

# Setting eCQMs on FHIR

Progression to Electronic Clinical Quality Measures (eCQMs) and Digital Quality Measures (dQMs) with HL7 Fast Healthcare Interoperability Resources (FHIR®)

## What is FHIR?

FHIR is a data interoperability platform created by the HL7 Community that:

- Standardizes data capture to support eCQM and dQM requirements for patient-centered care
- Uses the latest technology to streamline the sharing of data
- Defines 'Resources' as the fundamental standard blocks of data

## Why FHIR for eCQMs & dQMs?

### Promote Interoperability to Reduce Burden

– Align quality measurement with industry standards to reduce mapping effort

### Simplify Data Exchange

– Enable automated data retrieval from EHRs and submission of quality data through use of standards-based APIs

### Engage the Community

– Enlist the diverse community of FHIR stakeholders to help drive development of standards that are most useful to users

## CMS dQMs

dQMs are quality measures:

- Use standardized, digital data from one or more sources (wearable devices, HIEs, administrative systems) of health information, captured and exchanged via interoperable systems using FHIR APIs.
- Are computable in an integrated environment.
- eCQMs are considered a type dQMs,

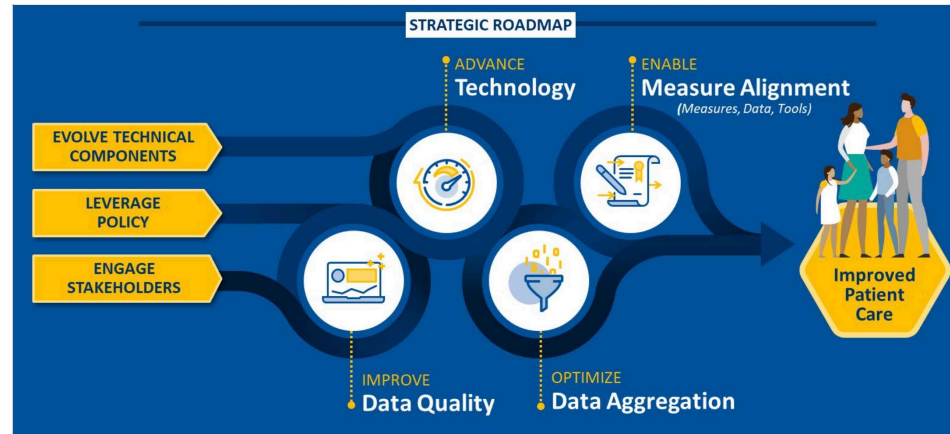


Figure 1. CMS' vision for transitioning to full digital quality measurement (source: [Centers for Medicare and Medicaid Services, dQM Strategic Roadmap](https://www.cms.gov/medicare/quality/strategic-roadmap))

## eCQI Ecosystem

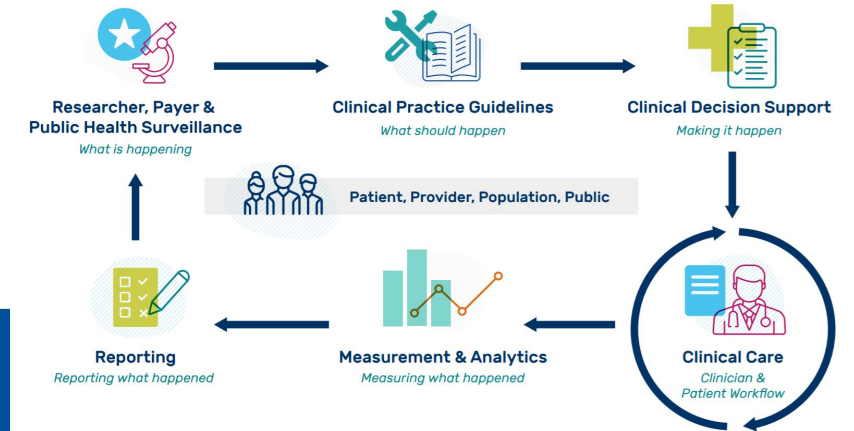


Figure 2. Quality Improvement Ecosystem (source: <https://hl7.org/fhir/us/davinci-deqm/#quality-improvement-ecosystem>)

Highlights the ideal iterative flow of evidence-based information from research to clinical practice and measurement to evaluate clinical performance and outcomes for healthcare organizations.

## References

- CMS. (2022). *Digital Quality Measurement Strategic Roadmap*. [https://ecqi.healthit.gov/sites/default/files/CMSdQMStrategicRoadmap\\_032822.pdf](https://ecqi.healthit.gov/sites/default/files/CMSdQMStrategicRoadmap_032822.pdf)
- CMS. (n.d). *Reference Brief: Digital Quality Measurement eCQMs*. [https://ecqi.healthit.gov/sites/default/files/Digital%20Quality%20Measurement%20eCQMs%20reference%20brief\\_508ed.pdf](https://ecqi.healthit.gov/sites/default/files/Digital%20Quality%20Measurement%20eCQMs%20reference%20brief_508ed.pdf)
- eCQI Resource Center. (2023, September 7). *dQMs—Digital Quality Measures* | [https://ecqi.healthit.gov/dqm?qt-tabs\\_dqm=1](https://ecqi.healthit.gov/dqm?qt-tabs_dqm=1)

## Acronyms

- CQL**: Clinical Quality Language  
**DEQM**: Data Exchange for Quality Measures  
**eCQM**: Electronic Clinical Quality Measure  
**HL7**: Health Level Seven International
- HQMF**: Health Quality Measure Format  
**QDM**: Quality Data Model  
**QI-Core**: Quality Improvement Core  
**QRDA**: Quality Reporting Document Architecture

How do I learn more?

Visit the eCQI Resource Center for recorded sessions and upcoming training events at at

<https://ecqi.healthit.gov>

Contact the FHIR eCQM Standards Team: [ecqm@icf.com](mailto:ecqm@icf.com)