# Non-Pressure Ulcers Service Assignment and Refinement (SAR) Webinar Meeting Summary

MACRA Episode-Based Cost Measures: Clinician Expert Workgroups
Workgroup Webinar, October 18, 2023
November 2023

Contents



## Project Overview

The Centers for Medicare & Medicaid Services (CMS) has contracted with Acumen, LLC to develop episode-based cost measures for potential use in the Merit-based Incentive Payment System (MIPS) to meet the requirements of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). Acumen's measure development approach involves convening clinician expert panels to provide input in cycles of development ("Waves").[1] In Wave 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.[2] 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), 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 comprising 15 to 20 members in June 2023, and they provided detailed input on the development of the selected episode groups during their first workgroup meetings from June 27 to 28, 2023. Then, Acumen reconvened the workgroups for a Service Assignment and Refinement (SAR) Webinar to revisit the measure specifications recommended during the initial meeting and refine the measures before national field testing. For Wave 6, all workgroup meetings were held virtually. The workgroups will convene for a third

[1] For information on measure development in Wave 5, refer to the Wave 5 Measure Development Process document (https://www.cms.gov/files/document/2023-cmft-ebcm-process.pdf).
[2] 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) and the Wave 5 Measure Development Public Comment Summary Report (https://www.cms.gov/files/document/wave-5-public-comment-summary-report.pdf).

meeting to continue measure specification and refinement discussions after a national field test, which is currently slated for early 2024.

# Non-Pressure Ulcers SAR Webinar, October 18, 2023

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

## 1. Overview

The goals of the Non-Pressure Ulcers SAR 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 webinar was held virtually 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 Dorothy Winningham, attended the webinar to discuss and address questions regarding the PFP findings. The Workgroup Composition List contains the complete list of members, including names, professional roles, employers, and clinical specialties.[3]

All interested parties beyond the workgroup 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.

Before the webinar, workgroup members received background information and materials to inform the meeting discussions, including the meeting agenda, slide deck, and a draft codes list detailing the service and diagnosis codes used to trigger non-pressure ulcers episodes. A reference document with background on chronic condition measures, their framework, draft trigger codes, and information about the base risk adjustment model was shared with workgroup members prior to the June 2023 Workgroup Webinars. Also, workgroup members received the investigations described in Table 1 below.

**Table 1:** Workgroup Webinar Investigations

| Investigation | Description |
|---|---|
| **Sub-Population Analysis** | • Provides data on the frequency and cost associated with a set of sub-populations informed by public comments received, prior workgroup discussions, and deliberations among the Acumen clinical team<br>• Useful for discussion regarding accounting for patient heterogeneity |

[3] CMS, "MACRA Episode-Based Cost Measures Wave 6 Clinician Expert Workgroup Composition (Membership) List" (https://www.cms.gov/files/document/wave-6-measure-specific-workgroup-composition-list.pdf).

| Investigation | Description |
|---|---|
| **Service Utilization over Time Analysis** | • 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)<br>• Useful for discussion regarding identifying clinically relevant services |

After the webinar, workgroup members received a recording of the webinar and were 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 sub-section summarizes the PFP findings discussed during the webinar. The remaining sub-sections describe workgroup member discussions and recommendations on defining the patient cohort, accounting for patient heterogeneity, and identifying clinically related services, respectively. The final sub-section provides an overview of next steps for the measure development process.

## 2.1 Person and Family Partner (PFP) Findings and Discussion

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

PFPs recognized a variety of providers and treatment modalities that were essential to caring for patients with non-pressure ulcers. These include wound care specialists and educators, personal care assistants in home and rehabilitation facilities, dietary and nutrition services, weight management, medications, durable medical equipment (DME), wound dressing products, and home health. Physical and occupational therapists (PT/OT) supported patients by teaching energy conservation techniques and educating patients and their caregivers on performing activities of daily living (ADLs).

PFPs emphasize the need for clear and effective communication between the care team, patients, and caregivers. PFPs also highlighted the need to educate family caregivers, since they're significant in caring for patients with non-pressure ulcers and wounds. Family caregivers often receive information on range of motion, mobility, positioning, wound care procedures, observation cues, weight management, and nutrition. PFPs explained that effective education methods could include written instructions with illustrations, concise videos, and consistent provider communication.

Furthermore, PFPs had positive feedback about home health services and reported that home health consisted of a cohesive multidisciplinary team. Alternatively, PFPs expressed concerns about the care received in inpatient rehabilitation facilities, citing inadequate resources for wound care and a lack of protocol for caring for non-pressure ulcer patients. PFPs mentioned

that some families of non-pressure ulcer patients felt excluded from participating in the patient's care in rehabilitation settings despite their attempts to be involved.

## 2.2 Defining the Episode Group

Acumen reviewed the methodology for constructing an episode-based cost measure, including the steps for defining an episode of care. 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 clinician group (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 and provided targeted discussion questions on how the draft measure specifications may be improved.

Based on input from the prior webinar, the draft Non-Pressure Ulcer measure specifications use the services and diagnoses listed in Table 2 below to define an episode.

**Table 2:** List of Services and Diagnoses Used to Define a Non-Pressure Ulcer Episode

| First Service (Trigger Claim) | Second Service (Confirming Claim) | Relevant Diagnosis |
|---|---|---|
| • Outpatient evaluation and management (E/M)<br>• Measure-specific E/M<br>• Rehabilitation services | • Outpatient E/M<br>• Measure-specific E/M<br>• Rehabilitation services<br>• Wound debridement<br>• Skin grafts<br>• Wound modalities (vacuum-assisted closure, VAC)<br>• Wound dressing products | • Non-pressure ulcer – lower limb<br>• Non-pressure ulcer – other<br>• Atherosclerosis with ulceration<br>• Diabetic ulcers<br>• Venous ulcers |

During the webinar, workgroup members reviewed the list of services and relevant diagnoses to trigger and confirm a non-pressure ulcers episode. The workgroup had no concerns about the relevant diagnoses for identifying non-pressure ulcers patients. There were also no concerns about the continued inclusion of outpatient and measure-specific E/M services on the list of triggering and confirming services for the measure; however, workgroup members had mixed reactions about using rehabilitation services in the trigger logic, given that the triggering services determine attributed TINs and clinicians, identified by their TIN-National Provider Identifier (TIN-NPI). Meanwhile, workgroup members discussed whether it's appropriate to attribute Non-Pressure Ulcers episodes to PTs/OTs. PFPs highlighted the importance of PT/OTs in caring for non-pressure ulcers patients, and some workgroup members expressed that PT/OTs often develop care plans and provide treatment services for non-pressure ulcers. Other workgroup members questioned whether PT/OTs could reasonably influence the frequency, intensity, or occurrence of clinically related services downstream. Some workgroup members noted that it may be appropriate to attribute episodes to PT/OTs who are part of a multi-disciplinary practice rather than those in practices solely comprising rehabilitative clinicians.

Furthermore, the workgroup revisited the topic of a medication attribution check. Some chronic condition measures only attribute clinicians to episodes if they've prescribed at least 2 condition-related medications to 2 different patients during the current plus prior performance period (see Step 4 in Table A1 of Appendix A). After the first webinar, the workgroup agreed not to include a medication attribution check in the measure. During this webinar, the workgroup reaffirmed the

decision not to have a medication attribution check in the measure. Workgroup members noted that medications used to treat non-pressure ulcers aren't specific to this condition, and therefore, aren't indicative of whether a clinician or clinician group provides care for non-pressure ulcers. The workgroup was also concerned that a medication attribution check would exclude non-prescribing specialties who provide services relevant to wound care.

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

- For trigger claims, the workgroup recommended including outpatient and measure-specific E/M services and not including rehabilitation services.
- Members recommended including the following services as confirming claims: outpatient E/M, measure-specific E/M, rehabilitation services, wound debridement, skin grafts, wound modalities, and wound dressing products.
- Members recommended including the following condition-related diagnoses to trigger and confirm a non-pressure ulcer episode: non-pressure ulcer – lower limb, non-pressure ulcer – other, diabetic ulcers, atherosclerosis with ulceration, and venous ulcers.
- Members recommended not applying a medication attribution check, allowing both prescribing and non-prescribing clinicians to be attributed to the measure.

## 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 pre-existing conditions and other patient characteristics. Acumen described the methods for accounting for patient heterogeneity, and those are described in Table 2 below.

**Table 2:** Methods for Accounting for Patient Heterogeneity

| Method | Description |
|---|---|
| **Sub-Group** | • If applicable, we may stratify the patient population into mutually exclusive and exhaustive sub-groups to define more homogenous patient cohorts.<br>• 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.<br>• This approach is used when sub-groups are very different from one another, and each sub-group requires its own risk adjustment model.<br>• Since each sub-group will have its own risk adjustment model, the size of each sub-group should be sufficiently large. |
| **Risk-Adjust** | • We may define covariates in the risk adjustment model for the measure.<br>• 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.<br>• Risk-adjusted cost measures adjust observed episode spending to an expected episode spending (predicted by a risk adjustment model). |
| **Exclude** | • We may identify certain measure exclusions.<br>• 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. |
| **Monitor for Further Testing** | • We may monitor certain sub-populations for further testing.<br>• 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. |

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 are also described in Steps 3, 6, and 7 of Table A1 in Appendix A. Sub-section 2.3.1 outlines the workgroup discussions and recommendations on the sub-grouping methodology, and 2.3.2 focuses on refinements to the exclusions and risk adjustment methodology.

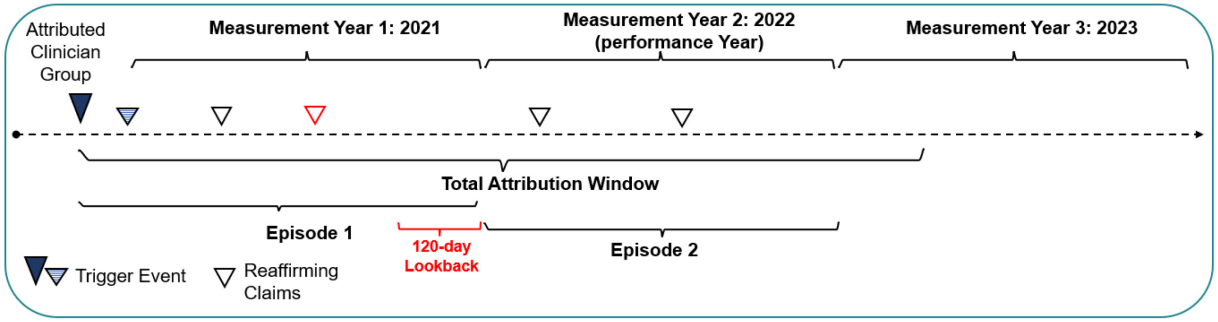
### *2.3.1 Sub-Grouping Methodology*

The draft measure specifications stratify episodes into exhaustive, mutually-exclusive, and granular patient cohorts (i.e., sub-groups) to ensure fair comparisons among clinicians with a similar patient case-mix. Based on prior consensus from the workgroup, the Non-Pressure Ulcers measure sub-groups by ulcer type:

- Diabetic ulcers (i.e., episodes with diagnosis codes indicating only diabetic ulcers)
- Venous ulcers (i.e., episodes with diagnosis codes indicating only venous ulcers)
- Arterial ulcers (i.e., episodes with diagnosis codes indicating only arterial ulcers)
- Multiple ulcer types (i.e., episodes with diagnosis codes indicating at least 2 different types of ulcers)
- Non-specific ulcers (i.e., episodes with no diagnosis codes for diabetic, venous, or arterial ulcers, and characterized by only chronic non-pressure ulcers diagnoses, i.e., L97/L98)

The current sub-grouping methodology evaluates ulcer diagnoses during the 120-day lookback period from the start of the episode window (Figure 1). For the diabetic, venous, and arterial ulcers sub-groups, 100% of ulcer diagnoses must be for the specific ulcer type. For example, an episode with almost all diabetic ulcer diagnoses and one arterial ulcer diagnosis during the lookback period would be categorized as multiple ulcer types. The non-specific ulcers sub-group is defined as having only chronic non-pressure ulcers diagnoses, i.e., L97/L98 ICD-10 diagnosis codes.

**Figure 1**. Episode Construction




During the webinar, Acumen presented data showing that this method of classifying ulcer types didn't categorize a significant portion of episodes; no ulcer diagnoses were observed in the 120-day lookback period for more than 40% of episodes. Acumen hypothesized that many episodes were uncategorized because patients didn't receive a non-pressure ulcer diagnosis until the initial trigger service. Additionally, almost 20% of episodes were categorized as non-specific ulcers, likely due to coding discrepancies. Acumen presented 2 refinement approaches to allow for more episodes to be categorized into sub-groups:

1. Including the start date of the episode window in the lookback period
2. Lowering the threshold for classifying an episode into a single ulcer type to 80%

Acumen presented analyses showing how the proposed refinement approaches could improve the classification of ulcer types. Results showed that including the start date of the episode window dramatically increases the number of episodes that can be assigned to a sub-group and reduces the unknown ulcer type episodes to less than 2%. The remaining unknown ulcer type episodes are a byproduct of the chronic condition measure framework (Figure 1), where episodes that are a continuation of prior care may not have an observable diagnosis during the lookback period. Furthermore, lowering the threshold for categorizing episodes to a single ulcer type to 80% increases the number of episodes assigned to a single ulcer type while maintaining agreement of downstream diagnoses with the sub-group designation.

During the webinar, the workgroup expressed support for including the start date of the episode window in the lookback period and setting an 80% threshold for episodes to be classified as a single ulcer type. Workgroup members also discussed how to address the unknown ulcer type sub-group. Members agreed to exclude these episodes due to lack of information.

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

In addition to sub-grouping, the measure also applies risk adjustment and exclusions to account for patient heterogeneity within the episode group. During the first workgroup webinar, members recommended risk adjusting for smoking and frailty indicators and excluding episodes with a pyoderma gangrenosum diagnosis. Workgroup members also proposed risk adjusting for some clinical conditions already accounted for in the CMS Hierarchical Condition Category (HCC) Risk Adjustment Model (i.e., prior pressure ulcer, malnutrition, prior amputations, patients using immune modulators, and prior fungating oncologic wounds). Based on prior workgroup input on sub-populations to monitor for future discussion, Acumen reviewed testing results showing observed and risk-adjusted episode costs for the following sub-populations of interest:

- Patients with sickle cell anemia
- Transplant patients
- Patients with calciphylaxis
- Patients with scleroderma
- Patients with vasculitis
- Patients with recent hospice use

The workgroup discussed risk adjusting for or excluding these patient sub-populations. Members agreed to exclude patients with calciphylaxis, scleroderma, sickle cell anemia, and vasculitis. While most workgroup members recommended excluding transplant patients and patients with recent hospice use, they didn't reach a consensus for how to handle these patient sub-populations. As such, Acumen will continue to monitor transplant patients and patients with recent hospice use. Additionally, some workgroup members suggested monitoring patients with lymphedema, citing strong associations between swelling/edema and lower extremity non-pressure ulcers.

<u>Key Takeaways from Discussion and/or Polls for Accounting for Patient Heterogeneity</u>:

- Members recommended continuing sub-grouping by ulcer type (i.e., diabetic, arterial, venous, non-specific, and multiple ulcer type).
- The workgroup recommended including the start date of the episode window to improve the sub-group classification of ulcer types.
- Members recommended using the 80% diagnosis threshold to indicate a single ulcer type.
- The workgroup recommended excluding the unknown ulcer type sub-group due to lack of information.

- Members recommended excluding the following patient sub-populations: patients with sickle cell anemia, patients with vasculitis, patients with scleroderma, and patients with calciphylaxis.
- The workgroup didn't reach consensus on how to address transplant patients and patients with recent hospice use.

## 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.

Based on feedback gathered from the first webinar, the draft measure currently includes the service categories listed in Table 3 below.

**Table 3**. List of Services Currently Included in the Non-Pressure Ulcer Measure

| Service Category | Examples of Services in Each Category |
|---|---|
| Routine primary care | Physician office/outpatient visits |
| Rehabilitation services | Physical therapy, occupational therapy |
| Imaging | Ultrasounds/duplex scans |
| Surgical procedures | Wound debridement, skin grafts |
| DME | Wheelchairs, orthopedic shoes, compression bandages |
| Lab work | Blood collection, metabolic panel |
| Advanced wound care therapy | Hyperbaric oxygen therapy, negative pressure wound therapy |
| Complications | Amputations, infections, related emergency department visits, related hospitalizations and subsequent post-acute care stays |
| Pathology | Specimen collection, infectious agent detection |
| Nutritional services | Nutritional assessment and intervention |
| Diabetic education | Education and support that manage blood sugar levels through diet and exercise |
| Home health services | Skilled nursing care, home health aides |
| Part D drugs | Wound-specific prescription drugs, antibiotics, topical drugs, and microbial washes |

During the webinar, Acumen presented the draft list of assigned services and provided analyses showing an array of clinically relevant inpatient and outpatient services occurring during episodes with high frequency and costs (e.g., inpatient surgical stays) currently not included in the measure. Workgroup members supported the list of assigned services included in the draft Non-Pressure Ulcer measure. They discussed expanding the types of services within the currently assigned categories to include hospitalizations for cellulitis, vascular procedures, and

hospitalizations for osteomyelitis. Members also emphasized the importance of mental health services in caring for non-pressure ulcers patients.

Workgroup members revisited whether to include behavioral health and medication management services, as they had yet to reach a consensus from the first webinar. Some members noted that behavioral health services such as psychotherapy, grief counseling, and support groups could be beneficial for patients undergoing treatment for non-pressure ulcers. However, they maintained that these services should be included in the measure only when paired with a diagnosis for non-pressure ulcers. In contrast, the workgroup expressed concerns about assigning costs related to medication management services, citing patients with multiple comorbidities who may be on treatment regimens unrelated to their non-pressure ulcers/wounds. The workgroup emphasized that while patients with non-pressure ulcers may receive these services, medication management may be more relevant for the already-existing conditions rather than for the wound. However, they were amenable to including these services when paired with a relevant diagnosis for non-pressure ulcers.

The workgroup maintained that including Part D drugs in the measure is beneficial, as medications are essential to wound care. Like the PFPs, the workgroup recognized the importance of medications in wound care. However, they were concerned that the drugs used to treat non-pressure ulcers/wounds are typically not specific to this condition and may be prescribed for comorbid conditions. As such, they recommended that the measure should include only those Part D drugs specifically used to treat and manage non-pressure ulcers/wounds, including topical ointments and creams (e.g. Santyl) and antibiotics (e.g., Vancomycin, intravenous antibiotics, and anti-Methicillin-resistant Staphylococcus aureus [MRSA] drugs). Several workgroup members also noted that some medications may be used to treat conditions that contribute to non-pressure ulcers, such as hypertension or diabetes medications. The workgroup was less supportive of including these types of medications.

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

- Members recommended including behavioral health and medication management services in the measure.
- Members recommended expanding the types of services in the currently assigned categories to include hospitalizations for cellulitis, vascular procedures, and hospitalizations for osteomyelitis.
- Members recommended including only Part D drugs that specifically treat and manage non-pressure ulcers.

## 2.5 Next Steps

In the last session, Acumen provided an overview of the next steps. After the meeting, Acumen distributed the SAR Webinar Poll to gather input from members on the discussions held during the webinar. 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 |
|---|---|
| **Step 1: Trigger** – Identify a Clinician Patient Relationship | • Trigger logic looks for a pair of services billed by the same clinician group (identified by their 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.<br>• A **trigger event** consists of (i) a trigger claim, and (ii) a confirming claim.<br>  ○ A **trigger claim** is an outpatient evaluation and management (E/M) code with a relevant diagnosis<br>  ○ A **confirming claim** is either another outpatient E/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 |
| **Step 2: Reaffirm** – Identify the Total Length of Care | • 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').<br>• 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. |
| **Step 3: Define an Episode** During Which Cost will be Assessed | • An 'episode' is a segment of care that allows clinicians to be assessed in a measurement (or performance) period.<br>• 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.<br>  ○ 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.<br>  ○ 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.<br>• Once an episode window is defined, if applicable, the episode is placed into one of the episode sub-groups to enable meaningful clinical comparisons. |
| **Step 4: Attribute the Episode** to the Clinician Group and Clinician(s) | • Attribute episode to the TIN that billed the trigger services (trigger claim and confirming claim) for the 'total attribution window.'<br>• 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:<br>  ○ Billed at least 30% of outpatient E/M codes with a relevant diagnosis and/or condition-related CPT/HCPCS codes with a relevant diagnosis<br>• The 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:<br>  ○ Check #1: 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)<br>  ○ Check #2: Prescribed at least 2 condition-related medications to 2 different patients during the current plus prior performance period (to ensure that attributed clinicians are actually involved in providing ongoing chronic care management)<br>  ▪ 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. |

| Step | Description |
|---|---|
| **Step 5: Assign the Cost** of Clinically Related Services | • Measures include only the costs for clinically related services, rather than all costs within the episode.<br>• Clinically related services include treatment, monitoring, complications, and other services where the attributed clinician has reasonable influence on occurrence, frequency, and/or intensity.<br>• Costs are payment standardized to remove variation due to geographic region or provider-specific adjustments.<br>• These are identified through medical service codes and diagnosis codes. The measure calculates the cost of these specific services observed during the episode window. |
| **Step 6: Apply Measure Exclusions** | • 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. |
| **Step 7: Risk-Adjust Episode Cost** | • Risk adjustment predicts the expected cost of an episode by adjusting for factors outside of the clinician's control.<br>• 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.<br>• In addition, each measure may have tailored risk adjustors for factors specific to the condition.<br>• If the cost measure has episode sub-groups, the risk adjustment model is run separately for each sub-group. |
| **Step 8: Calculate the Measure Score** | • 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.<br>• Longer episodes are weighted more heavily than shorter ones to ensure fair comparisons; a scaled approach is used to calculate observed and expected costs.<br>• The average ratio of observed to expected costs per provider is then translated into a dollar amount as the provider's measure score. |

Please contact **Acumen MACRA Clinical Committee Support** at 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.