Digital Quality Measure (dQM) Public Comment Webinar – Transcript

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Presentation

Thank you everyone for joining. We will begin momentarily.

Welcome, everyone, to the CMS Digital Quality Measure dQM Public Comment Webinar. Thank you for joining us today. We appreciate your participation and feedback as we advance digital quality measurement.

Just some housekeeping items. This session is being recorded. The recording will be available to attendees after the webinar if you are joining via the Teams app. The slides are currently available on the eCQI Resource Center website, and a link will be provided in the Q&A window. A recording will be available on the site following review. We encourage you to submit questions throughout the presentation using the Q&A panel.

For a better experience, please download the Teams app to be able to contribute questions directly. To access the Q&A, the Q&A icon, the speech bubble with a question mark, in the top right of your Teams window. Select Ask a Question, type in your question, and click Send. You can also view other questions and upvote those you find relevant. We will address as many questions as possible during the Q&A session at the end of the presentation.

Today's session will walk through the purpose, goals, and key considerations for reviewing dQM materials. Instructions for submitting formal public comments will be provided later in the presentation.

Next slide, please.

During this session, we will discuss the purpose and goals for the presentation. Review the transition to digital quality measurement, including advancing quality measures throughout the use of FHIR, FHIR benefits and overview, FHIR as it applies to quality measures. We will then review the contents of the FHIR public comment period published through the MADiE tool, including measure packages and new test case exports that are available for your review.

Next slide, please.

Additionally, we will review dQM components, hypoglycemia measures, representing a new area of collaboration between CMS and CDC, and the dQM public comment process.

We are pleased to welcome Joel Andress, the Digital Quality Measurement Lead at CMS. Joel leads efforts to move CMS quality measurement into digital formats, reducing reporting burden for care providers and advancing healthcare data interoperability. Next, I'll pass it to Joel from CMS to begin the presentation. Thank you.

Thank you, Amira.

Greetings, everyone, and welcome to our presentation today.

We've asked you to join us to take a forward-looking view of the future of quality reporting across CMS's programs and highlight how CMS is modernizing quality measurement through its digital quality measures.

We're hoping to set expectations for upcoming changes in how quality measures are developed, implemented, and reported across our programs and give you an opportunity to actively participate in that transition.

CMS has been moving forward toward a digital-first quality measurement strategy with an emphasis on interoperability, automation, reduced provider burden, improved data accuracy, and timeliness. Digital quality measures enable alignment between clinical care, reporting requirements, and program accountability that have long been sought in CMS quality programs. And our belief is that by implementing digital quality measures, we'll be able to support the long-term sustainability of these programs and greater improvement in the quality of care in our provider systems.

The primary purpose of this presentation is to present to you what we're going to be doing during the dQM public comment period that's beginning today and to clarify for you how you can meaningfully engage with us during that period to review what we're posting for the digital quality measures, as well as point you in the direction of the kinds of feedback that we're looking to obtain during this discussion. As always, we encourage your active participation, and your input is certainly welcome.

CMS programs are currently transitioning from traditional measures to FHIR-based digital quality measures. These changes may include updated measure logic, new data requirements, and enhanced technical specifications, and are designed to improve measure validity, increase the interoperability of the data being collected, and support automated reporting within CMS's programs.

We are seeking to ensure that there is an alignment between human-readable and computable specifications that we've developed in the FHIR standard, ensure that there's a feasibility of collecting required data elements in EHR systems, and try to get a sense of what the potential impact on reporting workflows and provider burden would be given the changes to these measures.

To facilitate your feedback, we have prepared ONC Jira tickets in our system in order to house the measure specifications and select test decks. After review, comments may be submitted directly to

the corresponding measure ticket, where the measure steward and developer will review and respond following the close of the public comment period.

Our hope is that this will provide us an opportunity to obtain clear insight into the transition of digital quality measurement, equip all of you with the context needed to understand what we're changing about these measures and the presentation of information regarding them, and to enable meaningful stakeholder participation in the development and implementation process. As an outcome of this discussion, we hope to ensure that you understand the direction of the COS quality reporting and are able to review the digital quality measure artifacts that we're presenting, interpret technical and human-readable components, and provide informed, constructive feedback.

CMS is currently in the process of converting its electronic clinical quality measures into digital quality measures that are based on the FHIR standard. These converted measures will ultimately represent a subset of digital quality measures that will be a much more expansive category and incorporate other sources of data and reporting. While related, digital quality measures are distinct from the current program eCQMs and are built on a different data model and technical foundation. eCQMs have been used for many years across CMS Quality Reporting Programs. They're based on the Quality Data Model, or QDM, which is designed defined specifically for CMS use and designed primarily for reporting from electronic health records.

eCQMs have enabled automated reporting compared to manual abstraction, but are limited in their interoperability and are closely tied to EHR-based data sources. Digital quality measures, on the other hand, are built on FHIR standard and use interoperable data. They use that as an interoperable data model. Designed to be modular, reusable, and scalable across programs and use cases, the measures can include data requirements that are not confined to a single system.

Digital quality measures expand the concept of data sources to include medical devices, clinical systems, patient-facing applications, and other digital health technologies beyond traditional EHRs. Converting eCQMs to dQMs preserves existing measure intent while modernizing the technical foundation, and that positions CIS quality programs for greater interoperability, reduced reporting burden, and more comprehensive and timely quality insights.

FHIR, as many of you are aware, is a data standard from HL7 and defines how healthcare information can be exchanged between different computer systems regardless of how it is stored in those systems. It allows healthcare information, including clinical administrative data, to be available securely to those who have the need to access it and to those who have the right to do so for the benefit of patients receiving care.

FHIR provides a comprehensive framework for implementing clinical quality measures and offers a standardized set of resources and operations that support the representation, sharing, and evaluation of clinical knowledge artifacts. Additionally, it's not constrained simply to the quality measurement purpose, and this means that the data are interoperable for a variety of purposes, not simply within our reporting programs.

The framework enables standardization and interoperability by using consistent data formats and structures and facilitating seamless integration across the diverse healthcare systems. Automation

and real-time access are facilitated through data exchange and supported by real-time retrieval and evaluation of clinical data, FHIR uses structured data in order to enhance accuracy and enable more informed decision-making and timely interventions.

The modular design and RESTful APIs support rapid implementation, scalability, and adaptability to the evolving requirements. Data collected for the purpose of our program are then reusable for different purposes, increasing the efficiency of the data collection. FHIR supports efficient handling of large data sets and enables population-level analysis and reporting.

So, what are FHIR resources? In FHIR, healthcare data are broken down into categories such as patients, encounters, medications, and so on. Each of these categories are represented by a FHIR resource, which includes its data elements, constraints on data, and relationships. These resources are designed for reuse, performance, usability, fidelity, and implementability.

So, what does that mean? It means that they're designed to meet general needs of healthcare to avoid over-complicated, redundant resource sets. We're capturing different versions of the same piece of data in many different ways. It improves on performance and constructions, making these better suited for being exchanged across data networks. It's designed to be understood by technical experts and non-technical people alike and it's designed to restrict intermixing of values with differing data types.

Again, these are easy to understand, readily exchanged using industry standards, common programming language, and established data exchange technologies, which improves on the implementability.

Currently, there are 157 resources in FHIR, and the next slide includes some common resources in use with our digital quality measures included in this public comment period. The clinical module includes allergy intolerance, condition problems, procedure, and care plans resources. Some resources may reference other resources, such as service requests. The diagnostics module includes observation and diagnostic report. For more information on FHIR modules, check out FHIR R4, the FHIR R4 homepage at HL7.

Base FHIR resources are intentionally generic by design to support broad reuse, flexibility, and interoperability across many healthcare uses. Because base resources are generic, FHIR relies on profiles and implementation guides to add specificity for particular needs, such as CMS programs or digital quality measures, while maintaining a common interoperable foundation. A FHIR profile is a set of rules and constraints applied to a FHIR resource to find how that resource must be used for a specific use case. In other words, a profile takes a general FHIR resource and tailors it for a particular purpose, such as quality measurement, reporting, or a specific CMS program.

It's important to know that a FHIR profile will constrain a base resource by requiring or prohibiting certain elements, specifying value sets or code systems, and setting directionality of the element and how many times the element can appear. And it ensures consistency across implementations and supports interoperability by clearly defining the expectations for the collected data.

The FHIR implementation guide, on the other hand, is a document or a digital resource that provides detailed instructions for using FHIR in a specific context, program, or use case. Think of it as a recipe book that tells implementers exactly how to apply FHIR standards correctly. The contents of an implementation guide include profiles, extensions, value set bindings, examples and sample data, rules and constraints, and guidance for implementers.

The QI-Core Implementation Guide is a FHIR-based implementation guide developed to standardize how clinical data are represented for quality measurement and improvement. It provides a bridge between clinical care data and digital quality measures. This IG ensures consistent and interoperable representation of clinical concepts needed for quality measurement facilitates the transition from traditional eCQMs based on the QDM to FHIR-based digital quality measures, and supports quality reporting programs, clinical decision support, and population health initiatives.

In a nutshell, the QI-Core IG is a foundational guide that defines how clinical data should be represented in FHIR so that quality measures can be accurate, interoperable, and implementable. Other IGs that are key to the implementation of measures include the Quality Measure IG, or QM IG, which essentially defines how a measure is constructed, and the DEQM, or Data Exchange for Quality Measures IG, which defines how to exchange digital quality measurement data between systems, i.e., how to report the measures to CMS when it's time to do so.

This slide provides an illustration of the transition from the current eCQL approach and their related implementation guides to a FHIR-based CQL approach. Current eCQMs rely on the quality data model, the CQL for measure logic, the CQL-based HQMF for measure definition, and the QRDA I and III for measure reporting.

The FHIR-based approach for dQMs replaces these with the QI-Core FHIR profiles for use of the data model, retains the CQL logic standard, and incorporates FHIR measure resources for measure definition and the DEQM individual and summary for measure reporting. Overall, this is intended to emphasize a modernization for FHIR standards reducing reliance on QDM and QRDA while retaining CQL and improving the interoperability and consistency across measure definition and reporting, and notably also including consistency with non-quality measure uses of these data.

This table represents a mapping between the QDM data types and FHIR QI-Core profiles for digital quality measures. It shows how each clinical concept in QDM translates to a FHIR resource and the conditions needed for it to count in a measure. And this gives you some idea of the kind of mapping we've undertaken as we've converted our measures into the FHIR standard. You can find more information about the mapping if you check out the quality data model, QDM version 5.6 to QI-Core R6 mapping part of the QI-Core IG on HL7.

On this slide, we can see CQL with QDM versus QI-Core and how they interact. The graphic displays the QDM version of the initial population translated to the QI-Core version on the bottom half of the slide. Both definitions identify adults ages 18 to 75 who had at least one qualifying encounter and have a diagnosis of diabetes during the measurement period.

The QDM version uses a diagnosis data element and checks whether the diabetes diagnosis prevalence period overlaps any day of the measurement period. On the other hand, the QI-Core

version uses condition encounter diagnosis, which is a FHIR-based resource and requires the condition to be verified and checks whether the diabetes condition's prevalence interval overlaps any day of the measurement period. In short, the clinical intent is the same in both models.

The difference is that QI-Core expresses the logic using FHIR QI-Core constructs and functions, such as verified conditions and prevalence interval, whereas QDM uses QDM-specific data elements and attributes.

So, all of that's well and good, but then we come to the question of how we are able to represent this information to you to support your implementation of it as stakeholders. And that's where MADiE comes in.

MADiE is a second-generation tool that's designed for the creation, testing, and management of both eCQMs and digital quality measures. It essentially takes on the role of the Matt and Bonnie tools in combination and is able to incorporate both QDM and FHIR data models for use of measure publication. It provides a web-based interface where users, such as measure developers and healthcare professionals, can author measures using standardized languages, such as CQL, to execute measure logic against the constructed test cases to provide users with information to evaluate whether or not the measure logic aligns with the intent of the measure.

In short, MADiE streamlines the development, testing, and management of quality measures to improve healthcare reporting outcomes. MADiE's role is also to publish the artifacts that are there for you to assist you in the implementation of these measures. And so much of what you'll be reviewing in the public comment beginning today comes from the MADiE system. As part of the measure authorship process, MADiE publishes a number of digital quality measure exports that are essentially the different ways a measure and its related components can be saved or shared.

Each format serves a specific purpose. So, the measure hypertext markup language, HTML, is a human readable web page version of the measure. It's useful for viewing the measure in a browser or sharing it with people who don't need to read the raw code. This essentially is what allows you to take a look at it and know what the measure is about as a subject matter expert or clinician or a measure expert.

The JSON notation is a machine-readable format. It stores the measure in a structured way that software systems can parse, process, or import. And then the XML format is another machine-readable format that's widely used in healthcare IT and represents the measure and standardized structure compatible with digital systems.

In addition to these three formats of the measure specifications, we provide the CQL folder, which contains the clinical quality language files, including the measure CQL, which is the main CQL code the user wrote for the measure.

The CQL for all included libraries incorporates any additional CQL libraries the measure depends on, like reusable functions or definitions, which are critical for computable logic, the instructions that tell software how to calculate the measure.

The resource folder contains supporting files for included libraries. The JSON file for all included libraries incorporates machine-readable JSON versions of any libraries in use. The XML file for all included libraries provides XML versions of those same libraries. And these ensure that all reference libraries are included so the measure can run incorrectly in other systems. To summarize, MADiE exports measures in multiple formats.

HTML for humans, JSON and XML for machines and CQL folders for the measure logic and supporting libraries so they can be viewed, shared, and implemented consistently.

Under the dQM public comment, CMS is publishing the dQM measure packages for those measures we've converted to the FHIR standard. The publication of these packages containing these files that I've described includes what we believe to be an appropriate representation of the artifacts that would publish, would publish in future annual updates for those dQMs. So, essentially we're presenting to you what we think measure packages would look like once we implemented FHIR digital quality measurement reporting.

This slide provides you with a snapshot of the human readable header or metadata that comes along with the digital quality measure. This is essentially the front page or metadata summary of a quality measure in the digital format. It provides key information about the measure that systems, users, and developers need to understand it without reading the full measure logic. It functions something that's a label on a book. It tells you the title, author, and what the book is about before you dive in.

The dQM header is important because it travels with the measure when exporting, sharing, or implementing it in health IT systems. It allows software to quickly identify and categorize the measure without parsing all of its logic. This is a snapshot of the human-readable body, which is similar in appearance to the QDM body.

The header and body are also referred to as measure specifications, particularly in quality measurement circles. A digital quality measure body is essentially the core logic of a digital quality measure, the part that tells software how to actually calculate or evaluate the measure. If the header is like the label on a book, the body is like the content inside.

The dQM body usually includes measure logic and definitions, which incorporate the actual criteria, calculations, and rules used to determine if patients meet the measure. It's written in CQL or another computable format. The populations field specifies the denominator and numerator who meet for the measure, and they also include exclusions, exceptions, or stratifications used within the measure.

The functions and expressions can provide reusable code snippets or calculations used within the measure, and can include libraries that provide shared logic for the measure. The patient data fields the measure uses and FHIR resources can also be referenced in the body, and any additional execution instructions can be incorporated within the body to provide assistance and implementation.

Here you can see a side by side comparison of the metadata for eCQMs and dQMs. Some of the names, some of the fields are renamed. A handful that were obsolete, such as the transmission format, were removed. And other concepts have been revised to fit with FHIR data standard, that's requirements. But by and large, what you're going to see is comparable to what you've seen before and involves an updating of the format to match with what you, with what is provided under the FHIR standard. So, the focus of this is to give you an opportunity to see how we've mapped out these measures, what they look like, and provide us feedback.

We also want to hear about any ambiguities in how we've presented the materials, whether or not something's missing that would be important to include, or if something is presented in a way that's difficult to use. This is an opportunity for you to call that out and provide us with feedback so we can consider how best to ensure that the documentation we provide in the future meets the needs of the stakeholder community.

Something that's new to what we're posting here are the test case exports. We haven't posted these in the past, but we've had interest in looking at them.

We think that sort of shifting over to the FHIR standard gives us an opportunity to do so fairly cleanly. And so, we're piloting for test X for four measures. As part of this public comment period to get your feedback on the presentation and usability of the test decks and get your feedback. And because we haven't posted these before, we haven't received the feedback on them before.

So, we're particularly interested in seeing what, if anything, needs to be considered in changing them for future use. So, what happens is measure developers build out a group of synthetic patient test cases to validate that the code for each part of the digital quality measures logic executes as intended. When all test cases for a measure are run, the goal is to achieve 100% coverage, meaning that all components of the measure code and requirements are included in at least one pass and one fail scenario across the test cases. And 100% passing, meaning that all the test cases execute successfully in alignment with the expected results.

Each test case export file contains subfolders, the name of each corresponding to the patient ID or UUID for that test case. It also includes a README file that represents an index of all test cases. As I said, CMS is releasing four test decks for CMS-2, CMS-506, CMS-986, and CMS-996 as part of the dQM public comment period.

We're hoping to get feedback on the adequacy and usefulness of current test case standards and formats, including whether the test cases sufficiently reflect real-world scenarios, whether the test cases adequately address boundary timing scenarios, and if there's any additional information that CMS should consider posting as a supplement to FHIR test case packages published during future annual FHIR measure releases.

The test case index file provides a mapping of the test case UUIDs or patient IDs, which are also the names of the test case subfolders, to the corresponding case number, test case grouping, and test case title from MADiE. The test case title, which is the rightmost piece of text in each line on the slide, provides a shorthand description of the condition that is being tested to ensure that the code handles it as expected. However, to gain a better understanding of the purpose of each test case,

you can also open the human readable file from the measure package and navigate to the measure group sections to review detailed definitions of population criteria.

The test case grouping, which is the section of text immediately following the equal sign, is a combination of the measure component of population criterion to be tested and the expected test case result, which will be either pass or fail.

For any given FHIR test case folder, you would open the test case JSON file stored inside and search for the measure report resource within the JSON file text. You look for the tested measure components, population criterion in that section of the text, and make note of population count results. For more details on the utilization of these files, we have hosted as part of the public comment a guide for reading dQM test cases, which will include it as part of the language in the JIRA issue when you look to review the content and then comment.

With particular note within the public comment are the CMS and CDC and HSN hypoglycemia measures. CMS and CDC are currently working together to modernize hospital quality measures through FHIR, and this is beginning with hypoglycemia.

As CMS began converting its hypoglycemia eCQM to the FHIR standard along with all of its other eCQMs, CDC was also developing in parallel the NHSN Hypoglycemia Digital Quality Measure, the first of many dQMs anticipated for the NHSN surveillance program in the near future. CMS and CDC recognize an opportunity to collaborate and consider possible reporting avenues that would permit automated reporting of a single set of data to serve the needs of both programs.

At this point, CMS and CDC have two hypothesis measures that are designed to be aligned, and CMS is considering reporting options to allow hospitals to report some measures using the NHSN FHIR pathway. This option would help providers build their FHIR capability, reduce reporting burden, and advance data interoperability. Both measures capture data related to an inpatient encounter, anti-diabetic medications, and blood glucose during a calendar year period. The CMS version includes specifications to calculate the measure results, where the CDC measures calculated downstream by NHSN and can be used for surveillance.

This slide describes the CMS and CDC NHSN versions of the severe hyperglycemia and FHIR quality measures. Both measures apply to inpatient encounters, which also include emergency department and observation encounters ending within one hour of inpatient admission. Both measures cover a one-year effective period and identify severe hypoglycemia events as defined by blood glucose in patients on anti-diabetic medications.

Compared to the CMS measure, the CDC and HSN, the measure uses longer lists of codes to identify blood glucose lab tests in anti-diabetic medications. For the CMS measure, blood glucose tests include 16 laboratory concepts. For the NIHSN measure, 84 concepts are included, including CMS and 16. For the CMS measure, anti-diabetic medications include 92 RxNorm SCD and generic concepts.

For the NHSN measure, all prescribable and non-prescribed and wide diabetic medications and all RxNorm term-type concepts, including CMS's 92 terms, are incorporated to ensure the broadest

capture of anti-diabetic medications possible. For additional details on the NHSN hypoglycemia FHIR digital quality measure and reporting NHSN digital quality measures, you can visit the NHSN Digital Quality Measures resource page and the NHSN dQM Implementation Guide pages.

There you will find guidance for reporting FHIR dQMs to NHSN, including readiness materials and material to optimize reporting. These resources are also available on the NCGR ticket link that we will cover next.

It's important to keep in mind that these are two separate measures, and we're looking for feedback in this case on the potential utilization of these measures in CMS and in the context of CMS and CDC reporting programs, and where it makes sense to consider using one or both within the context of those, because the goal is to limit the amount of burden in reporting that is placed upon the providers while still meeting the surveillance needs of the NHSN program and the quality reporting needs at CMS.

So, we're requesting public feedback on the draft digital quality measures for potential use in CMS quality reporting programs.

The draft dQM packages are available through ONC JIRA tickets, including 17 hospital inpatient digital quality measures, four hospital outpatient digital quality measures, and 49 eligible clinician digital quality measures. Test case exports are provided for some of those measures, four in total, and public comments are open from January 21, 2026, through February 23, 2026, and should be submitted directly on the ONC JIRA tickets.

You'll note that in addition to the measure specifications themselves and the measure packages that are incorporated with those, we've posted a guide for reading dQM test cases to assist you in doing so. We've also incorporated a targeted questions document, which identifies specific areas of interest that CMS is requesting feedback on.

We'd ask that you take a look at that as you're reviewing the materials and offer us your fulsome feedback on the measures, the presentation of information that we've offered here, and help us ensure that we can provide the best reporting experience possible for our programs.

And now I'll hand it over to Amira and we'll move into the Q&A phase.

Q&A

Thank you, Joel. We'll move to the Q&A session. If you're logged in via the Teams app, you should see the Q&A icon on the top of your screen. Reminder, if you have specific measure or implementation-related questions, submit those to the appropriate GIR project. And also, please do not include any personal identifiable information or PII.

Just one moment while we collect the Q&As.

All right, let's start with the first question.

Our EMR vendor provides us the functionality to generate QRDA files today. Will vendors be required to move to the dQM format?

Thank you for the question. This is Joel Andress.

I think we're anticipating that you're going to see comparable requirements in terms of functionality that needs to be permitted to support quality reporting for the measures. As we're changing to new standards, the specifics about those requirements are going to evolve to take the changes in standards into account. Obviously, the specific requirements that will be in place are going to be managed through rulemaking, and so we would expect that you'd see that in place in the appropriate interoperability and quality reporting program rules. But by and large, we're going to try to ensure that we're maintaining the same kind of functionality that you possess, if not improving upon it, because of the new standards that are in play.

All right, the next question, can you please repeat the four measure IDs released?

I think we could go back to the previous slide.

Is that correct?

Is that the, we have three Jira tickets, if that's what the questioner is asking.

No, I think what they're asking about is the test case reporting. They want to know which four measures we're providing the test case reports for, which is an earlier slide.

I think we passed by it.

Yeah.

OK.

Let's put it in the chat here.

Yeah, we'll respond in the chat with this and we'll get the measure numbers for you.

Yeah.

Great.

The next question we have is, what is the future of other quality measures, such as MIPS CQMs, which are based on the plain language specs? Will CMS be working on moving these two dQMs?

Sure, thank you for the question. I think we're interested in moving as many quality measures as possible to a digital reporting format that includes the MIPS CQMs. We're currently considering how that can be accomplished. It tends to be specific to the measure type you're using, the method of reporting that's currently used, and how the requirements are defined. So, I don't have specific

explanation for how that's going to be accomplished for the MIPS CQMs. But that is something that we're looking into, not only for those, but for other measures and other programs as well.

All right, the next question we have is, will this data be expected to be sent in real time since it's using FHIR or would we submit how we do today, just using the FHIR method versus QRDA?

All right, thank you. Yeah, it's a good question. I think we're interested in getting data reported and then incorporated in as timely a fashion as we possibly can. I think probably we're still going to be tending toward having specific reporting deadlines to set requirements. But when we're contemplating that one, obviously it'll have to go through rulemaking before it's actually in place. And two, it's going to be with an eye not only for timeliness of the data, but also for the readiness and supporting infrastructure available to the vendors and to CMS. So, I think that remains the specific reporting pacing or timeline is going to remain TBD for a bit and will be dependent somewhat on the capabilities that the reporters have available to them.

That said, I'm hopeful that it would also evolve to provide for increasingly timely data as that support infrastructure improves and we get greater flexibility for data reporting.

Does CMS have an anticipated date on when dQMs will be required?

And that's the big question.

So, the answer to that is that it's still TBD. In all honesty, even if I had a date set up, I couldn't tell you that here in this venue. The date when we're ready to publish it will be communicated through the appropriate rulemaking channels for the quality reporting programs. In anticipation of that, I would expect you would also see an appropriate sequence of activities, including the certification requirements intended to support reporting of the data before we ever defined when the data would be required for reporting.

All right, next question. Do the main EHR companies such as Epic, MedTech, Cerner, all have these new FHIR aspects already?

So I'm not entirely sure I understand everything you mean by aspects, but I can tell you that from our own engagement with vendors, our understanding is that the infrastructure for, or the development of the infrastructure for reporting these measures is at least partially dependent upon ASCP O&C and CMS providing clear, clearly defined requirements for certification and reporting before the vendors are our committee made a large amount of resources to to be able to support the reporting of those data.

So, I think the that our understanding from this is that as you see the requirements coming out, you'll see the capability building out as well.

But they have, I think, a reasonable hesitation to build out anticipated requirements when we haven't yet defined them within our rules. So, as those roll out, I think the infrastructure will be increasingly in place to support them.

OK.

Is the QDM-to-FHIR mapping complete or are there known gaps?

So, the measures that we're presenting here are all published using the QI-Core STU-6 standard. So, the mapping for these measures is complete for STU-6. Obviously, we would expect the standard to continue evolving and as we move to new standards and the mapping may evolve with it. But for now, I think, you know, the measure, the measure specifications that you have available to you for comment have been fully mapped.

Okay.

The next question we have here is - Is there a set schedule for organizations to send FHIR data? Will there be submission deadlines like currently established with eCQMs?

Okay, I think we had a similar question to this earlier. The answer remains the same, which is, you know, any set reporting deadlines are going to come through the Quality Reporting Program rule and the rulemaking process. So, I'm not in a position to be able to stay what those would be, even if I had them all available to hand here, which I currently do not.

I think it's going to be-- the precise pacing of reporting is going to be dependent upon the program needs, as well as the supporting infrastructure and readiness of the vendors and reporting entities.

But we want to approach it with an eye toward making the data as timely as we possibly can and improving upon the usability of those data as they are being both collected internally with the system and then reported to CMS.

Okay, next we've got a terminology question. With QDM, data elements collected from EHR are mapped using standard terminologies like SNOMED and RXNORM, et cetera. Is terminology mapping no longer applied?

So, this is Bryn. I can start on the answer to this one. So, data elements in QDM pair a data type with a terminology. And those data elements are then expressed in the data requirements section of the eCQM narrative. In FHIR-based dQMs, the approach is similar.

Retrieve expressions within the CQL, delimited using the square brackets in the same way that they were in the QDM. Encounter inpatient encounters, for example, pairs a FHIR data type, potentially profiled, with a terminology identified as a value set. And those are just like the eCQM narratives expressed in the data requirements section of the dQM narrative.

Those value sets used in the measures are aligned with the constraints introduced by profiles in US Core and QI-Core. So, for example, the inpatient encounters value set is a subset of the encounter type binding in US Core. And to the extent that these data requirements aren't met by the FHIR resources in US Core and QI-Core due to local codings, for example, providers that need to provide mappings from local codes to the standardized terminologies used by the measures.

So, the short answer is yes, terminology is still very much a component and it's used in a very similar way to the way it's used in QDM eCQMs.

Thanks, Bryn. We've got another question here.

Will USCDI Plus be used? And if so, what is the anticipated time period for all mapping that would be required? Thank you.

All right, so the answer to the first part of the question is that we're anticipating using USCDI plus QM to capture data elements that aren't already captured under USCDI.

And explicitly that is kind of the role of USCDI plus's quality measure domain is to contain quality measure concepts that aren't necessarily broadly applicable to all systems needs, but that are supportive of the quality measurement enterprise within our programs.

So, we're certainly working with ASTP O&C to ensure that content definitions or concept definitions that are not in USCDI for our measures are reflected within the quality measurement domain.

I'm not quite sure that I understand what you mean in terms of the time period for using it. So, if you can provide further clarification in the Q&A, then we might be able to respond to that more directly. If you're not able to now, then if you send an e-mail to our help desk at the eCQI Resource Center, then we'd certainly be happy to to respond more, you know, more completely.

All right. Let's go and I'm going to prioritize some of the questions that have been upvoted- just looking at the time.

Well, this is another time timeline question, but I'll place it again.

Is there a time frame for when this transition will take place? Specifically, when will dQMS be required for reporting from MIPS and QPP programs?

And we can follow up if needed.

Right.

So, I think we're in a position to put a specific date on it, although the answer is certainly approaching. In terms of the sequencing that we're looking to do, we're looking to have a transitional period.

We anticipate having a transitional period where reporting of the FHIR base, the FHIR base dQMs is a reporting option, but not necessarily required.

You can get credit for meeting your reporting requirements in the ECR reporting programs by reporting the FHIR-specified measures instead or in lieu of the current QDM-specified eCQMs. And then after a transitional period, once we're comfortable with the extent to which the technology is mature and we're confident that people have a reasonable capability to report on these measures, on a mandatory basis, then we would look toward transitioning to a state where reporting is mandatorily or mandates the use of FHIR, and then we'd potentially look at retiring the QDM specified measures exactly when that mandatory transition occurs is to be determinable, depend in part on how the transitional reporting goes.

Transitional reporting, I think we're still working on coordinating certain interoperability requirements with ASTP/ONC before we can provide a specific date for when that's going to begin. But this public comment period is intended, one, to get your feedback, but it's also intended as an indicator to show that we have the measure specifications and definitions required for reporting these measures available. And so it's one of the major steps on the path to getting that voluntary reporting requirement up and running.

Thanks, Joel.

Another popular question we have here is how is CMS and CDC considering aligning on FHIR standards?

The CMS dQMs are utilizing QI-Core, while it looks like the CDC NHS and FHIR dQMs are based on the US Core.

See, I can take a go at responding to this unless I know we have Andrea from the CDC here.

Andrea, do you want to- Do you want to speak to this at all?

Hi, Joel. We are in the process of making sure that everything is aligned fully with US Core and some of the things will be aligned with QI-Core. I think QI-Core offers some additional data elements that are needed. And so we will, NHSN will be using a few data elements at this time that are available in QI-Core, but most of our stuff is based on US Core, and I believe it's pretty consistent with how CMS is tackling this. So I think it's quite consistent.

This is Bryn. I can add to that as well. QI-Core is derived from US Core, meaning that anything that's characterized in US Core is available in QI-Core. We just have some additional things in QI-Core that we add that aren't available in US Core that we need in order to characterize the data requirements for all the measures. One of the significant examples is medication administration, where we need that data, and it's not profiled in US Core. And so, QI-Core introduces a medication administration.

But US Core has a medication request, and QI-Core just uses a derived profile from the US Core medication request. So, wherever there's available data in US Core, we use it. And anything that is QI-Core compliant is US Core compliant as well. So yes, they are aligned, but we're trying to capture the additional things that US Core doesn't have yet.

Yeah, I completely agree with Bryn. So, the way that NHSN and CMS are handling it is the same. So exactly what Bryn just said.

All right, I can go to the next question.

Semi-similar.

Is the anticipated submission for CMS programs to be the FHIR API or the NHSN interface? Would the NHSN FHIR API be an extra API? And then just a note that is still increasing the understanding of the technological material.

So maybe a clarification there.

Sure.

So I think, so assuming that you're discussing this, so I mean, there are two really arenas to handle this. One is, will CMS have an API for reporting of its digital quality measures?

Yes.

And my understanding is that NHSN also will have an API for reporting of its digital measures for its surveillance work.

And Andrea can speak to that more if she needs to.

With specific attention to the hypoglycemia measure, which is where we have an overlap in the digital quality measures that we've mapped out so far.

I think there's still some discussion going on about what the best approach is for supporting reporting of this measure. One of the use cases that we've laid out for quality measurement is we wanted to be able to maximize the utility of any event of reporting. And when we realized CMS and CDC realized that we had both created a FHIR version of hypoglycemia.

They created kind of a natural test of the extent to which we might be able to support this kind of single event reporting that would feed into multiple programs.

One of the things that we're looking for specifically in this public comment period is we want to get some feedback on the two measures as they're currently presented to help inform some of our discussions about how we're going, how exactly we're going to manage the reporting of hypoglycemia quality data to CMS and the extent to which we can create the most efficient pathway for submitting those data.

And so we made a decision for this public comment period to include both measures here because quite likely we're not sure yet exactly what our what our pathway is going to be and we want to get some feedback here to help inform some of those discussions.

And as you can imagine, as these sort of a larger set of digitally specified measures from CDC become available, this becomes a, you know, a continuing and much larger conversation than just the one about hypoglycemia.

So, your input on that topic is, I think, very much appreciated and anticipated on our end. Andrea, I don't know if you wanted to comment further.

I agree completely with your comments, Joel, and I would just add that it's really the same FHIR API, essentially, the same generic FHIR API that's provided by the electronic health records. And then either NHSN grabs data from it or CMS grabs data from it, essentially.

That's the highly simplified version, but it's either way, it's the same FHIR APIs that are used to help for folks who are still getting their minds around this.

It's a it's a complicated space for sure.

Right.

Thank you all for joining us today. We are at a little over time. There were quite a bit of other questions we didn't get to, but the team will be preparing a Q&A document and posting that alongside the slides and the recording on the eCQI Resource Center. So, we really appreciate your time.