NATIONAL QUALITY FORUM
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Public Comments

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

Background

On July 12, 2021, NQF posted the Environmental Scan Report on the project web page for a 21-day review and commenting period. NQF is sought feedback on the tone of the Environmental Scan Report, whether the Literature Review accurately captures the current state of the use of EHRs in the measurement of care communication and coordination, any additional advantages or challenges in using EHRs for measuring care communication and coordination, and any additional EHR-based tools to assist in performing or measuring care communication and coordination.

Public Comment Prompts:

1. What general comments do you have on the report?
2. The Environmental Scan Report (pages 3-19) is intended to educate and convey the importance of leveraging EHRs to measure and improve care communication and coordination to a broad, nontechnical audience with an educational tone. How could the language or tone of the Environmental Scan Report be improved to be more educational or more accessible to a broad, nontechnical audience?
3. The "Literature Review" (page 20-57) is intended to be a technical overview of the current state of leveraging EHRs to measure and improve care communication and coordination. How could the "Literature Review" more accurately reflect the current state?
4. What additional advantages or challenges of measuring care communication and coordination in EHRs that should be included in the "Literature Review"?
5. What additional EHR-based tools should be included in the "Literature Review" that are most useful for performing or measuring care communication and coordination activities?

Comments Received

What general comments do you have on the report?

Organization: RELI Group, Inc.

RELI Group, Inc. thanks NQF for the opportunity to review this important work and to provide comments. The document emphasizes important communication and coordination issues, including the importance of communication with the patients and providing them access to information. The report emphasizes the use of patient portals and various items that should be available to the patient through such portals, e.g., patient plan of care.

However, the authors may consider whether there is sufficient recognition of the fact that for portals to be helpful they must be used and usable. Additionally, there needs to be alternatives for patients who do not find use of IT portals feasible and practical. Although having important information "available" to patients is helpful, it has no effect if patients do not sign up for and/or use the portal to access the information.

Potential EHR measurement concepts that could address these issues include: 1) data as to the use of patient portals including whether patients sign up for the portal; 2) whether patients who are signed up for the portal access important items e.g., the patient plan of care; 3) whether messages entered by the patient are responded to within a particular period of time; 4) experience of patients in using portals to improve usability and use; 5) pushing information to patients who so opt via email or text rather than require patients to pull the information; and 6) whether there are alternative easily used and accessible methods of communication, particularly telephone, available to patients who do not sign up for the portal or who cannot effectively use IT systems. This applies particularly to the very elderly for whom telephone communication options would often be much more suitable.

Although these concepts are process rather than outcome based, they would appear practical and foundational. By contrast, tying outcomes to the EHR communication for measurement purposes may be impractical. For example, measures such as readmission rates or ED visits are insensitive indicators once they are risk adjusted. Use of the EHR itself could provide comprehensive data for the measure concepts suggested above ultimately allowing for patient focused communication improvement efforts. This contrasts also with approaches such as patient surveys which are labor intensive, sample based, and ultimately provide only summary information.

Proposed Committee Response:

Thank you for your comments. The Committee will review this comment when it convenes on August 17, 2021.

Organization: University of Colorado School of Medicine

Generally, I feel this is a good start at outlining the state of care coordination and many challenges to its measurement. One area is not mentioned that is very important in the care of children, especially those with special health care needs and disabilities, is coordination beyond "the four walls" of the core health care system. Community resources and especially schools must be included in care coordination if it is to be fully relevant for children. This means addressing the communication barriers between EHRs and school systems, ensuring access for appropriate school personnel (nurses, special education directors for example) and enabling bidirectional communication to make coordination possible. Other community resources such as therapy and other service providers are similarly important. Parents and children see these community partners as an essential part of their child's health care.

Proposed Committee Response:

Thank you for your comments. The Committee will review this comment when it convenes on August 17, 2021.

Organization: American College of Medical Quality

Because care coordination has always been thorny, complex and dynamic, there is a new opportunity to make progress right now. It is hence disappointing that NQF continues to spend time on "Literature Reviews" such as the unscientific and anecdotal one provided in this Report. While the final conclusions of the Report are promising, much of what was presented was not at all data-driven, such as this rather nebulous and disappointing summary from the Environmental Scan of the information presented in the on pages 7-9 of the Report:

……This literature review identified several outcomes of care communication and coordination that can be measured in the EHR, including readmissions, ED visits, hospitalizations, preventable hospitalizations, and others. Yet while many of these outcomes are related to care communication and coordination, other factors (e.g., clinical, patient, community, and SDOH) may be greater contributors, thus making it a challenge to isolate the effects of care communication and coordination efforts.

2. In the Environmental Scan, NQF Staff glossed over the one critically important systematic evidence review of Care Coordination from 2013 (excluded by the search criterion of only studies 2014 and later) authored by Ellen Schultz, et al (attached).[1] The tables in this review are excellent and effectively summarize the available evidence at the time that was evaluated through a structured, scientific methodology. This comprehensive evaluation is important for the Committee to review in detail, because it successfully bundles several main domains of Care Coordination together (see especially Table 2) and highlights the need to move from "point solution" and "transactional" measurements that exist widely throughout the current NQF set of 162 measures labelled as "Care Coordination" (as identified within the NQF Quality Positioning System[2] listed in Appendix B of the Report).

[1] Schultz, E.M., Pineda, N., Lonhart, J. et al. A systematic review of the care coordination measurement landscape. BMC Health Serv Res 13, 119 (2013). https://doi.org/10.1186/1472-6963-13-119 Accessed August 2, 2021.

Proposed Committee Response:

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Organization: American College of Medical Quality

3. Some major biased assumptions appear in the Report such as this excerpt on Page 13:

Reduction of unplanned hospital readmissions is a classic outcome of an effective care communication and coordination activity. When a patient's care is not well coordinated during and after a hospital discharge, there may be gaps in follow-up care, poor communication among clinicians, or poorly executed plans of care. This can lead to a patient returning and requiring additional inpatient care, termed a readmission.

However, there is extensive "mixed" evidence that the 30-day readmission rates are actual valid, "meaningful" accountability quality measures of true care coordination. For example, in the recently published Health and Human Services Fiscal Year 2021 Annual Performance Plan and Report:

Based on national trends, which reflect a slowing in readmissions reductions for all Medicare beneficiaries after a number of years of larger declines, CMS has selected a more modest target reduction rate for CY 2021 of 0.25 percent.[i]

In addition, there have been numerous studies calling into question the importance of sustaining hospital readmissions as valid measures of actionable quality improvement interventions.[ii] [iii] [iv] [v] These and many other similar studies call into question the generalized statement that readmissions measures are useful in evaluating whether/if care has been truly well coordinated.

[i] FY 2021 Annual Performance Plan and Report - Goal 1 Objective 2 | HHS.gov Accessed August 2, 2021.
[ii] Trends in 30- and 90-Day Readmission Rates for Heart Failure - PubMed (nih.gov) Accessed August 2, 2021.
[iii] https://www.hcup-us.ahrq.gov/reports/statbriefs/sb248-Hospital-Readmissions-2010-2016.pdf Accessed August 2, 2021.
[iv] Link between readmission rates, mortality rates back under scrutiny | Fierce Healthcare Accessed August 2, 2021.
[v] DeVore AD, Granger BB, Fonarow GC, et al. Effect of a Hospital and Post discharge Quality Improvement Intervention on Clinical Outcomes and Quality of Care for Patients With Heart Failure With Reduced Ejection Fraction: The CONNECT-HF Randomized Clinical Trial. JAMA. 2021;326(4):314–323. doi:10.1001/jama.2021.8844

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Organization: American College of Medical Quality

Team-based care is a strategy that can be implemented at the health system level to enhance patient care by having two or more health care providers working collaboratively with each patient.[i] [ii] [iii] These teams may include doctors, nurses, pharmacists, community paramedics, primary care providers, community health workers, and others (e.g., dietitians). Yet this Report fails to acknowledge and document a major and essential strong body of evidence with (perhaps) the greatest potential to truly improve Patient-Centered Care Coordination across the full continuum of the US healthcare delivery system.

[i] Promoting Team-Based Care to Improve High Blood Pressure Control | CDC | DHDSP Accessed August 2, 2021.
[ii] Outcomes in Multidisciplinary Team-based Approach in Geriatric Hip Fracture Care: A Systematic Review - PubMed (nih.gov) Accessed August 2, 2021.
[iii] Team-Based Care and Patient Satisfaction in the Hospital Setting: A Systematic Review - PubMed (nih.gov) Accessed August 2, 2021.

Proposed Committee Response:

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Organization: American College of Medical Quality

5. This report did not explicitly evaluate the role and/or impact of care coordination on total cost of care, including identifying any formal evaluation of the countless payment and infrastructural programs that have or have not had a significant and sustained impact on quality of care. What is really needed is a significant "unified" capital investment by all current stakeholders (especially health systems, large medical groups, commercial and government payers, Health IT and digital health firms and employers), rather than waiting for federal and state governmental agencies to run more "pilots". Furthermore, stakeholders should no longer be concerned about "ownership" of Intellectual Property, but rather, effective execution of impactful care coordination in accordance with the best and evolving evidence.

Proposed Committee Response:

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Organization: American College of Medical Quality

6. The report does an excellent job of summarizing the importance of documenting and assessing Social Determinants of Health (SDOH) in the context of Care Coordination:

SDOH factors can have a major impact on an individual's overall health and well-being and can also serve as barriers to care communication and coordination as people move within and across clinicians and healthcare settings…..Better EHR capture of SDOH has three potential benefits: (1) improving medical care through better recognition of SDOH by clinicians, (2) serving as standard variables for use in performance measurement and risk adjustment, and (3) serving as data for EHR-based tools to help risk stratify patients and direct the delivery of social service resources. Notably, all of these goals would serve to improve care communication and coordination across settings. (From Expert Interview 2. January 2021)

NQF should also acknowledge the growing body of evidence documenting important cautions and challenges of inaccuracy and bias of analyzing SDOH data obtained from EHRs: [i]

Machine learning algorithms have the potential to improve medical care by predicting a variety of different outcomes measured in the electronic health record and providing clinical decision support based on these predictions. However, attention should be paid to the data that are being used to produce these algorithms, including what and who may be missing from the data. Existing health care disparities should not be amplified by thoughtless or excessive reliance on machines.

Additionally, recently published evidence (this past week) is showing marked reductions in racial and ethnic disparities in insurance coverage, access to care, and self-reported health,[ii] suggesting that care coordination may be playing an important role in closing these gaps. Perhaps there are new "lessons learned" from this important progress relative to more effective care coordination (perhaps) as a result of increasing widespread access to and use of EHRs.

[i] Gianfrancesco MA, Tamang S, Yazdany J, Schmajuk G. Potential Biases in Machine Learning Algorithms Using Electronic Health Record Data. JAMA Intern Med. 2018;178(11):1544–1547. doi:10.1001/jamainternmed.2018.3763

[ii] Wallace J, Jiang K, Goldsmith-Pinkham P, Song Z. Changes in Racial and Ethnic Disparities in Access to Care and Health Among US Adults at Age 65 Years. JAMA Intern Med. Published online July 26, 2021. doi:10.1001/jamainternmed.2021.3922

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Organization: American College of Medical Quality

7. CMS, AHRQ, FDA, CDC, HHS, ONC, NIH and NQF should together strongly consider jointly funding and supporting an updated, formal, comprehensive systematic evidence review of Care Coordination (such as the 2013 Schultz study) and include a more specific focus on digital health (not just EHRs), as well as social determinants of health, team-based care, shared decision making and clinical decision support algorithms (all as examples) that help to guide complex care. How the latest advances in technology with widespread digital health uptake, FHIR standards, APIs are most effectively impacting care coordination and cost of care could also be addressed in this process. It would certainly be of greater value to follow a more rigorous, standardized explicit and scientific approach to evaluating and quantifying evidence (such as that deployed by NICE[i] rather than what was described in this Report). Using a framework such as PICOTS to strengthen evidence assessments (e.g. from the AHRQ's Evidence-based Practice Centers Program[ii]) would provide a far more formal discipline to this process as well.

[i] Reviewing research evidence | Developing NICE guidelines: the manual | Guidance | NICE; Accessed online August 2, 2021.
[ii]Using the PICOTS Framework to Strengthen Evidence Gathered in Clinical Trials—Guidance from the AHRQ's Evidence-based Practice Centers Program https://www.fda.gov/media/109448/download Accessed online August 2, 2021.

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Organization: American College of Medical Quality

8. Some members of the current Patient Experience and Function Committee participated intensively in the 2014 HHS-Sponsored work as participants on the then NQF Care Coordination Steering Committee.[i] A major "Ah-Ha Moment" for many of the attendees at this multi-day session was that traditional measure developers did not appear (then) up to the task of coming up with a more dynamic, technologically-enabled, comprehensive and parsimonious set of Care Coordination quality "measures for accountability" that could address the complete lack of important synergies between and among the various domains referenced in Comment 2 above. Hence, trying to "force fit" any more accountability measures such as those currently in the NQF QPS any further into future value-based payment arrangements and public quality reporting systems (still largely invisible to consumers) is, in the opinion of many healthcare providers, a major distraction of valuable time and resources.

Comments submitted by Donald E. Casey Jr MD, MPH, MBA, FACP, FAHA, CPE, DFAAPL, DFACMQ
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[i] NQF: NQF-Endorsed Measures for Care Coordination: Phase 3 (qualityforum.org) ; Accessed August 2, 2021.

Proposed Committee Response:

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What additional advantages or challenges of measuring care communication and coordination in EHRs that should be included in the "Literature Review"?

Organization: University of Colorado School of Medicine

As I mentioned before, one area is not mentioned that is very important in the care of children, especially those with special health care needs and disabilities, is coordination beyond "the four walls" of the core health care system. Community resources and especially schools must be included in care coordination if it is to be fully relevant for children. This means addressing the communication barriers between EHRs and school systems, ensuring access for appropriate school personnel (nurses, special education directors for example) and enabling bidirectional communication to make coordination possible. Other community resources such as therapy and other service providers are similarly important. Parents and children see these community partners as an essential part of their child's health care.

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