

# Non-Pressure Ulcers Workgroup Webinar Meeting Summary

MACRA Episode-Based Cost Measures: Clinician Expert Workgroups  
Workgroup Webinar, June 28, 2023  
July 2023

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## Project Overview

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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”).<sup>1</sup> In Wave 6, we reviewed feedback from prior Waves; this includes input from public comment periods in which we sought input on candidate clinical areas and episode groups for potential development.<sup>2</sup> We developed prioritization criteria used to identify strong candidate episode groups and concepts based on input from our technical expert panel (TEP), Person and Family Engagement (PFE), Clinical Subcommittees (CS), and Clinician Expert Workgroups (“workgroups”). The following Wave 6 episode groups were selected for development based on the prioritization criteria, prior input received, and discussions with CMS: (i) Movement Disorders: Parkinson’s Disease, Multiple Sclerosis [MS], Amyotrophic Lateral Sclerosis [ALS], Huntington’s Disease, and (ii) Non-Pressure Ulcers.

We held a nomination period for workgroup members between May 15, 2023, and June 2, 2023. The workgroups are composed of clinicians with expertise directly relevant to the selected episode groups. We finalized workgroups of about 15-20 members in June 2023, and they provided detailed input on the development of the selected episode groups during their first workgroup webinars from June 27 to 28, 2023. For Wave 6, all workgroup meetings were held virtually. The workgroups will convene for a second and third meeting to continue measure

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<sup>1</sup> For information on measure development in Wave 5, refer to the [Wave 5 Measure Development Process](https://www.cms.gov/files/document/2023-cmft-ebcm-process.pdf) (PDF, 735 KB) document (<https://www.cms.gov/files/document/2023-cmft-ebcm-process.pdf>).

<sup>2</sup> For a summary of comments we received during the Waves 4 and 5 public comment periods, refer to the [Wave 4 Measure Development Public Comment Summary Report](https://www.cms.gov/files/document/wave-4-public-comment-summary.pdf) (PDF, 840 KB) document (<https://www.cms.gov/files/document/wave-4-public-comment-summary.pdf>) and the [Wave 5 Measure Development Public Comment Summary Report](https://www.cms.gov/files/document/wave-5-public-comment-summary-report.pdf) (PDF, 693 KB) document (<https://www.cms.gov/files/document/wave-5-public-comment-summary-report.pdf>).

specification and refinement discussions before and after a national field test, which is currently slated for early 2024.

## Non-Pressure Ulcers Workgroup Webinar, June 28, 2023

This meeting summary document outlines the purpose, discussion, and recommendations from the Non-Pressure Ulcers Workgroup Webinar. Section 1 provides an overview of the webinar goals and process. Section 2 summarizes the discussion and recommendations from the workgroup. Appendix A provides an overview of the chronic condition cost measure framework.

### 1. Overview

The goals of the Non-Pressure Ulcers Workgroup Webinar 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 how to define the patient cohort, account for sub-populations to ensure that the measure allows for meaningful clinical comparisons, and identify clinically related services

The meeting was held online via webinar and attended by 18 of the 19 workgroup members. The webinar was facilitated by Acumen moderator, Heather Litvinoff. The Non-Pressure Ulcers workgroup chair was Caitlin Hicks, who also facilitated meeting discussions. Two PFPs, Connie Montgomery and Johnes Daniel, attended the webinar to discuss and address questions regarding the PFP findings. The Workgroup Composition List will contain the full list of members, including names, professional roles, employers, and clinical specialties; it will be posted on the QPP Cost Measure Information pages.<sup>3</sup>

All interested parties 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. This includes the meeting agenda, slide deck, and a reference document with background on chronic condition measures, their framework, draft trigger codes, and information about the base risk adjustment model. Members also received a welcome packet containing the following information: (i) a schedule of Wave 6 activities, (ii) an overview of the PFP engagement strategy, (iii) resources describing episode-base cost measures, and (iv) a guide on project background and the development process. Also, workgroup members received the investigations described in Table 1 below.

**Table 1: Workgroup Webinar Investigations**

Investigation	Description
Sub-Population Analysis	<ul style="list-style-type: none"><li>Provides data on the frequency and cost associated with a set of sub-populations informed by public comments received and deliberations among the Acumen clinical team</li><li>Useful for discussion regarding accounting for patient heterogeneity</li></ul>

<sup>3</sup> The composition list will be posted on the Current Work page on the QPP Cost Measure Information pages: <https://www.cms.gov/medicare/quality-payment-program/cost-measures/current>.

Investigation	Description
<b>Service Utilization over Time Analysis</b>	<ul style="list-style-type: none"> <li>Provides data on the top 200 most frequent services for each claim setting across episodes for the draft version of the measure along with various metrics regarding those services (e.g., share of episodes with that service, average cost of the service per episode, share of attributed clinicians who furnished the service).</li> <li>Useful for discussion regarding identifying clinically relevant services</li> </ul>

After the webinar, workgroup members were sent a recording of the webinar and polled on their preferences to ensure the measures are developed based on well-documented input. Based on similar meeting discussion practices, the threshold for support was >60% consensus among poll responses. This document summarizes the workgroup members' input from both the discussion as well as the polls.

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 subsection summarizes the Person and Family Partner (PFP) findings discussed during the webinar. The remaining subsections describe workgroup member discussions and recommendations on defining the patient cohort, accounting for patient heterogeneity, and identifying clinically related services, respectively. The final subsection provides an overview of next steps for the measure development process.

### 2.1 PFP Findings and Discussion

We conducted focus groups and interviews with 5 PFPs to gather input that would inform cost measure development for Non-Pressure Ulcers. During the webinar, 2 PFPs shared these findings and fielded questions from workgroup members.

PFPs reported that diagnosis and treatment for a non-pressure ulcer was typically delayed. Specifically, 2 PFPs noted that they were unaware of their family member's non-pressure ulcer until it reached severe infection and resulted in an amputation. Workgroup members echoed these PFPs' experiences while discussing severe non-pressure ulcer episodes that begin in the inpatient setting. Additionally, PFPs noted that patients with non-pressure ulcers had preexisting conditions, such as diabetes, end-stage renal disease (ESRD), chronic obstructive pulmonary disease (COPD), and pressure ulcers. Often, the patient's other conditions were prioritized over wound care. Other factors noted by PFPs that resulted in delayed care included if a patient resided in a rehabilitation hospital or skilled nursing facility.

PFPs described a variety of medical specialties that were key to providing treatment for a non-pressure ulcer. Often, personal care assistants (as well as licensed vocational nurses and registered nurses) in the nursing home setting provided daily monitoring of non-pressure ulcers. PFPs also noted that occupational and physical therapists were also helpful in recognizing and treating ulcers. PFPs reported receiving care from podiatrists, home wound care, wound care specialists, surgeons, and intensive care unit (ICU) staff. Additionally, PFPs mentioned social workers as a bridge to appropriate treatment, which later aligned with recommendations from workgroup members to add behavioral health services as clinically relevant services.

PFPs also provided input on treatments they received to manage non-pressure ulcers. Home wound care was described as the first step to managing a new non-pressure ulcer. With this, PFPs noted that education provided to patients and their caregiver by clinicians, such as wound care specialists, aided with proper home wound care. For patients with diabetic ulcers, PFPs described offloading treatments such as orthopedic shoes and wound debridement procedures.

## 2.2 Defining the Patient Cohort

Acumen reviewed the methodology for constructing an episode-based cost measure, including the steps for defining the patient cohort. Cost measures for chronic conditions aim to identify a longitudinal patient-clinician relationship (i.e., trigger an episode of care for that condition) using the presence of related service and diagnosis codes on claims billed by the same provider (as identified by their Tax Identification Number [TIN]). The workgroup discussed these categories of service and diagnosis codes in the context of what patient and clinician populations they would capture and to what degree they would reliably indicate an ongoing care relationship. The steps for defining the patient cohort are described in Steps 1-4 of Table A1 in [Appendix A](#). Acumen asked the workgroup to review the triggering methodology, as well as the draft services and diagnoses, to discuss how the draft specifications may be improved.

### 2.2.1 Trigger Diagnoses

The workgroup discussed which diagnosis codes indicate a trigger or confirming service was provided as part of treatment and management of non-pressure ulcers. Acumen shared the preliminary diagnosis categories for the Non-Pressure Ulcers draft measure specifications:

- Non-pressure ulcers – lower limb
- Non-pressure ulcers – other
- Venous ulcers
- Diabetic ulcers
- Atherosclerosis with ulceration
- Other ulcers

The workgroup recommended including a category for traumatic lower extremity wounds that are recoded as non-pressure ulcers after a certain amount of time. These wounds are sequela to various types of open wounds of the hip, thigh, knee, lower leg, ankle, foot, and toes.

### 2.2.2 Trigger and Confirming Services

The workgroup discussed what types of services should be used to trigger and confirm a patient-clinician relationship for the treatment and management of non-pressure ulcers. Acumen presented preliminary service categories for trigger and confirming claims included in the Non-Pressure Ulcers draft measure specifications, as outlined in Table 2.

**Table 2:** Trigger and Confirming Claim Categories for Non-Pressure Ulcers

Trigger Claim (First Service)	Confirming Claim (Second Service)
<ul style="list-style-type: none"> <li>• Outpatient evaluation and management (E&amp;M)</li> <li>• Measure-specific outpatient E&amp;M</li> <li>• Rehabilitation services</li> </ul>	<ul style="list-style-type: none"> <li>• Outpatient E&amp;M</li> <li>• Measure-specific outpatient E&amp;M</li> <li>• Rehabilitation Services</li> <li>• Wound debridement</li> <li>• Skin grafts</li> <li>• Wound modalities</li> <li>• Wound dressing products</li> </ul>

The workgroup discussed the categories currently included as trigger and confirming services in the draft measure specifications. In particular, workgroup members suggested the possibility of using physical therapy services as a trigger service due to the fact that many patients seek physical therapy as their first treatment for a non-pressure ulcer. Workgroup members also recommended adding specific services already included in the draft measure specifications, such as hyperbaric oxygen therapy, hydrotherapy, autologous platelet rich plasma, and total contact casting.

In addition to the service categories already included in the draft measure, the workgroup recommended additional trigger and confirming services to include. One workgroup member proposed adding endovascular venous ablation and duplex scan services as trigger services. Other members suggested including other therapies and durable medical equipment (DME) such as low frequency, non-contact, non-thermal ultrasound therapy services, topical oxygen therapy, and offloading devices. Additionally, workgroup members highlighted PFP experiences by discussing how to trigger severe non-pressure ulcer episodes that begin in the inpatient setting with services such as amputations.

### **2.2.3 Medication Attribution Check**

Acumen shared that certain chronic condition measures will attribute a clinician to episodes only if they've prescribed at least 2 condition-related medications to 2 different patients during the current plus prior performance period. This attribution check is only used in measures where the use of prescriptions is informative about the nature of care that the clinician provides. The workgroup verbally recommended against including a prescription attribution check as medications are often not used to treat non-pressure ulcers and many clinicians treating non-pressure ulcers (e.g., physical therapists) don't prescribe medications.

#### **Key Takeaways from Discussion and/or Polls for Defining the Patient Cohort:**

- Members recommended including non-pressure ulcer – lower limb, non-pressure ulcer – other, diabetic ulcers, atherosclerosis with ulceration, and venous ulcers diagnoses, and they recommended not including other ulcers diagnoses.
- Members recommended including measure-specific outpatient evaluation and management (E&M) services as trigger services, and they didn't reach consensus on whether to include rehabilitation services as trigger services. The workgroup will revisit this at the next meeting.
- Members recommended including measure-specific outpatient E&M services, rehabilitation services, wound debridement services, skin grafts, wound modalities, and wound dressing products as confirming services.
- Members recommended not including an additional clinician medication attribution check.

### **2.3 Accounting for Patient Heterogeneity**

Members engaged in a detailed discussion about how to account for patient heterogeneity among various sub-populations within the Non-Pressure Ulcers episode group. Sub-populations refer to patient cohorts as defined by their preexisting conditions and other patient characteristics. Acumen described the methods for accounting for patient heterogeneity, and those are described in Table 3 below.

**Table 3: Methods for Accounting for Patient Heterogeneity**

Method	Description
<b>Sub-Group</b>	<ul style="list-style-type: none"> <li>• If applicable, we may stratify the patient population into mutually exclusive and exhaustive sub-groups to define more homogenous patient cohorts.</li> <li>• 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.</li> <li>• This approach is used when sub-groups are very different from one another, and each sub-group requires its own risk adjustment model.</li> <li>• Since each sub-group will have its own risk adjustment model, the size of each sub-group should be sufficiently large.</li> </ul>
<b>Risk Adjust</b>	<ul style="list-style-type: none"> <li>• We may define covariates in the risk adjustment model for the measure.</li> <li>• 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 up a large share of patients who have a characteristic that's outside of the attributed clinician's reasonable influence.</li> <li>• Risk-adjusted cost measures adjust observed episode spending to expected episode spending (predicted by a risk adjustment model).</li> </ul>
<b>Exclude</b>	<ul style="list-style-type: none"> <li>• We may identify certain measure exclusions.</li> <li>• 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.</li> </ul>
<b>Monitor for Further Testing</b>	<ul style="list-style-type: none"> <li>• We may monitor certain sub-populations for further testing.</li> <li>• 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.</li> </ul>

After Acumen provided a description of each method and presented analytic data on sub-populations, workgroup members discussed the patient sub-populations and their preferences for how to address them. Information about these methods is also described in Steps 3, 6, and 7 of Table A1 in [Appendix A](#).

### 2.3.1 Sub-Groups

Acumen presented cost differences in episodes by non-pressure ulcer type including arterial, venous, diabetic, and other ulcers. The workgroup discussed that sub-grouping by ulcer type would be ideal; however, it poses a challenge to create mutually exclusive sub-groups, as a patient may have multiple conditions that are responsible for various types of ulcers. For example, an arterial ulcer may be caused by atherosclerosis or chronic venous insufficiency, and a patient may have both conditions. Additionally, the workgroup also stated that coding inaccuracies and discrepancies could impact sub-grouping by particular ulcer type.

Given the differences in ulcer type, the workgroup provided potential solutions to create mutually exclusive ulcer type sub-groups. Multiple workgroup members suggested creating sub-groups with combinations of ulcer types by evaluating occurrences of different types of diagnoses a patient has or their particular treatments. For example, members discussed a sub-group for patients with both arterial and diabetic ulcers.

The workgroup also discussed other clinical characteristics to consider as sub-groups other than ulcer type. One option included sub-grouping ulcers by severity; however, some members noted that grading classifications are difficult to capture via claims. Other sub-grouping options suggested by members included the number of ulcers and ulcer location.



### 2.3.2 Other Sub-Populations for Addressing Patient Heterogeneity

The workgroup discussed other sub-populations to potentially risk adjust, monitor, or exclude for the Non-Pressure Ulcers measure. Acumen presented an initial list of measure-specific comorbid conditions and risk factors to consider when discussing how to account for patient heterogeneity, including frailty, smoking, prior ulcer, and prior hospice. The workgroup generally agreed that these characteristics present at the start of an episode should be either risk adjusted, excluded, or monitored.

The workgroup also recommended additional sub-populations to consider such as malnutrition, smoking, and frailty. Acumen noted that several of the suggested sub-populations are already captured through the standard risk adjustment model such as morbid obesity, depression, ESRD, amputation status, paraplegia, cancer, and chronic kidney disease.

#### Key Takeaways from Discussion and/or Polls for Accounting for Patient Heterogeneity:

- Members recommended creating sub-groups for the cost measure and to do so based on ulcer type, such as combinations of ulcer types.
- Members recommended risk adjusting for smoking, frailty, prior ulcer, social determinants of health (e.g., homelessness), and malnutrition.
- Members recommended excluding pyoderma gangrenosum and fungating oncologic wounds.
- Members didn't reach consensus to either risk adjust, exclude, or monitor for the following sub-populations: prior hospice, transplant status, palliative care, scleroderma, vasculitis, sickle cell anemia, patients using immune modulators, and anti-neovascular cancer drugs. These will continue to be monitored for future testing and consideration.
- Additional suggestions of sub-populations to monitor included calciphylaxis and mobility status.

### 2.4 Identifying Clinically Related Services

Acumen described the purpose of service assignment so that members could discuss which services associated with the attributed 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. Episode-based cost measures aim to only include clinically relevant costs whose occurrence, intensity, and/or frequency are within the reasonable influence of the attributed clinician. Service assignment can be an effective form of adjusting for patient risk by omitting unrelated costs not furnished for Non-Pressure Ulcers. Information about identifying clinically related services is also described in Step 5 of Table A1 in [Appendix A](#).

Acumen asked for feedback on whether the following preliminary service assignment categories and examples capture both standard treatment and services provided to treat complications or other consequences of care:

- Routine provider services (physician office visits)
- Rehabilitation services (physical therapy, occupational therapy)
- Imaging (ultrasounds/duplex scans)
- Surgical procedures (wound debridement, skin grafts)
- Durable medical equipment (wheelchairs, orthopedic shoes, compression bandages)
- Lab work (blood collection, metabolic panel)
- Advanced wound care therapy (hyperbaric oxygen therapy, negative pressure wound therapy)
- Pharmacological treatments (antibiotics, injections)

- Complications (amputations, infections, related emergency department visits, related hospitalizations and subsequent post-acute care stays)
- Pathology (specimen collection, infectious agent detection)
- Home health services (skilled nursing care, home health aides)

The workgroup generally agreed with the service assignment categories presented by Acumen and discussed the possibility of including other categories such as nutritional services, diabetic education, behavioral health services, and medication management. The workgroup also discussed breaking down and recategorizing amputations. Specifically, the workgroup noted that major amputations, such as above-the-knee amputations, should be classified as complications while minor amputations may indicate that a clinician is providing high-value care to salvage a patient's limb, especially for patients that didn't seek treatment until a non-pressure ulcer became severe.

The workgroup was generally open to considering the inclusion of Part D services in the Non-Pressure Ulcers measure. Members provided the following preliminary list of Part D drug categories to consider:

- Wound-specific prescription drugs
- Antibiotics
- Topical medications
- Microbial washes

#### Key Takeaways from Discussion and/or Polls for Identifying Clinically Related Services:

- Members recommended including the following Parts A and B service categories: routine provider services, rehabilitation services, imaging, surgical interventions, DME, lab work, advanced wound care therapy, pharmacological treatments, complications, pathology, home health services, nutritional services, and diabetic education.
- Members didn't reach consensus on whether to include behavioral health and medication management as Parts A and B service categories.
- Members recommended including the following Part D services: wound-specific prescription drugs, antibiotics, topical medications, and microbial washes.

## 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. In this poll, we also asked workgroup members for their availability for the second webinar in October 2023. Acumen will operationalize input for the measure specifications based on workgroup webinar discussion and poll results and will follow up with workgroup members with more information about the next steps in the measure development process.



## APPENDIX A: CHRONIC CONDITION COST MEASURE FRAMEWORK

The table below provides an overview of the chronic condition episode-based cost measure framework.

**Table A1.** Chronic Condition Cost Measure Framework

Step	Description
<b>Step 1: Trigger</b> Identify a Clinician Patient Relationship	<ul style="list-style-type: none"> <li>• Trigger logic looks for a pair of services billed by the same clinician group (identified by their Taxpayer Identification Number [TIN]) to identify a clinician-patient relationship. The time period between the 2 services that constitute a trigger event is referred to as the 'trigger window' and reflects how often the clinician group sees the patient.</li> <li>• A <b>trigger event</b> consists of (i) a trigger claim, and (ii) a confirming claim. <ul style="list-style-type: none"> <li>○ A <b>trigger claim</b> is an outpatient evaluation and management (E&amp;M) code with a relevant diagnosis</li> <li>○ A <b>confirming claim</b> is either another outpatient E&amp;M code with a relevant diagnosis, or a condition-related Current Procedural Terminology/Healthcare Common Procedure Coding System (CPT/HCPCS) code with a relevant diagnosis</li> </ul> </li> </ul>
<b>Step 2: Reaffirm</b> – Identify the Total Length of Care	<ul style="list-style-type: none"> <li>• Once a clinician-patient relationship is identified, this starts a period of time when the TIN is measured on related costs (i.e., 'attribution window').</li> <li>• The attribution can be extended if we continue to see that the TIN is providing care for the patient for this condition (as identified by 'reaffirming claims'). The same trigger and confirming codes are typically used to reaffirm the clinician-patient relationship.</li> </ul>
<b>Step 3: Define an Episode</b> During Which Cost will be Assessed	<ul style="list-style-type: none"> <li>• An 'episode' is a segment of care that allows clinicians to be assessed in a measurement (or performance) period.</li> <li>• An episode window length is one year at a minimum. Episodes are assessed in the measurement period in which they end and only include days not previously measured in preceding measurement periods. <ul style="list-style-type: none"> <li>○ The episode window length may vary depending on the length of the total relationship between a patient and clinician group ('total attribution window'), and the data that hasn't been assessed in preceding measurement periods.</li> <li>○ Clinicians or clinician groups are measured on a patient at the end of the calendar year if there are 365 days' worth of claims data that hasn't previously been assessed or when the total attribution window ends, ensuring costs are only assessed once.</li> </ul> </li> <li>• Once an episode window is defined, if applicable, the episode is placed into one of the episode sub-groups to enable meaningful clinical comparisons.</li> </ul>
<b>Step 4: Attribute the Episode</b> to the Clinician Group and Clinician(s)	<ul style="list-style-type: none"> <li>• Attribute episode to the TIN that billed the trigger services (trigger claim and confirming claim) for the 'total attribution window'.</li> <li>• Attribute episode to the clinicians [identified by their TIN-National Provider Identifier (TIN-NPI)] within the attributed TIN that played a substantial role in the patient's care: <ul style="list-style-type: none"> <li>○ Billed at least 30% of outpatient E&amp;M codes with relevant diagnosis and/or condition-related CPT/HCPCS codes with a relevant diagnosis</li> </ul> </li> <li>• The clinician (identified by their unique TIN and National Provider Identifier combination, or TIN-NPI) must also meet particular requirements to ensure that no costs are assigned to the attributed TIN-NPI prior to seeing the patient and that we're attributing episodes to clinicians who manage a patient's chronic care. The TIN-NPI must have: <ul style="list-style-type: none"> <li>○ <u>Check #1</u>: Provided condition-related care to the patient prior to or on the episode start date (to ensure that clinicians are attributed episodes after they met the patient)</li> <li>○ <u>Check #2</u>: Prescribed at least 2 condition-related medications to 2 different patients during the current and prior performance period (to ensure that attributed clinicians are actually involved in providing ongoing chronic care management) <ul style="list-style-type: none"> <li>▪ This check is only used in measures where the use of prescriptions is informative about the nature of care that the clinician provides. When some of the types of clinicians that manage the condition don't always prescribe the relevant medication (e.g., clinicians that can't prescribe), a chronic condition cost measure wouldn't use this check.</li> </ul> </li> </ul> </li> </ul>

Step	Description
<b>Step 5: Assign the Cost of Clinically Related Services</b>	<ul style="list-style-type: none"> <li>Measures include only the costs for clinically related services, rather than all costs within the episode.</li> <li>Clinically related services include treatment, monitoring, complications, and other services where the attributed clinician has reasonable influence on occurrence, frequency, and/or intensity.</li> <li>Costs are payment standardized to remove variation due to geographic region or provider-specific adjustments.</li> <li>These are identified through medical service codes and diagnosis codes. The measure calculates the cost of these specific services observed during the episode window.</li> </ul>
<b>Step 6: Apply Measure Exclusions</b>	<ul style="list-style-type: none"> <li>Exclusions remove unique groups of patients or episodes from cost measure calculation in cases where it may be impractical or unfair to compare the costs of caring for these patients to the costs of caring for the cohort at large.</li> </ul>
<b>Step 7: Risk-Adjust Episode Cost</b>	<ul style="list-style-type: none"> <li>Risk adjustment predicts the expected cost of an episode by adjusting for factors outside of the clinician's control.</li> <li>The risk adjustment model includes many variables the workgroup will discuss throughout development. As a starting point, we assess the following: (i) Hierarchical Condition Categories (HCCs) from the CMS-HCC Version 24 (V24) Risk Adjustment Model, which includes 86 HCCs, (ii) age variables, (iii) indicator variables, and (iv) interaction variables.</li> <li>In addition, each measure may have tailored risk adjustors for factors specific to the condition.</li> <li>If the cost measure has episode sub-groups, the risk adjustment model is run separately for each sub-group.</li> </ul>
<b>Step 8: Calculate the Measure Score</b>	<ul style="list-style-type: none"> <li>The measure is calculated as the ratio of the observed cost (standardized to remove geographic and other differences) to the expected cost, averaged across all episodes attributed to the provider.</li> <li>Longer episodes are weighted more heavily than shorter ones to ensure fair comparisons; a scaled approach is used to calculate observed and expected costs.</li> <li>The average ratio of observed-to-expected costs per provider is then translated into a dollar amount as the provider's measure score.</li> </ul>

Please contact **Acumen MACRA Clinical Committee Support** at [macra-clinical-committee-support@acumenllc.com](mailto:macra-clinical-committee-support@acumenllc.com) if you have any questions. If you're 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.