NHIN Trial Implementations

Use Case Requirements Document

Use Case Title: Quality Detailed Use Case – Scenarios 1& 2, Flow #9

Workgroup: Population Perspective Workgroup

Version: V. 4

Description:

- Generally describe the Workgroup's understanding and assumptions in analyzing the use case priority information exchanges.

  The Quality Use Case subcommittee of the Population Perspective WG proceeds with an understanding based upon current analysis that Priority Flows #1, #4, and #9 of Scenarios 1 and 2 of the Quality Use Case may be considered functionally equivalent. This assumption seems to be supported by review of data, events, actions, conditions, and gaps, etc. for both hospital-based (Scenario 1) and clinician-based (Scenario 2) quality information collection and reporting; however, it may not be possible to realize the full implications of this assumption until requirements are driven to specifications and implementation processes, particularly with standards for a number of priority exchanges undefined.

  Quality reporting requirements are defined based on the measure set(s) used by entities that require quality performance reporting – e.g. CMS, Joint Commission, State surveillance, payors, internal tracking/monitoring – and other clinician/system-defined needs. Two primary yet divergent uses of quality measures are for patient care and reporting. At the patient-level, quality measures can serve as a point-of-care reminder for clinical care due (or received) by patients who are eligible for the specified care. Summarized or aggregated quality measures are reported at the clinician, hospital, site, or system level as required by accrediting, government, pay-for-performance, and other entities. As per HITSP, patient-level quality data analysis and aggregation may occur at one or more of the local care delivery locations, at an intermediate site (such as an HIE, HISP, or quality organization), or at the location of the intended recipient of patient-level quality data.

  Assumptions:

  - Patient, clinician, facility identification is standardized throughout the system
  - Information shared among facilities and clinicians in medical practice area is at the patient level to assure appropriate record linkage for patient at point of care
  - Information shared outside the actual provision of care is patient de-identified and 'rolled up' to the required level for reporting out.
  - Feedback to clinician includes all measures for which patient is eligible, due date, and latest result, if applicable
  - Prompts for new patients if eligible for (at least) preventive services – i.e., prompts care even though not able to be fully included in some reportable quality measures

- It is unlikely that real-time feedback to clinician will occur in time for the demonstration, but at some point in the future this feedback will include all measures for which patient is eligible, due date, and latest result, if applicable.

- Include general interpretations that the Workgroup made to support the priority information exchanges between HIEs and between an HIE and other actors in the exchange. See above

Priority Information Exchanges:

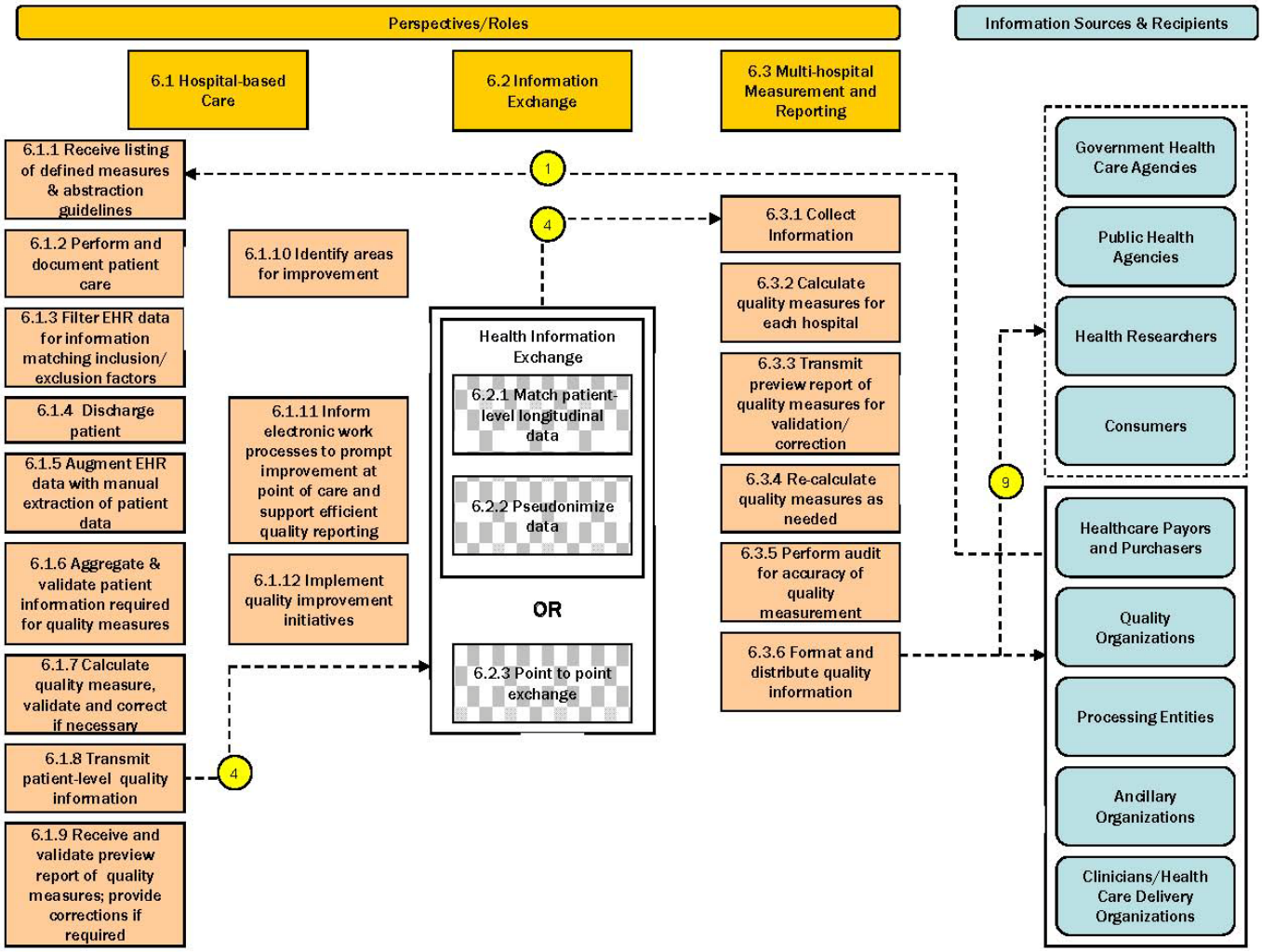
- Scenario 1 Hospital-based Care Quality Information Collection and Reporting (as above, excluded from further specific requirements analysis; subsumed by Scenario 2)

Priority Info. Exchanges	Use Case Description
Information Exchange #1	Defined quality measurement specifications to be reported are sent to hospitals.
Information Exchange #4	Hospital quality data is sent either via an intermediate entity or point-to-point for onward transmission to the Multi-Hospital Measurement and Reporting entity (patient-level – identifiable).
Information Exchange #9	Distributed data is available to users (aggregate hospital-level data).

- Diagram of the priority information exchanges of Hospital-based Quality Information Collection and Reporting

6.0 Hospital-based Care Quality Information Collection and Reporting

Figure 6-1. Hospital-based Care Quality Information Collection and Reporting Flow



- Scenario 2 Clinician Quality Information Collection and Reporting

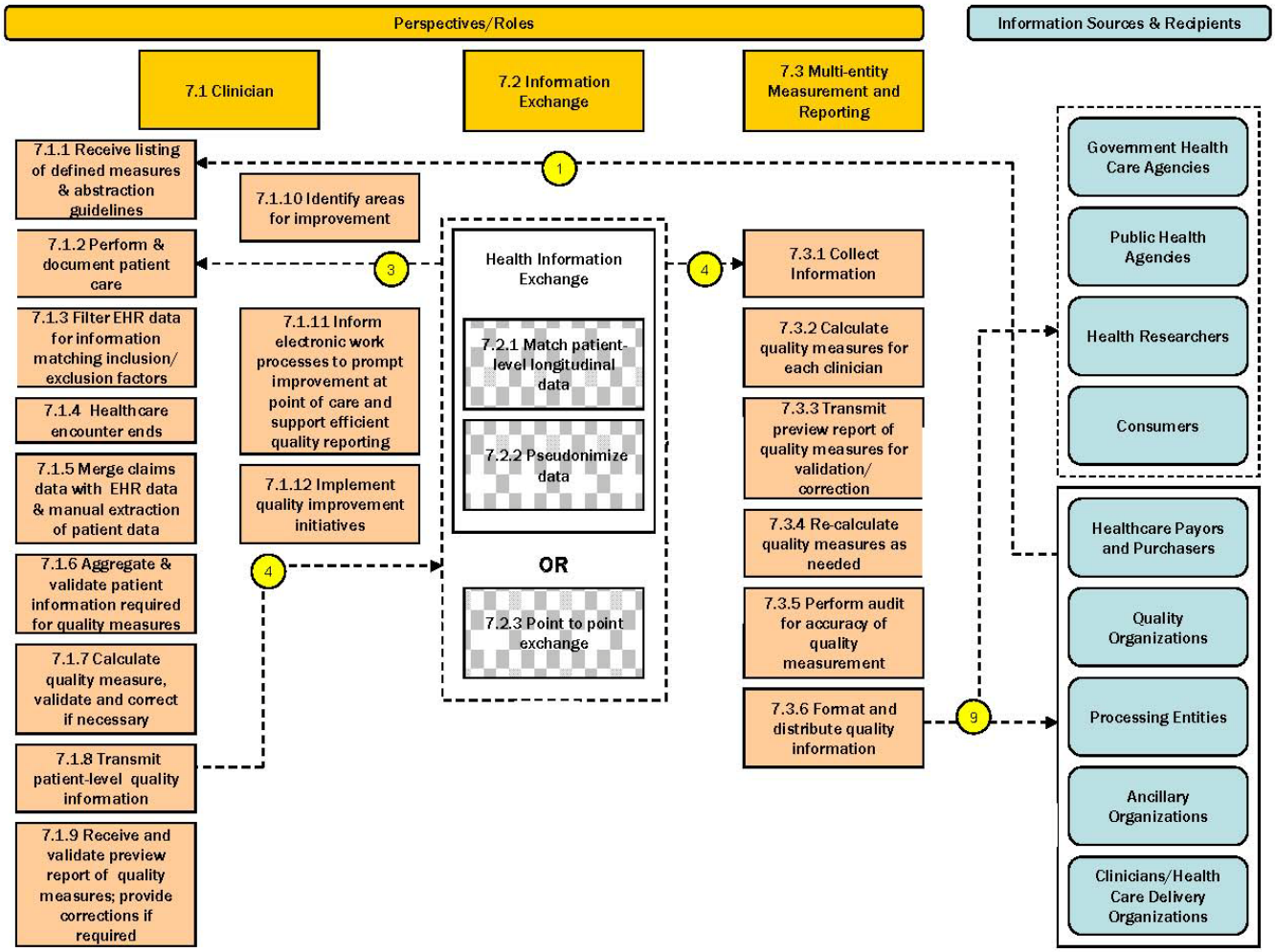
Priority Info. Exchanges	Use Case Description
Information Exchange #1	Defined quality measurement specifications to be reported are sent to clinicians.
Information Exchange #3	Longitudinal health information held in associated repositories is forwarded by the HIE (patient-level – identifiable).
Information Exchange #4	Clinician quality data is sent either via an intermediate entity or point-to-point for onward transmission to the Multi-entity Feedback and Reporting entity (patient-level – identifiable).

Information Exchange #9	Distributed data is available to users (aggregate clinician-level data).

- Diagram of the priority information exchanges of Clinician Quality Information Collection and Reporting

7.0 Clinician Quality Information Collection and Reporting

Figure 7-1. Clinician Quality Information Collection and Reporting Flow



Requirements:

Use Case Scenario: 7.0 Clinician Quality Information Collection and Reporting

Information Exchange: 9. Distributed data is available to users (aggregate clinician-level / hospital-level data)

1 Information Exchange Workflow

1.1 Workflow Steps and Description

[Describe the workflow steps in the identified use case information exchanges, including the functional capabilities of the exchanges and the actors involved.]

Data distribution files are returned which contain quality measure scores and exclusion data, and data files are distributed electronically to recipients. No patients are explicitly or implicitly identified in any data file.

1.2 Use Case References (e.g. Events/Actions)

[Cite applicable references to the use case (e.g. assumptions, events, actions, etc.) as well as the **rationale to justify interpretations** of the use case priority information exchanges.]

7.3.6 Event: Format and distribute quality information

7.3.6.1 Action: Completed clinician-level / hospital-level quality measurement report is distributed and made available to users for viewing and possibly downloading

Assumptions

- The quality measure specifications and inclusion criteria must first be mapped against each required or requested information recipient.
- Measures data are formatted for each recipient, per recipient specifications, including varying level of aggregated reporting – e.g., clinician-level, hospital-level, system-level.
- All entities that require or request reporting clearly specify measures (Flow 1) and data file/report format(s)
- Measures are calculated in the same way across sites/facilities where clinicians practice
- Patient-level measures data are provided with clinician/hospital/group/system identifiers
- In the future, there may be multiple versions of the same measure(s) in a single request– i.e., Patient-level measures are calculated to meet the varying definitions by entities that require reporting
- The Measurement and Reporting entity has the capability to provide data files and reports in all variety of formats

1.3 Key Assumptions

[Provide key assumptions the Workgroup used in interpreting the priority information exchanges, as well as the rationale.]

- Patient, clinician, facility identification is standard throughout the system, so that data can be rolled up at requested level
- Quality measure specification and quality report formats are coordinated
- Measures data are formatted for each recipient, per recipient specifications, including varying level of aggregated reporting – e.g., clinician-level, hospital-level, system-level.
- All entities that require or request reporting clearly specify measures (Flow 1) and data file/report format(s)
- Measures are calculated in the same way across sites/facilities where clinicians practice
- Patient-level measures data are provided with clinician/hospital/group/system identifiers
- In the future, there may be multiple versions of the same measure(s) in a single request– i.e., Patient-level measures are calculated to meet the varying definitions by entities that require reporting
- The Measurement and Reporting entity has the capability to provide data files and reports in all variety of formats

2 Information Exchange Requirements

2.1 Triggers

[The applicable user and system-driven activities that initiate the information exchange. For example, this could describe how a particular query and retrieval, routing of information, etc. are initiated.]

- A trigger can originate from the clinician/hospital based on a timed prompt in the system (end of year reporting, for example) to “push” data to HIE or point-to-point facility, or
- Based on a request from one of the Information Recipients, such as Government Heath Care Agencies, Health Researchers, Quality Organizations, or Healthcare Payors and Purchasers.

2.2 Data Content Requirements

[The type of data needed in the exchange and when that data should conform to a specification, and (if available) identified gaps in existing NHIN or HITSP specifications that need to be addressed for the information exchange.]

Data for summary reporting:

- Measure ID
- Measure name
- Measure description (including definition of terms)
- Instructions on reporting including frequency, timeframes, and applicability
- Topic type
- Measure developer / IP Holder
- Date sent
- Version

- Approved by
- Date of original approval
- Adoption by regulatory bodies and programs used by the regulatory bodies
- Rationale (includes Clinical area)
- Improvement notation (expected outcome includes Clinical area))
- Version changes
- Measurement start date (reporting period start)
- Measurement end date (reporting period end)
- Contact (not in the collaborative import data)
- Date of version (effective date of the version not in the collaborative import data)
- Level of analysis (who should adopt this)
- Numerator and denominator counts
- Exclusion count(s)
- Clinician/Hospital-level data (e.g., clinician/hospital/group/site/system identifiers)
- Visit time, date
- Data for comparative reporting
- Includes the potential for future calculation of metrics such as trending, confidence limits, and standard deviations as required by dashboards and comparison reporting

2.3 Other unique requirements

[Identify the functionality or interoperability capabilities that will be needed to support the information exchange.]