

CONNECTICUT
HEALTHCARE
INNOVATION PLAN

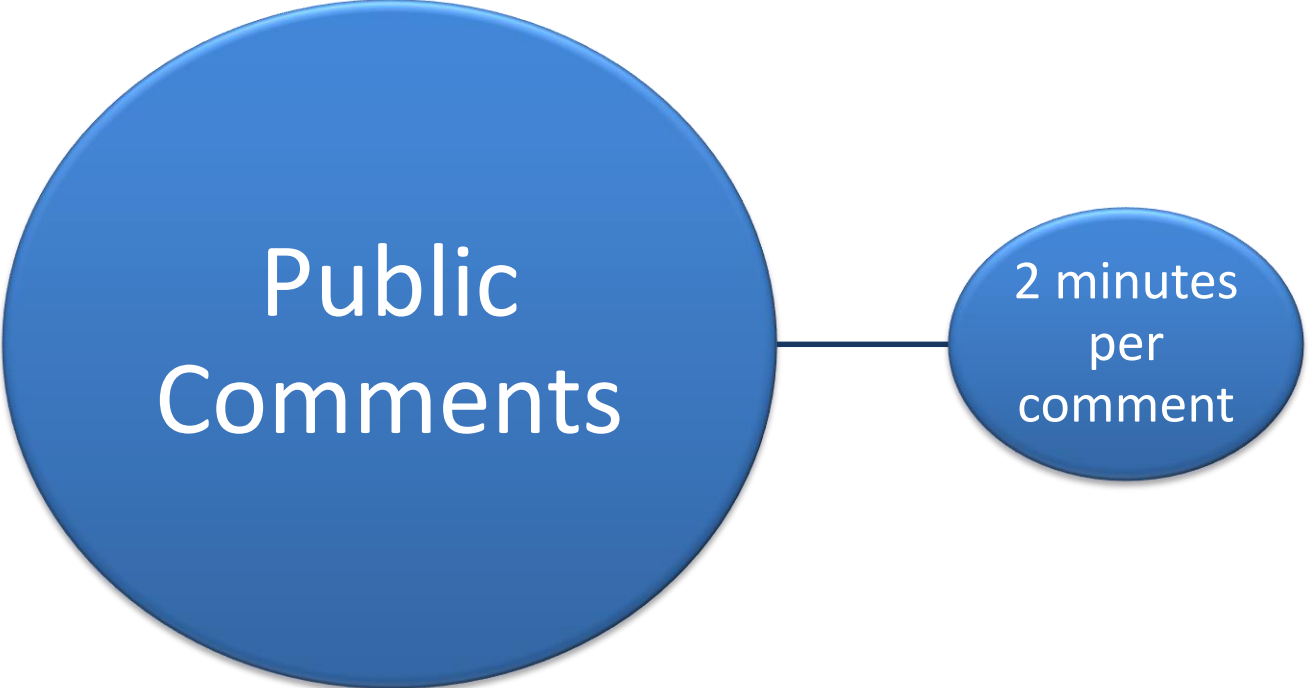


Healthcare Innovation Steering Committee

June 8, 2017

Meeting Agenda

| Item | Allotted Time |
|---|---------------|
| 1. Introductions/Call to order | 5 min |
| 2. Public comment | 10 min |
| 3. Approval of the Minutes | 5 min |
| 4. Population Health- Prevention Service Initiative | 45 min |
| 5. Health Information Technology- Clinical Quality Measure Production | 20 min |
| 6. Integrating Race/Ethnicity Reporting into the APCD | 20 min |
| 7. Public Scorecard and Quality Council Charter | 15 min |
| 8. Adjourn | |



Approval of the Minutes

Population Health- Prevention Service Initiative

Presentation Objectives

- Bring SIM Steering Committee up to speed with provisional recommendations
 - Review key milestones in Council planning from June 2016-June 2017
 - Review processes used and key learnings to develop the milestones
- Solicit input from Steering Committee on proposed CBO-Linkage Model
- Population Health Council to provide more complete recommendations in July based on input from Steering Committee

Key Planning Milestones: June 2016 -June 2017

1. Established Council framework and common understanding of goals of SIM and concepts of prevention among Council members (Introduction, Formation of Council)
2. Aligned SIM and SHIP priority areas within the context of population health and the health reform environment
3. Used root cause analysis to validate focus areas of Prevention Service Centers
4. Gained broad understanding of state capacity for prevention, and reviewed key aspects of community-based prevention models in practice (case studies)
5. Began designing preliminary structure and content for Prevention Service Center – organization, governance, and menu of services
6. Identified epicenters and target communities for data gathering and phase 1 demonstration
7. Engaged stakeholders in operational capacity analysis of CBO's in the state and validation of SIM planning assumptions
8. Developed, discussed, and refined straw model design concept based on Council feedback

Processes Used and Key Learnings

Aligned SIM and SHIP priority areas and confirmed focus areas for the Prevention Service Centers (Milestones #2 and #3)

- Used CT health status data to validate key priorities of diabetes, asthma, hypertension (with preliminary addition of child services and behavioral health)

Discussed implications of broad-based state environmental scan on current capacity for prevention; reviewed case study presentations from two CT CBO's with reflection on factors for success and current incentives and barriers for sustainability (Milestone #4)

- Currently no Prevention Service Centers exist in CT
- Prevention services such as diabetes self-management or medication management programs are provided through various community-based or healthcare organizations with no coordinating entity or referral mechanisms
- Funding is varied (grants, fees, some insurance) and sustainability is uncertain
- Ability to consistently track processes and outcomes is limited

Processes Used and Key Learnings

Discussed key functions needed to operationalize the Prevention Service Center Concept (Milestone #5)

- **Provides or coordinates evidenced-based**, high-fidelity culturally and linguistically appropriate, accessible **prevention services**
- Maintains **accountability** for services and outcomes
- Promotes and **markets services** to healthcare providers
- Develops, updates, and maintains formal agreements with partners and providers in re: 1) client identification, referral, outreach, retention and tracking strategies 2) data sharing protocols 3) program metrics and outcomes 4) funding .
- **Collects and analyzes client and program metrics** to demonstrate and improve processes and outcomes.
- Pursues **diverse sources of revenue** including: grants, fees, 3rd party payments to lead to financial sustainability.
- Participates in the **evaluation of prevention service centers as part of a learning collaborative** to contribute to system transformation.

Processes Used and Key Learnings

Ranked potential services in focus areas using agreed upon criteria for inclusion (Milestone #5).

- Developed criteria for service inclusion
- Voted/ranked evidence-based programs against criteria based on thorough presentation and vetting of programs with Council
- Developed Prevention Services that the model would promote

Key Criteria for Service Consideration (Milestone #5)

- **Population Health Priority:** Services address population health priorities identified by state or regional assessments
- **Evidence-based:** Extent to which there is an evidence-based protocol for the service
- **Helps Providers Earn Shared Savings:** Services provide investment opportunities for providers because they can earn points on quality scorecards or generate healthcare cost savings
- **Aligned with SIM:** Services align with the SIM priorities and/or CDC 6 | 18 strategy
- **Bucket 2:** Preventive services bridging clinical and community-based services

Prevention Services That the Model Promotes (Milestone #5)

The model promotes health related services delivered in community settings (CDC “Bucket 2” services):

- Asthma Self Management and In Home Environmental Assessment Program
- Diabetes Self-Management Program
- Diabetes Prevention Program
- Evidence-based assistance with use of Self-Monitored Blood Pressure devices
- Chronic Disease Self-Management Program
- Medication Therapy Management by Community Pharmacists
- Evidence-based Hypertension Interventions led by CHWs
- Early Childhood Behavioral Programs*

**Additional discussion and vetting against criteria needed*

Processes Used and Key Learnings

Selected regional epicenters for data gathering and Phase 1 Demonstration of the Prevention Service Centers (PSCs) (Milestone #6).

Coordinated selection of PSC epicenters with the selection of epicenters for Community Health Collaboratives under the Community and Clinical Integration Program (CCIP)

CRITERIA FOR PRE-SELECTION OF EPICENTERS

- Meaningful presence of accountable providers (including PCMH+, FQHCs and hospitals)
- High proportion of resident population attributed to participating PCMH+ providers

Selection of Demonstration Areas (Milestone #6)

- Agreed on provisional epicenters of **Bridgeport, New Haven, and Middletown**
- Agreed to consider two additional epicenters in **Hartford and New London** - will consider readiness, health disparities, and a history of collaboration as additional selection criteria
- Agreed to be more expansive for stakeholder engagement and then narrow to three demonstration areas based on the key findings
- Agreed that we could **explore additional communities for Phase 2**

Selection of Demonstration Areas (Milestone #6 continued)

- In the future, must determine boundaries of demonstration areas...

CRITERIA FOR FINAL SELECTION OF DEMONSTRATION AREAS

- Measurable burden of health outcomes for prioritized conditions (suitable BRFSS sample)
- Areas with recognized health disparities, health risks and other determinants of poor health
- Ongoing implementation of prevention initiatives related to the PSCs menu of services
- Presence of potential implementer Community Based Organizations (CBOs) Readiness

Processes Used and Key Learnings

Engaged stakeholders in operational capacity analysis of CBO's in the state and validation of SIM planning assumptions (Milestone #7).

1. **Operational capacity analysis of CBOs in the state:**

- Conduct a fact finding analysis of CBOs who may or may not partner with other institutions to implement selected prevention service initiatives.
- Profile all CBOs regarding their capacity for program/service implementation (in process).
- Recommend minimum operational standards to launch a demonstration.

2. **Listening sessions and CBOs engagement** (5 Focus Groups in target areas led by HRiA Facilitators using structured interview guide approved by Council, n=38):

- Validate SIM planning assumptions through inquiries with CBOs affiliated to regional systems implementing the DSS Person Centered Medical Home + initiative and the SIM Community and Clinical Integration Program (CCIP).
- Summarize and discuss with stakeholders from the population health council the challenges and opportunities of CBOs to intersect with the healthcare system market.

Processes Used and Key Learnings

Developed, discussed, and refined straw model design concept based on Council feedback (Milestone #8).

- Initial model proposed a lead entity – however, Council concerned about cost and administrative burden for Community Based Organizations (CBOs)
- Objectives should strengthen the ability to:
 - Establish linkages between entities
 - Enhance the capacity of CBOs to serve patients and meet increasing demand
 - Be “sellable” to participating entities, with a clear ROI

SIM Prevention Services Initiative CBO Linkage Model

Decision-making around key operational components

Technical Assistance

CBO selection

Gaps That the Model Aims to Address

- Individuals have unmet prevention needs related to asthma, hypertension, and diabetes that can be met by Bucket-2 prevention services
- Despite the strong evidence of their effectiveness, Bucket-2 prevention services offered by community-based organizations or public health entities are currently under-utilized by ACOs
- Community-based organizations and public health entities deliver evidence based prevention services, but have limited capacity and need support in marketing and delivering these services to ACOs

Program Goals

- Enable CBOs to access sustainable funding to support increased service capacity in the service of their mission.
- Position CBOs to develop new competencies and align existing ones with opportunities created by value-based payment.
- Increase the number and quality of formal referral linkages and contractual relationships between the healthcare sector (ACOs) and the community sector (CBOs, public health entities).
- Increase the number of individuals with unmet prevention needs who complete evidence-based “Bucket 2” prevention services.
- Improve ACO performance on quality measures related to asthma, diabetes, hypertension, ED utilization, and readmissions for a defined ACO-attributed population.
- Enable ACOs to succeed in shared savings programs and other alternative payment models.
- Open avenues for community integration to address clinical and social determinants of health.

Strategy 1

Improve capabilities of community organizations and public health entities to deliver a specific set of prevention services to the healthcare sector.

CBO Linkage Model

- Selects multiple community organizations using entry level requirements to connect to ACOs.
- TA focuses on business processes and other basic needs to facilitate quick linkage to ACOs.
- Potential CBO support grants to offset costs of TA participation.

Strategy 2

Promote collaboration between the community organizations and public health entities that deliver these services.

CBO Linkage Model

- Promotes peer-learning and collaboration through joint-learning activities led by the TA vendor.
- TA will help CBOs figure out whether and what type of formal partnerships (e.g., subcontracts) may be needed to meet demand once ACO interest is determined.

Strategy 3

Promote the establishment of formal referral (and potential financial) arrangements/linkages between these community organizations and ACOs.

CBO Linkage Model

- Works to facilitate formal linkages with ACOs and whichever CBO(s) align with their priorities and expectations.

Strategy 4

Formally recognize organizations that deliver these services.

CBO Linkage Model

- CBOs are recognized simply by participating in the TA and in activities that give them opportunities to connect to ACOs.

Strategy 5

Promote ACOs to adopt services and measure their impact on their attributed populations.

CBO Linkage Model

- Developing performance measures and total population health measures
- Develop and demonstrate contractual relationships between CBOs and ACOs
- Meeting the CCIP (Community and Clinical Integration Program) standards for linkages between CBOs and clinical care

Additional Upcoming Activities

- TA DESIGN GROUP to recommend qualifications and activities for TA Scope of Work
- Advanced Network/ACO Engagement to understand business needs of healthcare sector as it pertains to prevention services
- TA RFP to select TA Vendor(s)
- RFA to select Prevention Service Providers
- PCMH+ Integration with CBO Linkage Model

Health Information
Technology- Clinical Quality
Measure Production



Update on eCQM Initiative

Allan Hackney
Health Information Technology Officer
Office of the Lt. Governor

June 6, 2017



Definition: Functional Requirements

Functional requirements describe how a system will support the business requirements. They should be, as far as possible, expressed independently from any technology that will be used to implement the system. The functional requirements specify the system to be developed, so they may contain sufficient detail for the developer to build the correct product with only the minimal clarification and explanation from the business and its stakeholders.

Source: Adapted from Mastering the Requirements Process: Getting Requirements Right by Suzanne Robertson, James Robertson



Design Group Deliberation Topics

- Data Collection
- Data Transport
- Data Validation
- Data Attribution
- Data Aggregation and Normalization
- Data Measurement
- Measure Calculation
- Measure Reporting
- Results Dissemination
- System Access and Security
- Patient Consent



Data Aggregation and Normalization

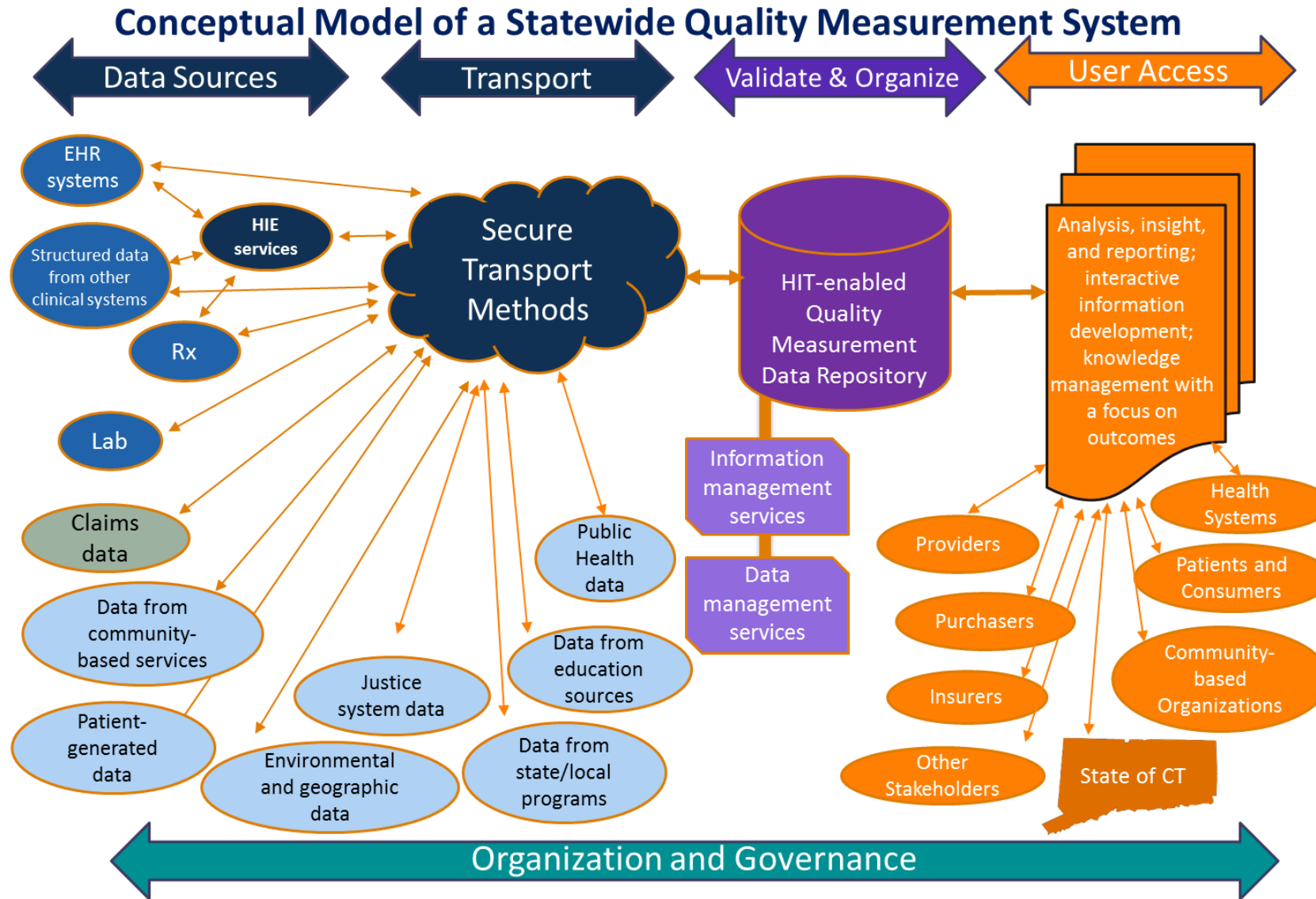
The System should support users in identification of cohorts of individuals using a variety of parameters, including demographic, clinical, and cost data, as well as race and ethnicity and other data related to social determinants of health where such data is available in standard formats or through 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.



Design Group Architectural Model





The development of a statewide quality measurement system:

1. **Should focus on the Quadruple Aim** of better health, better care, lower costs, and a positive healthcare workforce;
2. **Should keep the patient as the “north star”** with a vision for a person-centered system;
3. **Should incorporate all types of quality-related, structured data;** and ingest and create quality measures from different data sources;
4. **Should include the Design Group’s Functional Requirements;**
5. **Should interface with provider-specific reporting systems** (such as behavioral health and long-term and post-acute care providers) to the extent possible;

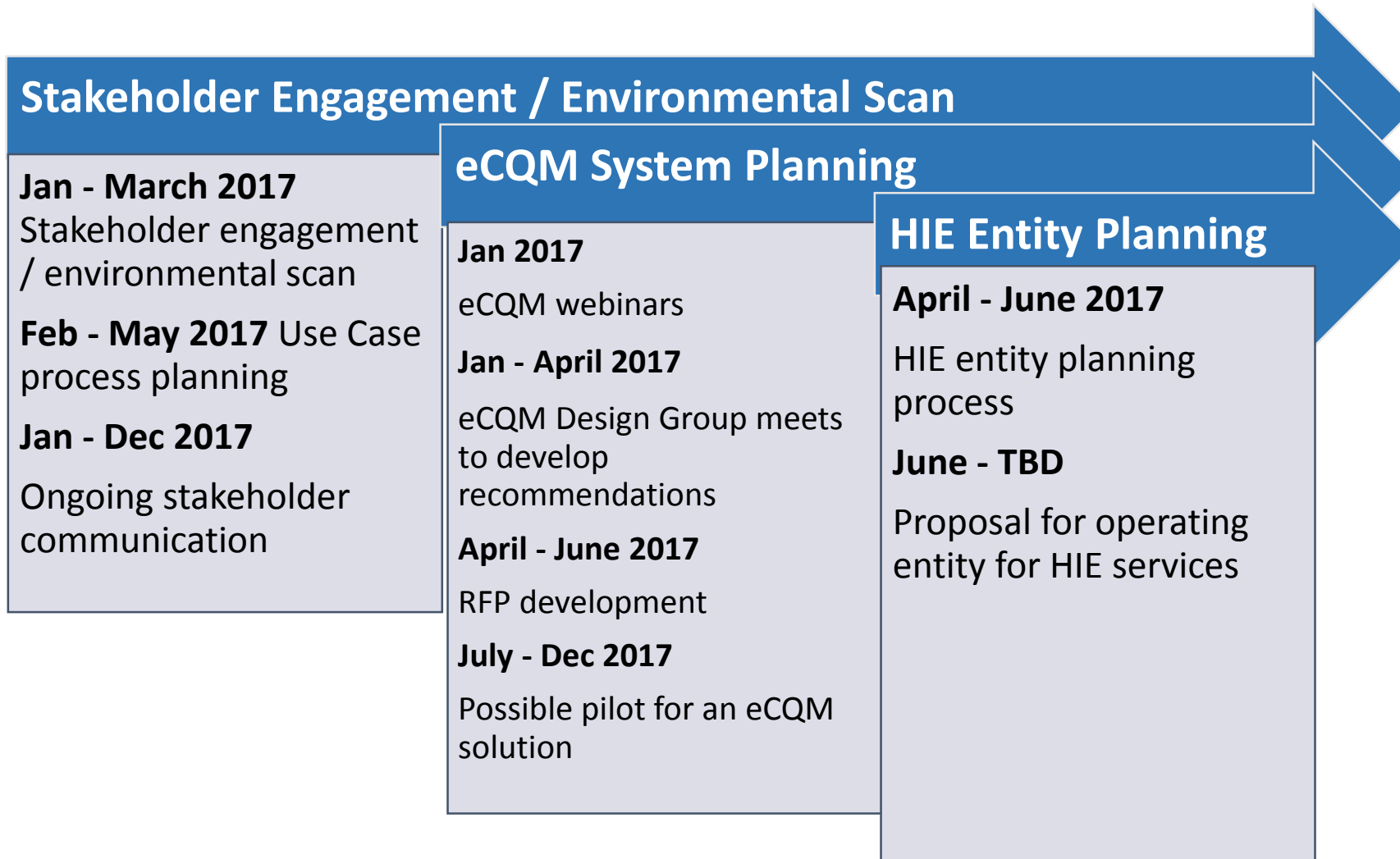


The **development of a statewide quality measurement system:**

- 6. Should adopt specifications for aligned measures** as they become available [through the efforts of CMS, America's Health Insurance Plans (AHIP), and other national initiatives];
- 7. Should maintain flexibility** as quality measurement improves from measuring processes to measuring outcomes, including patient-reported outcomes;
- 8. Should integrate with other components of Connecticut's health IT infrastructure**, including the state's APCD;
- 9. Should address transparency of costs** and availability of public-facing data over time; and
- 10. Should recognize the key challenges** that will be faced as the system is implemented.



Proposed Timeline of Activities





For the full report and more information:

<http://portal.ct.gov/en/Office-of-the-Lt-Governor/Health-IT-Advisory-Council>

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Integrating Race/Ethnicity Reporting into the APCD

Using the APCD to Monitor Health Disparities

- One major shortcoming of virtually all APCDs in the US is the absence of information on patient's race and ethnicity
 - Have race information on ~3% of beneficiaries
- This is a major problem for Connecticut
 - Recent data shows profound racial and ethnic disparities in access to and outcomes of healthcare
 - Readmissions following childbirth, TJA, chest pain
 - Preventable admissions for asthma, diabetes, cardiovascular conditions
- Health Equity Improvement is one of the SIM Aims

Populating APCD with Race and Ethnic Information

- UConn is using ancillary data to populate APCD with race and ethnic information
- Two step process:
 1. Merge birth records with APCD member file
 - Race and ethnic information on parents and children going back to 2003
 - ~ 50% of CT residents born in CT; have child in CT (?)
 2. Use statistical methods to impute race and ethnicity for patients not in birth record
 - Uses patient demographics from birth records (address, name, age etc.) to build a predictive model for patients' race/ethnicity
 - Also use Census data to inform race/ethnic distribution within the state

Imputing Race and Ethnicity: Strategy

- Employ multiple imputation (MI) techniques
 - MI is a simulation based approach to deal with incomplete data
 - The objective of MI is to replace each missing value with $m > 1$ plausible values based on a predictive model, which results in m sets of complete data set
 - Each of the completed data sets is analyzed, with the results combined into a final solution that takes into consideration the variability in the data and the fact that the true missing values are unknown

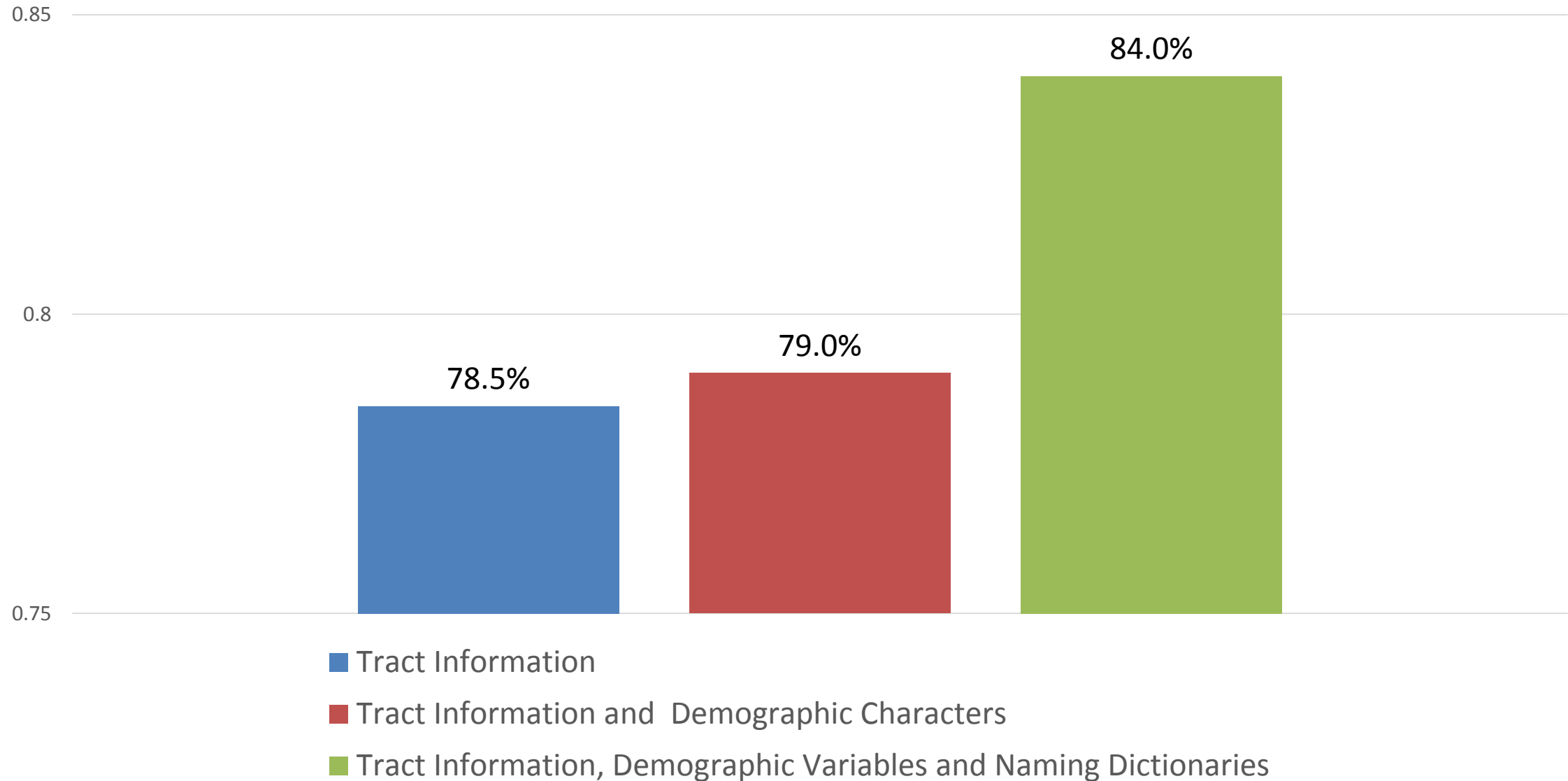
Imputing Race and Ethnicity: Data for Analysis

- Used 5 years of birth records from CT DPH (2011-2015)
- Observations in birth records data were matched to census tracts based on their physical addresses
 - 162,466 observations in total, residing in 827 tracts
- Using 2010 Census data, obtained summary statistics describing the population distribution of different race/ethnic groups in each tract
- We also included a database of the 1000 most commonly used last names for Whites, Blacks, Hispanics and Asians in 2000 Census from <http://names.mongabay.com/data>

Imputing Race and Ethnicity: Analytic Approach

- Birth data randomly split into two equal sized data sets for **training** and **testing** the model
- We evaluated our models using the % of observations in the testing dataset whose race/ethnicity was correctly predicted
- Estimated 3 multinomial logistic regression models:
 - Model 1: Race αf (Census track information)
 - Model 2: Race αf (Model 1 + Mom's age + Insurance type + Dad present)
 - Model 3: Race αf (Model 2 + Names)

Imputing Race and Ethnicity: Comparison of Model Accuracy



Imputing Race and Ethnicity: Conclusions

- An imputation strategy can be used to accurately assign race and ethnicity using ancillary data
- Residential location and census tract race/ethnic information alone achieves 78% accuracy
 - Name characteristics can significantly improve accuracy
- Note: population inference vs. patient-level information

Imputing Race and Ethnicity: Conclusions

- Populating the APCD with race and ethnic data will allow us to monitor and assess improvements in health access, outcomes and utilization under SIM
 - This is critical to achievement of SIM goal to reduce health disparities in CT

Public Scorecard &
Quality Council Charter

Current Quality Council Charter – Original scope

Common Performance Scorecard

1. What are the best examples of performance scorecards currently in use?
2. What will Connecticut's common scorecard across all health plans look like?
3. What is the process for all health plans to implement the common scorecard?
4. How will cross-payer analytics be integrated for a given practice profile, including commercial and public payers?
5. Is there a recommended frequency and schedule that could be adopted across payers?
6. How will the common performance scorecard be integrated with value-based payment calculations?
7. How will the scorecards be made available to the public?

Current Quality Council Charter – Proposed scope

Public Scorecard

1. Review use cases and design of existing public scorecards
2. Review best examples of public scorecard format and functionality
3. Advise on design of CT public scorecard including:
 1. Attribution and Risk Adjustment methodologies
 2. Benchmarking, Review, and Validation of data
 3. Format and functionality of public interface
 4. Development of supporting information and components
 5. Options for sustainable financing

Adjourn