlight national-level growth in exchange over time.	Specification 9.1.: Number of documents delivered to one health care organization from another health care organization (via push or pull) that include clinical information. Specification 9.2.: Number of document deliveries that take place between separate HINs via bridging gateways Specification 9.3.: Number of document deliveries that occur within HIN Specification 9.4: Each report to include a breakdown of number of transactions by exchange purpose *and breakdown of failed transactions and successful transactions.*	Transaction metadata from audit logs

Responses to Previous Feedback:

- Priority to focus on reporting inter-HIN transactions in the near term (beginning within 6 months of go-live as QHIN); adding intra-HIN transactions in the longer term (beginning within 12 months of go-live as a QHIN). **See timeline below**.

- Include reporting on "failed" vs. "successful" transactions.
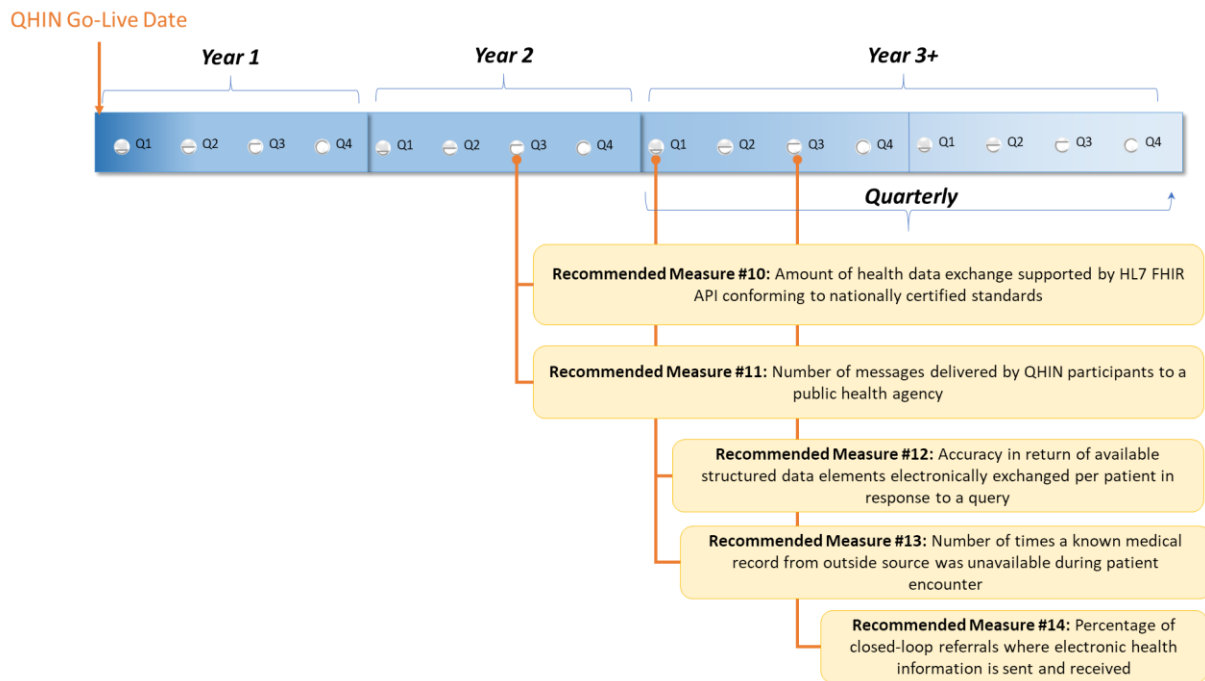- Definitions to be included in SOP document.

Timeline:

Requested Feedback:

1. Describe the level of **feasibility** of reporting as specified within first year.
2. Describe the level of **burden**. (i.e., low/medium/high).
3. Suggestions for specification **refinement**.

3   MEASURES RECOMMENDED FOR MID/LONG TERM DEVELOPMENT (YEARS 1-3)

An additional set of process and outcomes measures has been developed for consideration by the RCE in future years (after year 1). These metrics are intended to track the growth of the TEFCA ecosystem as it grows over time.

The timeline below includes all the proposed mid- to long-term measures.

3.1 Recommended Measure #10: Amount of health data exchange supported by HL7 FHIR API conforming to nationally certified standards

Proposed Measure	Outcome (Rationale)	Benefit to QHIN/RCE	Description/Specification	Data Source(s)
10. Amount of health data exchange supported by HL7 FHIR API conforming to nationally certified standards	Support faster delivery of health information for a variety of purposes	Highlight the ability of the QHIN ecosystem to support measurement and growth of key interoperability requirements and regulations	Specification 10.1: Provide summary breakout of the method of exchange used for each reported transaction	Transaction metadata from audit logs

Responses to Previous Feedback:

- None

Requested Feedback:

1. Describe the level of **feasibility** of reporting as specified in the mid-term (years 1-2).
2. Describe the level of **burden** (i.e., low/medium/high).
3. Suggestions for specification **refinement**.

3.2 Recommended Measure #11: Number of messages delivered by QHIN participants to a public health agency

Proposed Measure	Outcome (Rationale)	Benefit to QHIN/RCE	Description/Specification	Data Source(s)
11. Number of messages delivered by QHIN participants to a public health agency	Coordination with public health; improvements in completeness of information over time	Identify benefit of electronic health information exchange to support modernization of public health information infrastructure and rapid surveillance capabilities	Specification 11.1: Total number of transactions managed by QHIN in which receiver was a public health institution	Transaction metadata from audit logs

Responses to Previous Feedback:

- Revised to remove focus on syndromic surveillance and eCase reporting; number of transactions only.

Requested Feedback:

1. Describe the level of **feasibility** of reporting as specified in the mid-term (years 1-2).
2. Describe the level of **burden** (i.e., low/medium/high).
3. Suggestions for specification **refinement.**

3.3 Recommended Measure #12: Accuracy in return of available structured data elements electronically exchanged per patient in response to a query

Proposed Measure	Outcome (Rationale)	Benefit to QHIN/RCE	Description/Specification	Data Source(s)
12. Accuracy in return of available structured data elements electronically exchanged per patient in response to a query	Increase the consistency of data reliably delivered to requesting EHR system	Measure the concept of the quality of data content included in a transaction	Draft Specification: Leverage movement towards USCDI to measure ability of exchange processes to send individual data elements	Audit Log

Responses to Previous Feedback:

- None

Requested Feedback:

1. Describe the level of **feasibility** of reporting beginning in year 3.
2. Describe the level of **burden** (i.e., low/medium/high).
3. Suggestions for specification **refinement**.

3.4 Recommended Measure #13: Number of times a known medical record from outside source was unavailable during patient encounter

Proposed Measure	Outcome (Rationale)	Benefit to QHIN/RCE	Description/Specification	Data Source(s)
13. Number of times a known medical record from outside source was unavailable during patient encounter	Reduce unnecessary health care utilization through improved communication between providers and patient	Measure the concept of usability of data being exchanged	Draft Specification: Number of time medication reconciliation data from outside source was unavailable during encounter.	Audit log; Self-report; other referral metadata

Responses to Previous Feedback:

- None

Requested Feedback:

1. Describe the level of **feasibility** of reporting beginning in year 3.
2. Describe the level of **burden** (i.e., low/medium/high).
3. Suggestions for specification **refinement**.

3.5 Recommended Measure #14: Percentage of closed-hoop referrals where electronic health information is sent and received

Proposed Measure	Outcome (Rationale)	Benefit to QHIN/RCE	Description/Specification	Data Source(s)
14. Percentage of closed-loop referrals where electronic health information is sent and received	Improvements in safety and efficiency through better care coordination between primary care and specialist providers; support for the impact of value-based care	Measure the concept of impact of interoperable exchange on care coordination	Draft Specification: Number of times a received request for information was accepted by consulting provider Draft Specification: Number of times consultation summary returned to referring provider's EHR	Audit log; other referral metadata

Responses to Previous Feedback:

- None

Requested Feedback:

1. Describe the level of **feasibility** of reporting beginning in year 3.
2. Describe the level of **burden** (i.e., low/medium/high).
3. Suggestions for specification **refinement.**

3.6 Recommended Measure #15: Number of "connected clinicians" affiliated with QHIN

Proposed Measure	Outcome (Rationale)	Benefit to QHIN/RCE	Description/Specification	Data Source(s)
15. Number of "connected clinicians" affiliated with QHIN	Measure the total number of physicians participating in RCE ecosystem, working towards development of a national "numerator"	Foundational for establishing a proportion of participation relative to all registered physicians ("denominator"); establishes a sound baseline for other concepts like transaction volume	Draft Specification: Provide a total number of "end users" registered with each participating organization affiliated with QHIN. Draft Specification: Provide NPI for each individual "end user" reported by each affiliated organization	Self-report in template provided by RCE Secure upload of template if NPI included.

Responses to Previous Feedback:

- None

Requested Feedback:

1. Describe the level of **feasibility** of reporting at any point in time.
2. Describe the level of **burden** (i.e., low/medium/high).
3. Suggestions for specification **refinement.**

3.7 Recommended Measure #16: Data could not be parsed or interpreted by a receiving system

Proposed Measure	Outcome (Rationale)	Benefit to QHIN/RCE	Description/Specification	Data Source(s)
16. Data could not be parsed or	Show decrease in failures and missed	Identify areas of weakness or unexpected	Draft Specification: Report on the date/time range, volume and	As needed, report to RCE when

interpreted by a receiving system	opportunities over time as QHIN ecosystem evolves	failure in the ecosystem	significance of failed message delivery	outages occur

Summary of Items to Resolve

- RCE now recommends officially removing this measure.