eCQM Design Group

April 4, 2017

10:00 am – 11:30 am

CEDARBRIDGE GROUP

Agenda

Welcome / Roll Call **Approve 3/28/17 Meeting Summary**	Karen Bell, MD	10:00 AM
Today's Meeting Objectives	Karen Bell, MD	10:05 AM
Validate Updated Graphics	Design Group Members	10:10 AM
Continued: Consider Draft Functional Requirements for a Statewide Quality Measurement System	Design Group Members	10:20 AM
Discuss Business Requirements and Use Case Feedback	Design Group Members	10:55 AM
Meeting Wrap-up and Next Steps	Karen Bell, MD	11:25 AM

Meeting Objectives?

- Validate Updated Graphics
- Continued from 3/28: Consider Draft Functional Requirements for a Statewide Quality Measurement System
- Discuss Business Requirements and Use Case Feedback
- Outline Upcoming Meetings

Design Group Workflow

Roadmap for the Development of a Clinical Quality Measurement System

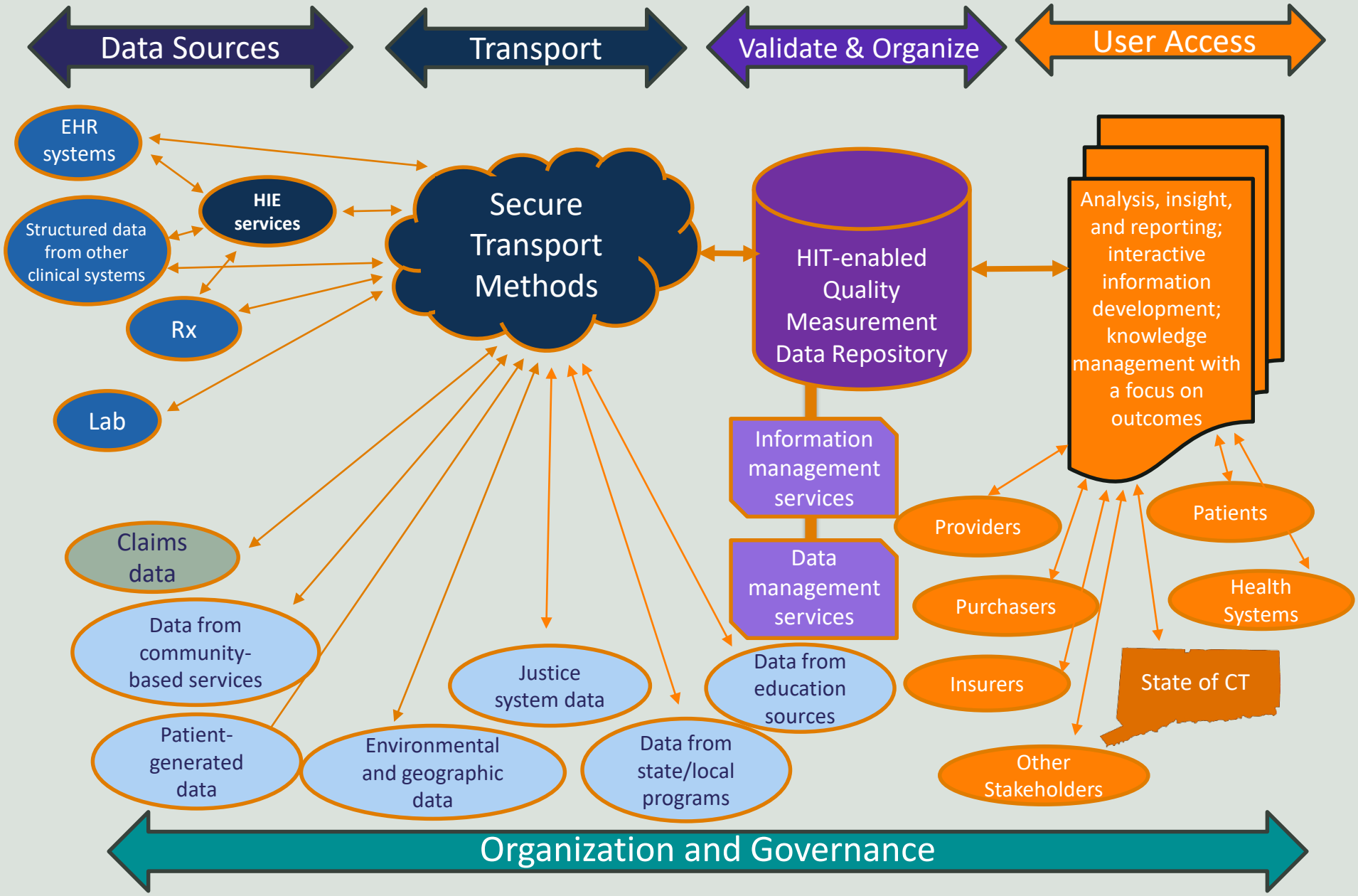
- Validate Stakeholders and Value Propositions
- Identify Clinical Data Sources and Data Flows
- Validate Components of a Clinical Quality Measurement System and the Scope of Design Group Work
- Confirm Business and Functional Requirements to Meet Needs of Priority Use Cases
- Discuss Future Planning Needs (Governance, Sustainability, Other)

Proposed Timeline

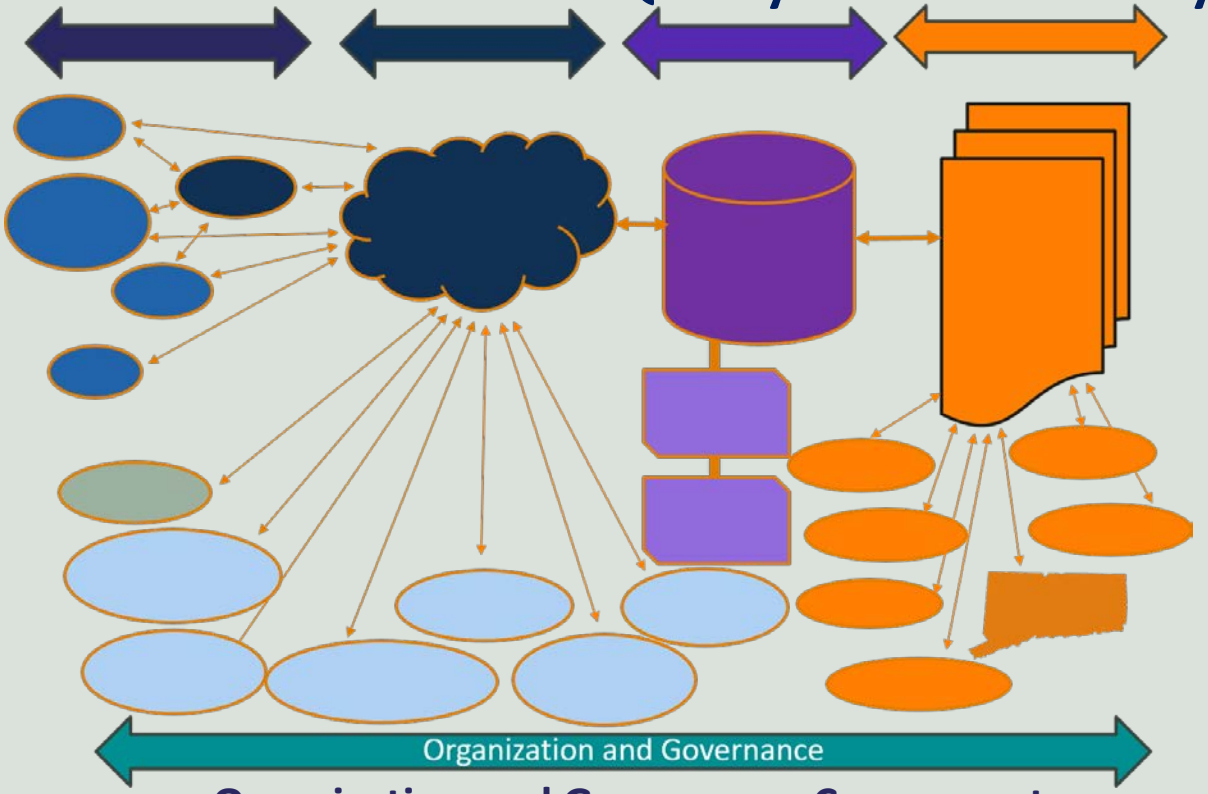
Milestones/Deliverables	Planned Dates
Validate value proposition summary Validate clinical electronic data sources necessary for clinical quality measures Review components of a statewide system and priority use case categories	3/7/17
Review preliminary themes from environmental scan/ stakeholder engagement Validate priority use case categories for statewide system Validate progress report to 3/16 Health IT Advisory Council Consider details around the components of a statewide system	3/14/17
Consider draft business and functional requirements for a statewide system	3/21/17
Review synthesis of input and validate recommendations for business and functional requirements for a statewide system	3/28/17
Continue review of input and validate recommendations for functional requirements; discuss business requirements and use cases for a statewide system	**4/4/17**
Consider governance, sustainability, and additional planning needs for a statewide system for inclusion in the recommendations to the Health IT Advisory Council	4/11/17
Present Final Report and Recommendations to Health IT Advisory Council	4/20/17

Validate Updated Components of Statewide System Graphic

Conceptual Model of a Statewide Quality Measurement System



Conceptual Model of a Statewide Quality Measurement System/Utility



Organization and Governance Components

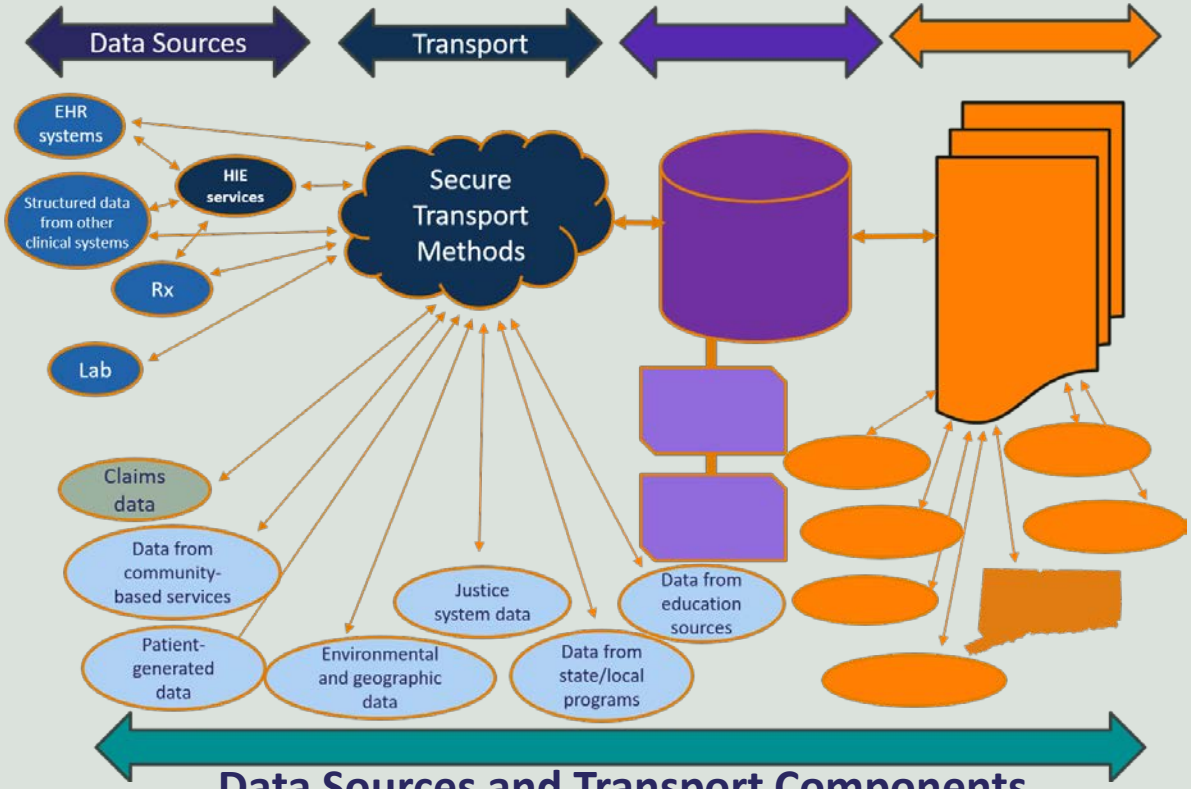
In scope for functional requirements:

- Locus of data aggregation (locally, intermediaries, and central)

Out of scope for functional requirements:

- Organizational governance (business operations, policy & legal, accountable oversight & rules of engagement)
- Operations
- Sustainable financial model
- Technical assistance framework

Conceptual Model of a Statewide Quality Measurement System/Utility



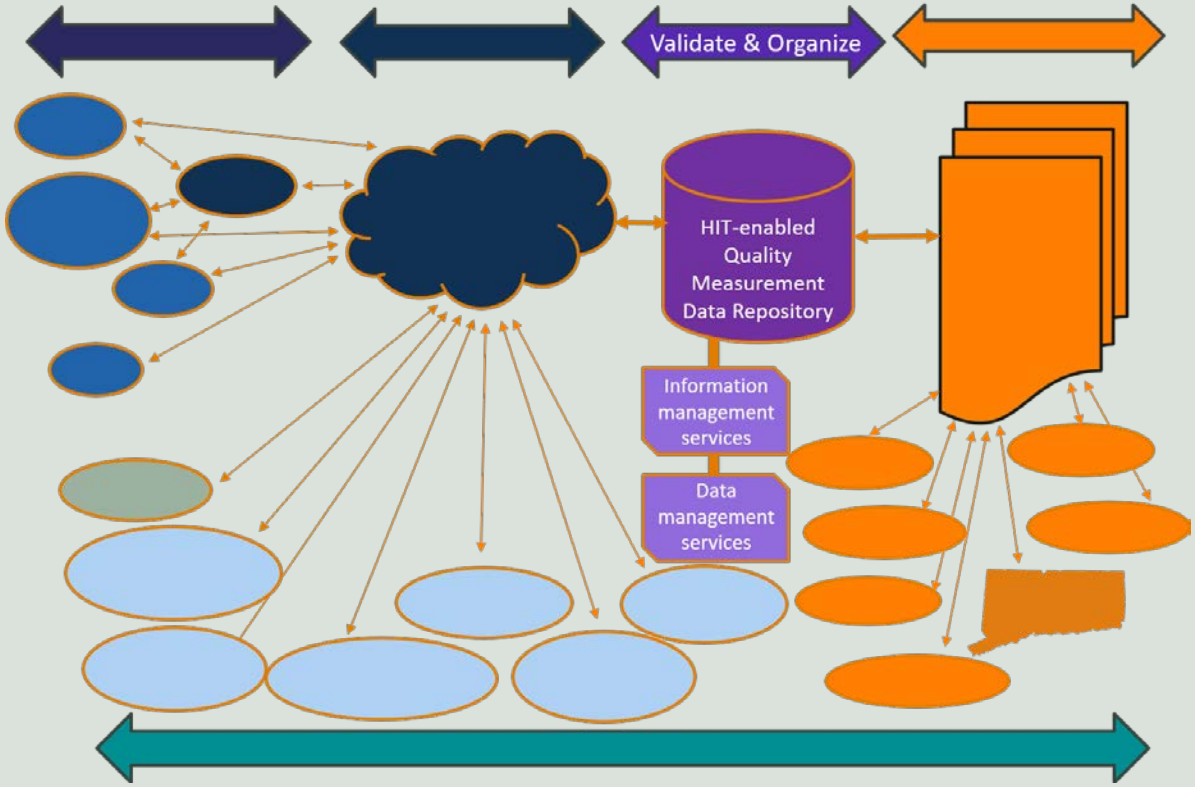
In scope for functional requirements:

- System performance and auditing capabilities
- Attribution (patients to providers)
- Secure data exchange (Direct, query/retrieve, HL7 v2.x)
- Content standards (claims, clinical, etc.)
- Security standards

Out of scope for functional requirements:

- Directories (Master Person Index, Master Provider Directory, and Authorized User Directory)
- HIPAA privacy requirements and consent framework
- Quality controls

Conceptual Model of a Statewide Quality Measurement System/Utility

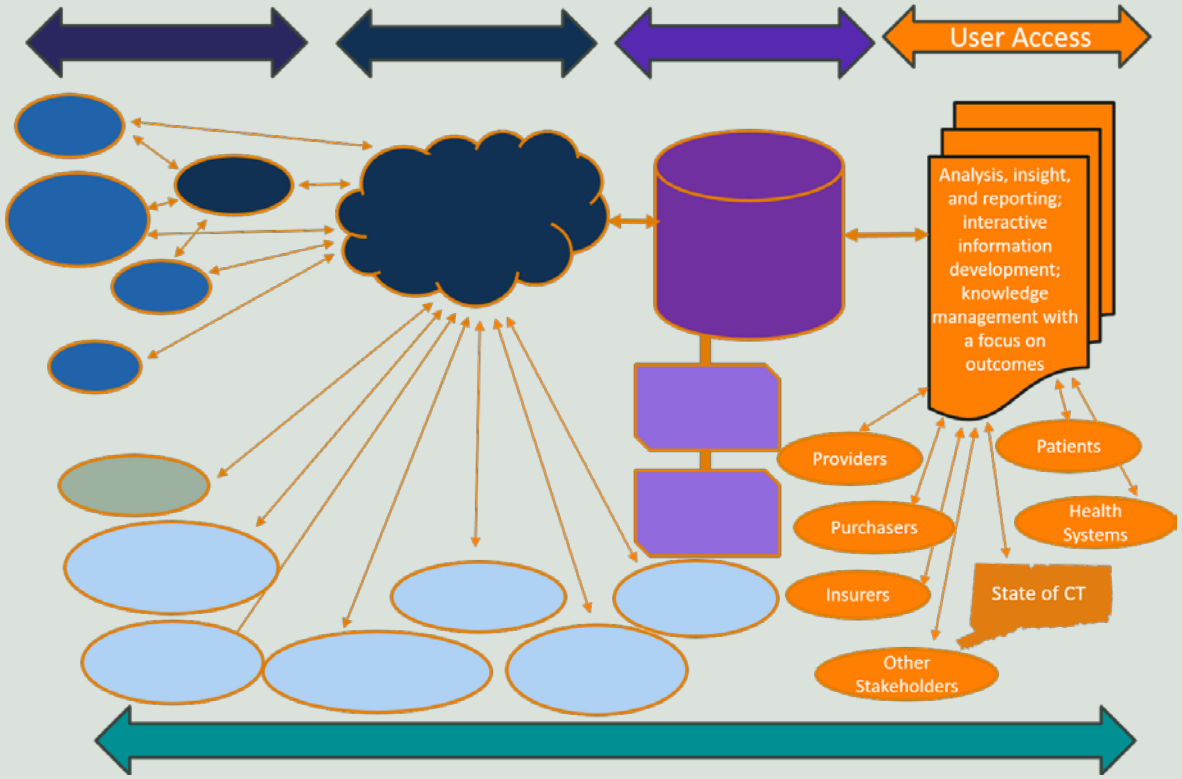


Validate and Organize Component

In scope for functional requirements:

- Data normalization
- Data integration
- Data analysis
- Risk adjustment
- Data Provenance

Conceptual Model of a Statewide Quality Measurement System/Utility



In scope for functional requirements:

- Analytical tools
- Notification (bidirectional secure communication about operations and content of the system)
- Consumer tools (e.g., scorecard of providers, track own blood pressure)
- Provider tools
- Feedback methods of aggregate and individual quality reports

Consider Draft Functional Requirements for a Statewide Quality Measurement System

DRAFT Functional Requirements: Data Collection

Data Collection	Updated
The Statewide Health IT-enabled Quality Measurement System (System) should be able to **query for, and retrieve (pull) data via nationally-recognized standards** including, but not limited to: HL7, version 2 and Fast Healthcare Interoperability Resources (FHIR).	*CedarBridge comments:* Will add the goal of the Cost Effectiveness in introduction of Recommendations. Have replaced "mature" with "nationally-recognized". If the Design Group would like to be more specific in this area, another option would be to reference the ONC Standards Advisory as the source for nationally-recognized standards.
The System should be able to **receive data in flat files,** including in Excel and comma separated value (CSV) formats.	N/A
The System should be able **to collect complete, accurate, and timely discrete data elements**, including but not limited to: lab results, prescription history, demographic data (including **age, gender, zip code,** race and ethnicity), vital signs, diagnoses, immunizations, radiology reports, images, and socio-economic data, when available.	✓

DRAFT Functional Requirements: Data Collection

Data Collection, cont.	Updated
The System should be **interoperable** with electronic health record systems (EHRs) and EHR interoperability modules, health information exchange (HIE) platforms, data warehouses, commercial labs, Connecticut's Department Public Health laboratory and registries, Surescripts, Connecticut Prescription Monitoring and Reporting System (PMRS), radiology systems, and **Application Programming Interfaces (APIs) coded to Computer Emergency Response Team (CERT) cybersecurity standards.**	✓
The System should have the capacity to **incorporate socioeconomic indicators and other data that suggest social determinants of health when these data are available, now and in the future**, as structured elements **or through Natural Language Processing (NLP).**	✓
The System should have the capacity to collect **race and ethnicity data** when available in standardized format in EHRs and other contributing data systems.	N/A
The System must be **scalable and flexible** to allow for the ability **to add clinical data** for any future clinical measures agreed upon through a measures governance process, including measures that utilize custom specifications.	N/A
The System must be **scalable and flexible** to allow for the ability **to add claims data** for any future cost and quality measures agreed upon by through a measures governance process.	N/A

DRAFT Functional Requirements: Data Collection, continued Data Transport

Data Collection, cont.	Update
The System must be **scalable and flexible** to allow for the ability **to add other data (community, environmental, educational, patient-reported etc.)** for any future health status measures agreed upon by through a measures governance process.	✓
Data Transport	**Updated**
The System should be able to **send data (push) or receive data (via push and pull)** via web services, FHIR (APIs, messaging, etc.), or other standards such as Direct secure messaging (XDR/SMTP).	✓

DRAFT Functional Requirements: Data Validation

Data Validation	Updated
The System should include the implementation of **Production and** non-Production **(test) instances** for testing (interface build, software updates, etc.).	✓
The **Production and** non-Production System must have the electronic capability to **validate the data fields** collected [alphabetic, numeric, dates, Uniform Resource Locators (URLs), etc.].	✓
The System must improve the **timely and accurate adjudication of performance based incentive payments** to providers participating in value-based payment models.	N/A
The System should allow **stakeholders to audit or otherwise verify accuracy of measure calculations at the patient level** and a **process for correcting errors.**	✓

DRAFT Functional Requirements: Data Attribution

Data Attribution	Updated
The System must use **sophisticated methods of attribution logic and securely reconcile different attribution methodologies to link patients to providers.**	✓
The System must be able to impose a complex set of **business rules** on incoming data feeds to a master patient index that can: - Create a unique patient identifier to support accurate attribution - Attribution of all care and services accessed by a patient to an assigned primary care **provider or other provider** regardless of who provided the care. - **Attribution of all care and services accessed by a patient** to organizations, based upon attributed provider - Ensuring appropriate linkage of patient data across various message types and submitters - Assign patients to a payer based upon a defined reporting period	✓

DRAFT Functional Requirements: Data Aggregation and Normalization

Data Aggregation and Normalization	Updated
The System should support users **in identification of cohorts** of individuals using a variety of parameters, including **demographic, clinical, and cost data, as well as race and ethnicity and other data related to social determinants of health** where such data is available in standard formats **or through NLP**.	✓
The System should be able to **identify cohorts of high-risk patients using predictive modeling** algorithms and support stratification within the cohorts by clinician, practice, organization, community, **and public health** levels.	✓
The System must **have a clearly defined process** to **normalize clinical data** across submitting organizations in order to increase comparability of data from disparate sources.	✓

DRAFT Functional Requirements: Data Measurement

Data Measurement	Updated
The System must support end users **by providing data** at the individual **patient** level, practice/facility level, and organization level.	✓
The System must **evaluate the effectiveness of integrated care on health outcomes** across stratified populations.	Will add the goal of the Quadruple Aim in the introduction of Design Group recommendations to the Health IT Advisory Council.

DRAFT Functional Requirements: Measure Calculation

Measure Calculation	Changes Needed?
The System should be able to **securely build and perform measure calculations** on data received from many data contributors. These sets of measures will be determined in partnership with the state and data submitters and contain only standardized measures that are pre-defined in detail.	

The System should have flexibility to **perform quality measure calculations** from a variety of standard quality measure sets including those endorsed by the National Quality Forum (NQF) and including, but not limited to, those established by:
- The Centers for Medicare and Medicaid Services (CMS)
  - Advancing Care Information
  - Medicare Shared Savings Program (MSSP)
  - Merit-based Incentive Payment System (MIPS)
  - Advanced Alternative Payment Models (APMs)
(Continued on next slide)	

DRAFT Functional Requirements: Measure Calculation

Measure Calculation	Changes Needed?

(Continued from last slide)
 	
- The National Committee for Quality Assurance (NCQA)
  - Healthcare Effectiveness Data and Information Set (HEDIS)
  - Patient Centered Medical Home (PCMH)
- Medicaid EHR Incentive Payment Program / Meaningful Use (MU)
- The core measures outlined in the Report of the Connecticut Quality Council on a Multi-Payer Quality Measure Set for Improving Connecticut's Healthcare Quality	

DRAFT Functional Requirements: Measure Calculation

Measure Calculation, cont.	Changes Needed?
In calculating measures, the System must be able to **address specific inclusion criteria, specific exclusion criteria, variable measurement periods,** including data that was collected outside of a measurement timeframe.	
The System must **allow users to build custom measures**.	
The System must have **sorting/filtering functionality** that includes, but is not limited to, filtering data by date range, organization, practice locations, individual provider, individual patients, patient morbidity and co-morbidity cohorts, race, ethnicity, gender, birth date ranges, etc.	

DRAFT Functional Requirements: Measure Reporting

Measure Reporting	Changes Needed?
The System must be **interoperable** with all data systems collecting quality measures and quality measurement data from providers participating in the CMS Quality Payment Program (QPP), including for MIPS, MSSP, Advanced APMs, and **other value-based payment models.**	
The System should be approved by CMS as a **Qualified Clinical Data Registry (QCDR)**. Functioning as a QCDR, the System will provide a streamlined method of reporting to CMS on the QPP measures and at least **15** of the other CMS-approved measures at the time of system launch **(There are 30 CMS-approved measures for 2017).**	
The System will demonstrate improvement in meeting the QCDR reporting requirements for CMS-approved measure sets in **2018 and 2019, and will be expected to meet 100% of the QCDR measure reporting requirements by 2020.**	

DRAFT Functional Requirements: Results Dissemination

Results Dissemination	Changes Needed?
The System should **support users in preparing reports** that aid in evaluating the effectiveness of service and clinical programs represented in the data.	
The System must support clinical quality improvement activities with **individual and aggregate-level data, reports, and dashboards** that are easily customizable and can display data at the **patient level, provider level, practice level, Accountable Care Organization (ACO) or organization level, payer level and statewide level**, in a variety of depths to meet the needs of system users.	
The System should include **consumer-facing web access to quality and cost reports**, the timing and details of which would be determined by a governance process.	

DRAFT Functional Requirements: System Access / Security

System Access/ Security	Changes Needed?
The System must conform to robust privacy and security standards, including the requirement for **two-factor authentication to validate user identity.**	
The System must support **role-based access** for a variety of end user roles.	
The System must **map all individual and organizational demographic data fields as closely as possible to a statewide provider directory system,** if such a system is determined to be part of a modular technical architecture for interoperable health IT systems in Connecticut.	

Discuss Business Requirements and Use Case Feedback

Validated: Central Value Proposition

A statewide system for electronic clinical quality measurement will enable providers and encourage payers to more efficiently participate in successful value-based payment models through:

- Person-centric measures that reflect the clinical care referable to a measure that has been received from all providers, included those who are outside specified networks of providers
- Trusted data and information from a third party with a state-of-the-art security infrastructure; quality assurance program; data governance system that focuses on data integrity, reliability, timeliness; and an overall governance system that is inclusive of stakeholder needs and priorities
- A goal of decreased administrative burden for providers by enabling a system that could allow data senders to submit standardized data and measures once to a single entity, and could eliminate the need for data and measure users to collate and recalculate data and measures from multiple sources

Over time, a robust healthcare delivery system of high-performing organizations will thrive in a value-based payment environment, and will help Connecticut achieve the quadruple aim of better health, better care, lower costs, and improved work life of healthcare providers.

Discussion:
Business Requirements

1. Clinical quality improvement activities (providers)
2. Care coordination and management of specific patient cohorts (multiple stakeholders)
3. Integration of care between physical health and behavioral health (multiple stakeholders, including consumers)
4. Development of value-based contracts with a high quality/lower cost network of providers (payers)
5. Accurate calculation of performance measures related to incentive reimbursement (providers)

Discussion:
Business Requirements

6. Transparency of healthcare quality measures (multiple stakeholders including consumers)
7. Transparency of healthcare costs (multiple stakeholders including consumers)
8. Development of targeted, effective, and efficient public health programs (all residents of Connecticut)
9. Administrative efficiency (payers and providers)
10. Research and evaluation (multiple stakeholders)
11. Patient/Consumer engagement (TBD)

Discussion:
Use Cases to Support Clinical Quality Improvement Activities

Clinical Data Only

- Identify patients with poorly managed conditions who receive care outside of the responsible provider's network

Clinical and Claims Data

-

Multiple Data Sources

- Identify contributing factors (social, environmental, and other factors) impacting populations with priority conditions

Discussion:
Use Cases to Support Care Coordination/Management of Specific Patient Cohorts

Clinical Data Only

- Identify patients with poorly managed conditions who receive care outside of the responsible provider's network

Clinical and Claims Data

-

Multiple Data Sources

- Identify contributing factors (social, environmental, and other factors) impacting populations with priority conditions

Discussion:
Use Cases to Support Integration of Care Between Physical Health and Behavioral Health

Clinical Data Only

•

Clinical and Claims Data

- Analyze patterns of care in patients utilizing behavioral health and physical health services

Multiple Data Sources

•

Discussion:
Use Cases to Support Development of Value-Based Contracts with a High Quality/Lower Cost Network of Providers

Clinical Data Only

- Provide aggregate outcome measures on all of a given provider's patients
- Provide composite outcomes on clinical measures on all payers' members

Clinical and Claims Data

- Integrate clinical and claims measures as needed for reporting purposes

Multiple Data Sources

-

Discussion:
Use Cases to Support Accurate Calculation of Performance Measures Related to Incentive Reimbursement

Clinical Data Only

- Identify true data gaps related to outcome performance measures

Clinical and Claims Data

- Identify true data gaps related to hybrid performance measures

Multiple Data Sources

-

Discussion:
Use Cases to Support Transparency of Healthcare Quality Measures

Clinical Data Only

- Report accurate outcome quality measures based on clinical and claims data to a public-facing website.

Clinical and Claims Data

- Report accurate process and outcome quality measures based on clinical and claims data to a public-facing website

Multiple Data Sources

-

Discussion:
Use Cases to Support Transparency of Healthcare Costs

Clinical Data Only

-

Clinical and Claims Data

-

Multiple Data Sources

-

Discussion:
Use Cases to Support Development of Targeted, Effective, and Efficient Public Health Programs

Clinical Data Only

- Identify relationships between demographic information and specific clinical outcomes

Clinical and Claims Data

-

Multiple Data Sources

-

Discussion:
Use Cases to Support Administrative Efficiency

Clinical Data Only

-

Clinical and Claims Data

-

Multiple Data Sources

-

Discussion:
Use Cases to Support Research and Evaluation

Clinical Data Only

- Perform program evaluation at multiple levels with respect to efforts to improve clinical outcomes

Clinical and Claims Data

- Identify opportunities to conduct health services research in partnership with academic, commercial, and governmental entities

Multiple Data Sources

-

Discussion:
Use Cases to Support Patient Engagement

Clinical Data Only

-

Clinical and Claims Data

-

Multiple Data Sources

-

Next Steps

- **Tuesday April 11, 2017**
  - Determine feedback methods for reviewing presentation to Health IT Advisory Council and assign presenter(s)
  - Discuss and finalize recommendations to the Health IT Advisory Council for addressing components of a statewide quality measurement system that were considered out of scope for the Design Group
- **Thursday April 20, 2017**
  - Health IT Advisory Council Presentation

Karen Bell MD

Karen@cedarbridgegroup.com

Carol Robinson

Carol@cedarbridgegroup.com

www.cedarbridgegroup.com

CEDARBRIDGE GROUP