Enterprise Measurement Engine & FPG Schema Migration

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Agenda

• Enterprise Measurement Engine (EME) Overview
• Office of Population Health & Accountable Care & Implementation of EME
• FY2021 FPG Schema Migration Achievements
• Chronic Kidney Disease Demo
• Implementing EME: Challenges, Lessons Learned & Future Considerations
Enterprise Measurement Engine (EME) Overview

The Enterprise Measurements Engine is a framework that enables users to create an Enterprise Measure, using UCLA Health’s enterprise tools and data sets.

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<th>Define Measure</th>
<th>Prepare data for the Measure</th>
<th>Calculate the Measure</th>
<th>Prepare Measure Reports</th>
<th>Visualize the Measure</th>
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<tbody>
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<td>▪ Description</td>
<td>▪ Collect data elements from Foundational Data Marts</td>
<td>▪ Standard code development using SQL Best Practices</td>
<td>▪ Generate summaries of Measures</td>
<td>▪ Represent visually (Tableau dashboards)</td>
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<td>▪ Measurement Period</td>
<td>▪ Clinical</td>
<td>▪ Integrate control charts and confidence intervals (R)</td>
<td>▪ Tables</td>
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<td>▪ Population Criteria (inclusions, exclusions)</td>
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<td>▪ Denominator</td>
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<td>▪ Code Systems</td>
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Standardization of measure development processes allows for shorter development and deployment cycles

- Concept and measure documentation through Collibra
- Scalable use of vetted specialized concepts across the enterprise (e.g. admissions)
- Best practice-defined measure SQL code and calculations
- Standardized visualization (Tableau) templates

Enterprise-shared transparency and accountability in EME lifecycle process

- Shared place to store work, version maintenance, change controls through Azure DevOps repository
- Collibra to document business/clinical decisions made about measure specifications and which value sets are tied to which concepts & measures
Office of Population health & Accountable Care: Implementation of EME for FPG Schema Migration

Define measure
- Collaborative approach with clinical and operational champion
- Intake form for high level documentation & corresponding detailed documentation in Collibra

Data preparation
- Value sets
- Build Concepts to promote to Foundational Data Mart, if not yet available
- Custom solutions as needed (e.g. provider affiliations)

Calculate the measure
- Collaborative approach with OHIA (e.g. weekly meetings) to implementing & adjusting existing OHIA SQL code templates
- Include control charts & confidence intervals (R)

Prepare Measure Reports (As Needed) & Visualization
- Tableau development with OPHAC’s standardized Tableau visualization template
FY2021 FPG Schema Migration Achievements

Process

• OPHAC specification intake form & field matrix
• OPHAC Tableau visualization template
• Automated process for importing and maintaining external data

Outcomes

• 26 concepts added to Foundational Data Marts
• 183 measures development
• 17 Tableau dashboards in production
Chronic Kidney Disease Demo

- Intake specification document
- Collibra
- Tableau dashboard
### Challenges

- Foundational Data Marts may not have all of the concepts & fields
- New concepts/measure deployment requires OHIA resourcing

### Lessons Learned

- Use of physical tables instead of temporary tables
- Use of deployment scripts to allow COEs to reduce deployment time

### Future Considerations

- Further leveraging of R capabilities & output display in Tableau
- Leveraging Collibra to align value sets across platforms (e.g. CareConnect)
- Automated notification to developers and stewards when changes made upstream in order to expect a change in their measures