



Meeting Summary

Digital Measurement Workgroup Web Meeting 2

The National Quality Forum (NQF) convened the second web meeting of the Digital Measurement Workgroup on July 30, 2021.

Welcome and Roll Call

NQF staff welcomed Workgroup members to the meeting and introduced the co-chairs of the Digital Measurement Workgroup, Dr. Helen Burstin and Ms. Sheryl Turney, who provided welcoming remarks. 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 reminded the group that the roster includes both voting and non-voting members. NQF shared that discussion will be facilitated by recognizing voting members first and that any member may ask a clarifying question at any time. NQF staff reviewed the meeting objectives:

- Review the goals and tasks of the Digital Measurement Workgroup
- Discuss initial materials to create a Digital Measurement Roadmap (i.e., draft digital quality measure (dQM) definition, data flow, and stakeholder roles)

Review Workgroup Goals

NQF staff shared that publicly available literature will be brought forth to aid in the discussion of information and solutions around data capture, accuracy, barriers, incentives, feasibility, interoperability, data sources, specification changes, etc. It was noted 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.

Specific tasks to achieve these goals were outlined as follows:

- Review existing definitions and frameworks related to digital measurement to build pathways toward the use of digital measures through the CQMC core sets across public and private payers;
- Identify barriers and opportunities to accelerate the shift to digital measurement and reduce reliance of claims data for CQMC core set measures; and
- Consider short-term and long-term strategies to achieve the following goals:

- Support digital infrastructure (e.g., US-CDI) and data standards (e.g., FHIR) to accelerate use of digital measures,
- Consider opportunities to partner with clinical registries and other digital repositories to support measurement and reporting of CQMC core sets, and
- Identify one clinical CQMC core set as a use case to fully explore the transition to digital measurement.

Digital Measurement Roadmap Discussion

Strawman dQM Definition

NQF staff reviewed the source documents used to develop a working definition of dQMs. Resources from the National Committee on Quality Assurance (NCQA), CMS Meaningful Measure System (MMS) 2.0, and CMS Request for Information (RFI) 2021 proposed definitions of dQMs were referenced. NQF shared components of the draft definition for Workgroup feedback.

NQF staff shared that dQMs are:

- Measures that are available in an electronic format;
- Automatically created by pulling data generated during the normal course of care;
- Can be transmitted electronically via interoperable systems; and
- Use digital data to assess quality, cost, or population health.

NQF highlighted that the purposes of dQMs:

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

NQF outlined characteristics of dQMs:

- 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.

A non-exhaustive list of common data sources for dQMs were shared including electronic health records (EHRs), registries, health information exchanges (HIEs), wearables, patient portals, and medical devices.

A co-chair asked the Workgroup whether this definition supported the Workgroup's goal of increasing the use of dQMs in the CQMC core sets. A Workgroup member recommended that clinical information be included in the definition to help move beyond measures based on claims. Another member noted that not all health activity is reimbursed through traditional claims and claims do not always contain information to assess the quality of the care. Accordingly, a measure that relies solely

on claims data would need to be specific for purpose (e.g., to be used by payers to assess their covered services) and it may not work for assessing population health. The same member shared that claims data itself is helpful when assessing the operations of a care site. The Workgroup discussed that from a clinical perspective, the evaluation of a provider or facility quality cannot solely be provided from claims-based information. It was noted that claims data provides useful information but may not provide a complete source of data for the most meaningful quality measures.

A member indicated that it is important to define whether claims-based measures would be digital measures based on the CQMC definition, as an entirely electronic claims-based measure can be a dQM by definition and have specific uses. A member noted that measures can be enhanced by pharmacy and/or laboratory claims data. The member shared that a goal should be to move away from claims-based only measures in the core sets when possible.

Another member inquired about the use of the word “automatically” in the definition. The member indicated that the language indicates no human intervention and may also lean towards claims-based measures. A member and co-chair both noted that the digital space does not include actual automation; data being entered into EHR reflects a secondary product of clinical care (e.g., a clinician entering information into an EHR). Both agreed that the use of the word “automatically” may be unnecessarily limiting. A member recommended replacing “automatically” with “calculable from restful data” (i.e., data collected in one place) with the use of built-in workflows to obtain other information.

A member noted that there is a benefit to using clinical and claims data together and not including a role for claims-based data to some extent may not be ideal. Another member concurred and noted that claims-based data can often be used across medical groups and EHR systems, creating more complete information when it may not otherwise exist (e.g., screening and/or vaccination records).

A member expressed that the definition should clearly distinguish that dQMS span beyond eQMs. The member also concurred with the previous point, stating that HIEs can make connections and give a broader view of patient care. Another member shared that at the provider level, claims-based data is useful for connecting utilization-based measures back to the clinical arena.

A member asked whether the flow of electronic information is only unidirectional as reflected in the definition or whether it should be updated to reflect a complete loop (i.e., information received from the provider is returned to the provider for their knowledge and/or action, if necessary). Another member responded that measurement does not necessarily always need to give feedback to the provider but can be shared back to provide opportunities for improvement.

A member referenced the Gaps in Care report available through HEDIS and noted that the system allows providers to request information from payers to close gaps in clinical care. This type of information sharing was noted as an example of how data flows between the provider and payer in a method that reduces duplicative efforts. The member added that dQMs should be computable from restful data, based on standardized, interoperable electronic specifications of data generated during routine processes.

A co-chair cautioned that the Workgroup may not want to define dQMs as only including easily accessible data, as it risks leaving out valuable information that may require some effort (e.g., abstraction or data cleaning).

Strawman Digital Quality Measurement Data Flow

NQF staff shared a draft of the strawman data flow visual representation below (Figure 1) to help inform the Workgroup’s discussion on uptake of CQMC digital measures by payers.

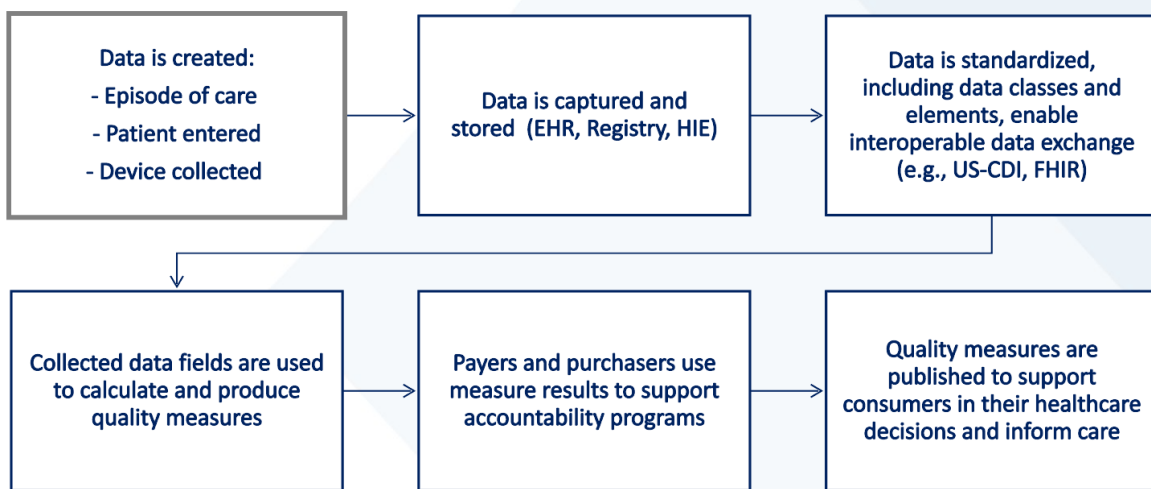


Figure 1. Strawman dQM Data Flow

NQF staff introduced guest speaker Linda Michaelson, Director of Healthcare Interoperability Standards, Optum, who is a [DaVinci Health Level 7 \(HL7\)](#) expert, to help inform the Workgroup’s discussion. Ms. Michaelson spoke on how Fast Healthcare Interoperability Resources ([FHIR](#)) has established the flow of data supporting digital measurement. She discussed quality resources available on FHIR which help run queries and other restful operations on clinical and financial modules of data. It was highlighted that clinical reasoning is the FHIR component centered on quality improvement.

Ms. Michaelson reviewed the quality improvement ecosystem and shared how the network is working to define the ecosystem using FHIR and Clinical Quality Language (CQL) guides. She highlighted that [Quality Improvement \(QI\) Core](#) is the data model used for quality within the ecosystem, using data derived from United States (US) Core, based on US Core Data Interoperability (US CDI). This data is generated from EHRs certified by the Office of National Coordinator for Health Information Technology (ONC).

Ms. Michaelson highlighted that DaVinci’s particular focus is on clinical care, measurement and analytics, and quality reporting within the ecosystem. The [Data Exchange for Quality Measurement \(DEQM\) guide](#) was noted as defining the work for this initiative. It was shared that for quality

measures not on FHIR, the Quality Engine transforms data into the quality data model (QDM), which can run through CQL.

Ms. Michaelson described the quality ecosystem on FHIR as a multidirectional flow. All pieces in the flow can be represented through FHIR or CQL, allowing data generated by providers to be used by payers and for the generation of separate measure reports. Additionally, a payer can query data directly from the provider. Data can also flow in the other direction, allowing providers to request data from the payer.

Ms. Michaelson reviewed the DEQM guide including its origins in closing care gaps using the NCQA's medication reconciliation post discharge measure. It was shared that the third edition of DEQM was recently released and includes features such as real-time payer access to EHR data and provider access to open care gap information.

A Workgroup member asked if the definition discussed earlier should be limited to measures using FHIR or CQL. Ms. Michaelson indicated that FHIR can be extended or expanded to meet new measure needs and that the dQM definition should prioritize quality of care needs. Another Workgroup member sought clarification on whether there are measures built out in this process. Ms. Michaelson responded that FHIR provides the tooling but does not build out measures de novo.

A Workgroup member noted that better governance systems are needed to improve the quality measurement environment. Ms. Michaelson responded that the most important issue is speaking the same language across stakeholders, which QI Core and HL7 generally try to resolve. A co-chair thanked Ms. Michaelson for her overview and opened the discussion of the proposed data flow to voting members.

A Workgroup member asked that the data flow be updated to indicate whether data is captured by a certified or non-certified health IT system for additional clarity. Another Workgroup member expressed hesitation about including registries with EHRs and HIEs because there are consolidation steps that occur in a registry that do not necessarily happen in an EHR or HIE.

A Workgroup member shared that there could be additional points of data capture included, such as a patient-reported outcome (PRO) directly from a patient portal.

Two Workgroup members discussed whether there is a required data integration step that should be included between data creation and its capture in EHRs. Also included within the discussion were the different options for capture and storage (e.g., healthcare sites that use multiple EHRs or data collection systems). They concluded more clarity is needed about exact roles as well as the directionality of the data flow.

NQF prompted the Workgroup to discuss challenges or barriers that occur within the data flow. One Workgroup member shared that there is a challenge with standardizing codes and clinical text is not yet standardized (e.g., Logical Observation Identifiers Names and Codes (LOINC) and Systemized Nomenclature of Medicine (SNOMED) codes). Another Workgroup member noted that a barrier to

the first step is missing data, either because it is too difficult to map or is mapped inconsistently or incorrectly. Another member noted that it is difficult to determine when data first becomes “digital.” The member indicated that the data standardization step is overly simplified as there are multiple standardization systems which still are not interoperable. The member recommended having the step be clearer about specific standards or achieving interoperability.

Three Workgroup members voiced barriers related to data aggregation challenges. They noted that EHR data is not monolithic, and there is a need to address the challenge of data integration between EHRs as patients can be seen by providers outside of their Accountable Care Organizations (ACO). A member discussed that the structure of the actual data flow diagram may need to be more circular with multidirectional arrows to help promote care coordination and bidirectional data flow.

Finally, a Workgroup member indicated that different specialties are at different stages with digital data. Some providers’ data are in narrative reports (e.g., pathology or laboratory). The current data flow diagram makes it difficult to determine where in the process data that needs human intervention would be included.

Stakeholders and Roles

NQF staff shared a strawman of Stakeholders and Roles within Digital Measurement (Figure 2). The co-chairs solicited feedback from the Workgroup on whether the strawman included the correct stakeholders, if there are roles are correct, and if any stakeholders are missing.

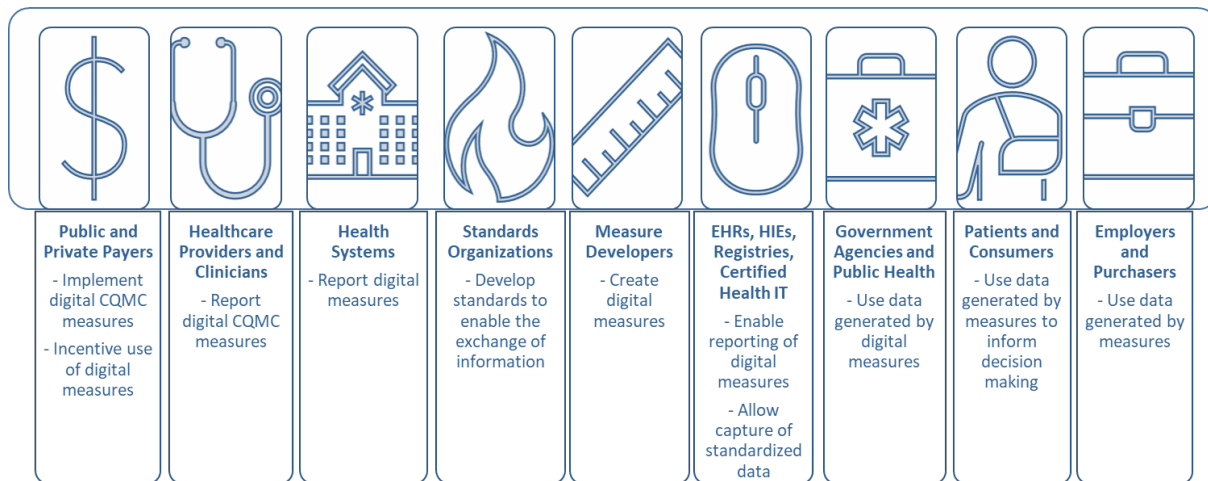


Figure 2. Draft Stakeholders and Roles within Digital Measurement

A Workgroup member indicated that regulators such as CMS and the ONC are different from government and should be included as their own category under “regulators and accreditation bodies”. NQF asked if The Joint Commission should also be included in this category. The Workgroup agreed that this was appropriate, as all three bodies are involved in setting rules and regulations.

A member noted that researchers were missing and asked if they were embedded in the registry, standards organization, or measure developer category. The member highlighted that researchers consume the data and inform many stakeholders (e.g., regulators, registries, measure developers, and standards organizations). The member inquired if researchers should have their own category. The co-chair noted that it was a valid point and added that the category could also include measurement science experts and measure developers.

A member suggested adding community-based organizations, especially as social determinants of health (SDOH) can greatly influence quality measurement and health outcomes. A member voiced support for the suggestion, recommended including community-based organizations under Standards Organizations, and highlighted the work of the Gravity project.

Another Workgroup member noted that technical assistance organizations such as Quality Improvement Organizations (QIOs) or other third-party vendors that help providers implement measures outside of the EHRs or report quality measures on behalf of healthcare organizations should be added. A Workgroup member shared that manufacturers of digital direct capture health devices (e.g., Fitbit or Apple) could also be included. Another member noted patient advocates as a missing category.

A member posed a question as whether to include data aggregators who are outside of HIEs and EHRs under the “EHRs, HIEs, Registries, Certified Health IT” category. The co-chair indicated that data aggregators could also be added to the category.

A member recommended adding that healthcare providers and clinicians also use digital data for quality improvement. A co-chair voiced support for the recommendation.

A member asked if the Workgroup would want to consider entities that set clinical guidelines and/or provide clinical decision support. Another member recommended including ACOs either under the public and private payers or healthcare providers and clinicians category. NQF staff stated that these recommendations will be considered in the next iteration of the stakeholders and roles diagram.

Next Steps

NQF staff shared that they will refine the definition, data flow, and stakeholder drafts per Workgroup feedback. NQF shared that the next meeting will be held on Thursday, August 26 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.