


# CMS Quality Initiatives & ONC's USCDI+ Quality Domain



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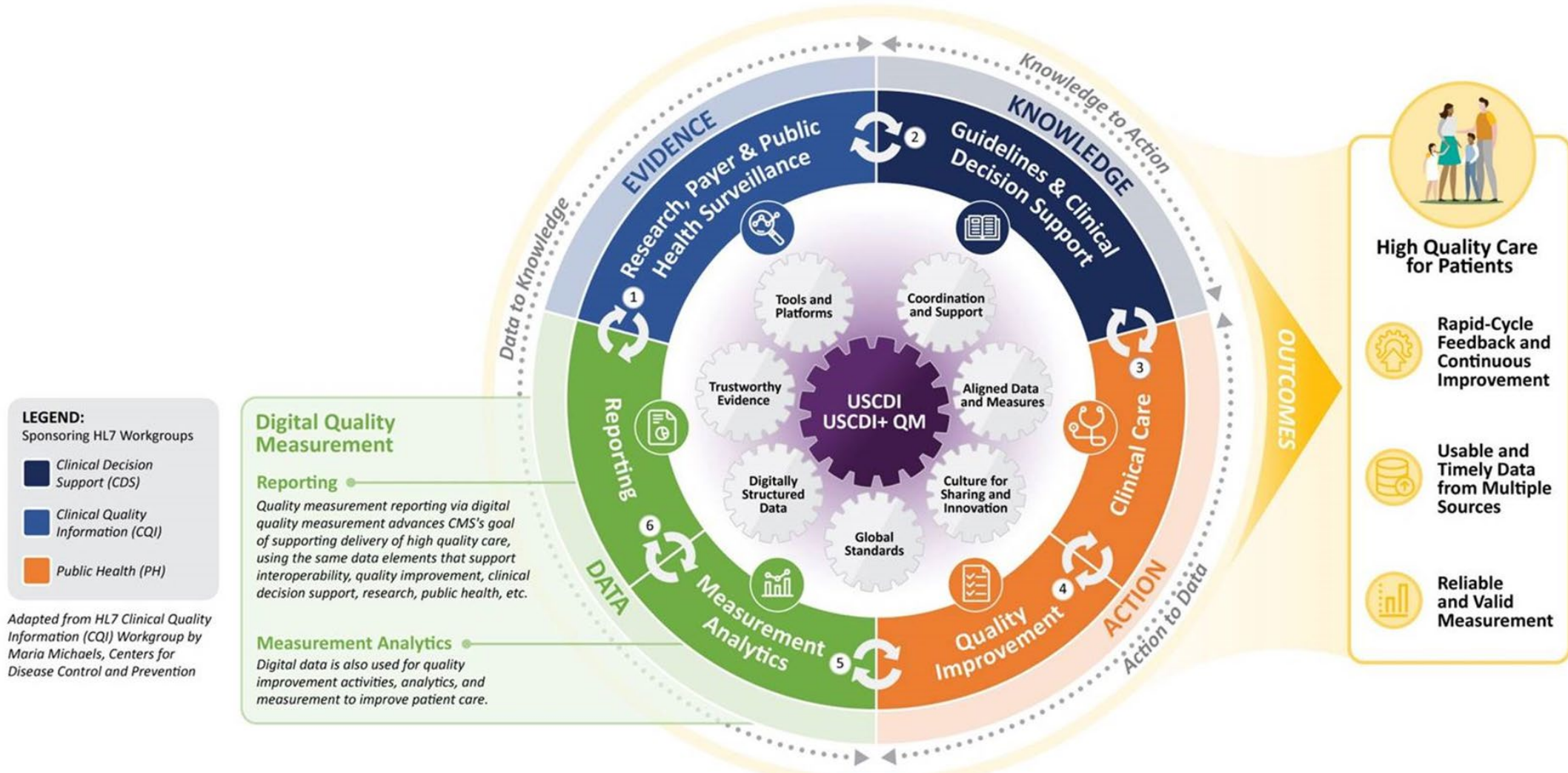
**May 2022**

# Learning objectives

- Outline how CMS and ONC are coordinating to ensure data sets are harmonized across national standards
- Explain the importance of creating a complete data set of elements for CMS quality measurement
- Give example of the ONC's United States Core Data for Interoperability (USCDI) as a standardized data set for nationwide, interoperable health information exchange and USCDI+ program

# Learning health systems use data to drive health care

## Digital Quality Measurement in the Learning Health System



Adapted from HL7 Clinical Quality Information (CQI) Workgroup by Maria Michaels, Centers for Disease Control and Prevention

# ONC and CMS are committed to data standardization

## ONC

- Is developing and harmonizing health data standards to advance interoperability
- Developed a standardized set of health data classes and constituent data elements – the USCDI
- Recently launched the USCDI+ program and is committed to facilitating harmonization across federal use cases and data sets to reduce data silos

## CMS

- Is transitioning to digital quality measurement
- Aims to enhance interoperability through use of high-quality standardized data for measurement, including through the use of FHIR®
- Is collaborating with ONC to support advancing data for digital quality measurement and other use cases through data standardization

# Why data standardization?

- We are contributing to the establishment of a functional learning health system
- Data are the staple of a functioning learning health system
  - **Learning health systems generate knowledge from data captured during routine care**
- Data standardization
  - **Transforms data into a common format**
  - **Ensures data quality**
  - **Allows for data flow**
  - **Supports program alignment**
- Standardized data could be used for multiple use cases, such as
  - **Patient health data access**
  - **Quality measurement**
  - **Big data analytics**
  - **Research**

# Why the FHIR<sup>®</sup> standard?

- Reduces burden
  - **Align CMS eCQM reporting with industry clinical data exchange framework and clinical decision support (CDS)**
  - **Enable automated data retrieval from EHR and submissions of quality data through use of standards-based APIs**
  - **Provide near real-time feedback on quality measurement results to providers**
- Simplifies data mapping
  - **Single mapping to FHIR vs. mapping to HQMF and QRDA**
- Improves alignment between eCQMs & CDS
  - **Both use a common FHIR data model (FHIR QI Core)**
- Promotes interoperability
  - **Data exchange requirements for quality measurement are aligned with interoperability standards used in other healthcare exchange**

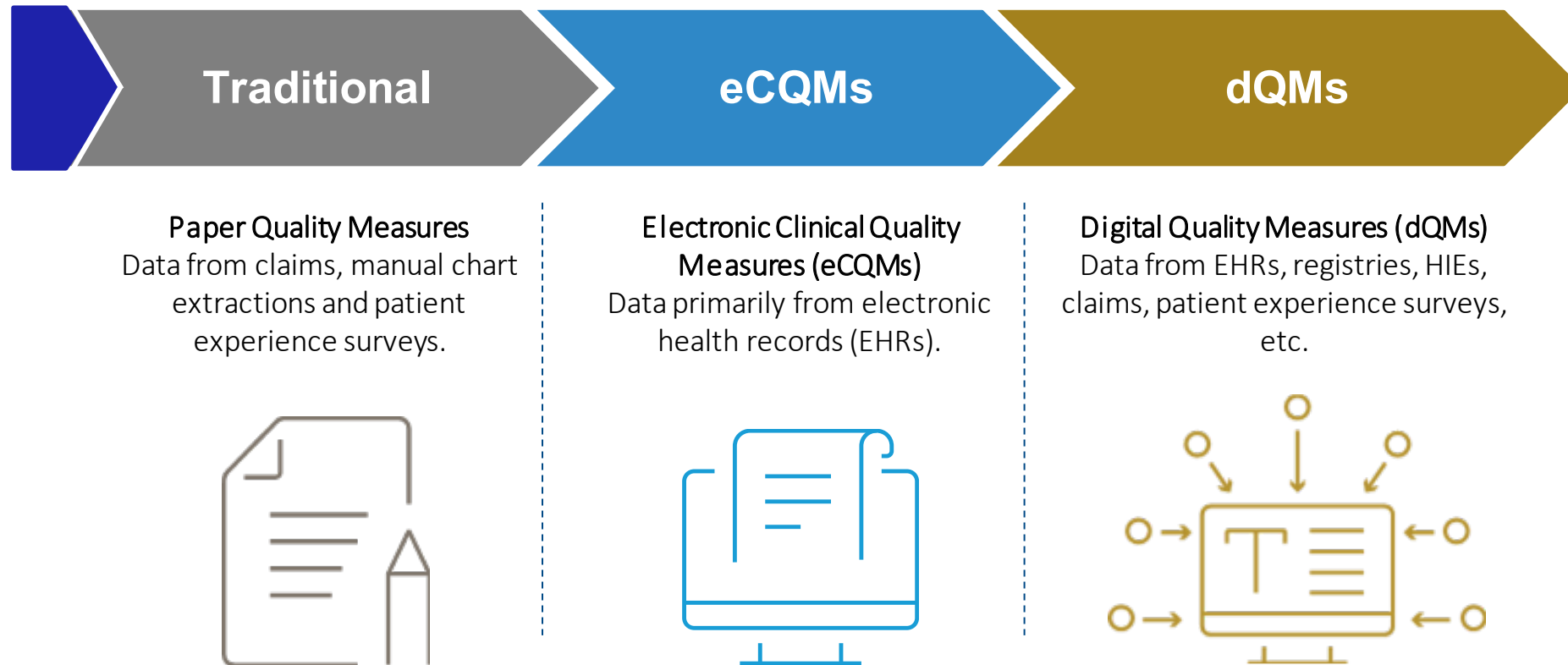


*Federal Data Standards: A Look at CMS' Work*

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# Evolution of quality measures: the journey from paper to digital





# CMS has set the ambitious and critical goal of transitioning to digital quality measurement

CMS has set a new course for quality measurement aimed at contributing to a learning health system (LHS) to optimize patient safety, outcomes, and experience



Enable a future in which **care quality is only measured electronically**, using standardized, interoperable data



Reduce the burden of electronic health record (EHR) data transfer by leveraging **Fast Healthcare Interoperability Resources (FHIR®) application programming interface (API) technology that is already required for interoperability**



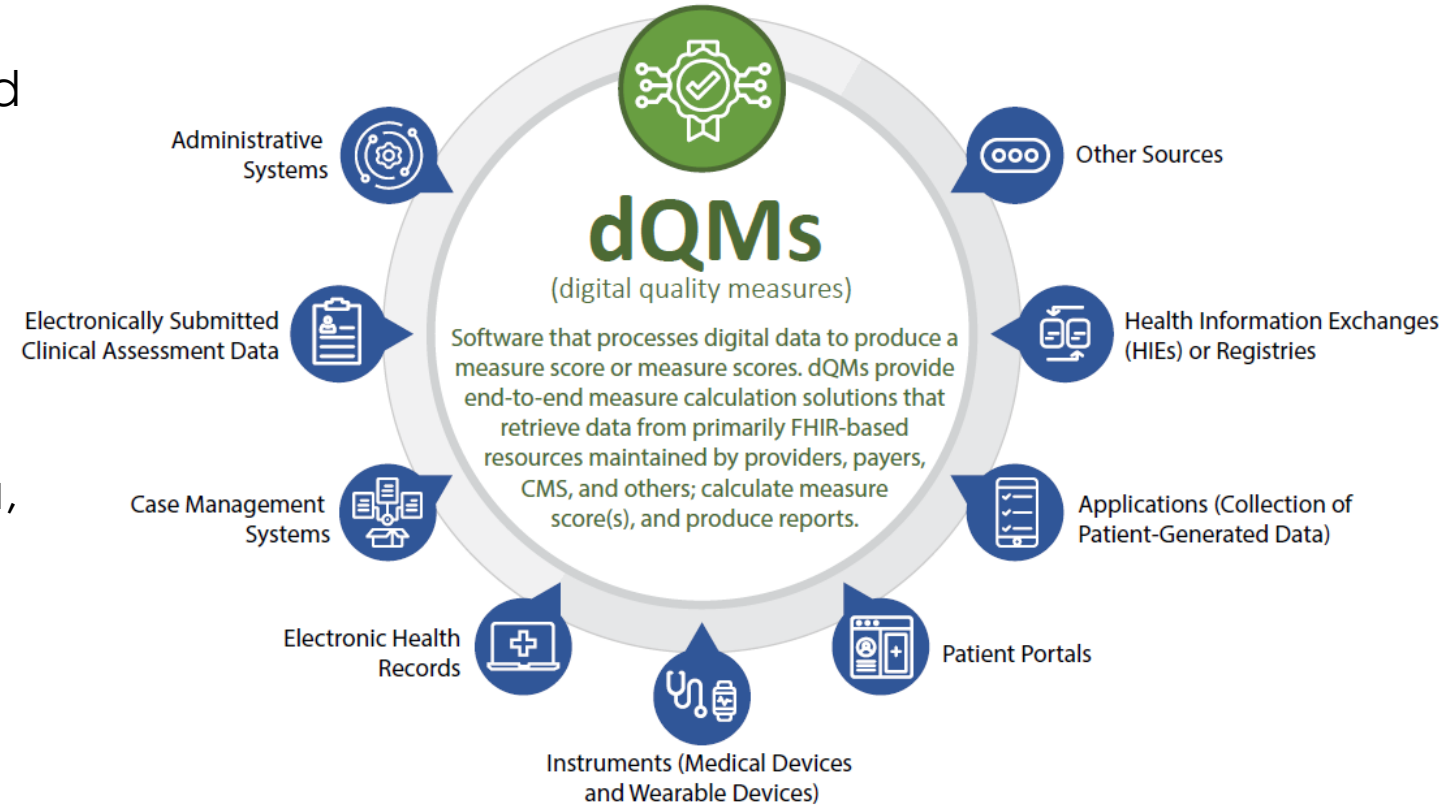
Provide usable, timely data from multiple sources to support delivery of high quality of care and quality improvement



Produce reliable and valid measurement results common across multiple programs and payers

# Digital quality measures (dQMs) defined

- dQMs are quality measures, organized as self-contained measure specifications and code packages, that use one or more sources of health information that are captured and can be transmitted electronically via interoperable systems
- Potential data sources for dQMs include EHR data, patient-generated health data, registry data, among others
- dQMs will leverage advances in technology (e.g., FHIR APIs) to access and electronically transmit interoperable data for dQMs



# Advancing Digital Quality Measurement

## STRATEGIC ROADMAP



# Reduce collection burden with structured, standardized data

## CURRENT STATE

### Providers' struggle to implement current eCQMs

- Limitations and slow adoption of current standards
- Lack of provider data mapping and quality assurance (QA) of required data
- Required changes to clinical workflows

### dQM implementation is seamless and at the push of a button

- Focus on **standardized data** – FHIR, USCDI, and supplemental standards (i.e., USCDI+) that enable automated extraction
- Standardized and automated data collection facilitates **valid and reliable data mapping** and streamlined auditing processes
- Eliminate workflow changes required only for measurement and focus on measures that also **align with quality improvement priorities**



*Federal Data Standards: A Look at ONC's Work*

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# USCDI: core principles



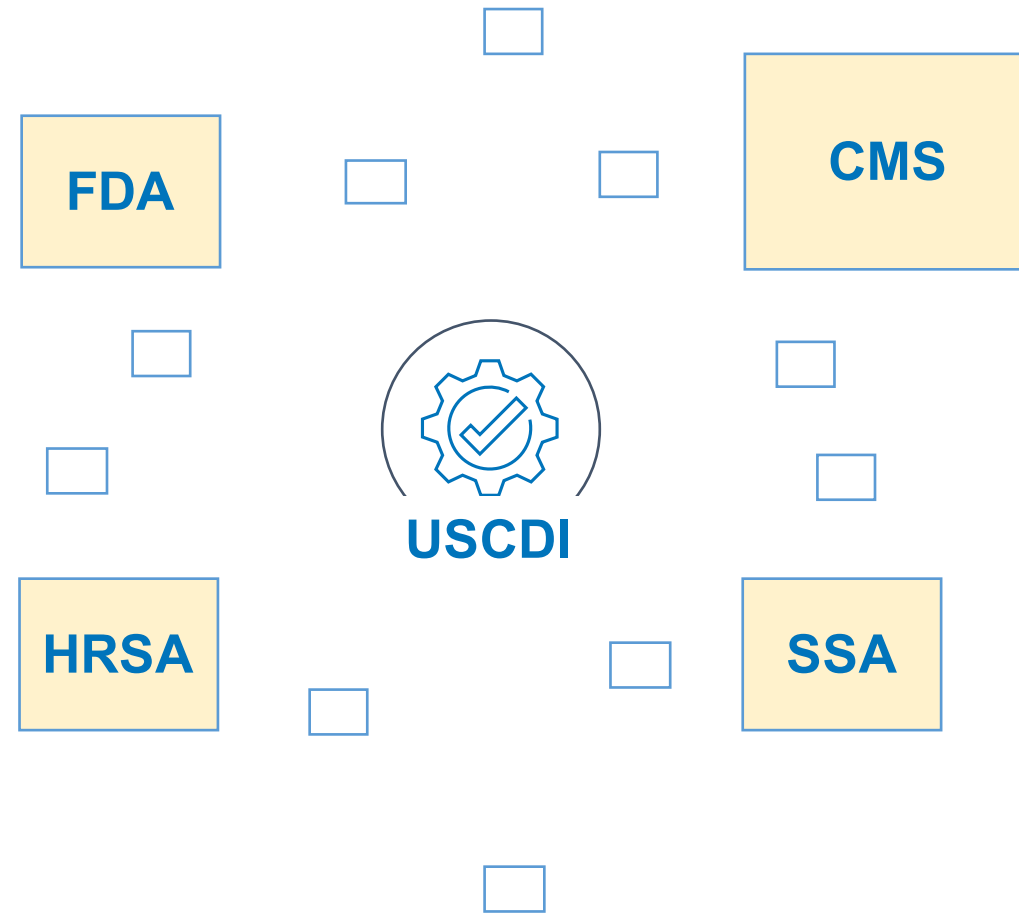
Comprises a core set of data needed to support patient care and facilitate patient access using health IT.

Establishes a consistent baseline of harmonized data elements that can be broadly reused across use cases, including those outside of patient care and patient access.

Expands incrementally over time via a transparent, established, and collaborative process, weighing both anticipated benefits and industry-wide impacts.

# Current state: data sets needed beyond USCDI

- Unique agency or program-specific data systems and requirements not fully met by USCDI
- Agencies pursue ad hoc approaches to additional data needs
- Creates increasing drift from USCDI, which presents lifecycle maintenance issues, industry resistance, fewer opportunities for synergies across agencies



# ONC has launched a new initiative call USCDI+

- Announced October 2021 in the Health IT Buzz Blog: <https://www.healthit.gov/buzz-blog/health-it/thinking-outside-the-box-the-uscdi-initiative>
- USCDI+ is a service that ONC provides to federal partners who have a need to establish, harmonize, and advance the use of interoperable datasets that extend beyond the core data in the USCDI in order to meet agency-specific programmatic requirements
- USCDI+ allows ONC to better serve federal partners, assure that extensions build from the same core USCDI foundation, and create the opportunity for aligning similar data needs across agency programs
- USCDI+ for Quality Measurement and Public Health are beginning with CMS and CDC partners





# USCDI+ external engagement & partnership



- Determine federal agency/stakeholder commitment
- Identify clear use case and need
- Develop robust implementation plans for agency stakeholders
- Assess regulatory, programmatic, or other requirements for use
- Define resources to support development/stewardship and sustainability of work



- Nationally-recognized data set that advances program goals via interoperability
- Ongoing maintenance and stewardship of data set that can evolve with program requirements/technology landscape
- Repeatable process for creating robust data sets beyond the USCDI but still leveraging the USCDI core and process
- Harmonization across programs/use cases to reduce fragmentation and data-silos
- Harmonization across federal data sets to optimize investments in interoperability

# Key takeaways

## LESSONS

- True alignment of quality measures cannot be fully successful until we ensure the underlying data are consistent
- Much of the data needed for quality measurement exist in EHRs, so advancing USCDI+ QM will aid in the progress through alignment
- Driving consensus on and prioritizing interoperability of the digital data is necessary and incremental
- The standardized data could be other use cases beyond quality measurement

## CHALLENGES

- Providers in different care settings vary in their readiness to collect data, standardize it in FHIR, and make it available for exchange through FHIR APIs
- A complete data set of elements for Federal quality measurement is one piece of the puzzle
  - **Alignment of measure concepts and specifications is another priority**
  - **Alignment must also consider state and private sector needs**

# Questions

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