Diabetes Workgroup Service Assignment and Refinement (SAR) Meeting Summary

MACRA Episode-Based Cost Measures: Measure-Specific Workgroups Service Assignment and Refinement (SAR) Webinar, January 9, 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 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. 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 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.

Diabetes Service Assignment and Refinement (SAR) Webinar, January 9, 2020

This meeting summary document outlines the purpose, discussion, and recommendations from the Diabetes 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 Diabetes workgroup webinar on January 9, 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 type 1, type 2, or unknown/mixed diabetes mellitus
(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 10 of 19 workgroup members. The webinar was facilitated by an Acumen moderator, Suzann Pershing. The Diabetes workgroup chair was Terry Lee Mills, who also facilitated meeting discussions, and the Chronic Condition and Disease Management CS co-chairs were Dheeraj Mahajan and 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 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 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

[4] For a list of Sepsis 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)

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 Diabetes 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 specialties that are most frequently attributed the Diabetes episode group and the top 10 drugs billed by the attributed clinician groups under the current trigger and attribution methodology. Overall, the members agreed that the current methodology has face validity and attributes appropriate specialties. Several members noted that it was appropriate that cardiologists were among the top 10 attributed specialties, since some cardiologists serve as primary care clinicians for diabetic patients. Similarly, the members indicated that some endocrinologists work in multi-specialty groups and, thus, would appear lower on the list of clinicians being frequently attributed the measure. Members did not suggest any additional criteria that would ensure that appropriate clinician group specialties are attributed the Diabetes measure.

While reviewing the top 10 drugs billed by attributed clinician groups, the workgroup noted the presence of a few drugs unrelated to diabetes treatment (top 10 drugs billed by attributed TIN include: Metformin, Atorvastatin Calcium, Amlodipine Besylate, Lisinopril, Furosemide, Gabapentin, Levothyroxine Dosium, Omeprazole, Insulin Glargine, and Simvastatin). While the workgroup did have an explanation for some of those drugs (e.g., Levothyroxine is frequently used for patients with thyroid issues and Gabapentin is used to treat neuropathy), the members suggested further analyses to determine which clinicians bill drugs to diabetic patients that are not diabetes-related. The workgroup noted surprise that sulfonylurea medications were not more common, and that metformin and insulin prescriptions were not prescribed by a larger proportion of attributed TINs (for reference, the mean proportion of all Part D claims billed by an attributed TIN for metformin was 65.5% and for insulin was 53.0%, based on preliminary analyses). Acumen noted that the numbers presented in the initial meeting materials were specific to a given attributed TIN; however, per measure specifications, episodes may be attributed to multiple TINs. The proportions of diabetes medications prescribed by any attributed TIN were higher (approximately 77% of metformin prescriptions billed by any attributed TIN and approximately 72% of insulin prescriptions billed by any attributed TIN). These numbers were

deemed by the workgroup to be more reasonable. However, the workgroup did suggest additional analyses, including identifying sources of insulin prescriptions from non-attributed TINs, and determining the top 15 diabetes-specific medications, including proportion billed by any attributed TIN. Acumen will investigate this information for further discussion in the next workgroup meeting.

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

- The workgroup agreed that the current trigger and attribution methodology has face validity and overall attributes appropriate clinicians.
- Members did not suggest any additional criteria that would ensure that appropriate clinician group specialties are attributed the Diabetes measure.
- Workgroup members suggested additional analyses of medication billing practices, including identifying sources of insulin prescriptions from non-attributed TINs, and determining the top 15 diabetes-specific medications, including proportion billed by any attributed TIN.

2.1.2 Discussion of Sub-Group Specifications

During the Diabetes in-person workgroup meeting in August 2019, members suggested developing a claims-based methodology to identify type 1 and type 2 diabetics so that the episode group could be stratified (or "sub-grouped") on these patient characteristics. During the webinar, workgroup members reviewed Acumen's approach that combines results from the following 4 independent methods focusing on different claims-based markers of type 1 or type 2 diabetes found during a year of the patient's data: *(i) All-Claims Diagnoses, (ii) E&M-Claim Diagnoses, (iii) Endocrinologist-Billed Diagnoses, and (iv) Drugs and Devices.*

The members agreed that the proposed algorithm appropriately separates type 1 and type 2 diabetics. Specifically, they noted that the proportion of patients assigned to each diabetes type was reasonable (1.7% of patients were identified as type 1, 93.6% as type 2, and 2% as either unknown or a mix of type 1 and type 2. These percentages do not add to 100% due to exclusions for patients with certain clinical characteristics.). They also suggested either excluding or weighting method *(iv) Drugs and Devices* less, since durable medical equipment and oral hypoglycemic medications might be used for patients with either type 1 or type 2 diabetes and, thus, might misclassify patient diabetes types. In particular, newer Continuous Glucose Monitor (CGM) devices may be used for type 2 diabetes. One member also suggested that method *(iii) Endocrinologist-Billed Diagnoses* should be given more weight.

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

- Members agreed that the proposed algorithm appropriately separates type 1 and type 2 diabetes.
- Members agreed to exclude method *(iv) Drugs and Devices* from the methodology.
- Members did not reach an agreement on whether any of the methods should be given more weight.

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, members were in initial agreement that once the attributed TIN is identified, either every TIN-NPI in that TIN or only one TIN-NPI should be attributed. There were concerns that an appropriate threshold for attributing multiple TIN-NPIs based on proportion of patient encounters would be difficult to establish and would vary based on practice size and type. Discussion ultimately leaned toward attribution to every TIN-NPI who manages the patient under an

attributed TIN. This would encourage accountability among clinicians managing a patient's diabetes and related complications as well as not disadvantage solo practitioners.

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

- The workgroup discussed that once the attributed TIN is identified, most likely every TIN-NPI in that TIN should be attributed.
- Members did not suggest any additional criteria to restrict the scope of attributed specialties.

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 (PAC) 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 to restrict the number of days in post-acute care that would be attributed to Diabetes episodes, to avoid high-outlier costs beyond the attributed clinicians' influence on Skilled Nursing Facility (SNF), Inpatient Rehabilitation Facility (IRF), and Long-Term Care Hospital (LTCH) settings. The members noted that SNF services should be limited to 14 days since longer SNF stays could be due to treatments unrelated to diabetes. The workgroup also felt that Home Health care could be attributed without any restrictions since it has relatively low costs and helps avoid future hospitalizations.

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

- Members discussed including SNF, IRF, and LTCH costs but restricting the attributed costs to 14 days, but ultimately did not reach consensus on these services. This may be revisited after field testing.
- Members discussed including Home Health related to diabetes without any restrictions, but ultimately did not reach a final consensus. This may be revisited after field testing.

2.2.2 Discussion of Assigned Services

During the meeting, workgroup members provided input on additional service assignment rules. Members agreed to assign services for direct diabetes complications, such as diabetic ketoacidosis (DKA), hypoglycemia, and electrolyte abnormalities. Members also suggested including services for long-term but likely known related outcomes, except acute kidney disease (AKD)/acute renal failure (ARF) since those may not be directly influenced by the attributed provider. Members pointed out that routine lab tests, diabetes education, and medical nutrition therapy should also be included as assigned services since these are important in ensuring that patients receive appropriate care. Finally, workgroup members indicated that wound care/Durable Medical Equipment (DME) should be assigned only if associated with a diabetes-specific diagnosis.

Workgroup members also discussed services that should not be assigned to the Diabetes episode group. Members suggested not including cardiac testing. It was felt that services for end-stage renal disease, dialysis, and renal transplant should continue to not be assigned, but that costs for milder chronic kidney disease should be assigned. The workgroup also recommended not including costs of downstream effects from diabetic complications (e.g., incontinence/urinary retention from diabetic autonomic neuropathy and anemia from diabetic nephropathy/chronic disease) or treatment for downstream complications (e.g., fistula placement for dialysis, orthotics after amputation, and percutaneous endoscopic gastrostomy [PEG] tube placement) since other providers tend to make decisions around these services and other factors beyond the attributed clinician's/clinician group's influence may affect the need for these services. The workgroup also felt that services associated with nonspecific symptoms such as nausea/vomiting, syncope, diarrhea, abdominal pain, or nonspecific abnormal fluid/electrolytes abnormalities should not be assigned.

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

- Members agreed to assign the following services:
  - Services for direct diabetes complications (e.g., DKA, hypoglycemia, electrolyte abnormalities);
  - Services for long-term but likely known related outcomes (e.g., neuropathy, diabetic ulcer and amputation, retinopathy);
  - Diabetic shoes;
  - Diabetes education;
  - Medical nutrition therapy;
  - Routine lab tests;
  - Milder chronic kidney disease;
  - Transitions in care; and
  - Wound care/DME with a diabetes-related diagnosis.
- Members suggested potentially assigning orthotics (e.g., after amputation).
- Members suggested not assigning the following services, which may be refined in future input opportunities:
  - Services related to non-specific symptoms;
  - Services related to acute renal failure, renal transplant, end-stage renal disease (ESRD), or dialysis;
  - Cardiac testing;
  - Downstream effects from diabetic complications (e.g., incontinence/urinary retention from diabetic autonomic neuropathy and anemia due to diabetic nephropathy); and
  - Costs of treatment for diabetes-related complications (e.g., fistula placement for dialysis and PEG tube placement for diabetic gastroparesis).

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, and Section 2.3.2 presents the discussion on the lookback period to identify risk adjustors, criteria used for risk adjustors, and clinician group's influence on risk adjustors.

2.3.1 Discussion of Risk Adjustor List

The workgroup members did not identify any additional risk adjustor variables to add to or remove from the list created after August 2019 in-person workgroup meeting.

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

- The workgroup members did not identify any additional risk adjustor variables to add to or remove from the list created after August 2019 in-person meetings.

2.3.2 Discussion of Risk Adjustor Construction

Overall, the workgroup agreed to continue using the current method (one claim) to identify comorbidities used in the risk adjustment model to maximize sensitivity for detecting risk adjustor variables. For similar reasons, workgroup members also did not support removing attributed clinician groups' claims from defining risk adjustors.

Workgroup members also 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. Overall, during the meeting, workgroup members voiced some agreement in extending the lookback period to 180 days, but ultimately did not reach a consensus to change the standard lookback, which is currently 120 days.

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

- Workgroup members recommended using one claim to identify comorbidities used in the risk adjustment model.
- Workgroup members discussed extending the lookback used for Hierarchical Condition Category (HCC) construction from 120 days to 180 days, but ultimately did not reach consensus to change the standard lookback. This may be revisited after field testing.

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.