Exploring HL7® FHIR® to Reduce Burden for Quality Measurement

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March 10, 2020
In 2018, MITRE delivered an electronic clinical quality measure (eCQM) strategy report to CMS with recommendations on increasing value and reducing burden of quality reporting.
eCQM Strategy Project Findings

• Quality Reporting Data Architecture (QRDA) format has matured, and vendors are now generally able to validate documents.

• Implementers request more detailed data mapping guidance to ensure that interfaces and data input fields capture quality data.

• QRDA relies on the Quality Data Model (QDM), which is only used for quality reporting.

• Clinicians find data collection obtrusive to their workflow and care of the patient.

• Submitters request real-time feedback on quality data submissions to increase value of quality reporting.
Benefits of FHIR

1. Simplify Data Mapping
2. Improve Alignment with Clinical Practice
3. Streamline Reporting
4. Promote Interoperability
Simplify Data Mapping

- QI-Core provides a comprehensive list of resources (clinical data) to allow eCQMs and Clinical Decision Support (CDS) to express criteria for clinical care examples and use cases
- Aligns with US Core where possible (e.g. Encounters)
- Includes mappings from QDM to enable transition of existing quality measures
- Adds additional constraints and extensions commonly used in quality measurement
Improve Alignment with Clinical Practice

- eCQM
  - Common Standards
    - For Metadata,
      - Data Model,
        - Expression Logic

- CDS
Improve Alignment with Clinical Practice

Clinical Systems

Common Standards For Data Capture, Retrieval, and Exchange

eCQM/CDS
Streamline Reporting

Data Exchange for Quality Measures (DEQM)

- Developed by the Da Vinci Project
- Defines FHIR operations to exchange clinical quality data

<table>
<thead>
<tr>
<th>Operation</th>
<th>Description</th>
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<tbody>
<tr>
<td>$evaluate-measure</td>
<td>Calculation results for a single measure as a MeasureReport</td>
</tr>
<tr>
<td>$data-requirements</td>
<td>List of data of interest for the quality measure as a Library</td>
</tr>
<tr>
<td>$submit-data</td>
<td>Submit a MeasureReport resource</td>
</tr>
<tr>
<td>$collect-data</td>
<td>Collect data of interest for measure contained in FHIR server as a MeasureReport</td>
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</table>
Promote Interoperability

- Universally applicable resources and guidance
- US Realm specific profiles
- Quality Improvement focused
- Quality Measurement focused

Consensus-based Promotion

- FHIR
- US Core
- QI Core
- DEQM
Current Activities

• Quality Reporting Pilots
• Measure Development & Testing
• Standards Refinement
• Connectathons

Please join the DEQM use case team or Clinical Quality Information (CQI) working groups to learn more and participate.

• DEQM – Thursdays 3:00-4:00pm ET
• CQI – Fridays 1:00-3:00pm ET
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