Emergency Medicine Workgroup Meeting Summary

MACRA Episode-Based Cost Measures: Clinician Expert Workgroups
Workgroup Webinar, June 24, 2021
June 2021

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Project Overview

The Centers for Medicare & Medicaid Services (CMS) has contracted with Acumen, LLC to develop episode-based cost measures for potential use in the Merit-based Incentive Payment System (MIPS) to meet the requirements of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). Acumen's measure development approach involves convening clinician expert panels to provide input in cycles of development ("Waves").[1] In Wave 4, instead of the typical Clinical Subcommittee (CS) process for episode group prioritization and selection, we obtained stakeholder input on candidate clinical areas and episode groups through a public comment period from December 16, 2020, to February 5, 2021.[2] This approach provided flexibility for a wider range of stakeholders to participate around their schedule. This approach will be revisited for future Waves of development. The prioritization criteria used to identify strong candidate episode groups and concepts were developed based on input from our technical expert panel (TEP), Person and Family Engagement (PFE), CS, and Clinician Expert Workgroups ("workgroups"). The following Wave 4 episode groups were finalized based on the prioritization criteria, public comments received, and discussions with CMS: (i) Emergency Medicine, (ii) Heart Failure, (iii) Low Back Pain, and (iv) Major Depressive Disorder.

We held a nomination period for workgroup members between April 26, 2021, and May 21, 2021. The workgroups are composed of clinicians with expertise directly relevant to the selected episode groups. Workgroups (of about 15-20 members) were finalized in June 2021, and they provided detailed input on the development of the selected episode groups during their first workgroup webinars from June 21 to June 24, 2021. For Wave 4, all workgroup meetings will be

[1] For information on measure development in Waves 3, refer to the 2020 Episode-Based Cost Measures Field Testing Wave 3 Measure Development Process document [PDF] (https://www.cms.gov/files/document/macra-cmft-ebcm-process-2020.pdf).

[2] For a summary of comments we received during the public comment period, refer to the MACRA Episode-Based Cost Measures: Wave 4 Measure Development Public Comment Summary Report document [PDF] (https://www.cms.gov/files/document/wave-4-public-comment-summary.pdf).

held virtually. The workgroups will convene for a second and third meeting to continue measure specification and refinement discussions before and after a national field test, currently slated for late 2021.

Emergency Medicine Workgroup Webinar, June 24, 2021

This meeting summary document outlines the purpose, discussion, and recommendations from the Emergency Medicine workgroup webinar. Section 1 provides an overview of the webinar goals and process. Section 2 summarizes the discussion and recommendations from the workgroup. Section 3 is an appendix that describes the materials and information provided to workgroup members prior to and during the webinar as preparation for discussion on detailed measure specifications.

1. Overview

The goals of the Emergency Medicine workgroup webinar on June 24, 2021, were the following:

(i) Provide input to specify a cost measure for potential use in MIPS that can accurately distinguish between good and poor performance among clinicians in terms of cost efficiency
(ii) Consider results of empirical analyses and the Person and Family Partner (PFP) findings
(iii) Provide input on episode group trigger codes and scope, grouping of conditions for Emergency Department (ED) visits, how to account for patient sub-populations to ensure that the measure allows for meaningful clinical comparisons, episode window length and categories of services to assign to the episode group

The meeting was held via webinar and attended by 15 of the 17 workgroup members. The webinar was facilitated by an Acumen moderator, Dr. Suzann Pershing. The Emergency Medicine workgroup chair was Dr. Susan Nedza, who also facilitated meeting discussions. Jan Sladewski was the PFP that attended the webinar to discuss and address questions regarding the PFP findings. The MACRA Episode-Based Cost Measure Workgroup Composition List will contain the full list of members, including names, professional roles, employers, and clinical specialties; it will be posted on the MACRA Feedback Page.[3]

Stakeholders beyond the workgroup members had access to a public dial-in number to observe the meeting as part of Acumen's continued effort to increase the transparency of the measure development process.

Prior to the webinar, workgroup members were provided with information and materials to inform their meeting discussions (see Section 3). After the webinar, workgroup members were sent a recording of the webinar and were polled on their preferences to ensure the measures are developed based on well-documented stakeholder input. Based on National Quality Forum practices, the threshold for support was greater than 60% consensus among poll responses. This document summarizes the workgroup members' input from both the discussion as well as the polls.

[3] The composition list will be posted on the MACRA Feedback Page (https://www.cms.gov/Medicare/Quality-Payment-Program/Quality-Payment-Program/Give-Feedback).

This meeting was convened by Acumen as part of the measure development process to gather expert clinical input; as such, these are preliminary discussions and materials, which don't represent any final decisions about the measure specifications or MIPS.

2. Summary of Sessions and Discussion

This section is organized based on meeting sessions and describes workgroup member discussions and recommendations. The first sub-section summarizes the PFP findings discussed during the first session of the webinar (Section 2.1). The following sub-sections describe workgroup member discussions and recommendations on defining the episode group (Section 2.2), addressing sub-populations of interest for meaningful clinical comparison (Section 2.3), and assigning services to the episode group (Section 2.4), respectively. Section 2.5 describes the next steps.

2.1 Person and Family Partner (PFP) Findings and Discussion

The attending PFP presented findings from focus groups and interviews with 3 PFPs conducted prior to the meeting. PFPs provided feedback about the reason for the ED visit, the healthcare team and services during and after the ED visit, and opportunities to improve ED care.

The PFPs sought care in the ED due to an acute onset of symptoms and often went to the ED without consulting their primary care provider (PCP) beforehand due to the severity of the symptoms. One PFP moved quickly through the triage process to receive care for severe symptoms (i.e., alternating between the ED and operating room for multiple surgical procedures), while the other PFPs experienced delays or wait times (e.g., 5-6 hours) before receiving care.

PFPs received care from multiple clinicians during the ED visit, such as emergency medicine clinicians, nurses, specialists, surgeons, and lab or x-ray technicians. They received procedures related to the reason for the visit (e.g., stent placement), labs, x-rays, other imaging, and pain medications. Some PFPs were admitted to the hospital, based on the triage team's assessment, whereas others were discharged home.

Overall, PFPs noted opportunities to improve ED care coordination and communication. They emphasized the importance of communication between the resident and attending clinicians and PCPs. The lack of coordination led a PFP to bear the responsibility for information sharing, and in one instance, the clinician from the ED gave discharge instructions to the patient, but didn't inform the patient's PCP of the ED visit. PFPs also noted gaps in communication during the ED visit regarding the care plan and requested services and tests, which made it difficult for the caregivers to understand the patients' needs.

Throughout the webinar, workgroup members discussed many of the items that the PFPs reported during the focus groups and interviews. During the measure scope discussion (Section 2.2), members discussed the triage process and various clinicians that might be involved in the patient's care during the ED visit. During this session, workgroup members also considered disposition status (i.e., admission versus discharge) and continued this discussion when thinking about how to account for cost differences between these patient sub-populations (Section 2.3). Workgroup members agreed with the importance of effective discharge care and recommended assigning the costs of services for follow-up primary care visits, readmissions, and ED revisits (Section 2.4).

2.2 Defining the Episode Group

In this session, Acumen reviewed the framework for defining an episode group and provider attribution. Acumen explained that episodes are defined by billing codes that open, or "trigger", an episode. For the Emergency Medicine episode group, episodes are triggered by Evaluation and Management (E&M) Current Procedural Terminology / Healthcare Common Procedure Coding System (CPT/HCPCS) codes for visits in hospital EDs. Episodes are attributed to clinicians billing at least one trigger code on Part B Physician/Supplier claims during the ED visit, which during initial testing, were predominately emergency medicine clinicians. This attribution approach was also supported by feedback received during the Wave 4 public comment period.

Acumen also presented results from a preliminary measure scope analysis. This analysis provided frequency and cost statistics for all ED visits as a starting point for the measure population, with a focus on 6 groupings of undifferentiated ED diagnoses,[4] selected based on public comments and an environmental scan search for salient diagnostic categories. The workgroup agreed with a broad measure scope that would capture as many ED visits as possible. They also discussed adding more diagnostic groups, and/or adding more diagnosis codes to some of the ED diagnostic groupings, since the preliminary 6 groupings with their draft definitions only capture around 42% of all ED visits. Since the analysis considered all potential ED diagnoses on a claim (i.e., not limited to a primary diagnosis), members were concerned about visits with multiple presentations / symptoms (e.g., shortness of breath and chest pain). Members requested that the Acumen team conduct an analysis to evaluate the overlap across visit types and potentially establish a hierarchy to classify visits. Members also noted the importance of distinguishing between classifying ED visits according to diagnosis code (reflecting a symptom in undifferentiated or unspecified cases) versus the actual presenting symptom(s) or chief complaint. This is because a patient could present to the ED with an altered mental state and receive a diagnosis of pneumonia upon further evaluation, in which case the diagnosis code would indicate pneumonia but not necessarily altered mental status.

Members held detailed discussions about the specificity of the diagnoses and/or conditions for the preliminary diagnosis groupings and the other potential groupings falling in the 58% of visits not included in the preliminary definition. Discussion included adding dizziness for altered mental state, considering a visit type for major trauma (e.g., related to spinal cord injuries or head bleeds) since minor traumas may already be captured under the diagnosis grouping for falls. Members also discussed how there might be more cost variation in undifferentiated symptoms (e.g., unspecified chest pain), and thus, a greater opportunity to improve ED care, as opposed to more specific diagnoses (e.g., acute myocardial infarction, stroke), since the guidelines and protocols for these conditions are established. Relatedly, a member pointed out that ED clinicians might have more of an opportunity to impact cost by focusing on less severe symptoms or conditions where patients are discharged, since those requiring specialty care could have more complex conditions that require admission.

Based on these discussions, the Acumen team will evaluate and conduct additional testing on the current list of ED visit types, using clinical and empirical methods to categorize remaining diagnosis codes that aren't in the current measure scope, as appropriate. This additional testing, and refinements to the proposed ED visit types for inclusion in the measure, will be presented for discussion at the next workgroup meeting.

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[4] The initial diagnosis code groupings included ED visits for unspecified (i) abdominal pain, nausea, and vomiting, (ii) altered mental state, (iii) chest pain, (iv) falls, (v) shortness of breath, and (vi) syncope.

Key Takeaways from Discussion and/or Polls for Defining the Episode Group:

- Members agreed with the draft list of trigger codes for the episode group.
- While members supported a broad measure scope, they had concerns and questions about the current ED visit types and didn't reach a consensus on the best approach to capture more ED visits. For the next meeting, the Acumen team will evaluate and conduct further testing on the current ED visit types to categorize additional diagnosis codes not in the preliminary measure scope.
- In the post-meeting poll, members provided suggestions for potential ED visit type categories including:
    - Trauma
    - Headaches
    - Musculoskeletal
    - Mental and behavioral health

2.3 Addressing Sub-Populations for Meaningful Clinical Comparison

Members also engaged in a detailed discussion about how to account for patient cohort heterogeneity among various sub-populations within the Emergency Medicine episode group. Sub-populations refer to patient cohorts as defined by their pre-existing conditions and characteristics. Workgroup members discussed:

(i) Stratifying the patient population into mutually exclusive and exhaustive sub-groups to define more homogenous patient cohorts[5]
(ii) Defining covariates in the risk adjustment model[6]
(iii) Identifying measure exclusions[7]
(iv) Monitoring certain sub-populations for further testing[8]

After Acumen provided a description of each method and presented analytic data on preliminary sub-populations (recommended or identified either through the literature scan, public comment, or Acumen clinical team), workgroup members discussed the patient sub-populations and their preferences for how to address them. The workgroup's discussions were focused on 3 patient sub-populations. Sections 2.3.1, 2.3.2, 2.3.3 summarize the discussions and recommendations about transferred patients, observation stays, and disposition status, respectively.

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[5] Sub-grouping is a method that's intended for when we would want to compare episodes only with other similar episodes within the same sub-group. This approach is used when sub-groups are very different from one another, and each sub-group requires its own risk adjustment model. Since each sub-group will have its own risk adjustment model, the size of each sub-group should be sufficiently large.

[6] Risk adjusting is a method to account for the case-mix of patients and other non-clinical characteristics that influence complexity. It's meant to be used for sub-populations that make a large share of patients who have a characteristic that's outside of the attributed clinician's reasonable influence. Risk-adjusted cost measures adjust observed episode spending to an expected episode spending (predicted by a risk adjustment model).

[7] Excluding is a method in which we exclude certain patients or episodes to address issues with patient heterogeneity. This approach should be used when the sub-population affects a small, unique set of patients in which risk adjustment wouldn't be sufficient to account for their differences in expected cost.

[8] Monitoring for further testing is an option for flagging certain sub-populations that the workgroup may revisit later during measure development upon review of further data. This approach is best used when the workgroup requests additional data or information on a sub-population to discuss the appropriate method for meaningful clinical comparison.

2.3.1 Transfers

The workgroup reviewed cost and prevalence data for hospital-to-hospital transfers. After reviewing the data, the workgroup requested that the Acumen team create a new sub-population for ED-to-ED transfers to inform their decision whether to exclude transfer patients at the next meeting. The workgroup was concerned about the heterogeneity in this patient sub-population, as small hospitals may transfer patients for different reasons (e.g., lack of space / equipment for complex patients) than other larger, particularly urban hospitals that have the space and resources to accommodate complex patients. The workgroup initially supported exclusion for hospital-to-hospital transfers (and potentially ED-to-ED transfers in the future), since the role of the attributed clinician isn't clear once the patient transfers to another facility.

Similarly, the workgroup also reviewed data on the patient sub-population for transfers from a Skilled Nursing Facility (SNF) to the ED. The workgroup agreed that these patients were more costly and complex than other patients presenting to the ED. A few members suggested handling this sub-population through risk adjustment, while others supported exclusion to align with the Acute Unscheduled Care Model (AUCM)[9], which excludes transfers from a SNF to the ED.

The workgroup didn't specifically review data for other transfer sub-populations, including transfers from a Long-Term Care Hospital (LTCH) to the ED and transfers from an Inpatient Rehabilitation Facility (IRF). However, workgroup members suggested their preferences in the Workgroup Webinar Poll.

Key Takeaways from Discussion and/or Polls for Transfers:

- Members requested a new sub-population for ED-to-ED transfers to inform decisions about a potential exclusion.
- Members recommended excluding hospital-to-hospital transfers and didn't reach a consensus in the poll on how to account for transfers from IRF, LTCH, and SNF to the ED. In the absence of consensus, the Acumen team will designate transfers from IRF, LTCH, and SNF to the ED as sub-populations to monitor for further testing, and the workgroup will have the opportunity to discuss this at the next meeting.

2.3.2 Observation Status

The workgroup also discussed how observation stays should be considered. The workgroup was concerned about the location of the observation unit (i.e., in the ED or in the hospital), since patients who are placed under observation status in another part of the hospital may not be under the control of the ED clinician. The Acumen team noted that differentiating the location of an observation stay between the ED and acute care facility might not be easily identified in claims data. Members also acknowledged potential incentives for ED clinicians to keep a patient in an observation unit, since observation services are billed as outpatient services and the high costs of prolonged observation stays are often shifted to patients.

The workgroup also discussed whether observation stays leading to an inpatient (IP) admission and discharge should be considered similarly to ED visits leading to admission and discharge. Members agreed that observation stays leading to an IP admission, regardless of the location, should be considered as part of the IP visit, in line with the AUCM, or excluded entirely. Some workgroup members supported treating the observation stays leading to hospital admission the

[9] American College of Emergency Physicians, "Acute Unscheduled Care Model." Federal Advocacy Overview Page (n.d.,), https://www.acep.org/federal-advocacy/federal-advocacy-overview/APM/.

same as the associated IP admissions because the observation stay would be billed with the admission. Members didn't reach a consensus during the meeting on how to treat observation stays leading to discharge and were able to indicate their preferences in the Workgroup Webinar Poll.

Key Takeaways from Discussion and/or Polls for Observation Stays:

- Members recommended treating observation stays leading to an IP admission similarly to ED visits leading to admission.
- Members didn't reach a consensus on how to treat observation stays leading to discharge; therefore, the Acumen team will continue to monitor this sub-population.

2.3.3 Disposition Status

The workgroup discussed how to account for ED visits ending in discharge versus admission, given that both of these disposition statuses are key opportunities to improve ED care. To begin, the workgroup reviewed data showing that risk adjustment removed a significant portion of variation in costs for ED visits ending in IP admission versus discharge. However, some members of the workgroup mentioned that once patients are admitted as to the IP, the attributed ED clinician could have limited influence on care decisions.

The Acumen team mentioned that differences in cost based on the outcome of the ED visit could be handled by stratifying into 2 sub-groups, if the outcome of the ED visit is expected to interact differently with each risk adjustment variable. It could also be handled through risk adjustment by adding a binary variable for whether the admission occurred or the Medicare Severity Diagnosis Related Group (MS-DRG) for the admission itself. The workgroup also considered further controlling costs through assignment of specific services in specific episode windows (the period of time after the ED visit) in the population of patients that are admitted (i.e., only assign relevant MS-DRG costs for admission). The workgroup also requested more data on Critical Access Hospitals (CAHs) to evaluate how many of the visits aren't related to transfers; members hypothesized that the number of visits would be lower if transfer cases were excluded from the measure specifications.

Based on these discussions, the workgroup initially agreed to include ED visits ending in discharge within the measure population. For ED visits ending in admission, the workgroup requested more data before deciding how to account for these cases, agreeing that risk adjustment would be required (at a minimum) if these episodes are included. As a next step, the Acumen team will prepare additional analyses on ED visits ending in admission and look into a new sub-population for CAHs that could be further discussed with the workgroup at the next meeting.

Key Takeaways from Discussion and/or Polls for the Disposition Status:

- Members initially agreed to include ED visits ending in discharge within the measure population.
- Per the members' request, the Acumen team will prepare additional analyses on ED visits ending in admission, including the role of CAHs, that could be further discussed with the workgroup at the next meeting.

2.4 Assigning Services to the Episode Group

Acumen described the purpose of service assignment so that members could begin brainstorming which services associated with the ED clinician's role in managing the patient's care should be included in the cost measure. These assigned services should be inclusive

enough to identify a measurable performance difference between clinicians but also not introduce excessive noise. Acumen also re-introduced the concept of the episode window to facilitate this session's discussion. The following paragraphs summarize discussions of the episode window and categories of assigned services.

The workgroup generally agreed that 30 days after the initial ED visit (i.e., the first Part B claim with the E&M codes for ED) is the maximum period of time that costs should be assessed for this cost measure to capture revisits and readmissions, with many or most costs occurring in a shorter post-ED window. The Acumen team clarified that service assignment rules allow specific services (e.g., follow-up imaging) to be assigned for shorter periods (e.g., 14 days) than the maximum episode window (e.g., 30 days after the initial ED visit). Overall, the workgroup agreed that the 30-day episode window would present an opportunity to align incentives with the AUCM and the MIPS Hospital-Wide, 30-Day, All Cause Unplanned Readmission Rate quality measure.[10] The workgroup also noted that a longer episode window might incentivize good follow-up care post-discharge, whereas a shorter episode window might not capture readmissions, for example.

The workgroup also had a brief brainstorming session to discuss appropriate windows for services that were identified through a pre-meeting RSVP survey. The workgroup suggested that a 30-day episode window was appropriate for ED revisits and hospital readmissions, in line with AUCM and the Hospital-Wide, 30-Day, All-Cause Unplanned Readmission Rate measure. Some workgroup members agreed that follow-up primary care visits should happen within a shorter timeframe, such as 7 to 10 days; however, other workgroup members noted that a shorter window might penalize efficient clinicians who schedule timely follow-up visits while less efficient clinicians may visit with patients outside this shorter timeframe.

Given the breadth of the measure and clinical differences between ED visits, the Acumen team requested input on approaches to identify services programmatically. As an example, one approach could remove unrelated costs (e.g., chemotherapy) to reduce statistical noise. Another approach could be to identify broad categories of services that are reasonably expected to be related to ED visits regardless of the reason for the visit or outcome (e.g., follow-up visits with PCPs). The workgroup didn't have time to provide input on these approaches during the webinar, so the Acumen team included them in the Workgroup Webinar Poll.

<u>Key Takeaways from Discussion and/or Polls for Assigning Services to the Episode Group</u>:

- Members recommended a 30-day episode window and agreed that specific services may occur in a shorter post-ED visit window.
- Overall, the workgroup agreed with the following proposed categories of assigned services:
    - Follow-Up Primary Care Visits
    - ED Revisits
    - Hospital Readmissions
    - Medication Monitoring
    - Pain Management
    - Wound Care
    - Follow-Up Imaging

[10] CMS, "Hospital-Wide, 30-Day, All-Cause Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System (MIPS) Groups," CMS Measures Inventory Tool (June 2021), https://cmit.cms.gov/CMIT_public/ReportMeasure?measureRevisionId=2327.

- In the post-meeting poll, workgroup members suggested additional broad categories of services that should be included after an ED visit, regardless of the visit type or outcome:
    - Outpatient physical therapy
    - Outpatient occupational therapy
    - Follow-up specialty care visits
    - Ambulatory behavioral health encounters
    - Ambulance claims
- In the post-meeting poll, workgroup members suggested broad categories of services that should not be included after an ED visit, regardless of the visit type or outcome:
    - Hemodialysis
    - Scheduled allergy shots
    - Physical therapy for condition unrelated to ED visit
    - Chemotherapy
    - Nursing home visits
    - Pathology services
    - Admissions for multiple trauma or transplants
    - Drug costs

2.5 Next Steps

In the last session, Acumen provided an overview of the next steps. After the meeting, Acumen distributed the Workgroup Webinar Poll to gather input from members on the discussions held during the webinar. The survey also consisted of open comment boxes to provide additional thoughts on topics for PFP input and a space to share additional comments. Acumen will operationalize input for the measure specifications based on Workgroup Webinar Poll results and will follow up with workgroup members with more information about the next steps in the measure development process (i.e., scheduling for the Service Assignment and Refinement Webinars in late August / early September 2021).

3. Appendix: Overview of Workgroup Member Preparation and Shared Materials

3.1 Introduction

Section 3.2 provides an overview of materials shared with the workgroup members prior to the workgroup webinar, and Section 3.3 provides a recap of concepts of the measure development process presented by Acumen.

3.2 Overview of Meeting Materials

Prior to the meeting, workgroup members were provided with the following information to inform their discussions and votes:

- Agenda and Slide Deck, which was sent prior to the meeting and outlined the topics and process used for the webinar, including embedded empirical analysis results
- A Welcome Packet of materials providing an overview of Wave 4 of cost measure development and information on the measure frameworks
- Investigation workbooks sent prior to the meeting, which presented detailed findings from empirical analyses:
    - A Sub-Population Analysis Workbook, which provided data on the frequency and cost associated with a preliminary set of sub-populations informed by public comments received and deliberations among the Acumen clinical team
    - An Emergency Department Scope Analysis, which provided frequency and cost statistics for various Emergency Department diagnosis code groupings and care pathways to inform scope and trigger discussions during the webinar

The materials shared were based on analyses run on draft measure specifications that the Acumen clinical team created based on input from the Wave 4 measure development public comments and discussions with CMS.

3.3 Overview of Cost Measure Development

At the beginning of the meeting, Acumen presented an introductory session on the following topics:

- The activities done to date for the development of episode-based cost measures, including the Wave 4 measure development public comment period
- The goals of the meeting and timeline of activities for Wave 4
- A recap of the Quality Payment Program and episode-based cost measures for MIPS
- A recap on the different sources of information for the workgroup to consider in addition to their clinical expertise, including analyses and data, a literature review, and findings from the PFPs