Asthma/COPD Workgroup In-Person Meeting Summary

MACRA Episode-Based Cost Measures: Measure-Specific Workgroups
In-Person Workgroup Meeting, August 12, 2019
September 2019

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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 (MACRA) of 2015. Acumen's measure development approach involves convening clinician expert panels to provide input in cycles of development ("waves").[1] The four Clinical Subcommittees (CS) that convened in May-June 2019 for Wave 3 were focused on the following clinical areas: Chronic Condition and Disease Management; Dermatologic Disease Management; General and Colorectal Surgery; and Hospital Medicine.[2] These CS provided input on selecting episode groups for development in Wave 3 and the composition of smaller, targeted workgroups to build out the measure. Acumen convened the following workgroups[3] (each composed of approximately 15 members) in mid-August 2019 for in-person meetings: Diabetes, Asthma/Chronic Obstructive Pulmonary Disease (COPD), Melanoma Resection, Sepsis, and Colon Resection.

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[1] For information on measure development in Waves 1 and 2 (2017 and 2018), refer to the Episode-Based Cost Measure Field Testing Measure Development Process document (https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/2018-measure-development-process.pdf).

[2] Members for these Clinical Subcommittees were recruited through a public nomination period from March 11 to April 12, 2019.

[3] Members for these workgroups were recruited from within the CS as well as a standing pool of nominees between June and July, 2019.

Asthma/COPD Workgroup Meeting, August 12, 2019

This meeting summary document outlines the purpose, discussion, and recommendations from the Asthma/COPD workgroup in-person meeting. Section 1 provides an overview of the meeting 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 at the beginning of the meeting as preparation for discussion on detailed measure specifications.

1. Overview

The goals of the Asthma/COPD workgroup meeting were to provide detailed recommendations on the following:

(i)   Trigger methodology and the specific trigger codes that would be used to identify the start of a chronic care management relationship between a patient and a clinician;

(ii)   Attribution methodology at the individual clinician level;

(iii)   Length of the attribution window, which is a time period that begins with the start of patient-clinician relationship and marks the period when a clinician can be reasonably held accountable for the care provided to the patient;

(iv)   Sub-groups, variables to include in the risk adjustment model, and measure exclusion criteria; and

(v)   Services that are associated with the clinician's role in managing the chronic condition and that should be included in the cost measure.

The meeting was held in Washington, DC, and attended by 14 of 16 workgroup members (10 attended in person and 4 via webinar). The meeting was facilitated by an Acumen moderator, Nirmal Choradia, and an Acumen Technical Lead, Sam Bounds, as well as a workgroup chair and one of the two CS co-chairs. The Asthma/COPD workgroup chair was Carolyn Fruci, and the Chronic Condition and Disease Management CS co-chair present was David Seidenwurm. The MACRA Episode-Based Cost Measure Workgroup Composition List contains the full list of members, including names, professional roles, employers, and clinical specialties.[4]

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 meeting, workgroup members were provided with information and materials to inform their meeting discussions (see Section 3). During and after the meeting, workgroup members were polled on their preferences, to ensure the measures are developed based on well-documented stakeholder input. Mirroring National Quality Forum practices, the threshold for recommendations was >60% consensus. This document summarizes the workgroup members' input from both the discussion as well as the polls.

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[4] For a list of Asthma/COPD workgroup members in Wave 3, please download the MACRA Episode-Based Cost Measures Measure-Specific Workgroup Composition (Membership) List available on the MACRA Feedback Page (https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/2019-workgroup-comp-list.pdf).

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

2. Summary of Discussion

This section is organized based on meeting sessions and describes workgroup member discussions and recommendations on each topic: defining the episode group and trigger codes, addressing patient cohort sub-populations to ensure meaningful clinical comparison, and assigning clinically-related services to the episode group.

2.1 Defining the Episode Group

In this session, Acumen reviewed the framework for defining an episode group and provided an overview of trigger and attribution methodologies. The goal was to identify what combination of information on administrative claims should indicate the start of a patient-clinician relationship. The same combination of information also identifies the clinician(s) providing the ongoing chronic care management to a patient. A patient would then be attributed to that clinician, and the clinician would be held accountable for the costs of that chronic care.

After Acumen provided a brief presentation regarding helpful claim information and methods for triggering an event, workgroup members discussed and voted on what trigger algorithms, trigger codes, and reaffirming algorithms to recommend for development. Sections 2.1.1 to 2.1.3 provide a summary of the discussion of trigger algorithms, trigger codes, and reaffirming algorithms, respectively. Section 2.1.4 provides a summary of the discussion on attributing the measure to an individual clinician (as identified by a unique Medicare Taxpayer Identification Number and National Provider Identifier pair [TIN-NPI]).

2.1.1 Discussion of Trigger Algorithm

Generally, members were in favor of a trigger algorithm that captures a large number of patients. While an alternate approach of capturing a narrower group of patients (e.g., patients on home oxygen) was discussed to improve comparisons, members ultimately favored a larger population to ensure the number of patients attributed per clinician was sufficiently large to sample a reliable measurement. Members understood that the heterogeneity of patients could be further addressed through sub-groups, risk adjustment, and exclusions.

Members also provided input on the length of the *trigger window*, which is the maximum allowable time between the initial trigger claim and the confirming claim that will identify a chronic patient and the managing clinician(s). There was some concern that a 90-day trigger window would skew the measure towards sicker patients (usually seen every 30-60 days) and miss healthier patients (usually seen every 180 days). Members weighed the tradeoffs of wanting to ensure that the measure captures both sicker and healthier patients, and agreed that a trigger window of 180 days is more appropriate and suitable for chronic care.

Key Takeaways from Discussion and/or Polls for Trigger Algorithms
- The workgroup ultimately voted for a broad trigger algorithm with a 180-day trigger window.

- The workgroup chose the following trigger algorithm: An initial 'Primary Care' Evaluation and Management (E&M) code with a chronic diagnosis and either another 'Primary Care' E&M code with a chronic diagnosis or a chronic Current Procedural Terminology / Healthcare Common Procedure Coding System (CPT/HCPCS) code.

2.1.2 Discussion of Trigger Codes

Workgroup members were in favor of a broader and more inclusive list of trigger codes, which trigger (or open) the episode group and determine the patient cohort that is included in the episode group. The list of preliminary trigger codes presented during the meeting consisted of:
- 'Primary Care' E&M codes, which are a specific subset of E&M codes for physician visits in the outpatient, physician office, nursing facility, or assisted living intended to identify primary care
- ICD-10 diagnoses codes, which indicate the presence of a chronic disease, and
- CPT/HCPCS service codes, which are procedure codes related to the treatment of a chronic condition.

'Primary Care' E&M trigger codes

Workgroup members agreed to include trigger codes related to skilled nursing facility and assisted living facility visits to avoid excluding vulnerable populations. However, they did agree to exclude nursing facility discharge codes from triggering an event to avoid mis-attribution, since a clinician discharging a patient from a nursing facility is unlikely to manage the chronic disease of the patient moving forward. Members discussed potentially adding inpatient E&M codes as trigger codes, although several members expressed their reservations since inpatient clinicians might not see patients on an ongoing basis for chronic care.

ICD-10 diagnoses codes

Workgroup members reviewed the initial list of ICD-10 diagnoses codes and suggested removing (i) unilateral pulmonary emphysema (MacLeod's syndrome), (ii) interstitial emphysema, and (iii) interstitial emphysema originating in the perinatal period. They suggested including trigger codes related to bronchiectasis, including (i) bronchiectasis with acute lower respiratory infection, (ii) bronchiectasis with (acute) exacerbation, and (iii) uncomplicated bronchiectasis if they occur in conjunction with another E&M with a different chronic diagnosis. Alpha-1 antitrypsin (AAT) deficiency was introduced as a potential trigger code, but since not everyone with AAT deficiency has COPD, it was suggested to not be included in the trigger codes list.

An important discussion was whether 'unspecified' codes should be used to indicate the start of a chronic care relationship. The consensus was to include these codes since they help capture a wide range of patients, particularly in primary care settings, and can be appropriate when a patient's severity frequently changes. Members further noted that not including unspecified codes could result in an unintended consequence that incentivizes clinicians to use unspecified codes even more often to avoid triggering an event.

CPT/HCPCS trigger codes

Members discussed including Part D medical therapy drugs and allergen testing/immunotherapy codes since current national guidelines include allergen immunotherapy as a treatment of asthma.

Key Takeaways from Discussion and/or Polls for Initial Asthma/COPD Trigger Codes
- Overall, the workgroup favored a broad list of trigger codes, but agreed to remove discharge nursing facility E&M codes (99315 and 99316) and ICD-10 diagnosis codes related to interstitial emphysema (J982 and P250).

2.1.3   Discussion of Reaffirming Algorithm

Workgroup members had different thoughts on what reaffirming algorithm to choose to indicate the extension or continuation of a clinician or clinician group's responsibility of managing a patient's chronic disease. While there was discussion on keeping it similar to the agreed upon trigger algorithm, overall members agreed to choose a less strict algorithm that requires only a single claim.

Key Takeaways from Discussion and/or Polls for the Reaffirming Algorithm
- The workgroup reached a consensus favoring the less strict reaffirming event of a single claim that is either a primary care E&M with a chronic diagnosis or a chronic CPT/HCPCS.

2.1.4   Discussion of TIN-NPI Attribution Methodology

Workgroup members provided input on the TIN-NPI attribution algorithm options, which Acumen would take into consideration during the measure development process. It was noted that the level of attribution (TIN vs. TIN-NPI) depends on what the primary goal of the cost measure is, either to measure cost performance at a higher level (TIN-level attribution), or to measure cost performance at a more detailed level (TIN-NPI-level attribution) that helps inform individual clinicians on their areas of improvement. There was a recommendation to attribute the measure at the TIN-NPI level to make sure that providers get more actionable information on their performance. There was a also comment favoring attributing any TIN-NPI within the TIN billing greater than or equal to 30 percent of the patient's triggering E&M codes (with the chronic condition diagnoses) during the trigger events' one-year attribution window. This was because this method would allow for the most number of clinicians who have a significant role in a patient's care to be attributed and get actionable feedback on their performance.

2.2   Addressing Patient Sub-Populations for Meaningful Clinical Comparison

Members discussed in detail how to account for various sub-populations within the Asthma/COPD episode group. Sub-populations refer to patient cohorts as defined by their pre-existing conditions and characteristics. Addressing these patient cohorts ensures meaningful clinical comparisons, including (i) stratifying into mutually exclusive, exhaustive sub-groups to define more homogeneous patient cohorts (Section 2.2.1), (ii) defining covariates in the risk adjustment model (Section 2.2.2), (iii) identifying beneficiaries for exclusion (Section 2.2.3), and (iv) monitoring for future consideration (Section 2.2.4).

After Acumen provided a description of each method and presented analytic data on suggested patient cohorts, workgroup members discussed their preferences for how to address each patient cohort.

2.2.1 Sub-Groups

Workgroup members were in favor of creating sub-groups for patients with asthma diagnoses, COPD diagnoses, and both asthma and COPD diagnoses. Members suggested a sub-group that includes patients with both asthma and COPD diagnoses since these are two different diseases being treated, and further mentioned that a category with both asthma and COPD diagnoses is important since 20 percent or more of the primary comorbidity of COPD is asthma.

There was discussion about potentially stratifying by dementia. However, members pointed out the difficulty in coding or capturing an accurate diagnosis of dementia due to its variability and overall recommended not creating a dementia sub-group.

Key Takeaways from Discussion and/or Polls for Sub-Groups
- The workgroup ultimately recommended the following sub-groups:
    - Patients with an asthma diagnosis only, without a COPD diagnosis
    - Patients with a COPD diagnosis only, without an asthma diagnosis
    - Patients with both an asthma and a COPD diagnoses

2.2.2 Risk Adjustors

The workgroup briefly discussed which variables to include as risk adjustors, as outlined in the bulleted lists below, though the final recommendations were gathered through surveys.

Workgroup members agreed to risk adjust for patients on home oxygen, who use a home hospital bed, and who use a wheelchair since these are high-risk factors and variables that assess the impaired functional independence/frailty of a patient. Members also agreed to include recent asthma and COPD admissions as risk adjustors by number of occurrences in the previous year. Workgroup members suggested risk adjusting for patients with depression and anxiety, which are strong predictive factors in clinician spending.

The workgroup emphasized the importance of examining social determinants of health for potential risk adjustment. Acumen noted that the team conducts ongoing testing on the effects of social risk factors throughout the measure development process as well as after the measure is fully specified, and would continue to evaluate them for chronic episode-based cost measures as well. Acumen further noted that in past testing, little variation in measure performance was found after the inclusion of social risk factors, indicating that the standard risk adjustment model is effective in accounting for those factors.

Key Takeaways from Discussion and/or Polls for Risk Adjustors
- Overall, workgroup members recommended adding the following risk adjustors:
    - Long-Term Steroid Use
    - Intubation for Respiratory Issue
    - Obesity
    - Depression and Anxiety
    - Chronic Hypercapnic Respiratory Failure (BiPAP)
    - Obstructive Sleep Apnea
    - Recent All-Cause Admission
    - Recent Asthma Admissions
    - Recent COPD Admissions
    - Home Oxygen

- Home Hospital Bed
- Wheelchair
- Pulmonary Rehabilitation
- They also discussed the following patient cohorts as potential risk adjustors:
    - Recent Respiratory Infection Admission
    - Recent Asthma Emergency Room (ER)/Observation
    - Recent COPD ER/Observation
    - Recent non-COPD/Asthma Respiratory ER/Observation
    - Nursing Facility Physician Visits

2.2.3   Exclusions

The workgroup was in general agreement with the list of exclusion criteria during the meeting. Members agreed to exclude small groups of patients who have very different care needs from the overall patient cohort.

<u>Key Takeaways from Discussion and/or Polls for Exclusions</u>
- Workgroup members recommended excluding patients with the following conditions/procedures in the 120 days before the trigger event:
    - Who underwent a Lung Transplant
    - In a Long-Term Care Hospital (LTCH)
    - With Lung Cancer
    - Who Underwent Lung Surgery
    - With Cystic Fibrosis
- They also discussed potentially excluding patients with interstitial pulmonary fibrosis.

2.2.4   Monitor for Testing

The workgroup was in general agreement with the list of patient cohorts to monitor during the meeting. Members suggested monitoring all Part D related patient cohorts since they are standard therapies.

<u>Key Takeaways from Discussion and/or Polls for Monitors</u>
- The workgroup recommended monitoring the following patient cohorts for testing:
    - Any Inhaler User
    - Inhaled Steroids
    - Long Acting Bronchodilators
    - Short Acting Bronchodilators
    - Short but not Long Acting Bronchodilators with Inhaled Steroid Use
    - Short and Long Acting Bronchodilators without Inhaled Steroid Use
    - Short and Long Acting Bronchodilators with Inhaled Steroid Use

2.3   Assigning Services to the Episode Group

Acumen described the purpose of service assignment so that members could identify which services associated with the clinician's role in managing the chronic condition should be included in the cost measure. These assigned services should be inclusive enough to identify measurable performance difference between clinicians but also not introduce excessive noise. Acumen also re-introduced the concept of the attribution window to facilitate this session's

discussion. Section 2.3.1 presents the discussion of attribution window length, and Section 2.3.2 summarizes the assigned services discussion.

2.3.1 Discussion of Attribution Window Length

Members discussed what attribution window length they preferred and weighed the options between long and short attribution windows. There was general consensus among workgroup members to have a one-year attribution window as opposed to a six-month attribution window. It was noted that a one-year attribution window length lines up with other elements in MIPS and is a better option for chronic measures.

Members did, however, acknowledge the disadvantages of a longer attribution window. One disadvantage is the impact of changes in insurance or the healthcare system that are out of the control of the patient or provider and that would be difficult to account for. Another disadvantage is that if a patient moves away or changes providers prior to the end of the attribution window, the clinician can still be held accountable for/attributed to that patient. There was also discussion on how to include costs for patients who die within an attribution window, which would be accounted for by either (i) including the average costs for the months during which the patient was alive, or (ii) excluding all costs associated with the patient.

Key Takeaway from Discussion and/or Polls for Attribution Window Length
- The workgroup ultimately recommended a one-year attribution window length.

2.3.2 Discussion of Assigned Services

Approximately three weeks prior to the workgroup meeting, workgroup members had participated in an optional *Categories of Assigned Services Survey* to provide preliminary input on the types of services to assign to the Asthma/COPD measure. This was intended to serve as the starting point for discussion during this portion of the session.

The workgroup briefly discussed the following asthma/COPD-related service categories that they wanted to assign: diagnostic and lab testing, durable medical equipment, acute hospitalization and urgent care, major lung and cardiac procedures, physical therapy, occupational therapy, speech-language pathology, and rehabilitation/aftercare. The workgroup also recommended against assigning services related to cancer and benign neoplasms.

Workgroup members provided their input on these categories of assigned services as well as other categories of assigned services that they did not have time to fully discuss during the meeting in a follow-up survey after the meeting. Acumen clinical and technical teams will take into consideration these results in producing a draft set of measure specifications for future refinement.

2.4 Next Steps

In the final session, Acumen provided an overview of the next steps in the measure development process. Acumen will gather and review the input provided during the workgroup meeting's discussions and polls to create draft measure specifications. These can then be used for future testing and potential measure refinement.

After the meeting, Acumen distributed the *Workgroup Meeting Follow-Up Survey* to gather input from members on attribution window length and services assignment questions, which were discussed during one of the last sessions of the meeting, and on several follow-up confirming questions related to earlier survey questions about the reaffirming trigger algorithm and patient cohorts. The survey also consisted of open comment boxes, including a question about the patient, family, and caregiver perspective.

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

Section 3.1 provides an overview of materials shared with the workgroup members prior to the meeting. Section 3.2 provides a recap of the main concepts of the chronic measure development process and the chronic cost measure framework presented by Acumen. Section 3.3 presents various stakeholder input and research from an environmental scan conducted by Acumen that workgroup members could consider.

3.1 Overview of Meeting Materials

One week prior to the meeting, workgroup members were provided with the following information to inform their discussions and votes during the meeting:

- *Measure Development Guide*, which provided a general overview of chronic condition episode-based cost measures;
- *Analytic Key Findings*, which summarized a selection of high-level key findings from empirical analyses prepared for the meeting;
- *Chronic Episode Group Measure Summary Investigation Workbook*, which provided background information on the Asthma/COPD episode group to guide members in providing recommendations on the measure specifications, including triggering methodology, clinician-level attribution, and attribution window;
- *Sub-Population Investigation Workbook*, which provided information on frequency and cost for patient sub-populations, or patient cohorts, to inform discussions on sub-groups, exclusions, and risk adjustors for the cost measure;
- *Candidate Services Investigation Workbook*, which contained information on the utilization, frequency, cost, and timing of the most frequently provided services for patients with asthma/COPD to inform discussion on service assignment;
- *Literature Review/Quality Alignment*, which provided an overview of opportunities for improvement for the cost measure identified through the literature, and quality measures with potential for alignment; and
- *Person and Family Committee (PFC) Findings*, which summarized input from the PFC regarding patient and caregiver perspectives.

The materials shared were based on analyses run on a number of example triggering methodologies with preliminary trigger codes and specifications, which will be refined during measure development.

3.2 Overview of Chronic Cost Measure Development and Framework

In the beginning of the meeting, Acumen presented a short session to cover the following topics:

- Role of episode-based cost measures within the context of the cost performance category of MIPS.
- Recap of measure development to-date with 19 acute inpatient medical condition and procedural episode-based cost measures developed.
  - Eight of these are currently used in the 2019 MIPS performance period alongside two broader cost measures that have been in used since the 2017 performance period: Medicare Spending Per Beneficiary and Total Per Capita Cost.
- Details of Acumen's measure development approach, which includes stakeholder input throughout, including a guiding Technical Expert Panel (TEP), detailed clinical workgroups, and PFC providing patient and caregiver perspectives.[5]
- Overview of Wave 3 CS structure and input on cost measure components, which include defining an episode group, attributing episodes to clinicians, assigning costs, risk adjusting, and aligning cost with quality.

Acumen also introduced the chronic cost measure framework by defining key components and terms, including:
- *Trigger event* – pair of services that identify patients with a chronic illness and indicate that a clinician (or clinician group) is starting or continuing management of the patients' chronic disease;
- *Attribution window* – period during which a clinician is measured for an attributed patient and can reasonably be held responsible for associated patient costs, beginning on the earliest date of a trigger event;
- *Reaffirming event* – service(s) that show there is a continuation of a clinician's care with the patient after being previously identified (via a trigger event). Given the continued nature of chronic disease management, once a managing relationship is identified, fewer services may be required to reaffirm and extend a clinician's or clinician group's responsibility managing a patient's chronic disease;
- *Service assignment* – services and their associated costs that are clinically related and are under the reasonable influence of the attributed clinician and that are included during an attribution window for cost measurement as observed cost;
- *Performance period* – static year-long period (calendar year) in which a clinician will be measured;
- *Risk adjustment* – statistical measurement, or regression, to predict the expected spending for patients while accounting for clinical characteristics of the patient outside of the clinician's reasonable influence that can impact spending; and
- *Measure calculation* – comparison of each attributed patient's normalized observed spending to the expected spending as predicted by risk adjustment, averaged across all attributed patients for a clinician. As a result, a measure score of greater than one indicates that a clinician is more expensive than predicted and a measure score of less than one indicates that a clinician is less expensive than predicted.

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[5] Additional detail on the measure development process and stakeholder roles is available on the MACRA Feedback Page within the Episode-Based Cost Measure Field Testing Measure Development Process document (https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/2018-measure-development-process.pdf).

3.3 Overview of Stakeholder Input and Environmental Scan

Prior to discussion on measure specifications, Acumen presented additional information for workgroup members to consider, including (i) a summary of TEP recommendations (ii) existing literature that identifies opportunities to improve cost performance and care outcomes, and (iii) a list of quality measures for potential alignment consideration.

Additionally, the Westat team provided a summary of the PFC input on cost measure development. The PFC was a focus group of Medicare patients and caregivers that shared their feedback and perspectives regarding chronic care management and clinician cost performance.

Please contact **Acumen MACRA Clinical Committee Support** at macra-clinical-committee-support@acumenllc.com if you have any questions. If you are interested in receiving updates about MACRA Episode-Based Cost Measures, please complete this Mailing List Sign-Up Form to be added to our mailing list.