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# Leveraging Electronic Health Record (EHR) Sourced Measures to Improve Care Communication and Coordination

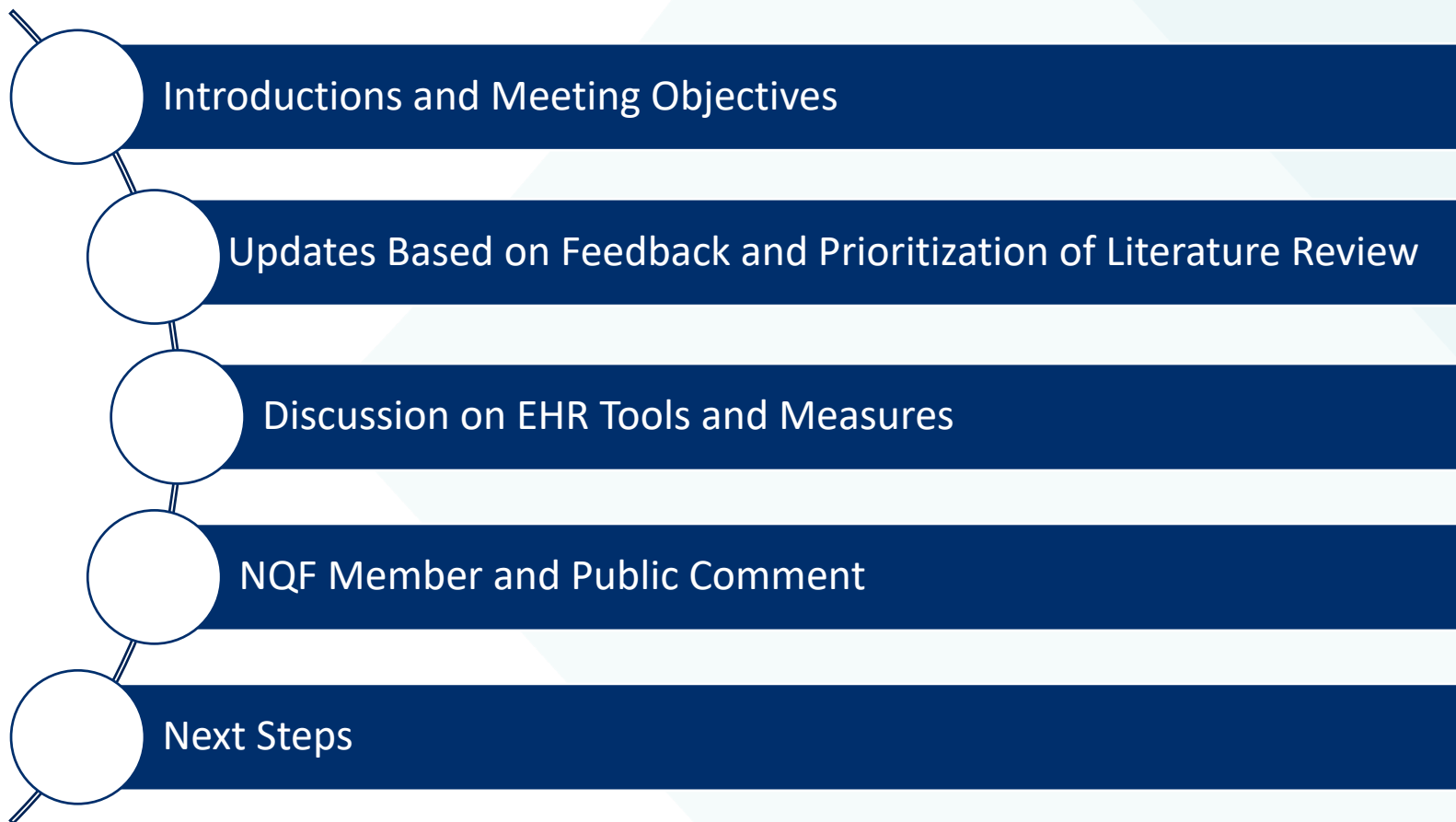
*Web Meeting*

April 12, 2021

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75FCMC20F00054– Leveraging EHR Sourced Measures to Improve Care Coordination*

# Welcoming Remarks

# Agenda



# Introductions and Meeting Objectives



## NQF Staff

- **Chelsea Lynch, MPH, MSN, RN, CIC**, Director, Quality Measurement
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- **Maha Taylor, MHA, PMP**, Managing Director, Quality Measurement
- **Wunmi Isijola, MPH**, Senior Managing Director, Quality Measurement

## Roster

- **Richard Antonelli, MD, MS  
(Co-Chair)**
- **Gerri Lamb, PhD, RN, FAAN  
(Co-Chair)**
- Kathleen Balestracci, PhD, MSW
- David Burianek
- Brian Buys, RN, MBA
- Sherri Costa, MS, RN, AOCNS
- Cynthia Cullen, MS, MBA, PMP
- Keith Horvath, MD
- David Key
- Joseph Kunisch, PhD, RN-BC, CPHQ
- Russell Leftwich, MD
- Michael Lieberman, MD, MS
- Brent Peery, DMin
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## Federal Liaisons

- **Joel Andress, PhD**, Centers for Medicare & Medicaid Services
- **Tiffany Gillis Brown, JD**, Health Resources and Services Administration
- **Chris Dymek, EdD**, Agency for Healthcare Research and Quality
- **Tara McMullen, PhD, MPH**, Department of Veterans Affairs
- **Carly Medosch, MBA, PMP**, Centers for Medicare & Medicaid Services
- **Francine Sandrow, MD, MSSM, FAMIA**, Department of Veterans Affairs
- **Whitney Weber, MPH**, Office of National Coordinator for Health Information Technology
- **Kenneth P. Yale, DDS, JD**, Department of Defense



## Meeting Objectives

- Review updates to the literature review and begin to prioritize findings for the Environmental Scan Report, including:
  - ▣ Definition of care communication and coordination
  - ▣ Relationships between care communication and coordination, EHRs, and improved health outcomes
  - ▣ Impact of social determinants of health on care communication and coordination and measurement
  - ▣ Advantages and challenges of measuring care communication and coordination in EHRs
- Obtain focused feedback on existing EHR-sourced tools and measures for care communication and care coordination



## Ground Rules



No rank in the  
room



Stay respectful and  
engaged



Participate



Refrain from  
political comments



Share your  
experiences



Learn from others

# Updates Based on Feedback and Prioritization of Literature Review



## Previously Proposed Definition of Care Communication and Coordination

- Care Coordination is a multidimensional concept that encompasses the effective communication between patients and their families, caregivers, and healthcare providers; safe care transitions; a longitudinal view of care that considers the past, while monitoring delivery of care in the present and anticipating the needs of the future; and the facilitation of linkages between communities and the healthcare system to address medical, social, educational, and other support needs, in alignment with patient goals. (NQF, 2014)



## New Proposed Definition of Care Communication and Coordination

- Care coordination is the deliberate synchronization of activities and information to improve health outcomes by ensuring that care recipients' and families' needs and preferences for healthcare and community services are met over time. (NQF, 2014)
- **Care coordination includes:**
  - ▣ Communication
  - ▣ Care Planning
  - ▣ Community-based care
  - ▣ Cross-continuum care
  - ▣ Cross-sectoral coordination
  - ▣ Integration
  - ▣ Patient and family engagement
  - ▣ Risk assessment
  - ▣ Shared decision-making
  - ▣ Transitions of care

## Care Communication and Coordination, EHRs, and Improved Health Outcomes

- Patient/family/caregivers are central to care coordination
  - ▣ Shared decision-making
  - ▣ Sharing experience (patient/caregiver reported outcomes)
  - ▣ Interactions between multiple providers
  - ▣ Providing data to providers
- Continuum of care should be considered as all settings are important including ambulatory, in patient, and community settings
- Lack of coordination between primary and specialty outpatient care can lead to underuse or overuse of services and poorer outcomes
- Need for quality-of-life outcome measures
- Not all measures should be outcomes-based to properly assess care coordination



## Uses of EHRs for Care Coordination: Patient/Family/Caregiver Perspective

### ■ Patient Portals

- ▣ Variation in data provided
- ▣ Interactive features vary

### ■ Data Management and Data Sharing

- ▣ Accuracy of patient data
- ▣ Limited ability for patients/families to review and revise data
  - » Once a patient sees a provider, the provider may be able to both see and add data to the patient's records even if the patient does not agree

### ■ Privacy of Sensitive Health Issues

- ▣ Limited ability of patients to remove data, or limit specific data, about health issues they don't want others to know about



## Uses of EHRs for Care Coordination: Provider and Measure Developer Perspective

### ■ EHRs Data Limitations

- Limited capture of non-billable care team members
- Data structure issues for measure development - example cancer screenings (EHR shows test was ordered or scheduled, but difficult to see if test was completed, results, and follow-up activity data)

### ■ Data is Dispersed – Lack of or Limited Interoperability

- Multiple data systems – laboratory, radiology/imaging, wearable monitoring devices, phone apps, personal health records, Health Information Exchanges (HIE)
- Multiple providers in team may use different EHRs
- Difficulties reconciling information between multiple sources
- Effects on ability to create measures



## Social Determinants of Health (SDOH)

- Lack of standardized data elements for SDOH data
- Equity mentioned explicitly
- Concepts to use EHRs to address SDOH
  - ▣ Conduct screenings for SDOH
  - ▣ Clinical decision support using SDOH
  - ▣ Track social risk scores
  - ▣ Establish data standards
  - ▣ Referrals and communication with social services/human services
  - ▣ Resource allocation, surveillance, and outreach

## Advantages and Challenges of Measuring Care Coordination in EHRs

- Care coordination is multi-directional across all settings including primary care, specialist care, pharmacy, laboratories, radiology, hospitals, PAC-LTC, home health, behavioral health, and community services and supports.
- Integration of information sharing and interoperability
  - ▣ FHIR Standards
- Incentives for making systems interoperable with standardized data structures are lacking
  - ▣ Regulations
  - ▣ Payers assisting with closing the gap
  - ▣ Competition among providers and EHR vendors
  - ▣ Meaningful and feasible performance measures



## Additional Definitions

- **Electronic Health Record (EHR):** An electronic health record is a longitudinal electronic record of patient health information generated by one or more encounters in any care delivery setting.<sup>1</sup>
- **Electronic Medical Record (EMR):** A digital version of a paper chart that contains all of a patient's medical history from one practice. An EMR is mostly used by providers for diagnosis and treatment.<sup>1</sup>
- **Personal Health Record (PHR):** A personal health record, or PHR, is an electronic application through which patients can maintain and manage their health information (and that of others for whom they are authorized) in a private, secure, and confidential environment.<sup>2</sup>

## Additional Definitions

- **EHR-sourced Measure:** Quality measures that rely on data that originally comes from an electronic health record. Note EHR sourced measures may be evaluated outside of the original EHR system where the data was collected. EHR-sourced measures may be evaluated in the EHR system, registry, data warehouse, or other separate system. (NQF, 2020)<sup>3</sup>
- **Electronic Clinical Quality Measure (eCQM):** Electronic clinical quality measures (eCQMs) use data electronically extracted from electronic health records (EHRs) and/or health information technology systems to measure the quality of healthcare provided. The Centers for Medicare & Medicaid Services (CMS) use eCQMs in a variety of quality reporting and value-based purchasing programs.<sup>4</sup>



## Discussion Questions

- Does the definition of care communication and coordination resonate with you?
  - ▣ What other aspects of care communication and coordination should be included?
- What other outcomes of care communication and coordination should be prioritized for the report?
- Are there additional ways EHRs can be utilized to address issues related to SDOH?
- What considerations should be included related to EHR data accuracy from the patient's perspective?
- In what specific ways do EHRs facilitate care communication and coordination?

# Discussion on Measures and EHR Tools



## Measure Scan Update

- Include measures that have gone through CDP but have not been endorsed
- Add additional typography to group measures
- IMPACT Act of 2014- post acute care settings have standardized set of quality measures including SDOH data
- Measure Concepts to Consider
  - ▣ EHR audit log measure that captures care plan
  - ▣ Implementation of closed-loop referrals
  - ▣ Referrals to human service/social service providers
  - ▣ SDOH screening and outcomes
  - ▣ ED/urgent care visits
  - ▣ Caregiver burden
  - ▣ Care integration as a patient-reported outcome (PRO)



## Existing EHR Care Coordination Tools

- Decision support
- Patient portals
- Application Programming Interface (API)
- Mhealth
- Natural language processing
- Artificial intelligence/predictive analytics
- Dashboards
- Integration with secondary/community level data sources (e.g., food deserts, census data) to assess risk/need for interventions
- Flowsheets with discrete data points in EHR that develop reports
- Navigation software and integration with EHR (e.g., other software platforms integrate with EHR)



## EHR Care Coordination Tools Discussion

- What additional EHR tools exist that have a positive impact on care communication and coordination?
- How can these tools be automated through EHRs and be used for measurement?
- What are some examples of effective ways that EHRs have been used to measure care communication and coordination?
- What evidence-based methods or promising practices are being used to measure care communication and coordination?
- What conceptual or measurement gaps exist with respect to care communication and coordination?

# NQF Member and Public Comment

# Next Steps

## Next Steps

- Save the date for future web meetings:
  - ▣ **Web Meeting 3:** Thursday, May 27th 12p-2p ET
  - ▣ **Web Meeting 4:** Tuesday, August 17th 1p-3p ET
- Share any recommended resources (e.g., peer-reviewed articles, white papers, potential Expert Interviewees), measures, or EHR tools for the literature review and measure scan by emailing [EHRCareCoordination@qualityforum.org](mailto:EHRCareCoordination@qualityforum.org)
- Contact [EHRCareCoordination@qualityforum.org](mailto:EHRCareCoordination@qualityforum.org) with any questions

# THANK YOU.

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## References

1. National Quality Forum. *NQF Health Information Technology Glossary: A Guide to HIT Jargon*.  
[https://www.qualityforum.org/Measuring\\_Performance/HIT\\_Glossary.aspx](https://www.qualityforum.org/Measuring_Performance/HIT_Glossary.aspx). Last accessed March 2021.
2. Office of the National Coordinator. *What is a personal health record?*  
<https://www.healthit.gov/faq/what-personal-health-record-0>. Last accessed March 2021.
3. National Quality Forum. *Technical Expert Panel on Electronic Health Record Data Quality Best Practices for Increased Scientific Acceptability*.  
[https://www.qualityforum.org/Publications/2020/12/Electronic\\_Health\\_Record\\_Data\\_Quality\\_Best\\_Practices\\_for\\_Increased\\_Scientific\\_Acceptability\\_-\\_Final\\_Report.aspx](https://www.qualityforum.org/Publications/2020/12/Electronic_Health_Record_Data_Quality_Best_Practices_for_Increased_Scientific_Acceptability_-_Final_Report.aspx). Last accessed March 2021.
4. Office of the National Coordinator. *eCQMs*.  
<https://ecqi.healthit.gov/ecqms>. Last accessed March 2021.