NATIONAL QUALITY FORUM
Driving measurable health improvements together

Leveraging Electronic Health Records (EHR) Sourced Measures to Improve Care Communication and Coordination Option Year Web Meeting 2

The National Quality Forum (NQF) convened a multistakeholder Committee web meeting for the Leveraging Electronic Health Record (EHR) Sourced Measures to Improve Care Communication and Coordination Project on January 13, 2022.

Welcoming Remarks, Meeting Objectives, and Attendance

Chelsea Lynch, NQF Director, welcomed participants to the web meeting and reviewed housekeeping reminders. Ms. Lynch introduced the Committee co-chairs, Dr. Richard Antonelli and Dr. Gerri Lamb, who provided welcoming remarks. Dr. Antonelli and Dr. Lamb expressed their appreciation for the Committee members as well as NQF and Centers for Medicare & Medicaid Services (CMS) staff for their support. Both co-chairs highlighted the use of the breakout groups and the pre-meeting worksheet to facilitate discussion. Ms. Lynch reviewed the meeting agenda and the following meeting objectives:

- Review and provide an overview on select background resources
- Refine and finalize recommendations for how EHRs can better facilitate care communication and care coordination

Victoria Freire, NQF Analyst, conducted roll call and facilitated Committee members’ disclosures. Ms. Freire then invited Federal Liaisons on the call to announce their presence as well. Ms. Lynch introduced the NQF project team and CMS staff before reviewing meeting ground rules for conducting a respectful and insightful discussion.

Background Resources

Ms. Lynch provided insight on the background resources document shared with Committee members prior to the meeting. She noted that during the first web meeting in November 2021, a few key concepts were mentioned during the discussion and additional information about these concepts were requested by the Committee. Ms. Lynch reiterated that NQF would not be presenting these concepts in a great amount of detail and highlighted that full comprehension of these concepts is not required to participate in the discussion. However, a basic understanding of these concepts will be helpful to ensure the recommendations that the Committee develops are detailed, practical, and will be able to help advance the field forward.

Ms. Lynch reviewed the dependencies of EHR attributes, noting that one of the major concepts for the project is interoperability, which is the ability to share information easily between different systems. Ms. Lynch explained that to facilitate the discussion, Committee members should think about interoperable data and how it relates to having effective EHR-based care communication and care coordination. Ms. Lynch also noted when developing recommendations, Committee members should consider interoperability but do not need to be constrained by it. The focus of the web meeting’s discussion will be on EHR functionalities, capabilities, and capacities that lead to usable EHRs through the lens of three stages of interoperability: early, intermediate, and advanced. The early stage of interoperability includes capabilities such as improving existing health information technology (IT) networks and beginning to standardize data vocabulary. The intermediate stage of interoperability includes capabilities such as expanding the health information that is being exchanged and increasing the number of providers that participate in the exchanging of information as well as starting to aggregate data across entities to manage quality and equity. The advanced stage of interoperability includes capabilities such as health IT systems that are continuously learning and improving functionality and using aggregated data with local data to create clinical decision support.

Ms. Lynch proceeded to provide brief overviews on the following resources related to interoperability:

- United States Core Data for Interoperability (USCDI)
- Health Level Seven Fast Healthcare Interoperability Resources (FHIR)
- Health Information Exchanges (HIE)
- Application Programming Interfaces (API)

United States Core Data for Interoperability

USCDI establishes a standard set of data classes and data elements for nationwide, interoperable health information exchange. This data set has been under standard and rule-making development for over 10 years and its use is mandated by the Office of the National Coordinator for Health Information Technology (ONC) as well as CMS to ensure improved healthcare information interoperability. It includes data classes such as assessment and plan of treatment, care team members, clinical notes, and goals.

Health Level Seven Fast Healthcare Interoperability Resources

FHIR is an internet-based approach to transferring and sharing health information to provide seamless interoperability and patient-centered, data-driven care. It is a representational state application programming interface (API) that includes specifications for how one system requests and receives data. It includes Resources which are discrete data concepts such as patient information, family history, and medication lists as well as Profiles, which are use cases that provide meaning to the Resources by describing the relationship between the different Resources. ONC and CMS both have rules that require implementation of FHIR-based APIs to support the sharing of health information. This implementation will also help move the field towards digital quality measurement.

Health Information Exchanges

HIEs are centralized databases or portals that combine EHR data from multiple sources to assist in data standardization and information sharing across settings. There are three key forms of HIE – directed exchange where information is shared between care providers to support coordinated care, query-based exchange where providers can find or request information on a patient from another provider, and consumer mediated exchange where patients can aggregate and control the use of their health information among providers.

Application Programming Interfaces

APIs are a set of defined rules that explain how computers or applications communicate with one another. They sit between an application and the web server and allow services and products to communicate with each other and leverage each other’s data and functionality through a documented interface. An example of an API is travel booking websites such as Travelocity or Orbitz where aggregated data from the websites of various airlines or car rental agencies are displayed on one platform.

Ms. Lynch offered Committee members the opportunity for questions on the background resources reviewed. A Federal Liaison from ONC offered a minor correction, stating that the USCDI is built on another core data set but has not been around for 10 years. The Federal Liaison also noted the US Core Implementation Guide is based on FHIR and ONC certification criteria uses USCDI data elements. The Federal Liaison also shared that there is a specific version of USCDI that ONC is working on with CMS called USCDI + QM. This version will support quality measurement efforts that are part of the transformation of quality measurement to a FHIR-based digital quality measurement model.

Working Session: Effectively Facilitate Care Communication and Care Coordination with EHRs

Ms. Lynch provided a brief overview of the breakout groups explaining that recommendations will be developed by themes. Ms. Lynch shared and reviewed the following themes with the Committee:

- Collect and share data
- Optimize usability for clinicians and patients
- Document performance of care communication and care coordination activities
- Assess the quality and performance of care communication and care coordination activities

These themes were developed from previous Committee discussions as well as during the development of the Literature Review and Environmental Scan Report.

Collect and Share Data

Ms. Lynch provided an overview on the theme of collecting and sharing data for EHRs, focusing on the EHR’s ability to intake data from systems where patients receive care, transfer data to local HIEs, and communicate with various applications while also allowing patients to control the sharing of their information.

Optimize Usability for Clinicians and Patients

Ms. Lynch provided an overview on the theme related to optimize usability for clinicians and patients for EHRs, noting EHRs must be able to perform tasks such as summarize specific data elements in an easily accessible and user-friendly manner and highlight when aspects of a care plan are not followed, such as when a treatment or follow up test is not obtained.

Document Performance of Care Communication and Care Coordination Activities

Ms. Lynch provided an overview on the document performance of care communication and care coordination activities theme for EHRs. Ms. Lynch highlighted that EHRs must be able to perform tasks such as creating customized alerts, developing, and implementing customized care plans, and allowing for real-time HIPPA (Health Insurance Portability and Accountability Act of 1996) compliant communication among the care team, including with patients.

Assess the Quality and Performance of Care Communication and Care Coordination Activities

Ms. Lynch provided an overview on the assessing quality and performance of care communication and care coordination activities theme for EHRs. Ms. Lynch highlighted that EHRs must be able to allow for functionalities such as assessing whether a care plan was created and followed, as well as allowing for the monitoring of care quality through queries and performance measures.

Working Session: Purpose and Approach

Ms. Lynch outlined that the breakout sessions allow for more in-depth discussion on recommendations. Each Committee member, Federal Liaison, and member of the public would be assigned to a breakout group with one of the co-chairs and a several NQF staff. Ms. Lynch emphasized that each group would have 60 minutes to brainstorm and discuss the four sets of recommendations for how EHRs can effectively facilitate care communication and care coordination before reporting out from the session and addressing any final points for discussion as a group.

Breakout Group 1 Discussion

Prior to the discussion, Dr. Lamb ensured that all group members had access to the breakout group worksheet and briefly reviewed the breakout session discussion questions:

- Are there EHR capabilities or capacities missing from the list of recommendations?
- Which recommendations should be refined or excluded?
- For *early* interoperability, what EHR functionality is needed to facilitate care communication and care coordination? What are the EHR usability considerations?
- For *intermediate* interoperability, what EHR functionality is needed to facilitate care communication and care coordination? What are the EHR usability considerations?
- For *advanced* interoperability, what EHR functionality is needed to facilitate care communication and care coordination? What are the EHR usability considerations?

One Committee member commented on the need for standardized data definitions to collect data across all health systems. Another Committee member noted the challenge of determining what to do with unstructured data within EHRs. Several other members agreed and question if there is value in defining what unstructured data could be essential for care communication and care coordination.

One member suggested against excessive customization of EHR alerts as described within the document performance of care communication and care coordination activities theme. The member noted that too many custom alerts could impede electronic data collection for quality measurement if the alerts result in data that are entered into the EHR instead of using the alerts simply to notify clinicians of information. Another member of the Committee recommended expanding the need for interoperability beyond just HIEs to include the use of immunization registries, lab results, and other health databases. Another member agreed and suggested the addition of patient-entered data as being important for care communication and care coordination, noting that the need for standardizing patient-entered data could be another recommendation.

Several of the members cited that the theme around optimizing usability did not include recommendations specifically relevant to patients. A member of the public suggested that language in patient portals needs to be understandable to patients and caregivers. Another member suggested the inclusion of patient action items (e.g., need to make a follow up appointment or obtain a lab test) in addition to clinical notes. Members also noted that patient portals and EHRs should capture social determinants of health (SDOH) and barriers. Another member agreed with the need for patient action items and suggested the addition of prioritizing the actions identified. One of the Federal Liaisons noted in the chat that some of the patient data discussed by the group is captured in EHRs and patient portals via the HL7 Consolidated Clinical Document Architecture (C-CDA) standard in the "Continuity of Care Document" although not all fields are required. The Federal liaison also shared that under the ONC EHR certification criteria there is a specific criterion for patient portals. Another member also commented that the Committee cannot assume patient preference for communication or assume patients will access the patient portal.

Breakout Group 2 Discussion

Dr. Antonelli began the discussion asking the breakout group for feedback on the themes previously mentioned.

Committee members suggested allowing input from patients when updating the information in the EHR as well as providing their health information (including physical documentation) to providers and health systems. Members also highlighted the importance of timely data, citing clinicians can be hindered in providing effective care when they need to wait both for data from other clinicians or health systems to be uploaded into the HIE and for the data to be uploaded into their local EHR. In an ideal world, a Committee member noted, a patient could visit a hospital and the information from where the patient had been seen previously would automatically push into the patient's EHR instead of relying on the clinician to go to the HIE to pull the data. A Committee member shared her experience with an HIE in Nebraska that had a few adjuncts that communicated directly with the EHR that has been helpful for clinicians. Another member highlighted the importance of including cost considerations for the recommendations developed.

Committee members began discussing the theme of optimizing usability, noting that data standardization should be an explicit recommendation. A member exemplified the importance of data standardization by highlighting that currently neither racial/ethnicity data nor the information about how a unit of blood is transfused is collected the same way across health systems. Additionally, a Committee member noted there is a move towards sharing results of laboratory tests with patients immediately and noted a concern about the burden this may cause if the results are not shared in a way the patient understands (e.g., including enough information so the patient does not have to interpret the results or next steps on their own). A Committee member noted the intent should be to increase patient access to health information overall, not focusing on sharing the information immediately.

Several Committee members noted that the theme did not include recommendations specifically relevant to reducing patient burden or increasing usability for patients. Current burden for patients is due to interoperability and having to be the communicator between providers and health systems. Members noted that patients and caregivers often have little say in controlling the information within their EHRs and recommendations by the Committee should reduce patients' time commitment and burden in sharing their health information in efforts to have effective care coordination.

Committee members then transitioned to discussing the theme of documenting performance of care communication and care coordination activities, starting with identifying additional members of the care teams. Committee members noted that care teams should include other members besides clinicians such as social workers, physical therapists, school system workers, and caregivers. Members also emphasized that family members should define the care team in joint effort with the provider. A Committee member also highlighted the World Health Organization's move towards "person-centered, integrated care" instead of using just "patient-centered care." The Committee members also discussed the best way to connect external data and health system data, some noting that organizations such as Activate Care and Unidas connect SDOH data, mental health data, and other data to the healthcare system in a bi-directional way. Other members inquired whether a bi-directional would be the best approach or whether using the EHR would work better. Another Committee member also highlighted the recommendation around the inclusion of evidence-based pathways within the EHR to ensure quality care, noting the challenge in keeping up with the current best practices. The member noted these should be suggestions provided to the clinician and should not override clinical judgement.

Committee members began discussing the theme of assessing the quality and performance of care communication and care coordination activities. Committee members discussed the importance of closing the loop in occasions when patients were referred to community resources, i.e., food banks that are part of a food prescription program. Another Committee member noted the importance of having a champion to oversee the care plan, particularly to help identify why a care plan is not followed.

Working Session: Breakout Group Report Outs

Ms. Lynch welcomed everyone back from the breakout sessions before asking Dr. Lamb and Dr. Antonelli, respectively, to share key recommendations from the breakout group discussions.

Breakout Group 1 – Report Out

Dr. Lamb shared an overview of the recommendations that her group refined and developed during the breakout session. Dr. Lamb noted that her group did not exclude any recommendations.

Dr. Lamb highlighted the need for standardized data definitions, connections to external databases to the EHR, and an emphasis on patient entered data into EHRs. Dr. Lamb noted the need for meaningful data as well as the inclusion of the patient perception when it comes to usability of EHRs. Recommendations included patient-entered data, standardized structured fields for patient data entry, and user experience (UX) code design for patient portal design.

Dr. Lamb also highlighted the emphasis on care teams as well as finding use for unstructured data.

Breakout Group 2 – Report Out

Dr. Antonelli shared an overview of the recommendations that his group developed during the breakout session.

Dr. Antonelli emphasized the importance of timely data, patient-entered data, and the ability of patients to flag their own data. Dr. Antonelli also noted the burden on patients and caregivers due to fragmented data. Dr. Antonelli highlighted that care teams can include members outside of the clinical team and family members should be allowed to jointly define their care team, which will support shared decision making. Dr. Antonelli also noted the importance of closing the loop when making a referral to a patient.

Ms. Lynch thanked the co-chairs and the Committee for the robust discussion on themes and recommendations. Ms. Lynch asked for any additional final comments.

One member reiterated the importance of including the patient voice and shared decision making for EHRs to reduce burden and increase usability.

Dr. Lamb was grateful to have an ONC Federal Liaison in the breakout group to provide insight on the current state of the patient portal as well as FHIR. Ms. Lynch also noted that it might be beneficial to have an ONC liaison present on FHIR and the use of APIs at a future Committee web meeting.

Member and Public Comment

Ms. Freire opened the web meeting to allow for public comment. No public comments were offered.

Next Steps

Ms. Freire reminded the Committee that any additional input on ideal capabilities and capacities of EHRs could be shared via email to EHRCarecoordination@qualityforum.org. Ms. Freire also noted that the next web meeting will be held on Tuesday, February 8, 2022. Ms. Lynch, Dr. Lamb, and Dr. Antonelli offered final remarks and concluded the call.