

CONNECTICUT  
HEALTHCARE  
INNOVATION PLAN

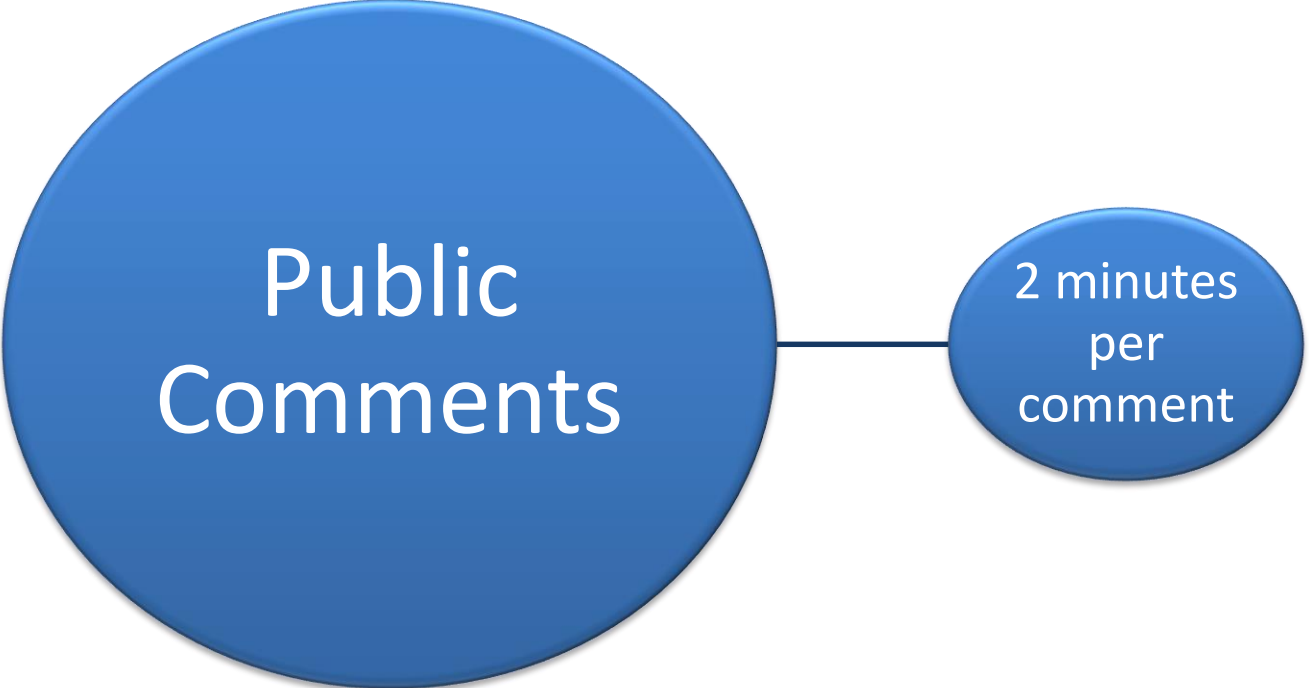


## Quality Council

September 26, 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. Purpose of Today's Meeting	5 min
↓	
5. Review Framework	40 min
↓	
6. HIT Clinical Quality Measure Production	45 min
↓	
7. Adjourn	10 min



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# Approval of the Minutes

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# Purpose of Today's Meeting

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# Review Framework and Fall 2017 Priorities

## Where have we been?



## Where are we going?



# Review Framework and Priorities for Fall 2017

Goal	Strategy	Questions/Activities
<b>Optimal Core Set of Quality Measures</b>	Quality Measure Maintenance	<ul style="list-style-type: none"> <li>- QM's still relevant/endorsed/stewarded?</li> <li>- Are there new measures to be considered?</li> <li>- Do we continue to be aligned with other programs that have QMs?</li> </ul>
<b>Increase Payer Alignment on Core Set and ensure work is coordinated with other reforms in the state</b>	Quality Alignment Implementation	<ul style="list-style-type: none"> <li><b>a. <u>Measure Alignment</u></b> <ul style="list-style-type: none"> <li>- How are we progressing on alignment?</li> <li>- Set goals for alignment</li> <li>- What are barriers and opportunities for alignment</li> <li>- Examine payer survey baseline and set goals for increased future alignment</li> </ul> </li> <li><b>b. <u>Engagement and Coordination</u></b> <ul style="list-style-type: none"> <li>- How do we refresh commitments of payers?</li> <li>- How do we engage providers?</li> <li>- How can we ensure recommendations are known and embedded in other efforts?</li> </ul> </li> <li><b>c. <u>Promote and support strategies for external entities to incorporate</u></b> <ul style="list-style-type: none"> <li>- How can we ensure Health Equity QMs methodology incorporated into scorecards?</li> <li>- How can we ensure eQMs are deployed across the state?</li> </ul> </li> </ul>
<b>Performance of Advanced Networks on core set is transparent</b>	Public Scorecard	<ul style="list-style-type: none"> <li>- Monitor progress</li> <li>- Identify barriers and opportunities</li> <li>- Planning and implementation work</li> </ul>



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# HIT Clinical Quality Measure Production

# eCQM Update and Concepts

Health Quality Council  
September 21, 2017

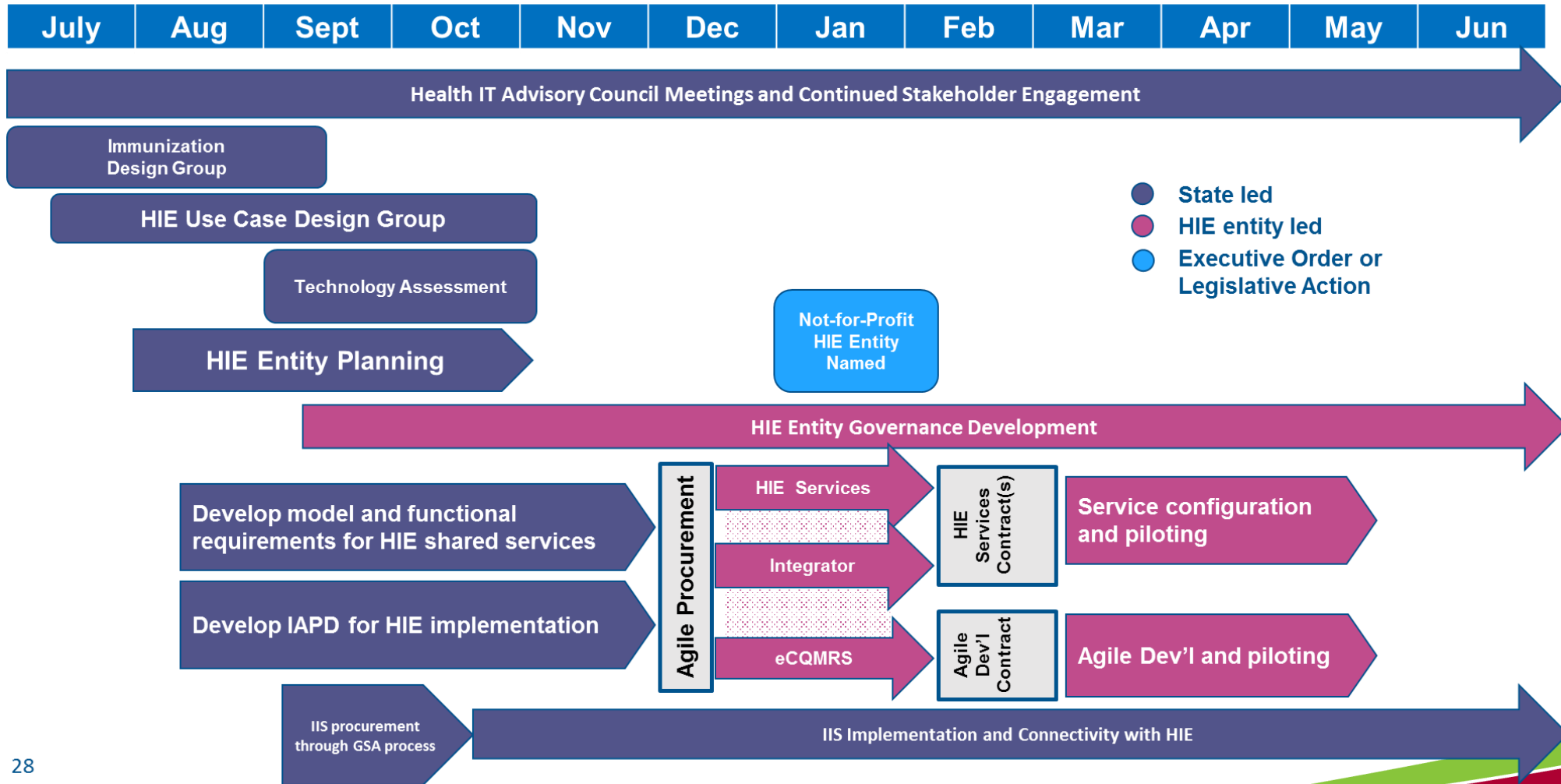


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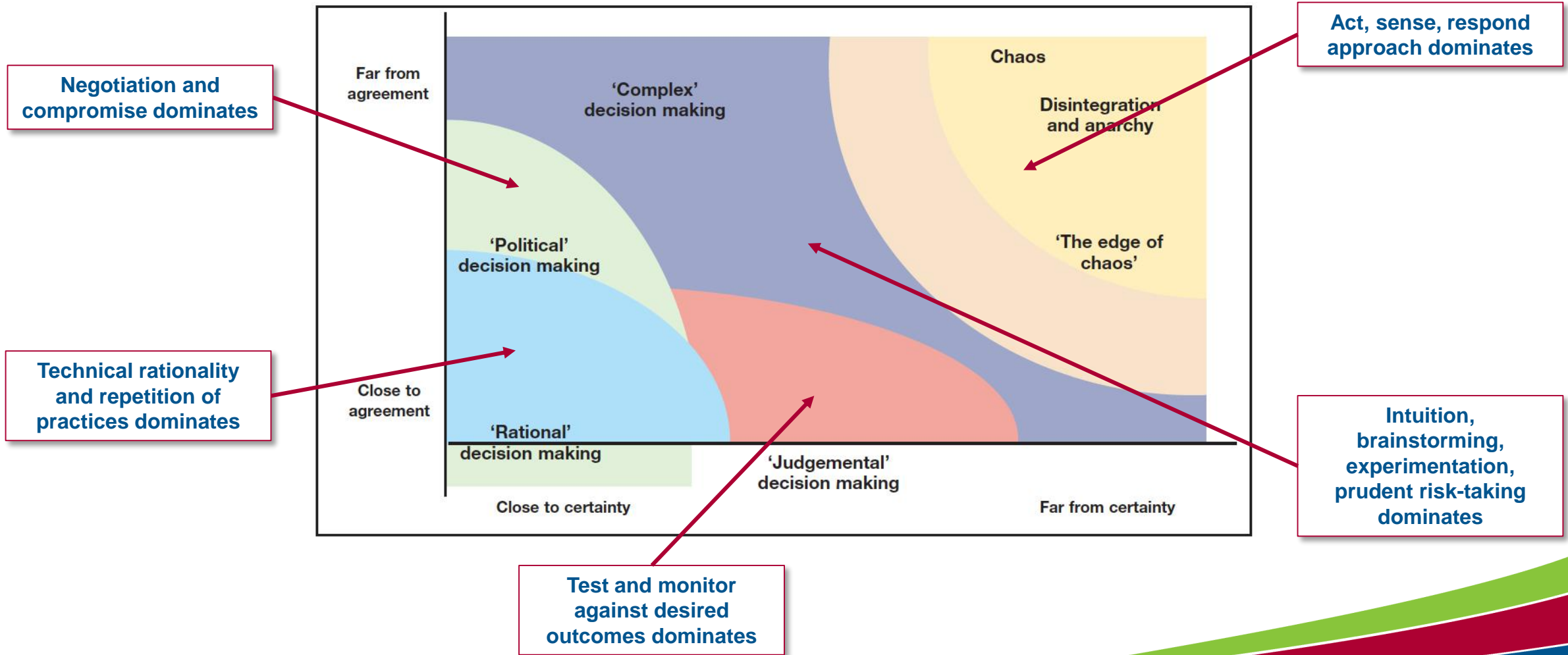
# Timeline

Milestones/Deliverables	Dates
eCQM Design Group convened and charter finalized	2/14/17
Design Group final recommendations prepared	4/24/17
eCQM recommendations accepted by the HIT Advisory Council	5/18/17
RFP preparation team formed	8/24/17
Data architecture team formed	8/24/17
Two day project planning session for RFP, SIM funding, pilot (Comptroller's office) and architecture	8/24-25/17
<b>Advisory Council Review of eCQM planning and approach; overview of "data lakes"</b>	<b>10/21/17</b>

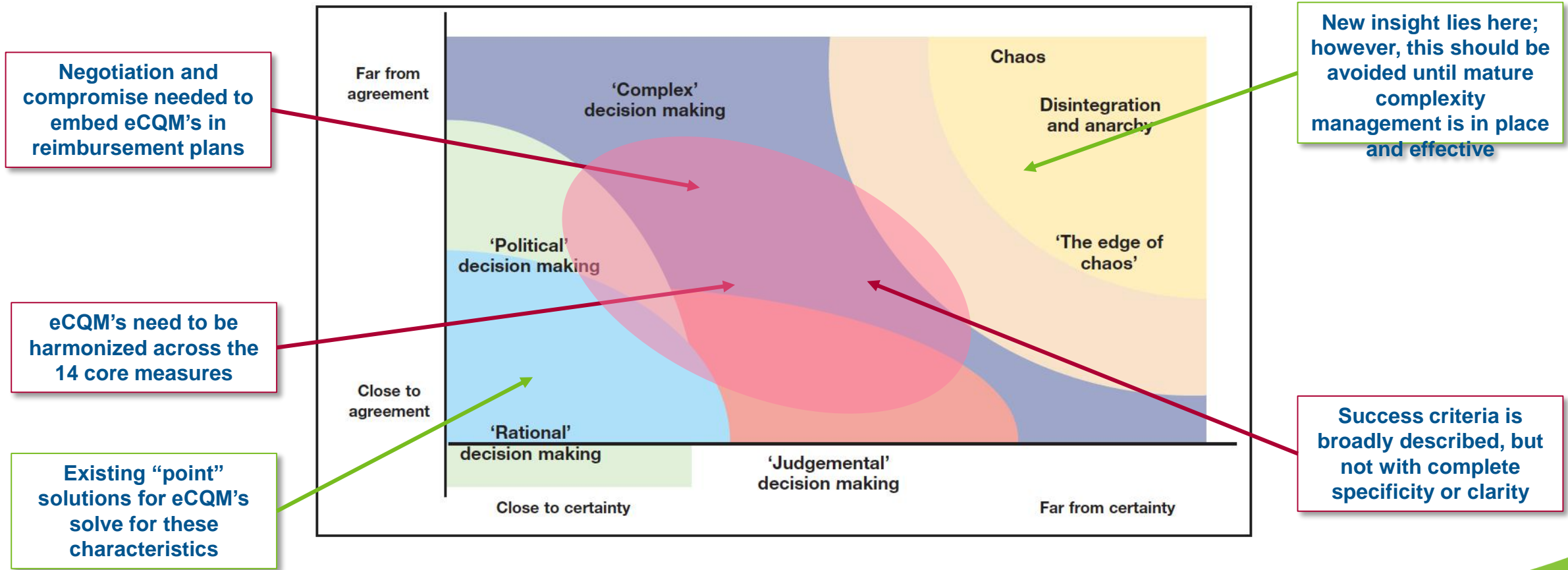
# Procurement Timeline



# The “Stacey Matrix” of Complexity



# Where does our problem lie?

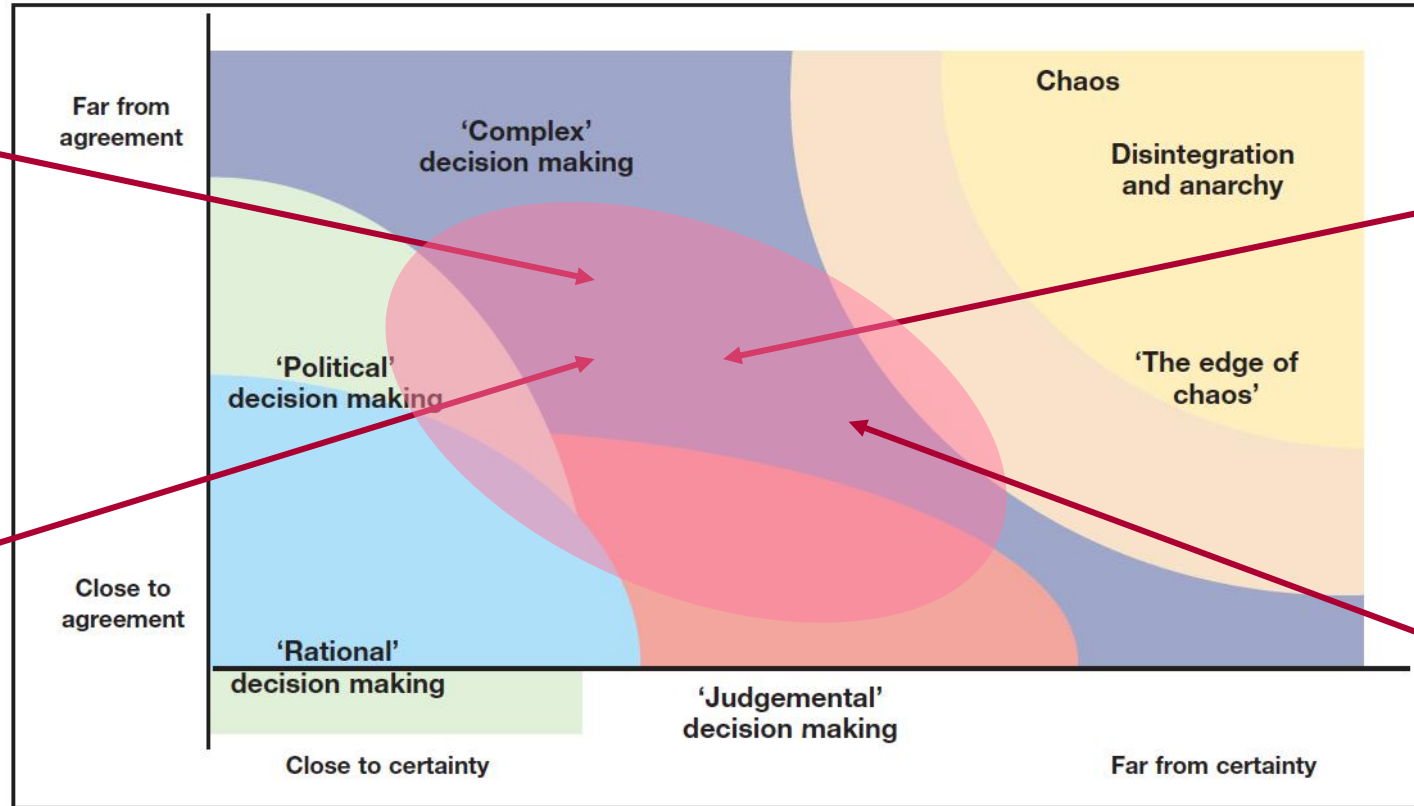


*The problem is complex, but traditional approaches are limited...*

# What happens after we solution for eCQM's?

How can we assess the cost of quality through claims data?

How does quality vary by race, ethnicity or language?

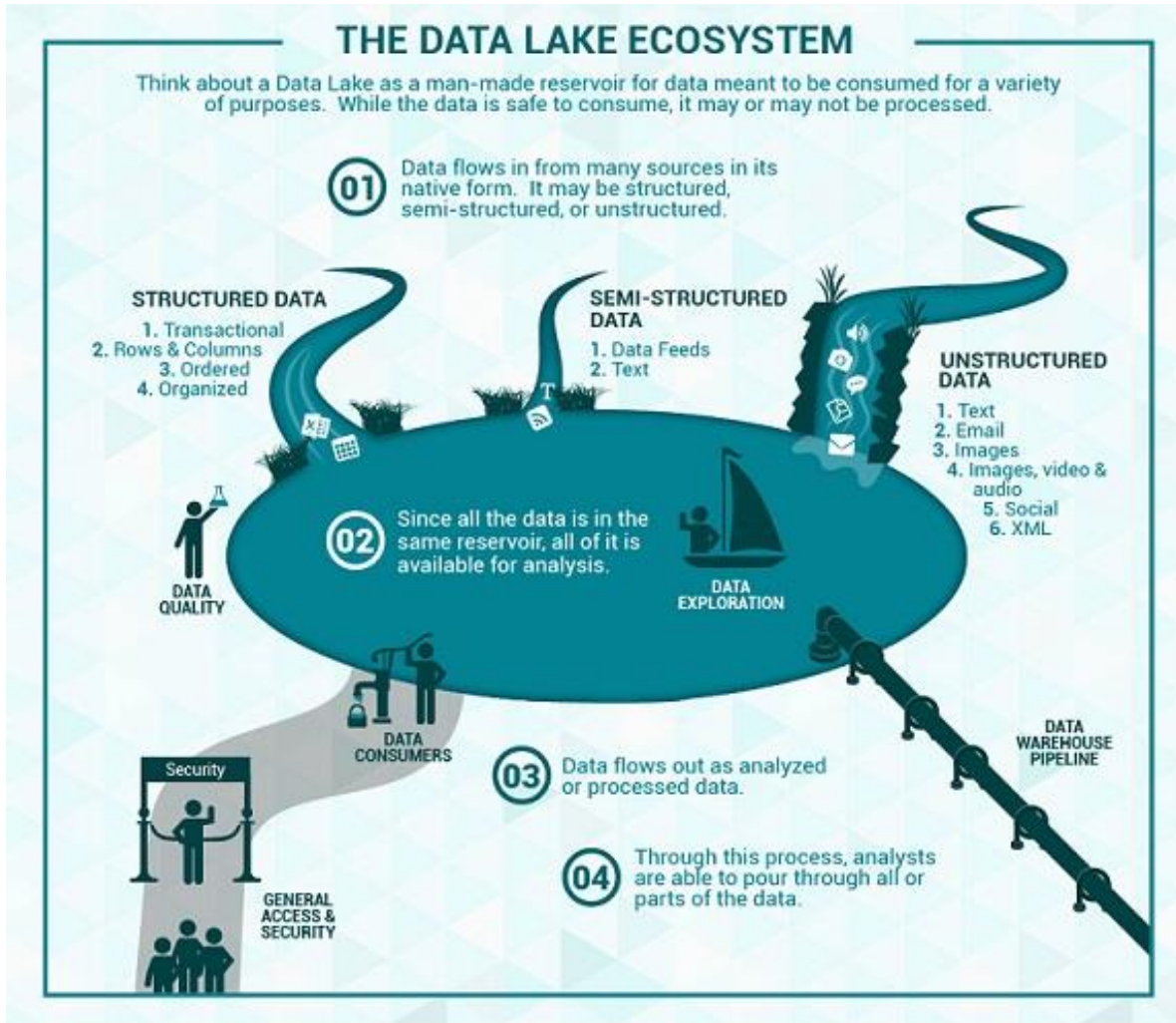


Can we correlate high-risk patients with quality metrics to produce alerts?

How does quality vary by value-based program design parameters?

*It's a natural to expect that future questions will require correlative data*

# Picturing a Data Lake



- ▶ **Focusing on a Data Lake to solve for eCQM's:**
  - Architecting to solve for immediate CQM needs, but...
  - Building a solution that anticipates a broad set of data use cases:
    - Claims data
    - Clinical data
    - Procedural data
    - Social determinant data
  
- ▶ **A data lake enables flexibility:**
  - Allows us to define outcomes (e.g., risk-based predictive alerting) without having to commitment to specifications in advance
  
- ▶ **A data lake enables Agile development approaches**



# Differences in Approach

## Data Warehouse

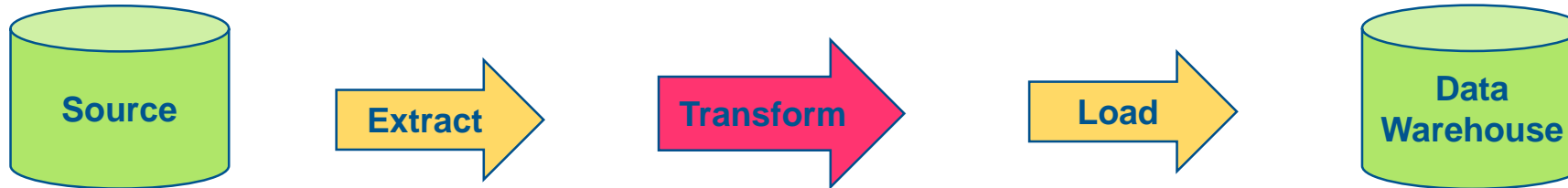
- ▶ *Focuses on Business Processes*
- ▶ *Highly processed*
- ▶ *Tabular & structured*
- ▶ *Lots of effort on design & build*
- ▶ *Optimized for data retrieval*
- ▶ *Highly governed*

## Data Lake

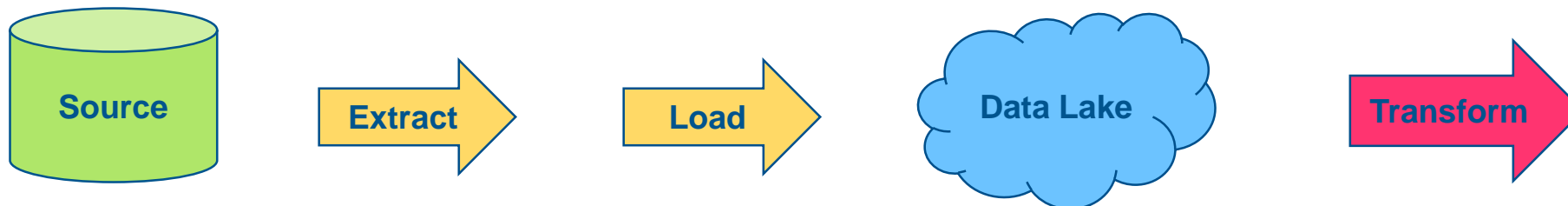
- ▶ *Stores everything*
- ▶ *Unprocessed (raw)*
- ▶ *Unstructured, semi-structured, structured*
- ▶ *Democratization of data*
- ▶ *Shared data stewardship*

# Extract, Transform and Load Processes

Data is transformed before storing in traditional approaches:

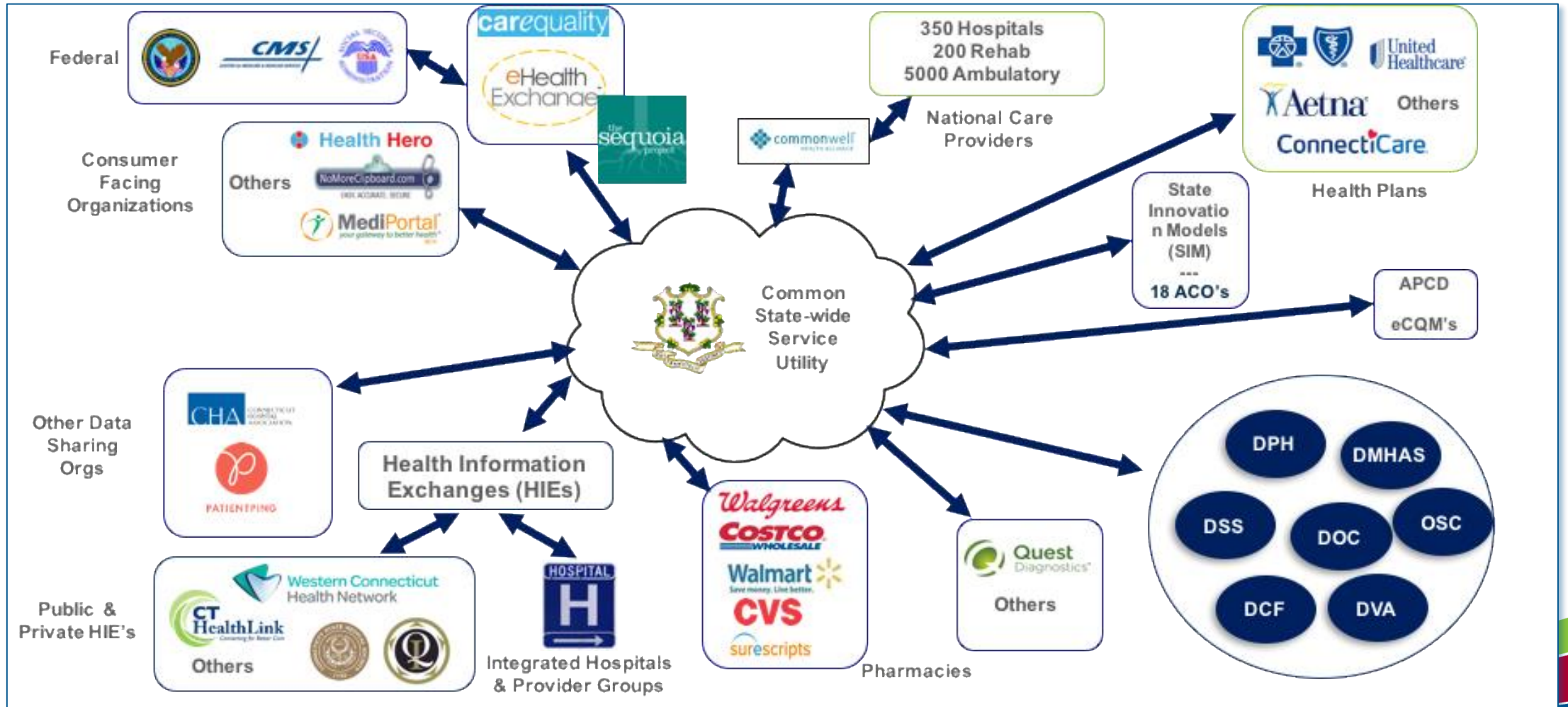


Data is transformed when used in data lake approaches:

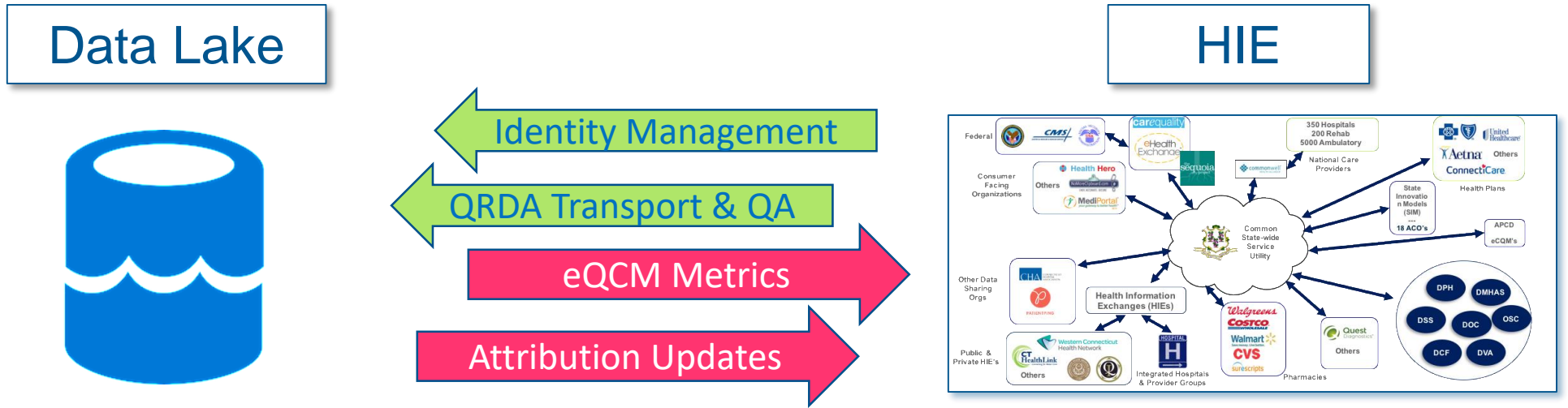


***Key takeaway: Data in a Data Lake can be repurposed many times without duplication, replication or reformatting***

# Vision for the Health Information Exchange



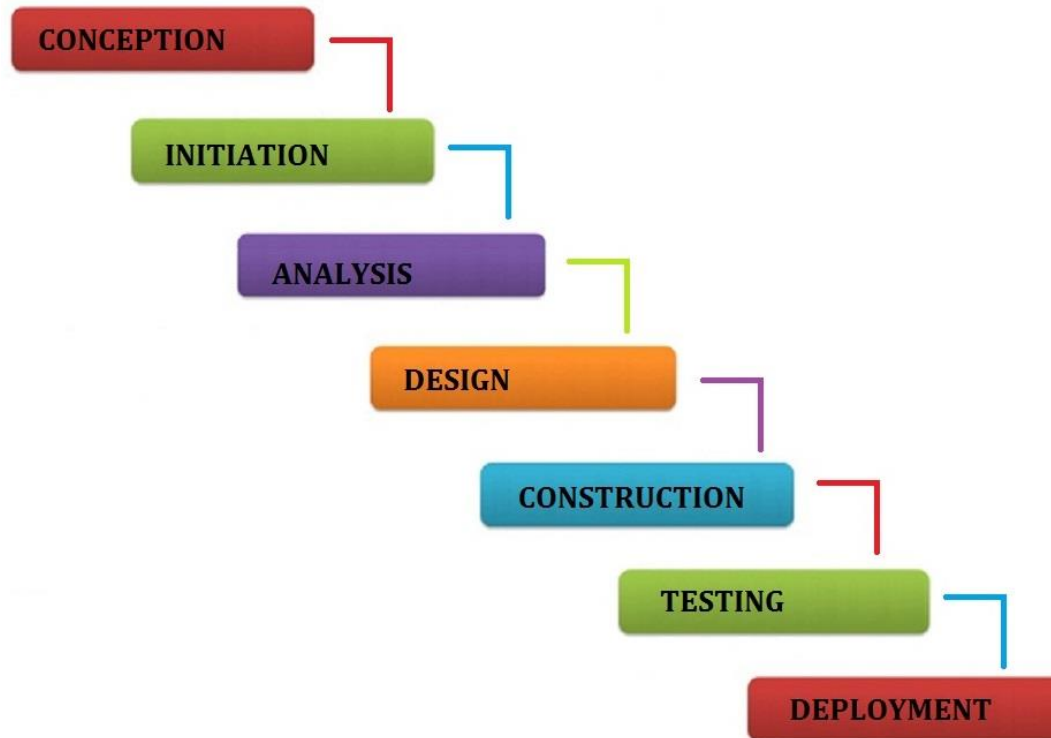
# Conceptual Architecture for eCQM's



- ▶ **Data lake optimized for analytics:**
  - Quality metric data stored as delivered
  - Master Data Management (MDM) tool manages all metadata
  - Plan for extensibility
- ▶ **Targeting cloud:**
  - Exploit recent Azure contract signed by CT
  - Plan for Agile development process
  - Exploit open source where practical

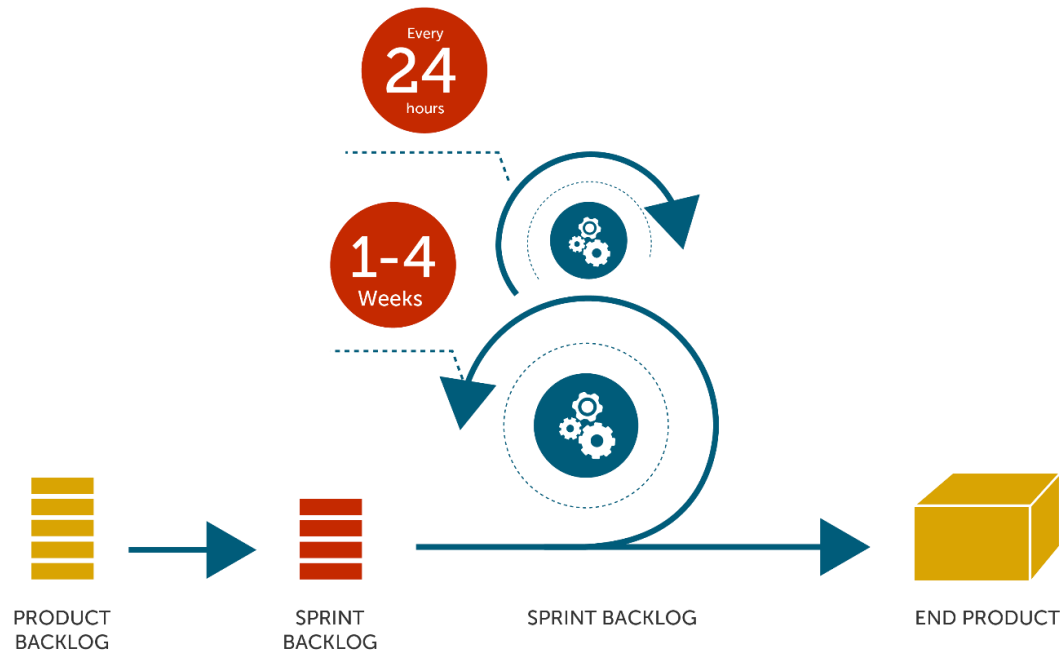
- ▶ **HIE optimized for transaction processing:**
  - Targeting large-scale service partnership
  - Focus on low-cost, high-efficiency
- ▶ **Key services:**
  - Identity as a service (IDaaS)
  - Secure transport
  - Q/A

# Waterfall: Traditional Development Method



- ▶ *Sequential process easy for users to understand*
- ▶ *Detailed specifications give predictability of expected product*
- ▶ *Fits well-known cost, scope and timeline project planning*
- ▶ *Talent easy to obtain and train*
- ▶ *Works well when there's a high degree of agreement and certainty*

# Agile: An Iterative Development Method



- ▶ *Iterative process delivering “minimally viable products” repeatedly*
- ▶ *Introduces new concepts:*
  - *Sprints and scrums*
  - *Backlogs*
- ▶ *User engagement throughout is crucial*
- ▶ *Suits situations where there is not full agreement or certainty*

# Differences in Approach

## Waterfall

- ▶ *Focus on project and process management*
- ▶ *Detailed requirements specified in advance*
- ▶ *Deliver high quality against requirements*
- ▶ *Testing done in construction phase*
- ▶ *Value delivered in implementation phase*
- ▶ *Changes are controlled tightly*
- ▶ *Vendor “lock-in” common*
- ▶ *Approach: “do things the right way”*

## Agile

- ▶ *Focus on product management*
- ▶ *Desired outcomes specified in advance*
- ▶ *Deliver high quality against business value*
- ▶ *Testing done continuously*
- ▶ *Value delivered incrementally*
- ▶ *Changes are encouraged*
- ▶ *Flexible “open source” configurations*
- ▶ *Approach: “do the right things”*

# Exciting, But Not Without Challenges...

## Agile

- ▶ **Challenges aligning to traditional agency processes:**
  - Procurement for Agile a nascent practice
  - Customers do not trust iterative solutions
  - Staff have difficulty aligning timely input
- ▶ **Federal practices do not align:**
  - Reporting practices oriented towards waterfall
  - Required artifacts align to traditional methods
- ▶ **Compliance reviews are difficult to execute within iterative time frames**
- ▶ **Technical environment are difficult to establish and maintain**

## Data Lakes

- ▶ **Challenges balancing security, accessibility and privacy:**
  - Irresistible temptation to classify all data as “highly sensitive”
- ▶ **Resistance to joint data governance:**
  - Traditionally agencies “owned” the data within their domain
  - Legacy statutes complicate data sharing
- ▶ **Talent is scarce, if any, in government:**
  - Acquiring and retaining talent in rigid state pay and benefit practices is difficult

**Fortunately, there is broad support Federal support and proven mitigants to address these challenges...**



# Contact Information

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## Health IT Advisory Council Website:

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

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Next Steps  
Adjourn