

Asthma/COPD Workgroup Service Assignment and Refinement (SAR) Meeting Summary

MACRA Episode-Based Cost Measures: Measure-Specific Workgroups Service Assignment and Refinement (SAR) Webinar, January 10, 2020
January 2020

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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 4 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 workgroups³ (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. Following the workgroup in-person meetings, Acumen convened the workgroups again for a Service Assignment and Refinement (SAR) webinar to revisit the specifications recommended during the in-person meeting and refine the measures prior to national field testing.

¹ For information on measure development in Waves 1 and 2 (2017 and 2018), refer to [Episode-Based Cost Measure Field Testing Measure Development Process](https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/2018-measure-development-process.pdf) 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 Service Assignment and Refinement (SAR) Webinar, January 10, 2020

This meeting summary document outlines the purpose, discussion, and recommendations from the Asthma/COPD workgroup Service Assignment and Refinement (SAR) 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 at the beginning of the webinar as preparation for discussion on detailed measure specifications.

1. Overview

The goals of the Asthma/COPD workgroup webinar on January 10, 2020, were to provide detailed recommendations on the following:

- (i) Trigger and attribution validity to discuss whether the current methodology attributed appropriate clinician group(s) in terms of specialty and Part D billing profile
- (ii) Sub-group specifications to determine if the claims-based sub-group methodology accurately classifies patients as asthma, COPD, and both asthma and COPD
- (iii) Attribution methodology for individual clinicians (identified by a unique Taxpayer Identification Number and National Provider Identifier pair, or TIN-NPI) to discuss how patients should be attributed to TIN-NPIs for TIN-NPI level reporting of the measure
- (iv) Service assignment to review initial service assignment rules and discuss pending questions on how inpatient and post-acute care services should be assigned to an episode
- (v) Risk adjustment to gather input on the initial risk adjustment variables and discuss pending questions on risk adjustor construction

The meeting was held online via webinar, and attended by 7 of the 16 workgroup members (2 of those unable to attend provided recommendations to the Acumen team for consideration during the webinar). The webinar was facilitated by an Acumen moderator, Nirmal Choradia. The Asthma/COPD workgroup chair was Carolyn Fruci, who also facilitated meeting discussions, and the Chronic Condition and Disease Management CS co-chairs were David Seidenwurm and Dheeraj Mahajan. 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 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. Mirroring National Quality Forum practices, the threshold for recommendations was >60% consensus for poll responses. This

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](https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/2019-workgroup-comp-list.pdf) 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) (<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/2019-workgroup-comp-list.pdf>)

document summarizes the workgroup members' input from both the discussion as well as the polls. Key takeaways summarized in the sections below were considered as Acumen clinical and technical teams worked to operationalize recommendations for specifications, balancing factors such as clinical coherence, technical feasibility, and statistical integrity. Workgroup members will have the opportunity to refine specifications in future input opportunities.

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 Sessions and Discussion

This section is organized based on meeting sessions and describes workgroup member discussions and recommendations on each topic: reviewing the trigger and attribution methodology validity, discussing sub-group specifications, discussing TIN-NPI attribution, assigning clinically-related services to the episode group, and reviewing risk adjustment variables and construction.

2.1 Reviewing Trigger and Attribution Methodology

Prior to the discussion, Acumen reviewed topics on trigger and attribution methodology. Section 2.1.1 provides a summary of the discussion on trigger and attribution methodology validity for the Asthma/COPD cost measure, Section 2.1.2 provides a summary of the discussion on sub-group specifications, and Section 2.1.3 provides a summary of the discussion on the TIN-NPI level attribution for the episode group.

2.1.1 Discussion of Trigger and Attribution Methodology Validity

Acumen presented data on which specialties are attributed the Asthma/COPD measure and their involvement in a patient's Part D drug management. Overall, workgroup members agreed that the current attribution methodology appropriately defines the patient population for the cost measure. Workgroup members also agreed that the list of specialties attributed most frequently seemed reasonable. Several members thought it was appropriate that cardiologists were among the top 10 most attributed specialty as some cardiologists serve as primary care clinicians for asthma/COPD patients. There was concern that certain specialties do not commonly treat asthma/COPD patients but may be attributed such as surgeons, oncologists, and gastroenterologists. There was discussion on whether or not to exclude allergists, since they might not manage COPD patients, but in response there was a suggestion that many allergists drive the management of asthma patients. Additionally, with cardiologists, there was a concern that some may be involved due to management of right-sided heart failure from COPD rather than management of the COPD itself. Ultimately, workgroup members did not reach consensus to exclude cardiologists. There was one comment that the validity of the methodology is easier at the TIN level given that it is broader, whereas at the TIN-NPI level there could be more variation in the kind of care provided due to clinician specialty. Similarly, there was a comment about looking into geographic variation due to virus exposure as well as the effects of seasonal variation in different areas.

Key Takeaways from Discussion and/or Polls for Trigger and Attribution Methodology Validity:

- The workgroup agreed that the current trigger/attribution approach has reasonable face validity.
- The workgroup agreed to exclude the following specialties from the attribution methodology:
 - Surgeons;

- Oncologists; and
- Gastroenterologists.
- The workgroup agreed to not exclude allergists from the attribution methodology.
- Based on the workgroup's recommendation, cardiologists will not be excluded.

2.1.2 Discussion of Sub-Group Specifications

During the August 2019 in-person meeting, workgroup members suggested developing a robust claims-based methodology to identify patients with asthma diagnoses, COPD diagnoses, and both asthma/COPD diagnoses so that the measure could be sub-grouped on these patient characteristics. Results from preliminary analyses for patient coverage for these 3 sub-groups stratified by different diagnosis frequency thresholds showed a nearly 10% increase in the number of patients in the both asthma/COPD diagnoses group when the threshold increased from 66% to 85%. Based on these results, workgroup members overall agreed with using an 85% diagnosis threshold (where 85% or more of International Classification of Diseases, 10th Revision (ICD-10) diagnosis codes are either asthma or COPD) to distinguish between these 3 sub-groups. They also suggested looking into Part D billing and other services that could represent and better distinguish between asthma only and COPD only patients.

Key Takeaways from Discussion and/or Polls for Sub-Group Specifications:

- The workgroup agreed with using the 85% diagnosis threshold to distinguish between patients with asthma, COPD, and both asthma and COPD.

2.1.3 Discussion of TIN-NPI Level Attribution

During the discussion on how patients should be attributed to TIN-NPIs for TIN-NPI reporting, workgroup members were in general agreement that once the attributed TIN is identified, only those TIN-NPIs who engage with the patient more than a certain amount should be attributed an episode. This would both allow identification of providers who guide patients' care and provide accountability among a group of clinicians. Further analysis on the threshold for TIN-NPI attribution will be conducted by the Acumen team. There was a comment suggesting that TIN-NPI attribution will be more accurate in multi-specialty TINs rather than single-specialty TINs.

Key Takeaways from Discussion and/or Polls for TIN-NPI Level Attribution:

- The workgroup agreed that once the attributed TIN is identified, only those TIN-NPIs who engage with the patient more than a certain amount should be attributed.

2.2 Assigning Services to the Episode Group

Acumen described the purpose of service assignment so that members could identify and discuss which services associated with the clinician's role in managing the condition should be included in the cost measure. These assigned services should be inclusive enough to identify a measureable performance difference between clinicians but also not introduce excessive noise. The workgroup reviewed the initial service assignment rules developed based on recommendations from the August 2019 workgroup in-person meeting and were also asked pending questions on service assignment. Section 2.2.1 presents the discussion of how inpatient and post-acute care services should be assigned to an episode, and Section 2.2.2 summarizes the assigned services discussion.

2.2.1 Discussion of Inpatient and Post-Acute Care Services

Workgroup members discussed pending questions on service assignment, including how inpatient and post-acute care services should be assigned to an episode. Workgroup members agreed that inpatient stays are an important complication of care that need to have their costs

fully included. However, for skilled nursing facility (SNF) stays associated with the inpatient stay, the workgroup believed that patients needing this care are inherently more complex and that while related, the cost of SNF should be restricted to 14 or 30 days. There was one comment on not assigning home health services due to the new reimbursement changes and variations in the home health payment model, but with the understanding that this is an important part of care for these patients. Another consideration that was brought up was the importance of knowing where a patient was admitted from when assigning post-acute care costs. There was a comment that SNF care after acute hospitalization if a patient is coming from a SNF perhaps should not be included.

Key Takeaways from Discussion and/or Polls for Inpatient and Post-Acute Care Services:

- Members discussed including SNF costs related to asthma/COPD but restricting the attributed costs to a certain number of days, but ultimately did not reach consensus. This may be revisited after field testing.
- The workgroup discussed including the costs of inpatient rehabilitation facilities, long-term hospital care, and home health related to asthma/COPD in the episode but restricting the costs of these assigned services to a certain number of days. Ultimately, the workgroup did not reach a consensus on these services, but this may be revisited after field testing.

2.2.2 Discussion of Assigned Services

Workgroup members provided input on additional service assignment rules. Members suggested keeping the list of durable medical equipment narrow and generally limited to nebulizers, home oxygen, and cough stimulating devices. Some members pointed out that while services related to non-specific symptoms could be caused by other disease processes, it is important to include these services as these other comorbidities are being accounted for in risk adjustment, which will lead to the measure identifying which clinicians are taking better care of the primary disease process. However, others mentioned that these services are not specific and may be difficult to associate with asthma/COPD. Overall, there was general agreement to include the cost of services for cough symptoms and abnormal breathing but not generalized weakness or chest pain. Workgroup members discussed including direct pulmonary complications from asthma/COPD such as upper respiratory infections or bronchitis but not including more indirect complications such as renal failure or diabetic ketoacidosis. The group was undecided about including treatment and hospitalizations for pulmonary embolism, arrhythmia, heart failure, and myocardial infarction during webinar discussions and ultimately suggested not including these as assigned services at the time. Other pending questions on service assignment, including whether or not to include surgical procedures, treatment of abnormal lung findings or lung cancer screening, Part B medications that may have a Part D analog, and costs of cardiac stress testing and arterial blood gas tests, were included in the *SAR Webinar Poll* after the meeting for workgroup members to vote on.

Key Takeaways from Discussion and/or Polls for Assigned Services:

- The workgroup recommended to generally not assign services for any durable medical equipment other than nebulizers, home oxygen, and cough stimulating devices.
- The workgroup recommended to assign the cost of services for cough symptoms and abnormal breathing, and but not assign the cost of services for syncope and collapse, dizziness and fatigue, chest pain, muscle weakness, and generalized weakness. This may be refined in future input opportunities.
- The workgroup recommended to assign treatment and hospitalizations for upper respiratory infections, bronchitis, and influenza.

- The workgroup suggested not assigning services for treatment and hospitalizations for the following, which may be refined in future input opportunities:
 - Arrhythmias;
 - Pleural effusion;
 - Heart failure or myocardial infarction;
 - Electrolyte abnormalities;
 - Pulmonary embolism, deep vein thrombosis;
 - Respiratory hemorrhage;
 - Renal failure; and
 - Diabetic ketoacidosis.
- The workgroup discussed not assigning surgical procedures, but did not reach consensus.
- The workgroup discussed not assigning the treatment of abnormal lung findings or lung cancer screening, but did not reach consensus.
- The workgroup recommended to assign Part B medications that may have a Part D analog.
- The workgroup recommended to assign the costs of arterial blood gas tests.
- The workgroup suggested to assign the costs of cardiac stress testing, but did not reach consensus.

2.3 Reviewing Risk Adjustment Variables and Construction

Acumen explained how risk adjustment variables are used in the regression model to predict expected cost and presented analytic data on initial risk adjustment variables based on recommendations from the workgroup during the August 2019 workgroup in-person meeting. Workgroup members discussed changes to the risk adjustment variables and discussed pending questions on risk adjustor construction. Section 2.3.1 summarizes the discussion on risk adjustment variables, Section 2.3.2 summarizes the discussion on exclusions, and Section 2.3.3 presents the discussion on criteria used for risk adjustors, clinician group's influence on risk adjustors, and the lookback period to identify risk adjustors.

2.3.1 Discussion of Risk Adjustor List

Workgroup members discussed including additional risk adjustment variables, including: smoking, number of asthma/COPD admissions, number of asthma/COPD emergency room (ER) visits, and recent all-cause admission. They agreed to add smoking as a risk adjustment variable given the clinical effect of smoking on asthma/COPD patients, and given the difference of cost between the mean observed grouped annualized cost (\$6,799) and mean risk-adjusted annualized cost (\$4,648) when looking at a large group of patients, which indicates that the current risk adjustment model does not sufficiently address the differences in these patients. For recent all-cause admission, workgroup members discussed shortening the lookback period to 90 days to adjust for patients who had a recent hospital visit and may be considered sicker.

Key Takeaways from Discussion and/or Polls for Risk Adjustor List:

- The workgroup recommended including the following risk adjustment variables:
 - Smoking
 - Number of asthma/COPD admissions
 - Number of asthma/COPD ER visits
 - Recent all-cause admission within 90 days prior

2.3.2 Discussion of Exclusions

Workgroup members also briefly discussed exclusions for the Asthma/COPD measure. There was a comment about excluding patients with stem cell transplant and sickle cell disease patients due to their inherent differences. Another comment expressed concern about asthma/COPD patients with anxiety and bipolar disorders who may sabotage their own care and exacerbate their asthma/COPD condition.

Key Takeaways from Discussion and/or Polls for Exclusions:

- The workgroup recommended excluding patients with stem cell transplant and sickle cell disease.

2.3.3 Discussion of Risk Adjustor Construction

The workgroup members discussed using stricter criteria (using 2 claims to construct a Hierarchical Condition Category model) for identifying comorbidities used in risk adjustment to make the risk adjustment variables more effective and avoid false positives, though ultimately consensus was not reached for this approach of using 2 claims. There was also agreement to not exclude the attributed clinicians' claims. The rationale for this included how a large TIN may be responsible for the overall management of a patient and thus removing their diagnoses may make the patient appear healthier than they actually are. Similarly, in a rural setting, a single provider may do a majority of the care for a patient due to access to care issues and removing their billing claims from risk adjustment would make their patients appear healthier as well.

Workgroup members briefly discussed the tradeoffs of what lookback period to use for identifying risk adjustors, where using a longer lookback period would capture more diagnoses for risk adjustor creation but decrease the number of episodes captured. Workgroup members expressed some agreement with extending the lookback period to 180 days but ultimately recommended retaining the standard lookback period of 120 days.

Key Takeaways from Discussion and/or Polls for Risk Adjustor Construction:

- The workgroup discussed using stricter criteria to identify comorbidities used in risk adjustment, but ultimately did not reach consensus on this approach.
- The workgroup agreed to keep all diagnoses from the attributed clinician group in risk adjustment.
- The workgroup recommended to keep the lookback period to 120 days.

2.4 Next Steps

In the final session, Acumen provided an overview of the next steps in the measure development process. After the meeting, Acumen distributed the *SAR 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 how to build opportunities for measure performance improvement into the measure specifications and to share any additional thoughts on the measure.

Acumen will gather and review the input provided during the SAR webinar discussions and poll to create updated measure specifications. These specifications will be posted publicly as a part of upcoming national field testing. During the field testing period, Field Test Reports for the Wave 3 measures under development will be available to clinicians and will contain information showing how clinicians would perform for the measures, based on the measure specifications at that time. There will also be an opportunity for all stakeholders to provide detailed feedback about the measures during field testing.

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 SAR webinar, and Section 3.2 provides a recap of the main concepts of the chronic cost measure development process and framework presented by Acumen.

3.1 Overview of Meeting Materials

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

- *Agenda and Slide Deck*, which included a list of discussion questions to be considered prior to the meeting and discussed during the webinar
- Investigation workbooks presenting detailed findings from empirical analyses:
 - *Sub-Population Analysis Workbook*, which provided the frequency and costs associated with different sub-populations within the episode group's patient cohort to help inform discussions on sub-groups, risk adjustors, and exclusions
 - *Candidate Services Over Time Analysis Workbook*, which provided statistics on the use of the top 300 Parts A and B services billed for patients with chronic conditions to inform discussions on patterns of care and variation of cost
 - *Trigger and Attribution Validity Analysis Workbook*, which provided statistics testing the validity of the current attribution methodology based on profiling the resulting attributed TINs by their Part D billing patterns and specialty composition

The materials shared were based on analyses run on triggering methodologies with trigger codes and specifications developed based on input from the August 2019 workgroup in-person meetings.

3.2 Overview of Chronic Cost Measure Development and Framework

At the beginning of the meeting, Acumen presented a brief introductory session on the chronic cost measure framework by revisiting key components and terms initially discussed during the workgroup in-person meeting, including:

- *Trigger event* – pair of services that identify the start or continuation of a clinician's or clinician group's management of a patient's chronic disease
- *Trigger window* – the maximum allowable time between the initial trigger code and the confirming claim that will trigger an attribution window
- *Attribution window* – the period during which a clinician or clinician group can reasonably be held responsible for associated patient costs, beginning on the earliest date of a trigger event
- *Service assignment* – services and their associated costs that are clinically related and are under the reasonable influence of the attributed clinician or clinician group that are assigned during an attribution window
- *Reaffirming event* – the service identified during an attribution window that reaffirms and extends a clinician's or clinician group's responsibility managing a patient's chronic disease
- *Episode* – the portion of the overall time period of a clinician's or clinician group's responsibility for managing a patient that is assigned to a performance period in which it ends
- *Performance period* – a static year-long period (calendar year) in which a clinician or clinician group will be measured

- *Risk adjustment* – aims to facilitate a more accurate comparison of cost across clinicians or clinician groups by adjusting for factors outside of the clinician’s reasonable influence that can impact spending
- *Measure calculation* – patient observed spending compared to the expected spending as predicted by risk adjustment, averaged across all attributed patients for a clinician or clinician group, where 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

There was also a recap on the different sources of information for the workgroup to consider, including analyses and data as well as the perspectives of patients and caregivers through Person and Family Engagement (PFE).

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.