Rheumatoid Arthritis Post-Field Test Refinement (PFTR) Webinar Meeting Summary

MACRA Episode-Based Cost Measures: Clinician Expert Workgroups
Workgroup Webinar, March 24, 2023
April 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 5, we obtained input on candidate clinical areas and episode groups through a public comment period from February 18, 2022, to April 1, 2022.[2] This approach provided flexibility for a wider range of interested parties to participate around their schedule. The prioritization criteria used to identify strong candidate episode groups and concepts were developed 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 5 episode groups were finalized based on the prioritization criteria, public comments received, and discussions with CMS: (i) Kidney Transplant Management, (ii) Rheumatoid Arthritis, and (iii) Prostate Cancer. In addition to Wave 5 of cost measure development, which is currently underway, Acumen is developing cost measures for Chronic Kidney Disease (CKD) and End-Stage Renal Disease (ESRD).

We held a nomination period for workgroup members between June 3, 2022, and July 1, 2022. The workgroups are composed of clinicians with expertise directly relevant to the selected episode groups. Workgroups (of about 15-20 members) were finalized in July 2022, and they

[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 public comment period, refer to the Wave 5 Measure Development Public Comment Summary Report (https://www.cms.gov/files/document/wave-5-public-comment-summary-report.pdf).

provided detailed input on the development of the selected episode groups during their first workgroup webinars from July 26 to 28, 2022. Acumen convened the workgroups again for a Service Assignment and Refinement (SAR) Webinar to revisit the specifications recommended during the workgroup webinar and refine the measures prior to national field testing. After the national field test from January 17, 2023, to February 14, 2023, Acumen convened the workgroups for a Post-Field Test Refinement (PFTR) Webinar to continue measure specification and refinement discussions in March 2023. For Wave 5, all workgroup meetings were held virtually.

Rheumatoid Arthritis PFTR Webinar, March 24, 2023

This meeting summary document outlines the purpose, discussion, and recommendations from the Rheumatoid Arthritis PFTR 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 Rheumatoid Arthritis PFTR Webinar on March 24, 2023, were the following:

(i) Review feedback on the measure from the national field test
(ii) Provide input to specify the cost measure for potential use in MIPS that can accurately distinguish between good and poor performance among clinicians in terms of cost efficiency
(iii) Consider results of empirical analyses and the Person and Family Partner (PFP) findings
(iv) Provide input on episode group trigger codes, how to account for sub-populations to ensure that the measure allows for meaningful clinical comparisons, and categories of services to assign to the episode group

The meeting was held online via webinar and attended by 11 of the 14 workgroup members. The webinar was facilitated by an Acumen moderator, Heather Litvinoff. The Rheumatoid Arthritis workgroup chair was Alex Limanni, who also facilitated meeting discussions. Rosie Bartel and Barb Wicht were the PFPs that attended the webinar to discuss and address questions regarding the PFP findings. The MACRA Episode-Based Cost Measure Workgroup Composition List contains the full list of members, including names, professional roles, employers, and clinical specialties; it's available on the MACRA Feedback Page.[3]

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 (see Section 3). 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

[3] CMS, "MACRA Episode-Based Cost Measures Wave 5 Clinician Expert Workgroup Composition (Membership) List" (https://www.cms.gov/files/document/wave-5-workgroup-comp-list-922.pdf).

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 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 Person and Family Partner (PFP) Findings and Discussion

We conducted focus groups and interviews with 4 PFPs to gather input that would inform cost measure development for Rheumatoid Arthritis. During the webinar, 2 PFPs shared these findings and fielded questions from the workgroup members.

The PFPs noted their focus group's experience with building a care plan, including how medication decisions are made. In general, the PFPs depicted an evolving process whereby decisions are made based on physician consultation, patient preference, and education. The care plan, including medication choices, is made based on discussions with the patient's physician. This is an evolving process where other comorbidities may impact the drugs a care team recommends. Serious comorbidities may take precedence and dictate decisions. One PFP said biologics help them to slow joint deterioration and manage pain. Patient preference also plays a role in deciding a care plan. For medications, all PFPs avoided opioids. PFPs noted that they preferred a care plan that wasn't reliant on a lot of medications. The patient's goals, however, were central to decision-making. Many felt that movement and physical therapy (PT) were the most effective in preventing the need for medication. PFPs stated that exercise, including bands and weights, has been helpful, and avoiding falls was also important in maintaining levels of movement. Overall, PFPs noted that understanding the underlying progression of rheumatoid arthritis and treatment options contributed to greater confidence in care plans and agency in making care decisions.

PFPs described how flareups factor into the care they receive. PFPs described both cases where they manage flareups on their own and when they may involve their care team. PFPs often manage flareups on their own using Motrin, Tylenol, ice packs, and caffeine to manage pain. They noted that sometimes flareups occur along with barometric changes, and that it can be hard to distinguish between a flareup, an aging symptom, or something else. Generally, the care team is involved with flareups if the pain is sufficiently bad where the patient thinks they need additional help. One PFP noted that injections to the affected joint are helpful, especially after starting biologics.

PFPs recounted their experiences with, and views regarding, surgery for rheumatoid arthritis. They mainly discussed the decision to have surgery and the outcomes of surgery. The main criterion PFPs described for deciding to have surgery was the progression of pain to a point where it was untenable. Conversely, the pain involved in recovering from surgery was also something that the PFPs mentioned considering. Overall, finding the path of the least pain was

the main factor they indicated for choosing whether to have surgery. All PFPs that had surgery mentioned that it was successful in reducing pain in the joint. One PFP had reduced pain but less function in the joint. Another had a full joint replacement and experienced greater function after, though the expectation and the decision to have surgery was only to reduce pain.

2.2 Defining the Patient Cohort

Acumen reviewed the methodology for constructing an episode-based cost measure, and specifically reiterated the steps relevant to defining a Rheumatoid Arthritis chronic episode. 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]). In the draft Rheumatoid Arthritis measure, episodes are triggered when the same TIN bills Medicare one trigger claim (outpatient evaluation & management [E&M] code) and one confirming claim (any trigger service, or condition-specific Current Procedural Terminology / Healthcare Common Procedure Coding System [CPT/HCPCS] code) within 180 days. Both of these claims must have at least one qualifying International Classification of Diseases, 10th Revision (ICD-10) diagnosis code to indicate that the patient is receiving rheumatoid arthritis-related care. Medication-related confirming services are identified using Part B Physician/Supplier claims. Part D prescription drugs aren't included as services in the trigger logic, as not all patients are enrolled in Part D.

The workgroup previously 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. One question of this type came from field testing.

Acumen noted field testing commenters suggested adding PT services as trigger and confirming claims. Acumen clarified that, even if added, episodes wouldn't be attributed to physical therapists due to the presence of a prescription drug check in the attribution logic. The prescription drug check requires attributed clinicians to have prescribed at least 2 condition-related medications to 2 beneficiaries in the year prior to the episode. We distinguish prescription medications as Part D medications, since Part B drugs are normally administered by the provider. Additionally, the trigger logic requires trigger claims to be paired with a rheumatoid arthritis (RA) diagnosis, and analyses show very few PT services during an RA episode have an RA diagnosis. The workgroup seemed to reach a verbal consensus that PT services shouldn't be added to the trigger logic, including one member from the American Physical Therapy Association who strongly recommended it not be.

<u>Key Takeaways from Discussion and/or Polls for Defining the Patient Cohort</u>:

- Members recommended not to include PT services as trigger and confirming claims.

2.3 Accounting for Patient Heterogeneity

Members also engaged in a detailed discussion about how to account for patient cohort heterogeneity among various sub-populations within the Rheumatoid Arthritis episode group. Sub-populations refer to patient cohorts as defined by their preexisting conditions and characteristics. Workgroup members discussed:

(i) Stratifying the patient population into mutually exclusive and exhaustive sub-groups to define more homogenous patient cohorts[4]
(ii) Defining covariates in the risk adjustment model[5]
(iii) Identifying measure exclusions[6]

Acumen provided a description of each method and presented analytic data on sub-populations. Acumen then presented questions on this subject based on field testing feedback and welcomed workgroup members to discuss the patient sub-populations and their preferences for how to address them. The discussion centered on the inclusion of certain sub-populations as covariates for risk adjustment.

During this webinar, Acumen reviewed the current risk adjustment model and asked for feedback on potential refinements. The rheumatoid arthritis risk adjustment model includes standard variables from the CMS Hierarchical Condition Category Version 24 (CMS-HCC V24) 2021 Risk Adjustment Model plus additional measure-specific risk adjustment variables. Measure-specific risk adjustment variables allow the model to capture variation in measure score due to patient-level characteristics specific to the Rheumatoid Arthritis measure. The specifications use a 120-day lookback period from the start of the episode. The measure currently risk adjusts for cognitive status/dementia, depression, fractures, frailty indicators, interstitial lung disease, smoking, and vasculitis. Section 2.3.1 summarizes discussion around the lookback period for prior rheumatoid arthritis. Section 2.3.2 then describes workgroup discussion around additional measure-specific risk adjustors.

2.3.1 Lookback Period for Prior Rheumatoid Arthritis

The first discussion pertained to the possibility of adding new measure-specific risk adjustors. One of the standard HCC variables is HCC 40 (Rheumatoid Arthritis and Inflammatory Connective Tissue Disease), which includes the rheumatoid arthritis diagnoses used in the trigger logic. More than 80% of episodes are risk adjusted for prior rheumatoid arthritis based on the presence of HCC 40 during the 120-day lookback period. However, analyses suggest that an additional 10% of episodes could meet criteria for prior rheumatoid arthritis if the lookback period was extended to one year. Acumen presented the possibility of adding measure-specific risk adjustors for the same conditions contained in HCC 40, but with a one-year lookback period.

The workgroup seemed generally supportive of this option. One member noted that this addition would likely capture patients whose rheumatoid arthritis is being managed well and other lower-cost patients since they require less frequent services, therefore making it a fairer measure. Another member thought this approach might better “level the playing field” between clinicians regarding patient characteristics outside of their control. Acumen explained that a limitation to

[4] 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. This approach is used when sub-groups are very different from one another, and each sub-group requires its own risk adjustment model. Since each sub-group will have its own risk adjustment model, the size of each sub-group should be sufficiently large.
[5] 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. Risk-adjusted cost measures adjust observed episode spending to expected episode spending (predicted by a risk adjustment model).
[6] 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.

extending the lookback period is that the number of episodes may decrease because episodes are excluded from the measure if the patient isn't continuously enrolled in Medicare for the entire lookback period, and a longer lookback period requires a longer time in which continuous enrollment is needed. The workgroup ultimately supported extending the lookback period to one year for a prior rheumatoid arthritis diagnosis.

2.3.2 Additional Measure-Specific Risk Adjustors

In the second discussion, Acumen asked the workgroup to consider whether it would be beneficial to differentiate between higher- and lower-severity rheumatoid arthritis by including additional risk adjustors. For example, rheumatoid heart disease, rheumatoid lung disease, rheumatoid vasculitis, and rheumatoid arthritis with other organ system involvement could be adjusted separately from less complex rheumatoid arthritis. Acumen also asked whether it would be appropriate to risk adjust for other, related autoimmune diseases (e.g., systemic lupus erythematosus, Sjogren syndrome, systemic sclerosis). The workgroup was generally in favor of adding measure-specific risk adjustors for these conditions, without any major dissent, noting that these were all reasonable things to adjust for that could affect measure score. The workgroup ultimately supported differentiating between higher- and lower-severity rheumatoid arthritis, recommending the addition of rheumatoid heart disease, rheumatoid lung disease, rheumatoid vasculitis, and rheumatoid arthritis with other organ system involvement as higher-severity risk adjustors. The workgroup consensus also recommended adding risk adjustors for other related autoimmune diseases and conditions (lupus, Sjogren syndrome, systemic sclerosis).

A workgroup member also suggested adding risk adjustors for obstructive sleep apnea, insomnia, and Post-Traumatic Stress Disorder (PTSD). The workgroup didn't reach a consensus regarding sleep apnea, though more supported that than PTSD and insomnia.

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

- Members recommended adding measure-specific risk adjustors for:
    - Higher-severity rheumatoid arthritis (rheumatoid heart disease, rheumatoid lung disease, rheumatoid vasculitis, and rheumatoid arthritis with other organ system involvement) and lower-severity rheumatoid arthritis with a one-year lookback period
    - Related autoimmune diseases and conditions (lupus, Sjogren syndrome, and systemic sclerosis)
- The workgroup didn't recommend risk adjusting for sleep apnea, insomnia, and PTSD.

2.4 Identifying Clinically Related Services

Acumen described the purpose of service assignment so that members could continue discussing 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. The following paragraphs summarize discussions of the categories of assigned services, specifically discussing the inclusion of PT and occupational therapy (OT), surgeries and hospitalizations, and Part B and Part D medications.

2.4.1 Physical Therapy and Occupational Therapy

During the webinar, Acumen presented utilization analyses for PT and OT services. Compared to the percent of episodes in which these services occur, very few episodes have PT/OT services assigned to the episode. Acumen noted PT/OT services may be under-captured because the current service assignment rules require these services to be paired with a rheumatoid arthritis diagnosis. Empirical analyses show that PT/OT services are most often

paired with “rehabilitation” diagnoses (e.g., muscle weakness, gait abnormality, joint pain). Acumen, therefore, asked whether it would be appropriate to include PT/OT services with rehabilitation diagnoses to capture more of these services, as long as they occur during a Rheumatoid Arthritis episode. The draft specifications required PT/OT services to be paired with a rheumatoid arthritis diagnoses; the change would require PT/OT services to be paired with either a rheumatoid arthritis or rehabilitation diagnosis.

One workgroup member wondered if including all PT/OT services in service assignment would disincentivize referring patients to PT/OT for other causes, and therefore recommended having a diagnosis check (i.e., for rheumatoid arthritis). Another asked if excluding certain PT/OT services from service assignment contradicts the purpose of this measure to try to capture all associated costs of rheumatoid arthritis care within the episode. The workgroup supported assigning PT/OT services with a rheumatoid arthritis diagnosis or with rehabilitation diagnoses of gait abnormality or joint pain, but not muscle weakness.

2.4.2 Surgeries, Hospitalizations, and Procedures

Acumen reviewed the current service assignment rules for inpatient hospitalizations and surgeries. Based on prior workgroup input, the following categories of hospitalizations are assigned to the episode group when a rheumatoid arthritis diagnosis is included on the inpatient stay claims:

- Rheumatoid arthritis and related conditions
- Joint surgeries
- Respiratory illnesses
- Cellulitis
- Fractures
- Sepsis

Workgroup discussion on surgeries followed 2 main themes. One theme was whether surgeries, hospitalizations, and procedures are rheumatoid arthritis-related. The other was what this information offers about the patient, provider, and episode of care.

As to whether surgeries, hospitalizations, and procedures are a part of rheumatoid arthritis care, Acumen asked if additional diagnoses should be included in the service assignment rules to capture downstream costs associated with less than optimal rheumatoid arthritis care. Not all of the hospitalizations occurring during the episodes are assigned to the episode group. Some workgroup members discussed further limiting assigned hospitalizations to only those that have a principal (“primary”) diagnosis of rheumatoid arthritis. However, Acumen noted that coding guidance and Medicare Severity Diagnosis Related Group (MS-DRG) assignment policies result in few hospitalizations having a principal diagnosis for rheumatoid arthritis. Limiting to hospitalizations with a principal diagnosis of rheumatoid arthritis could under-capture or even fully exclude hospitalizations that workgroup members previously suggested would be important to include. For example, the workgroup generally agreed that rheumatoid arthritis treatment can influence the risk of sepsis. Even when sepsis is related to rheumatoid arthritis, the hospitalization would be coded with a principal diagnosis for sepsis.

The workgroup also discussed procedures, such as arthrocentesis, intravenous (IV) infusion, and therapeutic, prophylactic, or diagnostic injections. The current service assignment rules require that these services be paired with a rheumatoid arthritis diagnosis to be assigned to the episode. Service utilization metrics show that only a portion of these procedures are included as assigned costs.

Overall, the workgroup was split on the use of a principal diagnosis check for surgeries, hospitalizations, and procedures. Some noted that, as the number of episodes with these assigned is low, it doesn't hurt to include them as long as they have any rheumatoid arthritis diagnosis on the claim (as not many episodes are affected and some of these could be related to the treatment of the condition). Others noted, however, that the low numbers indicate that these aren't particularly relevant events to rheumatoid arthritis (i.e., these were essentially rare events outside of the provider's control). Others still argued that including them would be fairer to providers who effectively manage their patients' rheumatoid arthritis by the use of things like medication, which, while costly in the short-term, can avoid these expensive complications later. In the end, the workgroup consensus supported keeping the current service assignment rules to assign clinically-related hospitalizations with a principal or secondary rheumatoid arthritis diagnosis. In addition, the workgroup unanimously supported assigning hospitalizations and procedures with a rheumatoid arthritis diagnosis instead of expanding the list of diagnoses.

The workgroup also debated to what extent these services offer information about a Rheumatoid Arthritis episode. One workgroup member noted that in some instances, patients may not be approved for surgery until their rheumatoid arthritis is under control, so surgery may not represent worsening rheumatoid arthritis. On the other hand, PFPs noted clinicians played an important role in keeping their disease managed and preventing the need for surgery. Workgroup members were also concerned that, due to the low frequency of hospitalizations, including these costs may not help with reliably differentiating clinicians' cost performance. Other workgroup members commented on the ways in which clinicians can influence the likelihood of a rheumatoid arthritis patient requiring hospitalization. For example, patients who are under-treated for their rheumatoid arthritis are at a higher risk for high-cost events, like hospitalizations for infections. Additionally, medications used to treat rheumatoid arthritis can increase the risk of infection and sepsis. The workgroup also discussed how assigning the costs of complications and other consequences may reflect when less-than-optimal care is being delivered compared to the costs associated with keeping patients healthy (e.g., medication).

The workgroup also discussed service assignment rules for home health. Currently, PT, OT, skilled nursing, home health aide, medical social services, and speech-language pathology (SLP) therapy services are assigned to the episode if they're paired with a rheumatoid arthritis diagnosis. During field testing, commenters recommended removing SLP services. The workgroup generally agreed that SLP is rarely used for rheumatoid arthritis, though one member did note it can be useful for patients with swallowing difficulties or at risk for aspiration. Acumen noted that less than 1% of episodes have SLP home health services assigned, so including or excluding it doesn't significantly affect the measure. The workgroup supported removing SLP home health services from service assignment in the end.

2.4.3 Parts B and D Medications

Following the SAR Webinar, the workgroup voted to include clinically-related Part B and D drugs. Part B drugs are considered for service assignment for all episodes, while Part D drugs are only included for those with Part D coverage. During this webinar, Acumen reviewed the current specifications, which uses subgrouping to account for whether a patient is enrolled in a Part D plan during the episode. This ensures that episodes for patients with Part D aren't directly compared with episodes for patients without Part D coverage.

The workgroup requested more information about payment standardization for Part B and D drugs. Part B medication costs are assigned using standardized payments, which removes factors such as geographic variation or provider-specific Medicare payment adjustments not related to resource use. Part D drugs costs are also standardized so that equal drug units for

drugs in the same drug group (i.e., with the same active ingredient, dose, delivery method, and brand/generic designation) are assigned the same standardized cost. The workgroup noted that medications are an integral part of RA treatment plans. One workgroup member questioned whether including medication costs was helpful in differentiating performance. Other workgroup members noted that medications can drive differences in costs of care, either based on the cost of the drugs themselves or the cost savings in patients with well-controlled RA.

The workgroup previously reached consensus to assign the following clinically related drugs:

- Abatacept
- Adalimumab
- Anakinra
- Baricitinib
- Biosimilars
- Canakinumab
- Corticosteroids
- COX-2 Inhibitors
- Etanercept
- Gabapentin
- Gold compounds
- Golimumab
- Hydroxychloroquine
- Leflunomide
- Methotrexate
- NSAIDs
- Opioids
- Phenylbutazone
- Rilonacept
- Sarilumab
- Sulfasalazine
- Tocilizumab
- Tofacitinib Citrate
- Upadacitinib

During field testing, a respondent from the person and family engagement survey noted they see an ophthalmologist for RA-related dry eye symptoms and are prescribed eye drops. The workgroup didn't dissent to including eye drops for rheumatoid arthritis care. The workgroup reached a consensus on the inclusion of eye drops, with a majority supporting it. The workgroup also supported that the current list of medications is otherwise comprehensive.

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

- Members recommended including PT/OT services with a rheumatoid arthritis diagnosis or certain rehabilitation diagnoses (gait abnormality and joint pain).
- Members recommended continuing to include hospitalizations, surgeries, and procedures with a rheumatoid arthritis diagnosis.
- Members recommended keeping the current list of assigned medications and adding eye drops.
- Members recommended removing home health SLP services.

2.5 Next Steps

In the last session, Acumen provided a wrap-up of the discussion and an overview of the next steps. After the meeting, Acumen distributed the PFTR Webinar Poll to gather input from members on the discussions held during the webinar. Acumen will operationalize input for the measure specifications based on PFTR Webinar discussion and poll results and will follow up with workgroup members with more information about the final steps in the measure development process.

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

3.1 Introduction

Section 3.2 provides an overview of materials shared with the workgroup members prior to the workgroup webinar. Section 3.3 provides a recap of concepts of the measure development process presented by Acumen.

3.2 Overview of Meeting Materials

Prior to the meeting, workgroup members were provided with the following information to inform their discussions and votes:

- Agenda and Slide Deck, which was sent prior to the meeting and outlined the topics and process used for the webinar, including embedded empirical analysis results
- Investigation workbooks sent prior to the meeting, which presented detailed findings from empirical analyses:
  - A Sub-Population Analysis, which provided 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
  - Service Utilization over Time Analysis, which lists 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).

The materials shared were based on analyses run on draft measure specifications that the Acumen clinical team created based on input from the previous meetings, field testing feedback, and discussions with CMS.

3.3 Overview of Cost Measure Development

At the beginning of the meeting, Acumen presented an introductory session on the following topics:

- The activities done to date for the development of episode-based cost measures, including the Wave 5 measure development public comment period
- The goals of the meeting and timeline of activities for Wave 5
- A recap of applicable background and context related to the cost measure, framework items, and information from the previous meetings