Quality Payment
PROGRAM

2023 Revised Cost Measure Feedback Period Summary Report for 3 Episode-Based Cost Measures

- **Cataract Removal with Intraocular Lens (IOL) Implantation**
  (currently Routine Cataract Removal with Intraocular Lens (IOL) Implantation)
- **Inpatient Percutaneous Coronary Intervention (PCI)**
  (currently ST-Elevation Myocardial Infarction [STEMI] with PCI)
- **Respiratory Infection Hospitalization**
  (currently Simple Pneumonia with Hospitalization)

April 2023

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1.0 Introduction

1.1 Project Title

MACRA Episode-Based Cost Measures: 2023 Revised Cost Measure Feedback Period

1.2 Project Background

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) established the Quality Payment Program (QPP). Under QPP, clinicians are incentivized to provide high-quality and high-value care through Advanced Alternative Payment Models or the Merit-based Incentive Payment System (MIPS). MIPS eligible clinicians will receive a performance-based adjustment to their Medicare payments. This payment adjustment is based on a MIPS final score that assesses evidence-based and practice-specific data in 4 performance categories: (i) quality, (ii) cost, (iii) improvement activities, and (iv) Promoting Interoperability.

CMS has contracted with Acumen, LLC to develop and maintain episode-based cost measures for potential use in the cost performance category of MIPS. This work is under the contract, "Physician Cost Measures and Patient Relationship Codes (PCMP)" (contract number 75FCMC18D0015, Task Order 75FCMC19F0004). Acumen has implemented a measure development process that relies on input from a large number of interested parties, including multiple groups of clinicians affiliated with a broad range of professional societies and Patient and Family partners, to develop clinically appropriate and transparent measures that provide actionable information to clinicians.

This document summarizes the feedback we received from interested parties during the February 2023 feedback period on the 3 episode-based cost measures undergoing potential revisions. Section 1.0 provides background on the episode-based cost measure reevaluation process and the 3 episode-based cost measures undergoing potential revisions. Section 2.0 summarizes the detailed feedback on each of the 3 episode-based cost measures.

1.3 Measure Development and Comprehensive Reevaluation Overview

The Wave 1 episode-based cost measures were added to the MIPS cost performance category in 2019. A total of 8 episode-based cost measures were added to the MIPS cost performance category in the 2019 performance year and were considered for comprehensive reevaluation, as they've been in MIPS for 3 years. The measures were originally selected for development based on input from expert clinician committees because of their impact in terms of patient population and clinician coverage, and the opportunity for incentivizing cost-effective, high-quality clinical care.

The purpose of comprehensive reevaluation is to ensure that measures continue to meet criteria for importance, scientific acceptability, and usability in line with the Measures Management System (MMS) Blueprint. We holistically reviewed the measures, sought public comment, and considered whether any changes needed to be made to measure specifications. Three Wave 1 episode-based cost measures were selected for potential revisions during the reevaluation based on information gathering, public comments, and discussions with CMS:

- Cataract Removal with Intraocular Lens (IOL) Implantation (previously Routine Cataract Removal with IOL Implantation)
- Inpatient Percutaneous Coronary Intervention (PCI) (previously ST-Elevation Myocardial Infarction [STEMI] with PCI)

- Respiratory Infection Hospitalization (previously Simple Pneumonia with Hospitalization)

The Clinical Subcommittees, which were originally convened during Wave 1 of episode-based cost measure development and met several times throughout 2017 to provide input on the full measure specifications, were reconvened as workgroups in fall 2022 to discuss updates to the measure, resulting in the updated draft measure specifications.

In February 2023, interested parties were invited to submit feedback via an online survey on the potential revision before consideration of their potential use in the cost performance category of the MIPS.[1] During the feedback period, interested parties had the opportunity to view (i) measure specifications documentation, (ii) measure testing forms, (iii) clinician expert workgroup meeting summaries, and (vi) summaries of previous Wave 1 measure feedback. Interested parties were invited to provide feedback on the measures by completing an online survey or submitting a comment letter. 18 survey responses were received.[2] These are shared with the Clinician Expert Workgroups to help inform measure refinement and recommendations.

For more detailed information on the episode-based cost measure development and reevaluation process, please refer to the MACRA Feedback Page.

2.0 Measure-Specific Feedback

This section includes the measure-specific feedback received during the February 2023 feedback period for the 3 episode-based cost measures undergoing potential revisions. The feedback was shared with the Clinician Expert Workgroups as part of Post-Feedback Period Refinement (PFR) discussions in spring 2023 as they considered potential refinements to the measures. Section 2.1 summarizes feedback on the Cataract Removal measure. Section 2.2 summarizes feedback on the Inpatient PCI measure. Section 2.3 summarizes feedback on the Respiratory Infection measure.

2.1 Cataract Removal

2.1.1 Defining the Episode

- One commenter reiterated their support for using the existing trigger logic rather than expanding to include additional trigger codes.

2.1.2 Accounting for Patient Heterogeneity

- Several commenters supported expanding the patient cohort to include previously excluded populations.
- Several commenters didn't support removing exclusions due to potential unintended consequences.
    - Some commenters recommended that the measure exclude high-risk pathologies and comorbidities, stating that higher risk patients have increased risk for complications that could result in increased episode costs.
    - One expressed concern that this could disproportionally affect underserved populations, and stated these populations have more comorbidities and high-risk pathologies.
    - One commenter stated that removing exclusions could result in clinicians referring higher-risk patients to tertiary care rather than performing cataract removal.

[1] Appendix A lists questions included in the online survey.
[2] Appendix B lists interested parties who submitted responses to the online survey.

    - Some commenters stated that removing exclusions would have the largest impact on low-volume small practices.
        - One commenter stated that clinicians and groups that didn't previously meet the established case minimum could now be included in measurement based on including more complex cases, which could negatively impact the cost performance.
        - Another commenter noted that high-volume practices are less likely to negatively impact cost performance due to a few high-risk cases.
    - One commenter stated exclusions shouldn't be removed without analyses to show that the measure remains valid.
- Several commenters requested additional information about changes to risk adjustment and exclusions.

2.1.3 Service Assignment

2.1.3.1 Part B Medications with Separate Payment Statuses

- Commenters provided differing views on whether Omidria should continue to be included as an assigned service.
    - Many commenters stated that Omidria is unnecessary in the types of cataract procedures included in this episode-based cost measure, and therefore should be included to capture opportunities for cost improvement.
        - Several commenters stated that Omidria is intended for use in high-risk cases, but in their experience, some clinicians use Omidria in all cases. Commenters further stated that the cases in which Omidria is indicated wouldn't be included in the patient cohort.
        - One commenter stated there are lower costs alternatives to Omidria that could be covered by the facility fee while still maintaining quality of care, such as ordering compounded phenylephrine and preservative-free lidocaine.
            - Another commenter stated that the Food and Drug Administration (FDA) advises against compounded medications.
    - Some commenters stated that Omidria shouldn't be included as an assigned service.
        - A couple commenters stated Omidria reduces the need for intraoperative and postoperative opioids and other medications such as non-steroidal anti-inflammatory drugs (NSAIDs) and opioids, and could result in Part D medication cost savings.
            - Commenters noted that if Dextenza and Dexycu aren't included as assigned services because they reduce Part D medication use, the same rationale and decision should extend to Omidria.
        - A couple commenters noted that Omidria has a separate payment status as a non-opioid pain management medication, and including Omidria as an assigned service would conflict with this status.
        - A couple commenters expressed concerns that including Omidria as an assigned service would disincentivize use, reduce quality of care for populations that would benefit from Omidria, and lead to increased complications and poor visual outcomes.
        - A couple commenters also expressed concerns that including Omidria would adversely affect measure scores for clinicians that use Omidria.
- Many commenters opposed included Dextenza and Dexycu as assigned services.

    - Many commenters stated that Dextenza and Dexycu replace postoperative corticosteroid drops, and therefore shouldn't be included in the measure.
        - Commenters further stated that these medications should only be included if Part D medication costs are added as assigned services.
    - Several commenters stated that Dextenza and Dexycu support better postoperative care and outcomes, particularly for patients with diminished capacity, limited dexterity, or other risk factors that make it difficult to adhere to traditional postoperative care.
        - One commenter noted that traditional postoperative care is also associated with a significant burden on clinicians, who must counsel patients on the care regimen.
    - Several commenters stated that Dextenza and Dexycu are useful in routine cases.
    - Several commenters expressed concern that including costs of Dextenza and Dexycu could have unintended negative consequences on quality of care.
- Many commenters provided feedback on why Omidria, Dextenza, and Dexycu shouldn't follow the same service assignment rules.
    - Some commenters stated that Dextenza and Dexycu replace the need for medications, but Omidria doesn't. The commenters stated that this warrants Dextenza and Dexycu not being included as assigned services.
        - Another commenter disagreed, stating that studies show Omidria can also reduce the need for postoperative medications.
    - Some commenters stated that while all 3 medications were granted passthrough status, the indications and uses for these medications differ.
- Many commenters provided additional input on separate payment statuses for Dextenza, Dexycu, and Omidria.
    - Several commenters stated that the purpose of passthrough status is to encourage the use of innovative services, and questioned whether assigning the cost of these services conflicted with that incentive.
    - Some commenters noted that Dexycu doesn't have a separate payment status as of December 31, 2022.
    - One commenter stated that once medications are no longer on passthrough status, the medications will be included in the facility fee and not included as separate costs for service assignment.
    - One commenter stated that no future clinically-related medications with passthrough status should be included in this cost measure.
- Several commenters requested clarification on the service assignment rules, as Dextenza and Dexycu weren't listed in the draft Measures Codes List.

2.1.3.2 Part D Medications

- Many commenters disagreed with including Part D medications as assigned services.
    - Several commenters stated that clinicians have little control over prescription drug prices.
    - Several commenters questioned whether clinicians would have sufficient information about Part D medication costs that would allow them to make informed decisions about which medications to prescribe.
        - Commenters expressed concerns that monitoring Part D medication costs could be burdensome for clinicians, and raised concerns that fluctuations in medication costs that would make it difficult to predict costs.
    - Several commenters stated that including Part D medications may have unintended consequences, such as clinicians having to choose between

medications that are lower cost to Medicare compared to medications that have lower out-of-pocket costs.
    - One commenter also questioned whether including Part D medications would cause clinicians to frequently change medications for non-clinical reasons. The commenter also questioned whether including Part D medications would lead to companies increasing medication costs.
    - One commenter recommended that Part D medication costs not be included until other MIPS measures which include Part D medications have been in use for longer. The commenter also requested that more information be made available about Part D medications and potential impacts to measures and unintended consequences.
    - One commenter stated that including Part D medication costs could penalize clinicians for choosing medically appropriate treatment, such as prescribing Part D medications in place of intraoperative medications due to patient allergies.
- Several commenters supported the inclusion of Part D medication costs.
    - Some commenters stated that Part D medication costs provide more information about costs of care associated with cataract removal procedures.
    - Some commenters stated that clinicians are responsible for and able to choose which medications to prescribe.
    - One commenter stated that including Part D medication costs would be beneficial, as there are potential cost savings associated with choosing generic medications that wouldn't negatively impact quality of care.
    - Commenters suggested including eye drops and antibiotics.
- Several commenters noted that if Part B medications with separate payment statuses are included as assigned services and have Part D alternatives, including Part D medications costs would provide a more balanced assessment of overall medication costs.
- Some commenters expressed concerns with the approach to include Part D medications, such as whether the measure would account for the fact that not all Medicare patients have Part D coverage and whether the cost measure could standardize medication costs.

2.1.3.3 Additional Non-Medication Services

- Some commenters supported including additional services related to cataract removal.
    - One commenter stated that preoperative testing should be included to capture potential cost savings, as clinicians should use their clinical judgment to determine the appropriateness and value of preoperative tests.
    - One commenter agreed with including additional telehealth visits.
    - One commenter agreed with including eye evaluation, stating the service is essential in preparing for a cataract removal procedure.
    - One commenter agreed with including emergency visits for ocular complaints and stated these visits represent postoperative concerns that need to be addressed.
- Some commenters expressed concerns with including additional services.
    - One commenter urged caution in including additional services that may be more likely to occur in underserved populations. The commenter stated certain populations may be more likely to seek emergency care rather than an office visit follow-up.

- One commenter disagreed with including durable medical equipment in the postoperative period (e.g., lenses, glasses), as these costs could be driven by patient preference outside the clinician's control.
- One commenter stated that additional services specific to complex cases shouldn't be added without additional analyses to show that the measure remains valid.
- One commenter stated that facilities drive preoperative testing decisions, and clinicians may have little control over these decisions.

2.2 Inpatient PCI

2.2.1 Defining the Episode

- Commenters generally supported expanding the patient cohort to include PCI for non-STEMI (NSTEMI) and non-myocardial infarction (non-MI).
  - One commenter noted that expanding the patient cohort would increase measure coverage, but urged further consideration into heterogeneity of the cohort and potential unintended consequences.

2.2.2 Accounting for Patient Heterogeneity

- Commenters generally supported the approaches used to account for patient heterogeneity and agreed that PCI for STEMI, NSTEMI, and non-MI shouldn't be compared against each other.
- A couple commenters stated that PCI for STEMI, NSTEMI, and non-MI captures heterogeneous patient cohorts and treatment options.
  - Commenters stated the following characteristics are associated with NSTEMI: more comorbidities; heterogeneous therapy options such as medical PCI, coronary artery bypass graft (CABG), or palliative care; and older age. The commenter questioned whether this cohort would be higher cost than STEMI as a result. The commenter also stated that the clinical definition of NSTEMI is vague, has changed over recent years, and may be difficult to identify using claims.
  - The commenter stated the STEMI cohort is more homogenous in treatment, with almost all receiving PCI. However, the commenter also stated that STEMI patients could present with cardiac arrest, shock, or complete heart blockages that require more advanced and higher cost therapies.
  - Commenters stated the non-MI cohorts are also likely to have more comorbidities.
    - One commenter further stated that they couldn't predict whether the costs for this cohort would be higher, but questioned the extent to which a clinician could influence costs.
  - One commenter suggested removing the non-MI cohort to decrease heterogeneity without reducing the cohort too much.
- A couple commenters questioned whether patients admitted for other reasons (e.g., heart failure, arrhythmia, or Type 2 MI), but receiving PCI, might be inappropriately included as NSTEMI.
- A couple commenters stated the importance of <u>not</u> penalizing clinicians for caring for sicker patients.
- A couple commenters suggested excluding patients with out-of-hospital cardiac arrest, as the patient cohort would be heterogenous and cost variation may be due to factors outside a provider's control.

- One commenter requested more information about the distribution of measure scores across the 3 patient cohorts.
- One commenter suggested risk adjusting for tobacco use because it's a risk factor among patients with STEMI.
- One commenter suggested excluding patients with temporary mechanical support, as these patients tend to be more complex.

2.2.3 Service Assignment

- A couple commenters requested additional consideration into including additional PCI procedures as assigned services. Commenters noted that care guidelines support staged procedures, and questioned whether the current service assignment rules would disincentivize performing a second PCI within the episode window.
- One commenter stated that the Inpatient PCI measure includes costs starting at admission, rather than the date on which the PCI procedure is performed. The commenter requested additional information about what costs are captured between admission and procedures.
- One commenter requested additional information on whether medications are included as assigned services, and noted that including medications could disincentivize use to save costs in the short team even though there may be long-term cost savings.

2.3 Respiratory Infection

2.3.1 Defining the Episode

- Commenters generally agreed that adding Medicare Severity (MS) Diagnosis Related Groups (DRGs) 177-179 to the trigger logic aligns with the intent of the measure to assess respiratory hospitalizations for pneumonia and related conditions.

2.3.2 Accounting for Patient Heterogeneity

- Commenters generally agreed with the approach used to account for expected differences in episode cost due to MS-DRG assignment.
- Commenters generally agreed with the changes to measure-specific risk adjustment variables and exclusion criteria.
- One commenter recommended further adjustments for episodes for certain respiratory diagnoses captured under MS-DRGs 177-179, due to expected cost differences, clinical treatment, and lengths of stay (e.g., abscess-related infections, fungal infections).
    - The commenter also stated that without adjustment, these episodes could disproportionately penalize tertiary referral hospitals and hospitals that treat underserved populations.
    - The commenter also suggested considering whether the CMS Hierarchical Condition Category (HCC) is appropriately accounting for the extent to which comorbidities influence episode cost, particularly among tertiary referral hospitals and underserved populations.

2.3.3 Service Assignment

- Commenters agreed with the current service assignment rules and didn't suggest any further changes to account for the expanded patient cohort.
    - One commenter stated their support for the inclusion of occupational therapy services, providing the rationale that occupational therapy could reduce costs while improving functional outcomes and reducing readmissions.

3.0 Next Steps for Measure Specification Refinements

Acumen will review feedback from interested parties with the Clinician Expert Workgroups during the Post-Feedback Period Refinement discussions. The Clinician Expert Workgroups' discussions about these questions will directly help to inform refinements to the measures' specifications.

Appendix A: Survey Questions

Cataract Removal with Intraocular Lens (IOL) Implantation

The intent of the draft Cataract Removal with IOL Implantation episode-based cost measure is to evaluate clinicians' risk-adjusted cost to Medicare for patients who undergo a procedure for cataract removal with IOL implantation. Compared to the current MIPS measure, the draft measure specifications include potential revisions to the patient cohort, methods to account for patient heterogeneity, and service assignment rules.

The revised Cataract Removal measure specifications use the same trigger logic as the current MIPS version to define the initial patient cohort; an episode is triggered using Current Procedural Terminology (CPT)/Healthcare Common Procedure Coding System (HCPCS) code 66984[3]. The revised measure specifications include updates to the patient cohort based on changes to the exclusion criteria.

During initial development, measure-specific exclusions were included to align with Physician Quality Reporting System (PQRS) predecessors to MIPS quality measure #191 *Cataracts: 20/40 or Better Visual Acuity within 90 Days Following Cataract Surgery* and #192 *Cataracts: Improvement in Patient's Visual Function within 90 Days Following Cataract Surgery*; MIPS quality measure #192 is no longer in use in MIPS. Since initial development, testing has shown that many episodes excluded due to ocular conditions had similar cost profiles compared to episodes included in the measure and represented a significant portion of triggered episodes.

Exclusions are intended for small patient/case cohorts that demonstrate extreme variability due to clinical heterogeneity, aren't feasible for performance improvement, and can't be mitigated via risk adjustment or service assignment.

The workgroup discussed the appropriateness of the original exclusion criteria and recommended potential revisions. The draft measure specifications now include episodes with certain ocular conditions in the measure without adjustment beyond the standard risk adjustment model and also include a measure-specific risk adjustor for ocular conditions impacting case complexity. Episodes with significant ocular conditions impacting surgical complication rate/visual outcomes are excluded (see Draft Measure Codes List file on the MACRA Feedback Page).

Does this approach appropriately define the cohort of patients undergoing cataract removal? Should additional changes be considered for the risk adjustment variables and exclusion criteria? If so, please describe the suggested changes and rationale.

The current service assignment rules for the Routine Cataract Removal measure include clinically related office-based procedures and testing, office visits and telehealth, returns to the operating room and other complications, and ancillary services, including anesthesia, medications, and injections. Acumen clinicians and workgroup members reviewed the service assignment rules and identified additional categories of assigned services to include in the draft measure specifications. These categories are:

- Additional telehealth services
- Durable medical equipment (DME)
- Emergency department (ED) visits for ocular complaints

[3]* Removal of cataract with insertion of prosthetic lens

- Eye care (e.g., examination of eye, microfluid analysis of tears)

More details about service assignment rules are available in the Draft Measure Codes List file on the MACRA Feedback Page.

Do these additional services reflect the costs related to cataract removal? Why or why not?

Acumen clinicians and workgroup members also discussed clinically related preoperative testing, such as chest radiographs or electrocardiograms, that are not included in the current MIPS specifications. Some workgroup members noted that preoperative testing can be a source of low value care, while others noted preoperative testing sometimes depends on surgical centers' requirements instead of providers' choices. The draft measure specifications don't include additional preoperative testing, but adding these services could improve the measures ability to capture variation in costs of care.

Does including additional preoperative testing better distinguish between high and low value care? What other factors should be considered when determining how to assign these services?

The revised measure specifications also reflect changes to the way in which clinically-related Part B medications with separate payment statuses are assigned to the episode. Workgroup members and feedback from interested parties indicated that the same service assignment rules should apply to all clinically related Part B drugs with separate payment statuses (e.g., incentivized for use through the Hospital Outpatient Prospective Payment System [OPPS] program), as selectively including medications could lead to unintended consequences. However, workgroup members didn't reach a consensus on whether the measure should include or exclude specific Part B drugs, including Omidria, Dexycu, and Dextenza. Because Omicra is included in the current MIPS measure specifications, and based on the feedback that the same service assignment rules should apply to all clinically-related Part B drugs, the draft measure specifications also include Dexycu, and Dextenza in the service assignment rules. Workgroup members and interested parties noted that these medications can be indicated for use in cataract procedures and result in better quality care and outcomes, but could also represent low value care if not used appropriately. Not including these medications would result in important costs not being captured when looking at overall costs of a cataract removal episode.

Given that the service assignment rules are intended to assess all clinically-related costs, what other factors should be considered when determining whether and how to assign the costs of Part B medications with separate payment statuses?

Standardized Part D costs weren't available at the time of original measure development, but were considered for inclusion in the measure as part of the reevaluation. The project Technical Expert Panel (TEP) provides overarching guidance for measure development. In prior discussion, the TEP noted Part D costs may not be relevant to all measures, but should be considered for inclusion when Part D costs make up a substantial portion of care or when assessing clinician performance may be incomplete without considering Part D costs.

Workgroup members noted that there are clinically-related Part D medications that could be considered for inclusion in the measure (e.g., post-operative eye drops). Part D payment standardization allows drugs with the same ingredient, strength, dosage form, route of administration, and brand/generic status to have the same unit price to allow the price to be comparable across providers, regardless of the drug manufacturer, Part D plan, or dispensing pharmacy. However, the workgroup also noted a need for drug price transparency to allow

clinicians to have more control over drug costs. The revised measure specifications don't include Part D drugs in the service assignment rules.

Should costs of clinically-related Part D prescription be assigned to the measure? Why or why not? If Part D prescription costs are added, what medications should be included in the service assignment rules?

Inpatient Percutaneous Coronary Intervention (PCI)

The intent of the draft Inpatient PCI episode-based cost measure is to evaluate clinicians' risk-adjusted cost to Medicare for patients who present with a cardiac event and receive PCI. Compared to the current MIPS measure, the draft measure specifications include potential revisions to the patient cohort and methods to account for patient heterogeneity.

The Inpatient PCI measure has been revised from the original STEMI PCI specifications to include PCI for STEMI, NSTEMI, and patients with neither STEMI nor NSTEMI. The measure trigger logic still defines PCI episodes using MS-DRGS 246-251, but no longer restricts to episodes with a STEMI diagnosis.

This potential revision would make the measure more impactful by assessing a greater number of episodes and clinicians. Expanding the cohort to include inpatient PCI regardless of diagnosis would reduce measurement gaps in assessing the value of care provided to patients undergoing PCI.

Does the updated trigger logic align with the intent of the measure to assess costs of care for patients who present with a cardiac event and receive PCI? Which, if any, additional changes should be considered?

The Inpatient PCI draft measure specifications account for expected cost differences between PCI episodes for STEMI, NSTEMI, or neither STEMI nor NSTEMI by creating subgroups for each of these categories. Subgrouping is a method that's intended to compare episodes only with other similar episodes within the same subgroup. This approach is used when subgroups are very different from one another, and each subgroup requires its own risk adjustment model. Since each subgroup will have its own risk adjustment model, the size of each subgroup should be sufficiently large. As an example, this approach would mean that STEMI episodes would only be compared against other STEMI episodes.

Does this approach appropriately identify and account for the differences within the overall patient cohort based on the diagnosis that accompanies the inpatient PCI stay? Should there be any changes to this approach? If yes, please specify.

The Inpatient PCI draft measure specifications use the same measure-specific risk adjustment variables as the current MIPS STEMI PCI cost measure. More details about the risk adjustment methodology are available in the Draft Measure Codes List file on the MACRA Feedback Page.

Does this approach appropriately identify and account for the differences within the overall patient cohort, which now includes patients receiving inpatient PCI for STEMI, NSTEMI, and neither STEMI nor NSTEMI PCI? For example, are there risk factors for patients presenting with NSTEMI or neither STEMI nor NSTEMI that are distinct from the risk factors expected for patients with STEMI? If yes, please specify.

The Inpatient PCI draft measure specifications use the same exclusion criteria as the current MIPS STEMI PCI cost measure. 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 subpopulation affects a small, unique set of patients in which risk adjustment wouldn't be sufficient to account for their differences in expected cost. More details about the exclusion criteria are available in the Draft Measure Codes List file on the MACRA Feedback Page.

Are the current exclusion criteria appropriate for the scope of the measures? Should additional exclusion criteria be considered now that the measure evaluates PCI for STEMI, NSTEMI, and neither STEMI nor NSTEMI? If yes, please specify.

The Inpatient PCI draft measure specifications use the same service assignment rules as the current MIPS STEMI PCI cost measure. More details about the current service assignment rules are available in the Draft Measure Codes List file on the MACRA Feedback Page.

Are there any particular services or types of care not included in the draft measure specifications that you would expect to see for PCI episodes for NSTEMI or neither STEMI nor NSTEMI? If so, please specify.

Respiratory Infection Hospitalization

The intent of the Respiratory Infection Hospitalization episode-based cost measure is to evaluate clinicians' risk-adjusted cost to Medicare for patients who receive inpatient treatment for a respiratory infection. Compared to the current MIPS measure, the draft measure specifications include potential revisions to the patient cohort and methods to account for patient heterogeneity.

The current MIPS measure specifications define patient cohort based on Simple Pneumonia & Pleurisy (MS-DRGs 193-195). Analyses shows changes in inpatient respiratory care, such as an increase in the number of inpatient stays for Respiratory Infections and Inflammations (MS-DRGs 177-179). The Respiratory Infections and Inflammations MS-DRGs include patients with pneumonia, and there are clinical similarities between treatment for pneumonia and other respiratory infections.

The draft trigger logic expands the measure to include MS-DRGs 177-179, as well as MS-DRGs 193-195. Along with other changes to the measure specifications, the revised measure captures a greater number of clinicians and episodes.

Does this update to the trigger logic align with the intent of the measure to assess respiratory hospitalizations for pneumonia and related conditions? Which, if any, additional changes should be considered?

The draft measure specifications account for expected cost differences between Simple Pneumonia & Pleurisy episodes and Respiratory Infections and Inflammations by creating subgroups for each of base DRGs. Subgrouping is a method that's intended for when we would want to compare episodes only with other similar episodes within the same subgroup. This approach is used when subgroups are very different from one another, and each subgroup requires its own risk adjustment model. Since each subgroup will have its own risk adjustment model, the size of each subgroup should be sufficiently large. The workgroup recommend subgrouping by base DRG, as it is expected that reimbursement rates differ based on the DRG assigned to an inpatient stay, and that the differences in reimbursement are not under the reasonable influence of the attributed clinician.

Does this approach appropriately identify and account for the differences within the overall patient cohort based on the base DRG for the trigger stay?

The draft measure specifications have updates to the exclusion criteria and measure-specific risk adjustment variables. Based on testing results and discussion with the workgroup, the following changes were made to the draft measure specifications:

- Certain subpopulations are no longer used as measure-specific risk adjustment variables and exclusions, and instead are accounted for via the standard risk adjustment model (i.e., variables that are already included in the CMS Hierarchical Condition Category [HCC] risk adjustment model).

- Various risk-adjustment variables for recent hospitalizations were combined and expanded to include all-cause recent hospital admission
- The measure includes risk adjustment for episodes with COVID-19 as the principal diagnosis on the inpatient trigger claim

Does this approach appropriately identify and account for the differences within the overall patient cohort? Which, if any, additional changes should be considered?

The Respiratory Infection Hospitalization draft measure specifications use the same service assignment rules as the current MIPS Simple Pneumonia with Hospitalization cost measure. More details about the current service assignment rules are available in the Draft Measure Codes List file on the MACRA Feedback Page.

Are there any particular services or types of care not included in the draft measure specifications that you would expect to see for episodes with an initial trigger stay in MS-DRGs 177-179? If so, please specify.

Appendix B: List of Commenters

This appendix provides an index of interested parties who submitted a comment during the feedback period. Though commenters who provided feedback and didn't include their name or organization aren't included in this table, their input has been included in the report.

Table B1. Interested Parties Providing Input During the Feedback Period

Submitter Name	Individual or Representative	Organization
Parag Parekh	Individual	-
Vanessa Gillespie	Individual	-
Christina "Tina" Pappalardo	Individual	-
Mustafa Hamed	Individual	-
David Glasser	Individual	-
Ernie Swanson	Individual	-
John McAllister	Individual	-
Monica Wright	Organization	The Society for Cardiovascular Angiography and Interventions
Carrie Horn	Organization	National Jewish Health
Fareen Pourhamidi	Organization	American College of Cardiology
Jessica Peterson	Organization	Marsden Advisors
Michael Romansky	Organization	Outpatient Ophthalmic Surgery Society
Brandy Keys	Organization	American Academy of Ophthalmology
Nancey McCann	Organization	American Society of Cataract and Refractive Surgery
Brian Carey	Organization	Foley Hoag LLP, Rayner
Jackie Price	Individual	-
Samuel Dan Caughron	Individual	-