Meeting Summary

Digital Measurement Workgroup Web Meeting 3

The National Quality Forum (NQF) convened the third web meeting of the Digital Measurement Workgroup on August 27, 2021.

Welcome and Roll Call

NQF staff welcomed Workgroup members and the co-chairs of the Digital Measurement Workgroup to the meeting. NQF staff reviewed the antitrust statement and acknowledged that CQMC is a member-funded effort with additional support from the Centers for Medicare & Medicaid Services (CMS) and America's Health Insurance Plans (AHIP). NQF staff facilitated roll call by organization and shared the meeting objectives:

- Review of Digital Measurement Workgroup Overview
- Continue Discussion on the Digital Measurement Roadmap
    - Strawman Digital Quality Measure (dQM) Definition
    - Stakeholders and Roles
    - Data Flow
    - Implementation Barriers and Opportunities

Digital Measurement Workgroup Overview

NQF provided a high-level overview of the Digital Measurement Workgroup tasks and goals. Staff shared that the goal of the Workgroup is to create a strategy roadmap document using recommendations for voluntary adoption for model(s) that facilitate greater uptake of digital measures (e.g., electronic Clinical Quality Measures ([eCQMs], registry measures), including electronic data capture and transmission for the CQMC core sets.

Digital Measurement Roadmap Discussion

Refined Definition, Stakeholders and Roles, and Data Flow

NQF staff introduced the co-chairs of the Digital Measurement Workgroup, Dr. Helen Burstin and Ms. Sheryl Turney, who provided welcoming remarks. Afterwards, NQF staff reviewed the updated working definition of dQMs and the updated components of the draft definition for the Workgroup's input.

NQF staff shared that dQMs are measures created by pulling data generated during the normal course of care and transmitted electronically. DQMs should be computed from data at rest (i.e., data collected and stored in one place that can be easily utilized) and based on standardized, interoperable electronic technical specifications.

NQF staff highlighted the purpose of dQMs:

- Reducing provider burden and allow for expanded measurement opportunities while increasing reliability.
- Intended to improve the patient experience including quality of care, improve the health of populations, and/or reduce costs.

NQF staff outlined the updated characteristics of dQMs as follows:

- Are specified in a standard interoperability format;
- Use machine interpretable measure logic (e.g., Clinical Quality Language (CQL));
- Use a common information model (e.g., FHIR); and
- Incorporate the concepts/terms (e.g., value sets) required to obtain reliable and comparable results.

NQF staff also shared a non-exhaustive, updated list of common data sources for dQMs, including electronic health records (EHRs), registries, health information exchanges (HIEs), wearables, patient portals, and medical devices. This list also included the new addition of enhanced claims data based on discussion and feedback received from Web Meeting 2.

A co-chair began the discussion by asking the group to consider adding language that specifies that the numerator and denominator for all measures must be clearly defined, so that stakeholders responsible for using and reviewing the measure understand its intent. There was general agreement from the Workgroup regarding this addition. The co-chair asked the Workgroup whether the term “pulling data” is too narrow for the definition given the future state of data collection. A workgroup member agreed, noting that the numerator and denominator should not be left up to interpretation by the implementors but rather by mapping the measure's specifications. The Workgroup member also agreed with the need to disambiguate and make the definition less dependent on the role stakeholders serve. It was noted that stakeholders play different roles (i.e., client and server) in the measure reporting scheme and can often switch. Similarly, the Workgroup member thought the expression “data at rest” is an outdated concept, suggesting it should be updated to “from data in one place to a defined schema”. The workgroup member also encouraged the explanation and refinement of the term “technical specification” to allow all measurement roadmap users to understand the definition better.

One workgroup member expressed concerns about using the term “measure” in the definition, as it implies there is an accepted quality measure definition that the current digital definition builds upon. Another member inquired about using the phrase "pulling data" in the definition, proposing the term “compiling” or “mapping” as more appropriate given that the compilation or mapping of data is the phase that causes the biggest challenge for most stakeholders. A Workgroup member also raised the idea of linking the working definition to electronic quality measures and explaining how it differentiates from paper technical specifications.

Based on the discussion and feedback, the co-chairs posed amending the definition to read "dQMS

are scores created by using data generated during the normal course of care and transmitted electronically." In response, Workgroup members stated that the edits too narrow given that digital quality measures being developed use data beyond those captured during the normal course of care. The co-chairs reminded the group that the discussion intends to outline key concepts and suggested keeping the definition as simple as possible for all users; as an example, "dQMs are scores created using electronic data from a variety of common data sources." A co-chair noted that the purpose, characteristics, and common data sources are key elements in clarifying the definition and asked workgroup members to weigh in on each component.

A co-chair walked through the purpose of dQMs, noting that no significant changes were made since the last web meeting, and asked for any additional considerations. Workgroup members did not have any further feedback on the purpose. The co-chair proceeded to review the identified characteristics, noting that based on the previous discussion, there should be a reference to a clearly defined numerator and denominator. A workgroup member asked how clearly defined numerator and denominator characteristics are specific to a dQMs versus any other quality measure. The co-chair clarified that it is not solely distinctive of dQMs, but it is still a characteristic. The co-chair noted that defining the numerator and denominator in terms of data elements/input is important to create interoperability between organizations with different resources or data sources and allow for a more straightforward interpretation. Adding to the recommendation, a Workgroup member suggested including language related to clearly defined inclusion and exclusion criteria. A workgroup member concurred and recommended adding “transparency” to digital measurement characteristics, to ensure that dQMs are explicit about the opportunities and mechanization of the measure. A co-chair voiced support for the recommendations, noting that it is essential that the roadmap uses language that is understandable by anyone, and encouraged the roadmap to include definitions of elements within the dQMs definition.

A co-chair asked the Workgroup if they had feedback on the common data sources. The co-chair reminded the Workgroup members that the list is not meant to be all-encompassing but to provide clarity. A Workgroup member asked the group if there was a definition for “enhanced claims data”. The member noted that during the previous Workgroup meeting, there was discussion on whether claims data is an electronic data source and whether it belonged in the list at all. In response, the co-chair explained that claims data can be part of a digital measure and noted that a digital measure should not be exclusively based on claims data.

Several Workgroup members voiced support for keeping enhanced claims data as it is a valuable source of information for dQMs. The Workgroup members noted that many programs do have claims-based digital quality measures and some dQMs were created for claims reporting. One of the members proposed adding an asterisk or explanation that the CQMC encourages the use of hybrid measures that use multiple sources and users should not use claims data exclusively to calculate the measure. Another workgroup member shared an example, noting that users may use claims data to identify the measure population and use clinical data sets to inform the critical elements of the measure.

Updated Stakeholders and Roles

NQF staff presented the updated list of identified stakeholders (Figure 1) based on the feedback received during Web Meeting 2. The updated diagram includes the addition of technical assistance organizations, data aggregator vendors, community organizations, researchers and regulators, and accreditation organizations. Workgroup members did not have any comments or questions on the updated diagram.

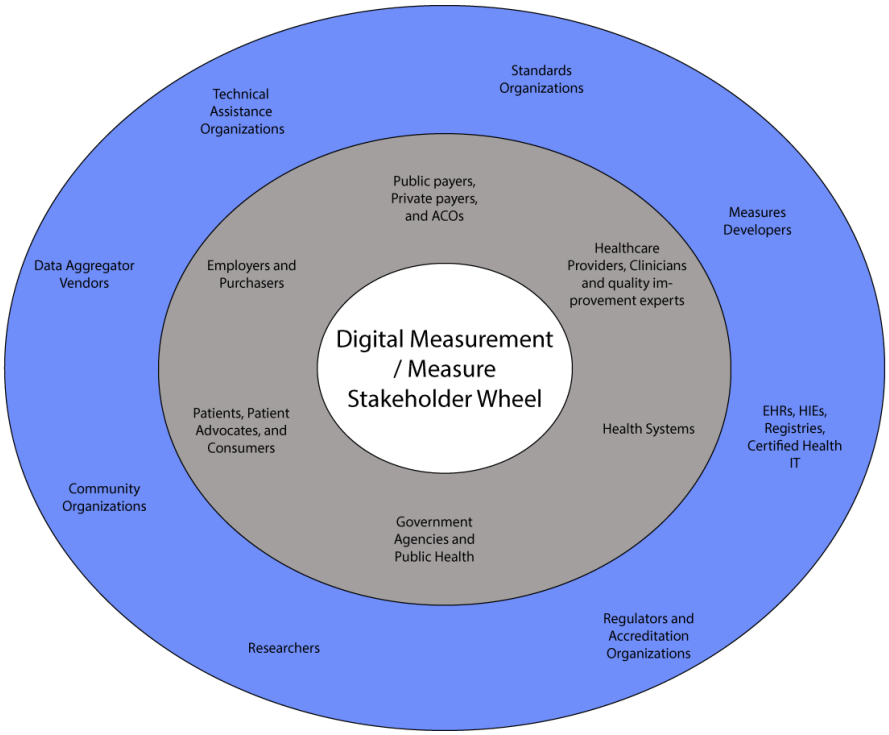


Figure 1. Digital Measurement/ Measure Stakeholder Wheel

Digital Medicine (DiMe) Society Presentation

NQF staff introduced guest speaker Jennifer Goldsack, Chief Executive Officer, Digital Medicine Society, to help inform the Workgroup's discussion on establishing a working definition and data flow. Ms. Goldsack shared that DiMe is a 501(c)(3) nonprofit dedicated to advancing the safe, effective, ethical, and equitable use of digital technologies to optimize health through convening, research, communication, and education. During her presentation, Ms. Goldsack emphasized that digital measures extend beyond sensor-technology collected data and include the use of innovative and publicly available data streams like GPS tracking, OnStar, and Google searches.

Ms. Goldsack shared that opportunities exist to align digital quality measures with the field's ongoing refinement of “quality” to reimage workflows and better serve patients. She warned against forcing measures into existing clinical practice for the sake of data collection, especially if providers will take limited actions or interventions based on the data. Ms. Goldsack shared that the field should move from measuring health after an intervention to capture how systems keep patients out of clinics and hospitals through better care management. To conclude her presentation, Ms. Goldsack cautioned

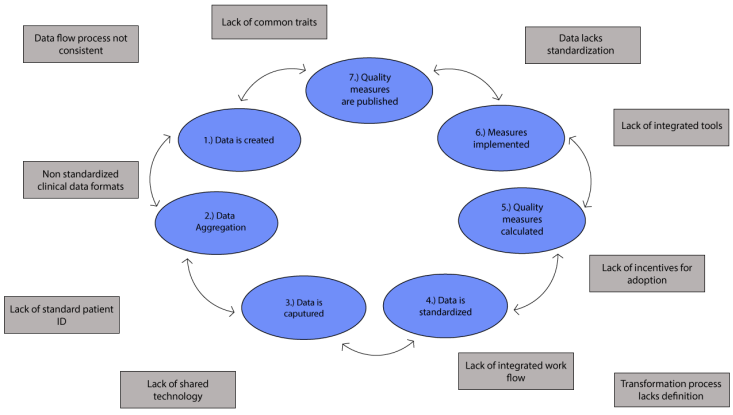
against creating new measures that may inadvertently create negative consequences for patients or providers.

A Workgroup member shared that they appreciated Ms. Goldsack's presentation, reemphasizing the importance of limiting information overload that can arise through digital medicine. It was noted that too much information could potentially misdirect treatment and the quality of care patients receive. Ms. Goldsack stated that digital measurement requires a three-part system including data verification to ensure the correct information is captured; data analytics/processing; and, perhaps the most critical, data validation. Ms. Goldsack shared that systems should question whether the data collected matters and helps inform an important behavior or outcome. Ms. Goldsack pointed out that just because we can measure something does not mean that we should.

Ms. Goldsack asked the Workgroup to consider using a multifactorial approach to measurement that allows for personalization of care. Digital measures will enable us to access data from multiple sources. Ms. Goldsack also asked how can we use the information to tailor care while maintaining fidelity to what is being measured? A Workgroup member asked how the field can combine data to develop algorithms that show outcomes based on certain behaviors to help inform intervention. Ms. Goldsack agreed with the importance of the question and stated that there is an opportunity to collect data that can be generalizable and allow for tailored interventions.

Data Flow Challenges and Barriers

NQF staff presented the new graphic (Figure 2) depicting the circular model of data flow that reflects the barriers and challenges of dQMs.



Workgroup members discussed the challenge of mapping data and data aggregation. Members cited examples of measures receiving low compliancy scores due to poor mapping of data elements, despite systems completing the required portions of the measure. A Workgroup member shared that dQMs using reference codes may not link appropriately to native data or standard data elements.

Workgroup members discussed the importance of providing guidance around transparency, how systems program measures, and what data points feed the specific measures. In discussing this opportunity, Workgroup members shared that it would be beneficial to include examples or use cases to show how the data flow and barriers impact providers and patients. Workgroup members also discussed the challenge of aggregating data within accountable care organizations (ACOs), as they have different resources available and use different systems and data collection methods.

Members also noted challenges in the shifting landscape between standards like the United States Core Data for Interoperability (USCDI) and Fast Healthcare Interoperability Resources (FHIR) as well as the costs associated with accessing portals that allow for interoperability. Workgroup members shared that there is limited interoperability between USCDI and FHIR, which are the most common systems for reporting dQMs in federal and private programs. It was noted that both standards require different infrastructure for providers and systems reporting data. However, Workgroup members stressed that developers creating dQMS that do not have a FHIR component for reporting should not consider this a barrier to developing the measure but rather an inhibitor to sharing data.

In discussing these barriers, the members agreed that the diagram should include a new element on the alignment between public and private systems on standardized mechanisms that are transparent, consistent, and easily interpreted by all stakeholders. Workgroup members recommended careful consideration and movement towards a compatible and consistent model that both public and private plans can use.

A member emphasized how measures are used as incentives to impacts patient care. Workgroup members discussed the challenges small providers or systems with limited resources face when implementing dQMs that require specific certified or validated data input tools. The Workgroup also discussed whether the barriers and challenges should be directly tied to specific data flow steps or if they would apply to multiple areas. Based on the meeting discussion, a co-chair stated that they apply to multiple areas.

dQM Implementation Opportunities

NQF staff reviewed the following dQM implementation opportunities:

- Incentives for development and implementation for dQMs
- Role of innovative technologies (e.g., Natural Language Processing, Machine Learning)
- EHR and measure developer guidance and recommendations from the CQMC
- Data standardization practices (i.e., supporting measures using FHIR or other standards)
- Promoting information sharing (e.g., sharing of proprietary information between EHRs to streamline electronic measure collection)

Workgroup members agreed to add administrative systems to the “promotion of information sharing” bullet based on previous points raised. The Workgroup acknowledged that challenges exist between administrative and clinical systems communication and the additional costs associated with portals that allow for this communication. A Workgroup member raised support for this addition,

sharing that limitations and challenges may exist for systems reporting on the same patient at the inpatient and outpatient levels. The member stated that systems should promote transparency and clarity on the measure's intent and the data requirements and data elements required to map the measure correctly.

Next Steps

NQF staff shared that they will further refine the definition and data flow per the Workgroup's feedback. Staff will present content for the first draft of the Digital Roadmap for Workgroup review. NQF shared that the next meeting is on Thursday, September 23, from 3:00 pm to 5:00 pm EST. NQF staff and the co-chairs thanked the Workgroup for their discussion and adjourned the meeting.