October 21, 2019

To: Consensus Standards Approval Committee (CSAC)
From: All-Cause Admissions and Readmissions Project Team
Re: All-Cause Admissions and Readmissions CDP Spring 2019

CSAC Action Required
The CSAC will review recommendations from the All-Cause Admissions and Readmissions project at its October 21-22, 2019 in-person meeting and vote on whether to uphold the recommendations from the Committee.

This memo includes a summary of the project, measure recommendations, measure specific public and member comments and the results from the NQF member expression of support. The following documents accompany this memo:

1. All-Cause Admissions and Readmissions Spring 2019 Draft Report. The draft report has been updated to reflect the changes made following the Standing Committee’s discussion of public and member comments. The complete draft report and supplemental materials are available on the project webpage.

2. Comment Table. This table lists one comment received during the post-meeting comment period and the NQF/Standing Committee response.

Background
Avoidable admissions and readmissions to acute care facilities are an important area for healthcare quality improvement. These avoidable admissions and readmissions often represent an opportunity to improve care transitions and prevent the unnecessary exposure of patients to adverse events in an acute care setting. To drive improvement in admissions and readmissions, performance measures have continued to be a key element of value-based purchasing programs to incentivize collaboration in the healthcare delivery system.

The 21-member All-Cause Admissions and Readmissions Standing Committee has been charged with overseeing the NQF All-Cause Admissions and Readmission portfolio, evaluating both newly submitted and previously endorsed measures against NQF’s measure evaluation criteria, identifying gaps in the measurement portfolio, providing feedback on how the portfolio should evolve, and serving on any ad hoc or expedited projects in its designated topic areas. The All-Cause Admissions and Readmissions portfolio includes measures for various care settings or points of care.

During two web meetings on June 20 and June 21, the All-Cause Admissions and Readmissions Standing Committee evaluated one newly submitted measure and one maintenance measure. The Committee recommended for endorsement NQF #3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate at the clinician group/practice level of analysis.
Committee did not recommend the individual clinician level of analysis version of the same measure NQF #3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate, based on validity concerns. Measure NQF #2539 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy was withdrawn by the developer from consideration pending alignment of measure testing and specifications. Following the post-comment call, NQF elected to return measure 3495 to the Standing Committee for re-review and defer a final recommendation to the fall 2019 cycle.

Draft Report
The All-Cause Admissions and Readmissions Spring 2019 draft report presents the results of the evaluation of two measures considered under the Consensus Development Process (CDP). One measure was deferred at the clinician group/practice level of analysis and not recommended at the individual clinician level of analysis, and one measure was withdrawn from consideration.

The measures were evaluated against the 2018 version of the measure evaluation criteria.

<table>
<thead>
<tr>
<th></th>
<th>Maintenance</th>
<th>New</th>
<th>Total</th>
</tr>
</thead>
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<tr>
<td>Measures under consideration</td>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Measures deferred</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Measures not recommended for endorsement</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Measures withdrawn from consideration</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Reasons for not recommending:

Importance - Meets Criteria
Scientific Acceptability – Does not meet criteria
Use – n/a
Overall – n/a
Competing Measure – n/a

CSAC Action Required
Pursuant to the CDP, the CSAC is asked to review the Committee recommendations on three measures from the spring 2019 cycle, as well as the decision not reconsider two measures from the fall 2018 cycle.
Comments and Their Disposition
Throughout the project, NQF received three comment from a member organization pertaining to the draft report and to the measures under consideration.

A table of comments submitted during the comment period, with the responses to each comment and the actions taken by the Standing Committee and measure developers, is posted to the All-Cause Admissions and Readmissions project webpage.

Comment Themes and Committee Responses
Comments about specific measure specifications and rationale were forwarded to the developers, who were invited to respond.

The Standing Committee reviewed the submitted measure-specific comment and the developer’s response.

Measure-Specific Comments
3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System (MIPS) Eligible Clinicians and Eligible Clinician Groups
The American Medication Association (AMA) appreciates the Standing Committee discussion and evaluation of this measure but continues to have significant concerns with the lack of adherence to the Consensus Development Process and whether the measure meets the NQF Measure Evaluation Criteria, particularly for evidence and scientific acceptability.

The NQF has had a longstanding commitment to ensuring that the CDP and associated criteria are followed consistently and the process is conducted in a transparent manner. Unfortunately, we do not believe that it is demonstrated in this project and associated report. Specifically, the AMA is concerned with the limited number of members who were able to participate in the evaluation of this measure on the June 21 webinar; specifically, the roll call prior to discussion of this measure identified only 11 of the 21 members. Based on our review of the votes available for the individual clinician and group levels of analysis, an additional five members evaluated the measures against the criteria but were not present during the discussion of the measure on June 21. It is concerning to have just 50% of the committee participate in the public discussion of the measure and almost 25% of the remaining members participate in voting on a measure for which it is not clear they were able to fully evaluate, ask questions of the developer, and hear public comments. In addition, the draft report released for comment does not include the committee votes for feasibility, usability and use, and the recommendation for endorsement for the group level of analysis (see pages 13-14) but the narrative indicates that it is recommended for endorsement. Omissions like these lead us to question the integrity and consistency of the process and makes it extremely difficult for NQF members and the public to engage in the CDP in a meaningful way.

As mentioned in our comments submitted prior to the committee’s evaluation, we believe that:

- Insufficient evidence was provided to support attribution of the measure to physicians or practices in the absence of some coordinated program or targeted intervention led by the health system or hospital;
• Assignment of responsibility of the reduction of readmissions to multiple physicians and practices in MIPS is not appropriate nor has the developer provided sufficient information to support the attribution of this measure to up to three physicians or practices;

• The measure score reliability results are too low when based on the minimum case number of 25 patients. Measures should meet minimum acceptable thresholds of 0.7 for reliability; and

• The conceptual basis used to explain which social risk factors were tested in Section 2b3.3a is inadequate and additional testing is needed to evaluate clinical factors in conjunction with social risk factors as well as the impact that the inclusion of these factors had on the absolute change of the rates.

As a result, the AMA is unable to support endorsement of the measure at this time and requests that NQF distribute the missing information in the report and the Committee reconsiders its recommendation for endorsement.

Committee Response
The Standing Committee acknowledges the main concerns raised by the commenter related to: evidence to support attribution to physicians or practices, assignment of responsibility of readmissions to multiple physicians, reliability results at case numbers of less than 25 patients, and approach to testing of social risk factors.

The Committee agrees that improvement of readmissions requires shared accountability among all members of the care team but also struggled with the attribution to an individual clinician. Thus, the Committee agreed to split consideration of the measure based on individual clinician and clinician group level of analysis, noting different conceptual attribution issues and reliability performance at the two levels of analysis. The Committee generally agreed that individual physicians often rely on peers, office and hospital-based support staff for important care transition roles and may have limited direct influence on the social risk and community supports available to the patients they serve. However, physician group practices do have a role in improving readmission outcomes and are more likely able to provide the resources to improve care transitions.

On the issue of testing of social risk factors, the Committee reviewed testing information on the conceptual basis for social risk adjustment, the variables selected and tested, and the rationale for not including these variables in the final model risk model. The developer noted that the inclusion of the social risk factors in the final model did not meaningfully change risk model performance or measure score distribution. The Committee agrees that further future testing should be undertaken by the developer in accordance with the commenter recommendations.

Finally, the Committee reviewed the reliability testing data provided by the developer in the submission form. Committee members noted that the reliability methods and statistics submitted by the developer were considered by the NQF Scientific Methods
Panel. Members of the Standing Committee agreed that the reliability statistics at lower case volume will demonstrate lower reliability. The Standing Committee requested the developer provide additional reliability statistics at lower case volume, both the range of performance and the mean values to improve transparency for all stakeholders. During the call, the Standing Committee generally agreed that the method and overall reliability performance was sufficient at the physician group level.

However, after reviewing the updated reliability testing information submitted via email after the call, and noting that incorrect reliability testing information was given verbally during the call which informed the Committee’s discussion and voting, NQF, in consultation with the measure steward and developer and Standing Committee Co-chairs, elected to defer the final recommendation and send the measure back to the Committee for re-review in the fall 2019 cycle.

**NQF Response:**
Thank you for your comments. NQF strives to achieve quorum at each step of the Consensus Development Process (CDP). Recognizing the burden on volunteer members of the CDP Committees with the increased activities in the bi-annual cycle of the CDP, NQF will be exploring process improvement opportunities to ensure future Committee calls do achieve quorum. With regards to voting, NQF followed our established procedure for cases when quorum is not achieved. Votes were not taken during the call where quorum was not reached. Following the call, the transcript and recording were provided to all Committee members along with a voting survey. Committee members who were not present are able to review the call materials and the transcript or recording prior to submitting their votes. Votes were accepted until quorum of the Committee was achieved.

There was an oversight by NQF staff in providing a full count of votes in the published version of the report. NQF corrected and reposted the report with the full information as soon as this comment was received. We thank the commenter for alerting us of this oversight.

**Developer Response:**
We appreciate this summary of your earlier comments, which we address below.

We also agree with the conclusions outlined within NQF’s final report, Improving Attribution Models (NQF, 2018), in that attribution models should reflect clinicians and providers with reasonable influence on the care and outcomes for patients in order to enforce accountability and facilitate quality improvement. During development, we solicited a wide variety of clinician, technical, and patient feedback through stakeholder engagement. The Technical Expert Panel, in particular, felt strongly that it was appropriate to attribute readmissions to multiple clinicians to encourage coordination and shared accountability. Additionally, the same panel identified the three clinicians attributed by this measure as being most accountable.
We agree that it is important that the final volume threshold correspond to adequate reliability. Constructing meaningful, reliable, valid provider quality measures is challenging and requires balancing competing factors and values. In the NQF Submission forms, we provide evidence that these measures do capture reliable and valid quality signals at the clinician and group level under the proposed attribution.

We tested for the effects of including two social risk factors within the model (dual eligibility status and low Agency for Healthcare Research and Quality SES) on final risk-adjusted rates for both clinicians and clinician groups. The correlation between the adjusted and unadjusted scores were 0.99, indicating extremely high agreement and that adding these social risk factors would have minimal impact on measure scores. Ongoing research aims to identify valid patient-level social risk factors and highlight disparities related to social risk. As additional variables become available, they will be considered for testing and inclusion within the measure. There are also alternative ways to adjust for social risk as part of measure program implementation, such as stratification or peer grouping, which CMS recently applied to the Hospital Readmission Reduction Program (HRRP).

Since the release of the Evaluation of the NQF Trial period for Risk Adjustment for Social Risk Factors report in July 2017, NQF announced the launch of a new, three-year initiative to explore unresolved issues that surfaced in the 2015-2017 social risk factor trial. The stated goal of the new Social Risk Trial is to “help inform a decision on whether to permanently change NQF’s policy to allow social risk adjustment for outcome measures.” For risk-adjusted outcome measures, CMS first considers adjustment for clinical conditions and then examines additional risk imparted by social risk factors after the potential for greater disease burden is included in the risk model. We believe that this is consistent with NQF current guidance and is appropriate given the evidence cited in our submission that people who experience greater social risk are more likely to have more disease burden compared with those who do not; and that this is clearly not a signal of hospital quality. In addition, according to NQF guidance, developers should assess social risk factors for their contribution of unique variation in the outcome – that they are not redundant. Therefore, if clinical risk factors explain all

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or most of the patient variation in the outcome, then NQF guidance does not support adding social risk factors that do not account for variation.

In addition to the correlation between adjusted and unadjusted scores, we also tested the change in risk-adjusted readmission rates. When incorporating the duel eligible risk factor, risk-adjusted readmission rates dropped an absolute value of 0.03% for clinicians and 0.02% for clinician groups. When incorporating low AHRQ SES, risk-adjusted readmission rates dropped an absolute value of -0.02% for clinicians and -0.01% for clinician groups.

NQF doesn’t specify or require testing for impact on program inclusion, program benchmarking, or star rating systems. At this time, it is not known how CMS will use this measure in the MIPS program.

We agree with the importance of balancing these competing considerations. We are committed to constant refinement and improvement of risk adjustment models used in all measures. We will reevaluate this model and available risk factors on an ongoing basis, with the goal of producing the most accurate and fair risk adjustment models for assessing provider performance.

**Member Expression of Support**

Throughout the 16-week continuous public commenting period, NQF members had the opportunity to express their support (‘support’ or ‘do not support’) for each measure submitted for endorsement consideration to inform the Committee’s recommendations. One NQF member provided an expression of nonsupport on both 3495 at both levels of analysis and on 2539. Appendix C details the expression of support.
## Appendix A: CSAC Checklist

The table below lists the key considerations to inform the CSAC’s review of the measures submitted for endorsement consideration.

<table>
<thead>
<tr>
<th>Key Consideration</th>
<th>Yes/No</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>Were there any process concerns raised during the CDP project? If so, briefly explain.</td>
<td>Yes</td>
<td>The Committee did not have quorum during the measure evaluation web meetings. Standard process for evaluation without quorum was followed: votes were taken via voting survey from a quorum of members, and Committee members who missed the discussion were asked to review the call transcript/recording and summary prior to voting. A version of the report that was missing votes for three criteria (feasibility, usability &amp; use, and overall recommendation) was posted for public comment. This was an oversight and was corrected as soon as staff were made aware of it.</td>
</tr>
<tr>
<td>Did the Standing Committee receive requests for reconsideration? If so, briefly explain.</td>
<td>Yes</td>
<td>The Committee received two requests for reconsideration on measures reviewed in the Fall 2018 cycle, 3443 All-Cause Emergency Department Utilization Rate for Medicaid Beneficiaries with Complex Care Needs and High Costs and 3445 All-Cause Inpatient Admission Rate for Medicaid Beneficiaries with Complex Care Needs and High Costs. This reconsideration discussion was held during the Spring 2019 cycle evaluation period. The Standing Committee reviewed the additional information submitted by the developer but elected not to reconsider (Y-4; N-14). The Committee generally agreed that the additional information did not adequately address their concerns. Committee members noted challenges with the data variability and said that a more standardized data collection approach was required for the measure to be ready for endorsement.</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
<td></td>
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<tr>
<td>-------------------------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>Did the Standing Committee overturn any of the Scientific Methods Panel’s ratings of Scientific Acceptability? If so, state the measure and why the measure was overturned.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>If a recommended measure is a related and/or competing measure, was a rationale provided for the Standing Committee’s recommendation? If not, briefly explain.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Were any measurement gap areas addressed? If so, identify the areas.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Are there additional concerns that require CSAC discussion? If so, briefly explain.</td>
<td>Yes</td>
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</table>

The Standing Committee split consideration of NQF #3495 based on level of analysis. The clinician: group level of analysis was originally recommended for endorsement. The individual clinician level of analysis was not recommended for endorsement.

The Standing Committee requested additional reliability statistics from the developer based on performance at lower case volumes. This information was to help provide transparency for members of the public.

After the post-comment call, the developer submitted additional clarifying reliability information and noted they had provided incorrect reliability testing information verbally during the call. Since this incorrect information informed the Committee’s final recommendation, NQF and the Committee co-chairs decided to send the measure and the updated information back to the Committee for review. Therefore, an endorsement recommendation will be deferred to the fall 2019 cycle.
Appendix B: Measures Not Recommended for Endorsement

The table below lists the Committee’s vote and rationale for measures not recommended for endorsement.

Legend: H = High; M = Moderate; L = Low; I = Insufficient

<table>
<thead>
<tr>
<th>Measure</th>
<th>Voting Results</th>
<th>Standing Committee Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System (MIPS) Eligible Clinicians and Eligible Clinician Groups - Individual Clinician LOA] [YALE Core/CMS</td>
<td>Evidence Y-11; N-5 Gap H-0; M-11; L-4; I-1 Reliability H-0; M-8; L-5; I-3 Validity</td>
<td>The Standing Committee raised several concerns about the individual clinician level specifications and testing. Specifically, the Committee was concerned about the attribution approach. The face validity of holding an individual clinician accountable for all-cause hospital readmission raised concern with the Standing Committee. The Committee was not clear how an individual physician could directly influence these outcomes without collaboration of other physicians and hospital partnerships.</td>
</tr>
<tr>
<td></td>
<td>Feasibility</td>
<td>The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability</td>
</tr>
<tr>
<td></td>
<td>Usability and Use</td>
<td>The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability</td>
</tr>
<tr>
<td></td>
<td>Use</td>
<td>The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability</td>
</tr>
<tr>
<td></td>
<td>Usability</td>
<td>The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability</td>
</tr>
</tbody>
</table>
| 3443 All-Cause Emergency Department Utilization Rate for Medicaid Beneficiaries with Complex Care Needs and High Costs (BCNs) (CMS/Mathematica Policy Research) | Evidence: Y-17; N-0  
Performance Gap: H-4; M-13; L-0; I-0  
Reliability: H-3; M-11; L-1; I-0  
Validity: H-0; M-3; L-8; I-4  
Feasibility  
The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability  
Usability and Use  
Use  
The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability  
Usability  
The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability | Committee members raise concerns about the measure’s generalizability to all 50 states, given the representativeness of the data used in testing.  
The Committee raised several concerns under the validity sub-criterion. The Committee noted that the developer tested the validity of the measure using a face validity test. The Committee was concerned that only 11 out of the 17 TEP members responded to whether the measure was a good indicator of quality. The risk-adjustment approach was developed using data from 10 states. The risk-adjustment model included 69 risk factors. While the measure demonstrated adequate discrimination and calibration of the risk adjustment model, the Committee expressed concerns that the variability of the underlying patient population could present a threat to validity. The data set used to develop the measure is not necessarily representative of the country or the population that the measure is intended to be applied. Of the 50 states, 34 were excluded due to data issues. Further, the Committee discussed that there is significant variation in the eligible population for this measure due to the differences in the Medicaid populations between states. Thus, applying this measure to the heterogeneous Medicaid populations across states makes differences in measure performance across states difficult to interpret. Are the differences due to actual health system performance differences or are the differences due to underlying differences in the Medicaid populations? The inability for the developer to distinguish this brought into question the validity of the measure as currently constructed. |
<table>
<thead>
<tr>
<th>Measure</th>
<th>Voting Results</th>
<th>Standing Committee Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>3445 All-Cause Inpatient Admission Rate for Medicaid Beneficiaries with Complex Care Needs and High Costs (BCNs) (CMS/Mathematica Policy Research)</td>
<td>Evidence: Y-17; N-0 Performance Gap: H-4; M-13; L-0; I-0 Reliability: H-3; M-11; L-1; I-0 Validity: H-0; M-3; L-8; I-4 Feasibility The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability Use The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability Usability The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability</td>
<td>The Committee raised a number of points about the validity of this measure. The data set used to develop the measure is not necessarily representative of the country or the population that the measure is intended to be applied. Of the 50 states, 34 were excluded due to data issues. Further, the Committee discussed the significant variation in the eligible population for this measure between states – due to the differences in the Medicaid populations between states. Thus, applying this measure to the heterogeneous Medicaid populations across states makes differences in measure performance across states difficult to interpret. Are the differences due to actual health system performance differences or are the differences due to underlying differences in the Medicaid populations? The inability for the developer to distinguish this brought into question the validity of the measure as currently constructed.</td>
</tr>
</tbody>
</table>
Appendix C: NQF Member Expression of Support Results

One NQF member provided expressions of nonsupport on the measures under consideration. Neither of the two measures under consideration received support from NQF members. Results are provided below.

3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System (MIPS) Eligible Clinicians and Eligible Clinician Groups (Measure Steward/Developer) [At both clinician: group and clinician: individual levels of analysis]

<table>
<thead>
<tr>
<th>Member Council</th>
<th>Support</th>
<th>Do Not Support</th>
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</thead>
<tbody>
<tr>
<td>Health Professional</td>
<td>0</td>
<td>1</td>
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</tbody>
</table>

2539 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy (Measure Steward/Developer)

<table>
<thead>
<tr>
<th>Member Council</th>
<th>Support</th>
<th>Do Not Support</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Health Professional</td>
<td>0</td>
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</table>
Appendix D: Details of Measure Evaluation

Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable

Measure Deferred – for Clinician Group/Practice Specification Only

3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System [Clinician Group/Practice LOA]

Description: This measure is a re-specified version of the hospital-level measure, “Hospital-Wide All-Cause, Unplanned Readmission Measure” (NQF 1789), which was developed for patients who are 65 years or older, are enrolled in fee-for-service (FFS) Medicare and are hospitalized in non-federal hospitals.

This re-specified measure attributes hospital-wide index admissions to up to three participating MIPS Eligible Clinicians or Eligible Clinician Groups (“providers”), rather than to hospitals. It assesses each provider’s rate of 30-day readmission, which is defined as unplanned, all-cause readmission within 30 days of hospital discharge for any eligible condition.

The measure reports a single summary risk adjusted readmission rate (RARR), derived from the volume-weighted results of five different models, one for each of the following specialty cohorts based on groups of discharge condition categories or procedure categories: surgery/gynecology; general medicine; cardiorespiratory; cardiovascular; and neurology, each of which will be described in greater detail below.

Numerator Statement: The outcome for this measure is readmission within 30-days of a hospital discharge. We define readmission as an inpatient admission for any cause, except for certain planned readmissions, within 30 days from the date of discharge from an eligible index admission.

Denominator Statement: The measure includes admissions for Medicare beneficiaries who are 65 years and older and are discharged from any non-federal, acute care inpatient US hospitals (including territories) with Medicare part A enrollment for the 12 months prior to admission and part A enrollment for the 30 days after discharge. These are called ‘index admissions’

Outcome attribution:

Each index admission is attributed to up to 3 eligible clinicians or eligible clinician groups.

1) One is the eligible clinician who filed a claim for the ‘discharge procedure’ (CPT code 99238 or 99239) for the patient; conceptually, this clinician is measured because, having billed for the discharge of the patient, they have some responsibility for the transition of the patient to non-acute settings.

2) Second is the eligible clinician who, during the inpatient stay, billed the most patient-facing charges; conceptually, this clinician has the most responsibility for the care of patients during their stay and may also be the Discharge Clinician.

3) Third is the eligible clinician that provides the plurality of outpatient primary care during the 12 months prior to the admission, as measured by plurality of primary care services; conceptually, a primary care provider may manage the transition from acute to non-acute care and participate in decisions to return to acute care.
Index admissions are attributed to a clinician by each of these rules; two or all three rules may attribute the index admission to the same clinician. Then, all admissions assigned to an eligible clinician are used to construct a single measure score for that clinician, regardless of the reason the admission was attributed. The measure has also been tested for eligible clinician groups, implemented here by grouping eligible clinicians who use the same Taxpayer Identification Number (TIN).

**Exclusions:** From the cohort, we exclude admissions if:
1. The patient is discharged against medical advice (AMA)
2. The patient is discharged from a PPS-exempt cancer hospital
3. The patient is admitted primarily for the medical treatment of cancer
4. The patient is admitted primarily for the treatment of psychiatric disease
5. The patient is admitted primarily for “rehabilitation care; fitting of prostheses and adjustment devices” (CCS 254)
6. Admissions without 30 Days of Post-Discharge Enrollment are excluded
7. Admissions cannot be identified in IDR database
8. The admission cannot be attributed to an eligible clinician.

Further exclusion details can be found in S.9 Denominator Exclusion Details

**Adjustment/Stratification:** Statistical risk model

**Level of Analysis:** Clinician: Group/Practice

**Setting of Care:** Inpatient/Hospital

**Type of Measure:** Outcome

**Data Source:** Claims, Enrollment Data

**Measure Steward:** Centers for Medicare & Medicaid Services (CMS)

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**STANDING COMMITTEE MEETING [June 21, 2019]**

1. **Importance to Measure and Report:** The measure meets the Importance criteria
   (1a. Evidence, 1b. Performance Gap)

1a. Evidence: **Y-14; N-2**; 1b. Performance Gap: **H-0; M-15; L-1; I-0**

**Rationale:**
- This is a re-specified version of the hospital-level measure, “Hospital-Wide All-Cause, Unplanned Readmission Measure” (NQF 1789). NQF 1789 was developed for patients who are 65 years or older, are enrolled in fee-for-service (FFS) Medicare, and are hospitalized in non-federal hospitals. This specified measure attributes admissions to up to three participating MIPS eligible clinicians.
- The Standing Committee reviewed the logic model presented by the developer demonstrating physician group interventions that can reduce the risk of unplanned hospital visits.
- The Standing Committee reviewed the range of performance for clinician groups from 13.1 in the first decile to 18.0 in the tenth decile.
2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)
2a. Reliability: H-0; M-13; L-2; I-1; 2b. Validity: H-0; M-10; L-6; I-0

Rationale:
- The Standing Committee reviewed the input provided by the NQF Scientific Methods Panel (SMP).
- The Standing Committee generally agreed with the input from the SMP that the reliability testing methodology was appropriate and that results demonstrated moderate reliability. The Standing Committee noted SMP concerns that social risk factors are excluded from the risk model given the effect size and the potential for negative consequences on access to care if this measure is not adequately risk adjusted. The Standing Committee agreed that the developer should examine other clinical variables that could underlie disparities such as frailty or functional status.
- The Standing Committee reviewed the measure score empirical validity testing and face validity testing submitted at the individual physician and physician group level. The Standing Committee noted that the evidence and validity testing must be evaluated separately for the two levels of analysis. The Committee agreed to vote individually on the two levels of analysis.
- The Standing Committee noted that eligible clinician groups’ risk adjusted readmission rates go down with increasing Overall Hospital Quality Star Rating and with increasing quintile of the Star Rating readmission quality score.
- The Committee reviewed the Face Validity testing and results, the approach to risk adjustment and the conceptual model for socio-demographic risk adjustment.
- The Standing Committee had a mixed review of the face validity of the measure, specifically, the role physician groups have in improving this outcome.

3. Feasibility: H-6; M-9; L-1; I-0
(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)

Rationale:
- The Standing Committee agreed that the measure uses claims data that can be operationalized; however, the measure is not yet in use. There are no fees, licensing, or requirements to use the measure.

4. Usability and Use:
(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)
4a. Use: Pass-14; No Pass-2; 4b. Usability: H-1; M-11; L-4; I-0

Rationale:
- The Standing Committee acknowledged that this measure is planned for use in the CMS
MIPS program.
• The Standing Committee noted that this is a new measure and there is no information available on performance improvement. This measure is not currently used in a program, but a primary goal of the measure is to provide information necessary to implement focused quality improvement efforts. Once the measure is implemented, the developer plans to examine trends in improvements by comparing RSRR over time.

5. Related and Competing Measures
• No related or competing measures noted.

Standing Committee Recommendation for Endorsement: Yes-11; No-5

Rationale
• The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

6. Public and Member Comment
One comment was submitted during the post-evaluation comment period:

The American Medication Association (AMA) appreciates the Standing Committee discussion and evaluation of this measure but continues to have significant concerns with the lack of adherence to the Consensus Development Process and whether the measure meets the NQF Measure Evaluation Criteria, particularly for evidence and scientific acceptability.

The NQF has had a longstanding commitment to ensuring that the CDP and associated criteria are followed consistently and the process is conducted in a transparent manner. Unfortunately, we do not believe that it is demonstrated in this project and associated report. Specifically, the AMA is concerned with the limited number of members who were able to participate in the evaluation of this measure on the June 21 webinar; specifically, the roll call prior to discussion of this measure identified only 11 of the 21 members. Based on our review of the votes available for the individual clinician and group levels of analysis, an additional five members evaluated the measures against the criteria but were not present during the discussion of the measure on June 21. It is concerning to have just 50% of the committee participate in the public discussion of the measure and almost 25% of the remaining members participate in voting on a measure for which it is not clear they were able to fully evaluate, ask questions of the developer, and hear public comments. In addition, the draft report released for comment does not include the committee votes for feasibility, usability and use, and the recommendation for endorsement for the group level of analysis (see pages 13-14) but the narrative indicates that it is recommended for endorsement. Omissions like these lead us to question the integrity and consistency of the process and makes it extremely difficult for NQF members and the public to engage in the CDP in a meaningful way.
As mentioned in our comments submitted prior to the committee's evaluation, we believe that:

- Insufficient evidence was provided to support attribution of the measure to physicians or practices in the absence of some coordinated program or targeted intervention led by the health system or hospital;

- Assignment of responsibility of the reduction of readmissions to multiple physicians and practices in MIPS is not appropriate nor has the developer provided sufficient information to support the attribution of this measure to up to three physicians or practices;

- The measure score reliability results are too low when based on the minimum case number of 25 patients. Measures should meet minimum acceptable thresholds of 0.7 for reliability; and

- The conceptual basis used to explain which social risk factors were tested in Section 2b3.3a is inadequate and additional testing is needed to evaluate clinical factors in conjunction with social risk factors as well as the impact that the inclusion of these factors had on the absolute change of the rates.

As a result, the AMA is unable to support endorsement of the measure at this time and requests that NQF distribute the missing information in the report and the Committee reconsiders its recommendation for endorsement.

Committee Response

The Standing Committee acknowledges the main concerns raised by the commenter related to: evidence to support attribution to physicians or practices, assignment of responsibility of readmissions to multiple physicians, reliability results at case numbers of less than 25 patients, and approach to testing of social risk factors.

The Committee agrees that improvement of readmissions requires shared accountability among all members of the care team but also struggled with the attribution to an individual clinician. Thus, the Committee agreed to split consideration of the measure based on individual clinician and clinician group level of analysis, noting different conceptual attribution issues and reliability performance at the two levels of analysis. The Committee generally agreed that individual physicians often rely on peers, office and hospital-based support staff for important care transition roles and may have limited direct influence on the social risk and community supports available to the patients they serve. However, physician group practices do have a role in improving readmission outcomes and are more likely able to provide the resources to improve care transitions.

On the issue of testing of social risk factors, the Committee reviewed testing information on the conceptual basis for social risk adjustment, the variables selected and tested, and the rationale for not including these variables in the final model risk model. The developed noted that the inclusion of the social risk factors in the final model did not meaningfully change risk model performance or measure score.
distribution. The Committee agrees that further future testing should be undertaken by the developer in accordance with the commenter recommendations.

Finally, the Committee reviewed the reliability testing data provided by the developer in the submission form. Committee members noted that the reliability methods and statistics submitted by the developer were considered by the NQF Scientific Methods Panel. Members of the Standing Committee agreed that the reliability statistics at lower case volume will demonstrate lower reliability, but the overall mean reliability statistics were acceptable. The Standing Committee requested the developer provide additional reliability statistics at lower case volume, both the range of performance and the mean values to improve transparency for all stakeholders. During the call, the Standing Committee generally agreed that the method and overall reliability performance was sufficient at the physician group level.

However, after reviewing the updated reliability testing information submitted via email after the call, and noting that incorrect reliability testing information was given verbally during the call which informed the Committee’s discussion and voting, NQF, in consultation with the Committee co-chairs and the measure developer, elected to defer the final recommendation and send the measure back to the Committee for re-review in the fall 2019 cycle.

NQF Response:
Thank you for your comments. NQF strives to achieve quorum at each step of the Consensus Development Process (CDP). Recognizing the burden on volunteer members of the CDP Committees with the increased activities in the bi-annual cycle of the CDP, NQF will be exploring process improvement opportunities to ensure future Committee calls do achieve quorum. With regards to voting, NQF followed our established procedure for cases when quorum is not achieved. Votes were not taken during the call. Following the call, the transcript and recording were provided to all Committee members along with a voting survey. Committee members who were not present are able to review the call materials and the transcript or recording prior to submitting their votes. Votes were accepted until quorum of the Committee was achieved.

There was an oversight by NQF staff in providing a full count of votes in the published version of the report. NQF corrected and reposted the report with the full information as soon as this comment was received. We thank the commenter for alerting us of this oversight.

Measure Steward/Developer Response:
We appreciate this summary of your earlier comments, which we address below.

We also agree with the conclusions outlined within NQF’s final report, Improving Attribution Models (NQF, 2018), in that attribution models should reflect clinicians and
providers with reasonable influence on the care and outcomes for patients in order to enforce accountability and facilitate quality improvement. During development, we solicited a wide variety of clinician, technical, and patient feedback through stakeholder engagement. The Technical Expert Panel, in particular, felt strongly that it was appropriate to attribute readmissions to multiple clinicians to encourage coordination and shared accountability. Additionally, the same panel identified the three clinicians attributed by this measure as being most accountable.

We agree that it is important that the final volume threshold correspond to adequate reliability. Constructing meaningful, reliable, valid provider quality measures is challenging and requires balancing competing factors and values. In the NQF Submission forms, we provide evidence that these measures do capture reliable and valid quality signals at the clinician and group level under the proposed attribution.

We tested for the effects of including two social risk factors within the model (dual eligibility status and low Agency for Healthcare Research and Quality SES) on final risk-adjusted rates for both clinicians and clinician groups. The correlation between the adjusted and unadjusted scores were 0.99, indicating extremely high agreement and that adding these social risk factors would have minimal impact on measure scores. Ongoing research aims to identify valid patient-level social risk factors and highlight disparities related to social risk. As additional variables become available, they will be considered for testing and inclusion within the measure. There are also alternative ways to adjust for social risk as part of measure program implementation, such as stratification or peer grouping, which CMS recently applied to the Hospital Readmission Reduction Program (HRRP).

Since the release of the Evaluation of the NQF Trial period for Risk Adjustment for Social Risk Factors report in July 2017, NQF announced the launch of a new, three-year initiative to explore unresolved issues that surfaced in the 2015-2017 social risk factor trial. The stated goal of the new Social Risk Trial is to “help inform a decision on whether to permanently change NQF’s policy to allow social risk adjustment for outcome measures.” For risk-adjusted outcome measures, CMS first considers adjustment for clinical conditions and then examines additional risk imparted by social risk factors after the potential for greater disease burden is included in the risk model. We believe that this is consistent with NQF current guidance and is appropriate given the evidence cited in our submission that people who experience greater social risk are more likely to have more disease burden compared with those who do not; and that this


is clearly not a signal of hospital quality. In addition, according to NQF guidance, developers should assess social risk factors for their contribution of unique variation in the outcome – that they are not redundant. Therefore, if clinical risk factors explain all or most of the patient variation in the outcome, then NQF guidance does not support adding social risk factors that do not account for variation.

In addition to the correlation between adjusted and unadjusted scores, we also tested the change in risk-adjusted readmission rates. When incorporating the dual eligible risk factor, risk-adjusted readmission rates dropped an absolute value of 0.03% for clinicians and 0.02% for clinician groups. When incorporating low AHRQ SES, risk-adjusted readmission rates dropped an absolute value of -0.02% for clinicians and -0.01% for clinician groups.

NQF doesn’t specify or require testing for impact on program inclusion, program benchmarking, or star rating systems. At this time, it is not known how CMS will use this measure in the MIPS program.

We agree with the importance of balancing these competing considerations. We are committed to constant refinement and improvement of risk adjustment models used in all measures. We will reevaluate this model and available risk factors on an ongoing basis, with the goal of producing the most accurate and fair risk adjustment models for assessing provider performance.

7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-X; No-X (Month, Date, Year: [Endorsed or Not Endorsed])

8. Appeals

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Measure Not Recommended – for Individual Clinician Specification only

3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System [Individual Clinician LOA]

Submission | Specifications

Description: This measure is a re-specified version of the hospital-level measure, “Hospital-Wide All-Cause, Unplanned Readmission Measure” (NQF 1789), which was developed for patients who are 65 years or older, are enrolled in fee-for-service (FFS) Medicare and are hospitalized in non-federal hospitals.

This re-specified measure attributes hospital-wide index admissions to up to three participating MIPS Eligible Clinicians or Eligible Clinician Groups (“providers”), rather than to hospitals. It assesses each provider’s rate of 30-day readmission, which is defined as unplanned, all-cause readmission within 30 days of hospital discharge for any eligible condition.

The measure reports a single summary risk adjusted readmission rate (RARR), derived from the volume-weighted results of five different models, one for each of the following specialty cohorts based on groups of discharge condition categories or procedure categories: surgery/gynecology; general medicine; cardiorespiratory; cardiovascular; and neurology, each of which will be described in greater detail below.

Numerator Statement: The outcome for this measure is readmission within 30-days of a hospital discharge. We define readmission as an inpatient admission for any cause, except for certain planned readmissions, within 30 days from the date of discharge from an eligible index admission.

Denominator Statement: The measure includes admissions for Medicare beneficiaries who are 65 years and older and are discharged from any non-federal, acute care inpatient US hospitals (including territories) with Medicare part A enrollment for the 12 months prior to admission and part A enrollment for the 30 days after discharge. These are called ‘index admissions’

Outcome attribution:
Each index admission is attributed to up to 3 eligible clinicians or eligible clinician groups.

1) One is the eligible clinician who filed a claim for the ‘discharge procedure’ (CPT code 99238 or 99239) for the patient; conceptually, this clinician is measured because, having billed for the discharge of the patient, they have some responsibility for the transition of the patient to non-acute settings.

2) Second is the eligible clinician who, during the inpatient stay, billed the most patient-facing charges; conceptually, this clinician has the most responsibility for the care of patients during their stay and may also be the Discharge Clinician.

3) Third is the eligible clinician that provides the plurality of outpatient primary care during the 12 months prior to the admission, as measured by plurality of primary care services; conceptually, a primary care provider may manage the transition from acute to non-acute care and participate in decisions to return to acute care.

Index admissions are attributed to a clinician by each of these rules; two or all three rules may attribute the index admission to the same clinician. Then, all admissions assigned to an eligible clinician are used to construct a single measure score for that clinician, regardless of the reason
the admission was attributed. The measure has also been tested for eligible clinician groups, implemented here by grouping eligible clinicians who use the same Taxpayer Identification Number (TIN).

**Exclusions:** From the cohort, we exclude admissions if:

1. The patient is discharged against medical advice (AMA)
2. The patient is discharged from a PPS-exempt cancer hospital
3. The patient is admitted primarily for the medical treatment of cancer
4. The patient is admitted primarily for the treatment of psychiatric disease
5. The patient is admitted primarily for “rehabilitation care; fitting of prostheses and adjustment devices” (CCS 254)
6. Admissions without 30 Days of Post-Discharge Enrollment are excluded
7. Admissions cannot be identified in IDR database
8. The admission cannot be attributed to an eligible clinician.

Further exclusion details can be found in S.9 Denominator Exclusion Details

**Adjustment/Stratification:** Statistical risk model

**Level of Analysis:** Clinician: Individual

**Setting of Care:** Inpatient/Hospital

**Type of Measure:** Outcome

**Data Source:** Claims, Enrollment Data

**Measure Steward:** Centers for Medicare & Medicaid Services (CMS)

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**STANDING COMMITTEE MEETING [June 21, 2019]**

1. **Importance to Measure and Report:** The measure meets the Importance criteria
   (1a. Evidence, 1b. Performance Gap)

1a. Evidence: Y-11; N-5; 1b. Performance Gap: H-0; M-11; L-4; I-1;

**Rationale:**

- The Standing Committee reviewed the distribution of risk adjusted readmission ratios (RARRs) for eligible clinician’s ranges from a mean of 11.4 in the first decile to 19.5 in the tenth decile

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2. **Scientific Acceptability of Measure Properties:** The measure does not meet the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: H-0; M-8; L-5; I-3; 2b. Validity: H-0; M-5; L-10; I-1

**Rationale:**

- Similar to the review of the physician-group specification of this measure, the Standing Committee reviewed the input provided by the NQF Scientific Methods Panel (SMP).
- The Standing Committee generally agreed with the SMP subgroup members that the approach to reliability testing was appropriate. The Standing Committee members generally found the results of reliability testing to be reasonable.
• Similar to the Validity summary provided above the Standing Committee reviewed the validity testing provided by the developer, the risk adjustment methodology, and the calibration statistics.

• The Standing Committee raised several concerns about the individual clinician specifications and testing. Specifically, the Committee was concerned about the attribution approach. The face validity of holding an individual clinician accountable for all-cause hospital readmission raised concern with the Standing Committee. The Committee was not clear how an individual physician could directly influence these outcomes without collaboration of other physicians and hospital partnerships.

3. Feasibility: H-X; M-X; L-X; I-X: The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)

Rationale:
• The Standing Committee generally agreed that the measure uses claims data that can be operationalized; however, the measure is not yet in use. There are no fees, licensing, or requirements to use the measure.

4. Usability and Use: The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

4a. Use: Pass-X; No Pass-X; 4b. Usability: H-X; M-X; L-X; I-X

Rationale:
• The Standing Committee acknowledged that this measure is planned for use in the CMS MIPS program.

• The Standing Committee had concerns about the usability of a clinician-level readmission measure to information necessary to implement focused quality improvement efforts. The Standing Committee noted that the benefits of the performance measure may not outweigh evidence of unintended negative consequences to individuals or populations given the locus of control of an individual clinician to the outcome.

5. Related and Competing Measures

• No related or competing measures noted.

Standing Committee Recommendation for Endorsement: Yes-X; No-X

Rationale
6. Public and Member Comment

7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-X; No-X (Month, Date, Year: [Endorsed or Not Endorsed])

8. Appeals
Measure Withdrawn

2539 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy

Submission

Description: Facility-level risk-standardized rate of acute, unplanned hospital visits within 7 days of a colonoscopy procedure performed at a hospital outpatient department (HOPD) or ambulatory surgical center (ASC) among Medicare Fee-For-Service (FFS) patients aged 65 years and older. An unplanned hospital visit is defined as an emergency department (ED) visit, observation stay, or unplanned inpatient admission. The measure is calculated separately for ASCs, and HOPDs.

Numerator Statement: Unplanned hospital visits within 7 days of a qualifying colonoscopy.

Denominator Statement: Colonoscopies performed at hospital outpatient departments (HOPDs) and ambulatory surgical centers (ASCs) for Medicare FFS patients aged 65 years and older.

Exclusions: S.4. Numerator Statement: Unplanned hospital visits within 7 days of a qualifying colonoscopy.
S.6. Denominator Statement: Colonoscopies performed at hospital outpatient departments (HOPDs) and ambulatory surgical centers (ASCs) for Medicare FFS patients aged 65 years and older.
S.8. Denominator Exclusions: We established the following exclusion criteria after reviewing the literature, examining existing measures, discussing alternatives with the working group and technical expert panel (TEP) members, and reviewing feedback from the national dry run held in July 2015. The goal was to be as inclusive as possible; we excluded only those high-risk procedures and patient groups for which risk adjustment would not be adequate or for which hospital visits were not typically a quality signal. The exclusions, based on clinical rationales, prevent unfair distortion of performance results.

1) Colonoscopies for patients who lack continuous enrollment in Medicare FFS Parts A and B in the 7 days after the procedure.
Rationale: We exclude these patients to ensure full data availability for outcome assessment.

2) Colonoscopies that occur concurrently with high-risk upper gastrointestinal (GI) endoscopy procedures.
Rationale: Patients undergoing concurrent high-risk upper GI endoscopy procedures, such as upper GI endoscopy procedures for the control of bleeding or treatment of esophageal varices, and have a higher risk profile than typical colonoscopy patients. Therefore, these patients have a disproportionally higher risk for the outcome.

3) Colonoscopies for patients with a history of inflammatory bowel disease (IBD) or diagnosis of IBD at time of index colonoscopy or on the subsequent hospital visit outcome claim.
Rationale: We exclude these patients because:
- IBD is a chronic condition; patients with IBD undergo colonoscopy both for surveillance due to increased cancer risk and for evaluation of acute symptoms. IBD is likely to be coded as the primary diagnosis prompting the procedure irrespective of whether the patients are undergoing a screening procedure or a diagnostic procedure in the setting of an acute exacerbation of IBD.
Therefore, we may not be able to adequately risk adjust for these patients, as we cannot identify relatively well versus acutely unwell patients among visits coded as IBD.

- Our aim is to capture hospital visits which reflect the quality of care. Admissions for acutely ill IBD patients who are evaluated with an outpatient colonoscopy and are subsequently admitted for medical treatment of an IBD flare do not reflect the quality of the colonoscopy. In our 2010 Medicare 20% FFS Full Development Sample (see the 2014 Facility 7-day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy Measure Technical Report posted at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228775197506) for full description of the dataset), more than one-third of IBD patients admitted to the hospital with colonoscopy had a discharge diagnosis of IBD, indicating their admission was for medical treatment of their IBD. We therefore excluded this group so that providers who treat a disproportionate number of IBD patients will not be disadvantaged in the measure.

- A post-index diagnosis of IBD, which represents a very small fraction of cases (less than 0.5% of the cohort) in the measure population, indicates that the condition was likely present at the time of the index colonoscopy but not coded.

4) Colonoscopies for patients with a history of diverticulitis or diagnosis of diverticulitis at time of index colonoscopy or on the subsequent hospital visit outcome claim.

Rationale: We exclude these patients because:

- It is unclear what the health status is of patients coded with a history or current diagnosis of diverticulitis, making it difficult to fully risk adjust for patients’ health. Colonoscopies performed on patients with a history or current diagnosis of diverticulitis are likely to be coded as diverticulitis as the primary diagnosis irrespective of whether the patients are undergoing a screening procedure or a diagnostic procedure (i.e., are acutely unwell with active disease). Furthermore, the codes for diverticulitis and diverticulosis may not be consistently used; patients with diverticulosis may be erroneously coded as diverticulitis. Therefore, we may not be able to adequately risk adjust as we cannot identify relatively well versus acutely unwell patients among visits coded as diverticulitis.

- Admissions for acutely ill patients with a history or current diagnosis of diverticulitis who are evaluated with an outpatient colonoscopy and are subsequently admitted for medical treatment of do not reflect the quality of the colonoscopy. In our 2010 Medicare 20% FFS Full Development Sample (see the Facility 7-day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy Measure Technical Report posted on the web page provided in data field S.1) more than one-quarter of patients with a history or current diagnosis of diverticulitis admitted to the hospital post colonoscopy had a discharge diagnosis of diverticulitis, indicating they were admitted for medical treatment of the condition. These admissions are likely unrelated to the quality of the colonoscopy. We therefore excluded this group so that providers who treat a disproportionate number of diverticulitis patients will not be disadvantaged in the measure.

- A post-index diagnosis of diverticulitis, which represents a very small fraction of cases (less than 0.5% of the cohort) in the measure population, indicates that the condition was likely present at the time of the index colonoscopy but not coded.

5) Colonoscopies that occur on the same hospital claim as an ED visit, unless the ED visit has a diagnosis indicative of a complication of care (applies to colonoscopies at HOPDs only).

Rationale: We exclude these patients because:
The sequence of events in these cases is not clear. It is not possible to use claims data to determine whether the colonoscopy was the cause of, subsequent to, or during the ED visit.

6) Colonoscopies that occur on the same day and at the same hospital as an ED visit that is billed on a separate claim than the index colonoscopy, unless the ED visit has a diagnosis indicative of a complication of care (applies to colonoscopies at HOPDs only).

Rationale: We exclude these patients because:
- It is unclear whether the same-day ED visit occurred before or after the colonoscopy. However, for ED visits billed on the same day but at a different facility, it is unlikely that a patient would experience an ED visit for an acute diagnosis at one facility and then travel to another facility for a routine colonoscopy on the same day. Therefore, these colonoscopies are not excluded because they likely represent a routine procedure followed by a complication of care.

7) Colonoscopies that occur on the same hospital outpatient claim as an observation stay (applies to colonoscopies at HOPDs only).

Rationale: We exclude these patients because:
- The sequence of events in these cases is not clear. It is not possible to use claims data to determine whether the colonoscopy was the cause of, subsequent to, or during the observation stay.

8) Colonoscopies followed by a subsequent outpatient colonoscopy procedure within 7 days.

Rationale: We exclude these patients because:
- The two colonoscopies are considered part of a single episode of care, for which the subsequent colonoscopy is considered the index procedure.

**Adjustment/Stratification:** Statistical risk model

**Level of Analysis:** Facility

**Setting of Care:** Outpatient Services

**Type of Measure:** Outcome

**Data Source:** Claims, Other

**Measure Steward:** Centers for Medicare & Medicaid Services

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**STANDING COMMITTEE MEETING [June 20, 2019]**

1. Importance to Measure and Report: The Standing Committee did not vote as the measure was withdrawn

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: Y-X; N-X; 1b. Performance Gap: H-X; M-X; L-X; I-X;

**Rationale:**
- The Standing Committee reviewed this measure of hospital visits within 7 days of a colonoscopy procedure performed at a hospital outpatient department (HOPD) or ambulatory surgical center (ASC) among Medicare Fee-For-Service (FFS) patients aged 65 years and older captures adverse patient outcomes associated with HOPD and ASC care and an important area for quality improvement.
- The Standing Committee agreed that the measure provides a logic model demonstrating provider-level and facility-level interventions that can reduce the risk of unplanned hospital visits.
• These provider-level factors include protocol for patient’s colonoscopy prep, and technical quality of the procedure. The facility-level factors include anesthesia, discharge, and follow-up protocols.
• The Standing Committee reviewed the overall 25th to 75th percentile performance range of risk-standardized hospital visit rates per 1000 colonoscopies from 11.8% to 12.8%, with mean performance of 12.3% and agreed that there is a narrow performance gap.

2. Scientific Acceptability of Measure Properties: The Standing Committee did not vote as the measure was withdrawn
(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)
2a. Reliability: H-X; M-X; L-X; I-X; 2b. Validity: H-X; M-X; L-X; I-X
Rationale:
• The Standing Committee reviewed the reliability testing and noted differences in the measure specifications (one year of data) and the three years of simulated signal-to-noise testing data. The Standing Committee requested that the developer consider aligning the testing with the measure specifications and resubmit the measure using a three year time frame for consideration in a future cycle of measure review.
• The Standing Committee noted that this alignment would help facilitate transparency and understanding among stakeholders and those being measured.
• The developer agreed to withdraw the measure from consideration and resubmit in a future cycle with testing data and measure specifications using a three year time frame. Given the withdrawal from the process, voting on the measure was suspended.
• The measure was withdrawn from consideration and will be updated and submitted in a future measure review cycle.

3. Feasibility: H-X; M-X; L-X; I-X: The Standing Committee did not vote as the measure was withdrawn
(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified; 3d. Data collection strategy can be implemented)

4. Usability and Use: The Standing Committee did not vote as the measure was withdrawn
(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)
4a. Use: Pass-X; No Pass-X; 4b. Usability: H-X; M-X; L-X; I-X

5. Related and Competing Measures
• No related or competing measures noted.

Standing Committee Recommendation for Endorsement: Yes-X; No-X
Rationale:
6. Public and Member Comment

7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-\textbullet; No-\textbullet; (Month, Date, Year: Not approved for endorsement)

8. Appeals
All-Cause Admissions and Readmissions Spring 2019 Review Cycle

CSAC Review and Endorsement

October 21-22, 2019
All-Cause Admissions and Readmissions Measures Portfolio

- 51 endorsed measures
  - Assessing different sites of care

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Standing Committee Recommendations

- 1 new measure was deferred to the upcoming evaluation cycle (Fall 2019)
  - 3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate – Clinician Group/Practice Level of Analysis

- 1 new measure was not recommended for endorsement
  - 3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate – Individual Clinician Level of Analysis

- 1 maintenance measure was withdrawn from consideration by the developer
  - 2539 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy

- 1 reviewed by the SMP
  - NQF #3495
Overarching Issues

- **Standing Committee Quorum and CDP Process**
  - *The Standing Committee did not have quorum during the measure evaluation web meetings. Standard process for evaluation without quorum was followed: votes were taken via voting survey from a quorum of members, and Committee members who missed the discussion were asked to review the call transcript/recording and summary prior to voting.*

- **Measure Evaluation - Split Level of Analysis**
  - *The Standing Committee split consideration of NQF #3495 based on level of analysis.*
    - The clinician group level of analysis was originally recommended for endorsement and then deferred due to questions about the testing results.
    - The individual clinician level of analysis was not recommended for endorsement.
Overarching Issues

- Request for Reconsideration - Fall 2018 Measures
  - The Committee received two requests for reconsideration on measures reviewed in the Fall 2018 cycle: NQF #3443 (All-Cause Emergency Department Utilization Rate for Medicaid Beneficiaries with Complex Care Needs and High Costs) and NQF #3445 (All-Cause Inpatient Admission Rate for Medicaid Beneficiaries with Complex Care Needs and High Costs).

  - This reconsideration discussion was held during the Spring 2019 cycle evaluation period. The Standing Committee reviewed the additional information submitted by the developer but elected not to reconsider either measure (Y-4; N-14). The Committee generally agreed that the additional information did not adequately address their concerns.
Public and Member Comment

- 3 comments were received in this cycle of work
  - 1 comment expressed concerns about the evidence and testing provided in support of NQF #2539
  - 1 comment on #3495 emphasized the lack of empirical evidence linking the accountable unit to meaningful influence on the outcome, and requested that the developer perform testing that demonstrates how the measure would perform under the MIPS benchmark methodology and Physician Compare Star Ratings
  - 1 comment pointed out a lack of full Committee participation in the evaluation of measures. The comment further stated that insufficient evidence was provided to support attribution of NQF #3495 to physicians or practices, and that the measure score reliability results were too low

» The commenter requested that NQF distribute the missing information in the report, consider additional testing to evaluate clinical factors in conjunction with social risk factors, and that the Committee reconsider its recommendation for endorsement. The same comment noted the omission of measure evaluation votes in the draft report that was posted for public comment.
Committee Response to Public Comment

Committee Response

- **Agreeing on the need for evidence to support attribution to physicians or group practice, the Standing Committee split consideration of the measure based on level of analysis (individual clinician vs. clinician group).**

- **The Standing Committee agreed that further testing is needed to assess the impact of social risk factors on performance rates.**

- **The Standing Committee requested additional reliability statistics from the developer based on performance at lower case volumes. This information was requested to help provide transparency for members of the public.**
Committee Response to Public Comment

NQF Response

- Concerning the omission of votes for three criteria (feasibility, usability & use, and overall recommendation) in the published draft report for public comment, NQF acknowledged that the omission of information was a case of staff oversight and corrected the omission as soon as the comment was received.
Member Expressions of Support

- One NQF member expressed nonsupport on the measures under consideration. No NQF member expressions of support were received.
The Standing Committee considered the comments and voted not to reconsider its decisions on the two versions of measure #3495. The Standing Committee requested additional testing information from the developer; some additional data was cited orally by the developer during the call, but Committee members noted this data was inconsistent with information provided in the submission forms.
Deferral of Measure #3495

- Due to concerns raised by the inconsistencies in testing information provided to the Committee, NQF, in consultation with the Committee and the developer, made the decision to defer an endorsement recommendation and return the measure to the Committee for a re-review in the upcoming evaluation cycle (fall 2019).
## Timeline and Next Steps

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAC Review</td>
<td>October 21-22, 2019</td>
</tr>
<tr>
<td>Committee Re-review of 3495</td>
<td>Fall 2019 Cycle</td>
</tr>
</tbody>
</table>
Questions?

- **Project team:**
  - Andrew Lyzenga, MPP, Senior Director
  - Suzanne Theberge, MPH, Senior Project Manager
  - Oroma Igwe, MPH, Project Manager
  - Asaba Mbenwoh Nguafor RN, MSN/MPH, Project Analyst
  - Taroon Amin, PhD, Consultant

- **Project webpage:**
  
  [http://www.qualityforum.org/All_Cause_Admissions_and_Readmissions.aspx](http://www.qualityforum.org/All_Cause_Admissions_and_Readmissions.aspx)

- **Project email address:**
  
  [Readmissions@qualityforum.org](mailto:Readmissions@qualityforum.org)
All-Cause Admissions and Readmissions, Spring 2019 Review Cycle: CDP Report

DRAFT REPORT FOR CSAC REVIEW

October 21-22, 2019

This report is funded by the Department of Health and Human Services under contract HHSM-500-2017-00060I Task Order HHSM-500-T0001.
All-Cause Admissions and Readmissions, Spring 2019 Cycle

DRAFT REPORT FOR CSAC

Executive Summary

Avoidable hospital admissions and readmissions are an important focus for healthcare quality improvement. These avoidable admissions and readmissions often represent an opportunity to improve patient care transitions and prevent the unnecessary exposure of patients to adverse events in an acute care setting. NQF currently has 51 endorsed all-cause and condition-specific admissions and readmissions measures for various settings. Several federal quality improvement programs have adopted these measures to reduce unnecessary admissions and readmissions to improve communication and care transitions.

For this project, the Standing Committee evaluated one newly submitted measure and one measure undergoing maintenance review against NQF’s standard evaluation criteria. The Committee recommended for endorsement 3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate at the clinician group/practice level of analysis. The Committee did not recommend the individual clinician level of analysis version of the same measure 3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate, based on validity concerns. Measure 2539 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy was withdrawn from consideration pending alignment of measure testing and specifications.

Brief summaries of the measures currently under review are included in the body of the report; detailed summaries of the Committee’s discussion and ratings of the criteria for each measure are in Appendix A.
Introduction

Avoidable admissions and readmissions to acute care facilities are an important area for healthcare quality improvement. These avoidable admissions and readmissions often represent an opportunity to improve care transitions and prevent the unnecessary exposure of patients to adverse events in an acute care setting. To drive improvement in admissions and readmissions, performance measures have continued to be a key element of value-based purchasing programs to incentivize collaboration in the healthcare delivery system. Shared accountability is required to improve this health outcome, as many healthcare providers have a role in ensuring a safe patient transition between care settings. While a wide variety of healthcare stakeholders support the goal of reducing unnecessary hospitalizations, debates remain on the target rate of readmissions, appropriate methods for attribution, and if these performance measures should be linked to provider payment.

While admissions and readmissions are important patient outcomes, systematic reviews have found that less than a third of readmissions are preventable. Many factors influence the rate of admissions and readmissions including the resources available in the community to support a safe transition between care settings and the social support available to patients. While these factors have a role, poor care coordination and low-quality care also led to higher rates of readmission. Evidence demonstrates that provider interventions can improve these important patient outcomes, such as improved communication of patient discharge instructions, coordination with post-acute care providers and primary care physicians, and the reduction of complications such as hospital-acquired conditions.

To incentivize reductions in inappropriate hospitalizations, CMS expanded accountability for avoidable readmissions throughout its quality reporting and payment programs. The Hospital Readmissions Reduction (HRRP) program reduces payment rates to hospitals with higher-than-expected readmission rates. The Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT Act) required CMS to implement quality measures for potentially preventable readmissions to long-term care hospitals, inpatient rehabilitation facilities, skilled nursing facilities, and home health agencies. Finally, CMS’ Merit-Based Incentive Payment System (MIPS), which adjusts Medicare payments at the physician level, includes an option of an all-cause hospital readmission measure for groups with at least 16 clinicians and a sufficient number of cases. Groups that report on the readmission measure are eligible for higher payment rates than clinician groups that do not. Given the increased use of readmission measures across settings of care, ensuring their scientific merit is more important than ever.

In this project, the All-Cause Admissions and Readmissions Standing Committee considered NQF 3495 Hospital Wide Unplanned Readmission for endorsement; this measure is split into two levels of analysis – clinician group/practice and individual clinician level of analysis Each level of analysis was assessed separately. The Committee also considered NQF 2539 Facility 7-Day Risk Standardized Hospital Visit Rate after Outpatient Colonoscopy.
NQF Portfolio of Measures for All-Cause and Condition-Specific Admissions and Readmissions

The All-Cause Admissions and Readmissions Standing Committee (Appendix C) oversees NQF’s portfolio of admissions and readmissions measures (Appendix B) that includes measures for a number of different sites of care. This portfolio contains 51 measures:

Table 1. NQF Admissions and Readmissions Portfolio of Measures

<table>
<thead>
<tr>
<th>Site of Care</th>
<th>All-Cause</th>
<th>Condition-Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Home health</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Skilled nursing facility</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Long-term care facility</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Inpatient rehab facility</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Inpatient psychiatric facility</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Dialysis facility</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Health plan</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Population-based</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Hospital outpatient/ambulatory surgery center</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Integrated delivery system</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Accountable care organizations (ACO)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>26</td>
</tr>
</tbody>
</table>

Additional measures are assigned to other portfolios. These include patient-reported outcome and transition-of-care measures (Patient Experience and Function), and a variety of condition-specific readmission measures (Surgery and Perinatal).

Readmissions Measure Evaluation

On June 20 and 21, 2019, the Readmissions Standing Committee evaluated one new measure and one measure undergoing maintenance review against NQF’s standard measure evaluation criteria.
Table 2. All-Cause Admissions and Readmissions Measure Evaluation Summary

<table>
<thead>
<tr>
<th></th>
<th>Maintenance</th>
<th>New</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures under consideration</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Measures deferred</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Measures not recommended for endorsement</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Measures withdrawn from consideration</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Comments Received Prior to Committee Evaluation

NQF solicits comments on endorsed measures on an ongoing basis through the Quality Positioning System (QPS). In addition, NQF solicits comments for a continuous 16-week period during each evaluation cycle via an online tool located on the project webpage. For this evaluation cycle, the commenting period opened on May 1, 2019 and will close on August 30, 2019. As of July 16, 2019, two comments were submitted and shared with the Committee prior to the measure evaluation meetings (Appendix F).

All submitted comments were provided to the Committee prior to its initial deliberations during the Committee webinars.

Comments Received After Committee Evaluation

The continuous 16-week public commenting period with NQF member support closed on August 30, 2019. Following the Committee’s evaluation of the measures under consideration, NQF received one comment from one member organization pertaining to the draft report and to the measures under consideration. All comments for each measure under consideration have been summarized in Appendix A.

Throughout the 16-week continuous public commenting period, NQF members had the opportunity to express their support (‘support’ or ‘do not support’) for each measure submitted for endorsement consideration to inform the Committee’s recommendations. One member submitted expressions of non-support on measures 3495 (at both levels of analysis) and on 2539.

Overarching Issues

During the Standing Committee’s discussion of the measures, several overarching issues emerged that were factored into the Committee’s ratings and recommendations for multiple measures.

Shared Accountability

Improvement of avoidable admissions and readmissions requires shared accountability among multiple healthcare providers. In this project, the Committee reviewed two readmissions measures that attribute the outcome to individual physicians, physician groups, along with hospital outpatient departments.
(HOPD) or ambulatory surgical centers (ASC) following a colonoscopy procedure. While the Committee agreed that these providers and settings have a role, the readmission of one patient can be counted in several measures, assessing quality for multiple providers. For example, a readmission could count in the numerator of a measure assessing a hospital’s readmission rate as well as a physician group’s readmissions performance rate.

While shared accountability is required to improve this outcome, the Committee struggled with attribution to an individual clinician. Attribution of readmission rates should consider the locus of control of the accountable entity. While multiple factors influence this outcome, individual physicians often rely on peers, office and hospital-based support staff for important care transition roles, and may have limited direct influence on the social risk and the community social supports available to their patients. The Committee noted that shared accountability should be balanced with the locus of control of the accountable unit.

Social Risk

The use of readmission measures for payment has raised questions about how much control a healthcare provider can have over a patient’s outcomes, as healthcare outcomes are influenced by both the care received and patient factors. In particular, stakeholders have raised concerns about the potential impact of social risk factors, as there is growing evidence demonstrating how these factors can influence health outcomes. The Committee recognized this evidence and reiterated the need to consider the potential influence of social risk factors on the results of admission and readmission measures. The Committee noted the need to ensure that healthcare providers disproportionately serving communities with increased social risk factors are not penalized unfairly, especially when readmission measures are publicly reported or used to determine payment. The Committee emphasized the need to maximize the predictive value of a risk-adjustment model and noted its expectation that developers will continue testing the risk-adjustment model with additional social risk factors in an effort to better understand unmeasured patient risk. The Committee noted that the conceptual rationale for adjusting for social risk should be considered on a case-by-case basis.

Unintended Consequences

The Committee reiterated the concern that readmission measures should account for a potential increase in observation stays and emergency department holding as an unintended negative consequence to patients. Some argue that patients may prefer treatment in these settings if possible, while others note that patients may experience negative consequences from observation stays such as less timely and less coordinated care. Observation stays can occur in the emergency department, in a dedicated unit, or in a setting similar to being admitted as an inpatient, leading to varying patient experience and time in the hospital. Finally, patients may incur financial hardship if they require post-acute care after an observation stay, as Medicare will not cover a skilled nursing facility stay after an observation stay. Because of the potential consequences to patients, the Committee recognized the need to continue to monitor for increased use of ED visits and observation stays as potential consequences of the use of readmission measures.
Summary of Measure Evaluation

The following brief summaries of the measure evaluation highlight the major issues that the Committee considered. Details of the Committee’s discussion and ratings of the criteria for each measure are included in Appendix A.

3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System (Centers for Medicare & Medicaid Services/Yale New Haven Health Services Corporation Center for Outcomes Research and Evaluation): Deferred at Clinician Group/Practice Level of Analysis / Not Recommended at Individual Clinician Level of Analysis

Description: This measure is a re-specified version of the hospital-level measure, “Hospital-Wide All-Cause, Unplanned Readmission Measure” (NQF 1789), which was developed for patients who are 65 years or older, are enrolled in fee-for-service (FFS) Medicare and are hospitalized in non-federal hospitals. This re-specified measure attributes hospital-wide index admissions to up to three participating MIPS Eligible Clinicians or Eligible Clinician Groups (“providers”), rather than to hospitals. It assesses each provider’s rate of 30-day readmission, which is defined as unplanned, all-cause readmission within 30 days of hospital discharge for any eligible condition. The measure reports a single summary risk adjusted readmission rate (RARR), derived from the volume-weighted results of five different models, one for each of the following specialty cohorts based on groups of discharge condition categories or procedure categories: surgery/gynecology; general medicine; cardiorespiratory; cardiovascular; and neurology.

Measure Type: Outcome; Level of Analysis: Clinician : Group/Practice, Clinician : Individual; Setting of Care: Inpatient/Hospital; Data Source: Claims, Enrollment Data

CLINICIAN: GROUP/PRACTICE LEVEL OF ANALYSIS

The Standing Committee reviewed the logic model presented by the developer demonstrating physician group interventions that can reduce the risk of unplanned hospital visits. Several Standing Committee members agreed that physician groups and ACOs should have the infrastructure to improve admissions and readmissions.

The Standing Committee reviewed the input provided by the NQF Scientific Methods Panel (SMP). The Standing Committee noted the SMP’s concerns that social risk factors are excluded from the risk model given the effect size and the potential for negative consequences on access to care if this measure is not adequately risk adjusted.

The Standing Committee agreed that the developer should examine other clinical variables such as frailty or functional status. The Standing Committee reviewed the measure score empirical validity testing and face validity testing submitted at the individual physician and physician group levels. The Standing Committee noted that the evidence and validity testing must be evaluated separately for the two levels of analysis. The Committee agreed to vote individually on the two levels of analysis. The Standing Committee noted that eligible clinician groups’ risk-adjusted readmission rates go down with increasing Overall Hospital Quality Star Rating and with increasing quintile of the Star Rating readmission quality score. The Committee reviewed the face validity testing and results, the approach to risk adjustment, and the conceptual model for sociodemographic risk adjustment. Committee members had
differing views of the face validity of the measure with respect to the role that physician groups have in improving this outcome.

The Standing Committee agreed that the measure uses claims data that can be operationalized; however, the measure is not yet in use. There are no fees, licensing, or requirements to use the measure. The Standing Committee acknowledged that this measure is planned for use in the CMS MIPS program. The Standing Committee noted that this is a new measure and there is no information available on performance improvement. The Standing Committee agreed that the clinician group level of analysis of this measure generally met the NQF criteria of endorsement.

**INDIVIDUAL CLINICIAN LEVEL OF ANALYSIS**

The Standing Committee reviewed the distribution of risk-adjusted readmission ratios (RARRs) for eligible clinicians’ ranges from a mean of 11.4 in the first decile to 19.5 in the tenth decile. Similar to the review of the physician-group specification of this measure, the Standing Committee reviewed the input provided by the NQF Scientific Methods Panel. The Standing Committee generally agreed with the SMP subgroup members that the approach to reliability testing was appropriate. The Standing Committee members generally found the results of reliability testing to be reasonable. The Standing Committee reviewed the validity testing provided by the developer, the risk-adjustment methodology, and the calibration statistics.

The Standing Committee raised several concerns about the individual clinician specifications and testing. Specifically, the Committee was concerned about the attribution approach. The face validity of holding an individual clinician accountable for all-cause hospital readmission raised concern. The Committee was not clear how an individual physician could directly influence these outcomes without collaboration of other physicians and hospital partnerships. There was general agreement that the measure uses claims data that can be operationalized, however, the measure is not yet in use. There are no fees, licensing, or requirements to use the measure. The Standing Committee acknowledged that this measure is planned for use in the CMS MIPS program. The Standing Committee had concerns about the usability of a clinician-level readmission measure and the extent to which it would provide the information necessary to implement targeted quality improvement efforts. The Standing Committee noted that the benefits of the performance measure may not outweigh evidence of unintended negative consequences to individuals or populations given the limited ability of an individual clinician to influence the outcome. The Standing Committee generally agreed that the clinician level of analysis of this measure does not meet the NQF criteria for endorsement.

One comment was received on this measure at both levels of analysis, raising both process concerns and measure-specific concerns. The process concerns noted the lack of quorum during the Committee measure evaluation webinar on June 21 and the posting of a draft report that omitted vote counts. The commenter raised several concerns with the measure’s evidence; the assignment of responsibility to multiple physicians and practices; the measure’s reliability, especially with the minimum case number of 25 patients; and the conceptual basis used to explain which social risk factors were tested. The Committee discussed the comment extensively on the post-comment call, but ultimately voted not to reconsider the measure and to continue to recommend the measure at the clinician: group level.
Following the post-comment call, the developer submitted additional reliability testing information and analyses to respond to the Committee questions, and noted that incorrect reliability testing information had been given verbally in response to Committee questions during the post-comment call. Given that this incorrect information informed the Committee’s decision, NQF, in consultation with the Committee co-chairs and the measure developers and stewards, decided to defer the final endorsement decision on this measure. This measure will go back to the Committee in the fall 2019 cycle for re-review, and an updated endorsement recommendation will be made during that cycle.

Measure Withdrawn from Consideration

2539 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy (Centers for Medicare & Medicaid Services/Yale New Haven Health Services Corporation Center for Outcomes Research and Evaluation): Withdrawn following Committee Discussion

**Description:** Facility-level risk-standardized rate of acute, unplanned hospital visits within 7 days of a colonoscopy procedure performed at a hospital outpatient department (HOPD) or ambulatory surgical center (ASC) among Medicare Fee-For-Service (FFS) patients aged 65 years and older. An unplanned hospital visit is defined as an emergency department (ED) visit, observation stay, or unplanned inpatient admission. The measure is calculated separately for ASCs, and HOPDs. **Measure Type:** Outcome; **Level of Analysis:** Facility; **Setting of Care:** Outpatient Services; **Data Source:** Claims, Other

The Standing Committee reviewed this measure of hospital visits within 7 days of a colonoscopy procedure performed at a hospital outpatient department (HOPD) or ambulatory surgical center (ASC) among Medicare Fee-For-Service (FFS) patients aged 65 years and older. The measure captures adverse patient outcomes associated with HOPD and ASC care, an important area for quality improvement. The Standing Committee agreed that the measure provides a logic model demonstrating provider-level and facility-level interventions that can reduce the risk of unplanned hospital visits. These provider-level factors include a protocol for a patient’s colonoscopy prep and technical quality of the procedure. The facility-level factors include anesthesia, discharge, and follow-up protocols.

The Standing Committee reviewed the overall 25th to 75th percentile performance range of risk-standardized hospital visit rates per 1000 colonoscopies from 11.8 percent to 12.8 percent, with mean performance of 12.3 percent and generally agreed that there is a narrow performance gap. The Standing Committee reviewed the reliability testing and noted differences in the measure specifications (one year of data) and the three years of simulated signal-to-noise testing data. The Standing Committee requested that the developer consider aligning the testing with the measure specifications and resubmitting the measure using a three-year time frame for consideration in a future review. The Standing Committee noted that this alignment would help facilitate transparency and understanding among stakeholders and those being measured. The developer agreed to withdraw the measure from consideration and resubmit in a future cycle with testing data and measure specifications using a three-year time frame. Given the withdrawal from the process, voting on the measure was suspended.
The developer withdrew the measure from consideration and will update the measure and submit it to NQF in a future measure review cycle.
References


Appendix A: Details of Measure Evaluation

Rating Scale: \textbf{H}=High; \textbf{M}=Moderate; \textbf{L}=Low; \textbf{I}=Insufficient; \textbf{NA}=Not Applicable

Measure Deferred – for Clinician Group/Practice Specification Only

\underline{3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System [Clinician Group/Practice LOA]}

**Submission | Specifications**

**Description:** This measure is a re-specified version of the hospital-level measure, “Hospital-Wide All-Cause, Unplanned Readmission Measure” (NQF 1789), which was developed for patients who are 65 years or older, are enrolled in fee-for-service (FFS) Medicare and are hospitalized in non-federal hospitals.

This re-specified measure attributes hospital-wide index admissions to up to three participating MIPS Eligible Clinicians or Eligible Clinician Groups (“providers”), rather than to hospitals. It assesses each provider’s rate of 30-day readmission, which is defined as unplanned, all-cause readmission within 30 days of hospital discharge for any eligible condition.

The measure reports a single summary risk adjusted readmission rate (RARR), derived from the volume-weighted results of five different models, one for each of the following specialty cohorts based on groups of discharge condition categories or procedure categories: surgery/gynecology; general medicine; cardiorespiratory; cardiovascular; and neurology, each of which will be described in greater detail below.

**Numerator Statement:** The outcome for this measure is readmission within 30-days of a hospital discharge. We define readmission as an inpatient admission for any cause, except for certain planned readmissions, within 30 days from the date of discharge from an eligible index admission.

**Denominator Statement:** The measure includes admissions for Medicare beneficiaries who are 65 years and older and are discharged from any non-federal, acute care inpatient US hospitals (including territories) with Medicare part A enrollment for the 12 months prior to admission and part A enrollment for the 30 days after discharge. These are called ‘index admissions’

Outcome attribution:

Each index admission is attributed to up to 3 eligible clinicians or eligible clinician groups.

1) One is the eligible clinician who filed a claim for the ‘discharge procedure’ (CPT code 99238 or 99239) for the patient; conceptually, this clinician is measured because, having billed for the discharge of the patient, they have some responsibility for the transition of the patient to non-acute settings.

2) Second is the eligible clinician who, during the inpatient stay, billed the most patient-facing charges; conceptually, this clinician has the most responsibility for the care of patients during their stay and may also be the Discharge Clinician.

3) Third is the eligible clinician that provides the plurality of outpatient primary care during the 12 months prior to the admission, as measured by plurality of primary care services; conceptually, a primary care provider may manage the transition from acute to non-acute care and participate in decisions to return to acute care.

Index admissions are attributed to a clinician by each of these rules; two or all three rules may attribute the index admission to the same clinician. Then, all admissions assigned to an eligible clinician are used
to construct a single measure score for that clinician, regardless of the reason the admission was attributed. The measure has also been tested for eligible clinician groups, implemented here by grouping eligible clinicians who use the same Taxpayer Identification Number (TIN).

**Exclusions:** From the cohort, we exclude admissions if:
1. The patient is discharged against medical advice (AMA)
2. The patient is discharged from a PPS-exempt cancer hospital
3. The patient is admitted primarily for the medical treatment of cancer
4. The patient is admitted primarily for the treatment of psychiatric disease
5. The patient is admitted primarily for “rehabilitation care; fitting of prostheses and adjustment devices” (CCS 254)
6. Admissions without 30 Days of Post-Discharge Enrollment are excluded
7. Admissions cannot be identified in IDR database
8. The admission cannot be attributed to an eligible clinician.

Further exclusion details can be found in S.9 Denominator Exclusion Details

**Adjustment/Stratification:** Statistical risk model

**Level of Analysis:** Clinician: Group/Practice

**Setting of Care:** Inpatient/Hospital

**Type of Measure:** Outcome

**Data Source:** Claims, Enrollment Data

**Measure Steward:** Centers for Medicare & Medicaid Services (CMS)

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**STANDING COMMITTEE MEETING [June 21, 2019]**

1. **Importance to Measure and Report: The measure meets the Importance criteria**
(1a. Evidence, 1b. Performance Gap)
1a. Evidence: **Y-14; N-2**; 1b. Performance Gap: **H-0; M-15; L-1; I-0**

**Rationale:**
- This is a re-specified version of the hospital-level measure, “Hospital-Wide All-Cause, Unplanned Readmission Measure” (NQF 1789). NQF 1789 was developed for patients who are 65 years or older, are enrolled in fee-for-service (FFS) Medicare, and are hospitalized in non-federal hospitals. This specified measure attributes admissions to up to three participating MIPS eligible clinicians.
- The Standing Committee reviewed the logic model presented by the developer demonstrating physician group interventions that can reduce the risk of unplanned hospital visits.
- The Standing Committee reviewed the range of performance for clinician groups from 13.1 in the first decile to 18.0 in the tenth decile.

2. **Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria**
(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)
2a. Reliability: **H-0; M-13; L-2; I-1**; 2b. Validity: **H-0; M-10; L-6; I-0**

**Rationale:**
• The Standing Committee reviewed the input provided by the NQF Scientific Methods Panel (SMP).
• The Standing Committee noted SMP concerns that social risk factors are excluded from the risk model given the effect size and the potential for negative consequences on access to care if this measure is not adequately risk adjusted. The Standing Committee agreed that the developer should examine other clinical variables that could underlie disparities such as frailty or functional status.
• The Standing Committee reviewed the measure score empirical validity testing and face validity testing submitted at the individual physician and physician group level. The Standing Committee noted that the evidence and validity testing must be evaluated separately for the two levels of analysis. The Committee agreed to vote individually on the two levels of analysis.
• The Standing Committee noted that eligible clinician groups’ risk adjusted readmission rates go down with increasing Overall Hospital Quality Star Rating and with increasing quintile of the Star Rating readmission quality score.
• The Committee reviewed the Face Validity testing and results, the approach to risk adjustment and the conceptual model for socio-demographic risk adjustment.
• The Standing Committee had a mixed review of the face validity of the measure, specifically, the role physician groups have in improving this outcome.

3. Feasibility: H-6; M-9; L-1; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified; 3d. Data collection strategy can be implemented)

Rationale:
- The Standing Committee agreed that the measure uses claims data that can be operationalized; however, the measure is not yet in use. There are no fees, licensing, or requirements to use the measure.

4. Usability and Use:

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

4a. Use: Pass-14; No Pass-2; 4b. Usability: H-1; M-11; L-4; I-0

Rationale:
- The Standing Committee acknowledged that this measure is planned for use in the CMS MIPS program.
- The Standing Committee noted that this is a new measure and there is no information available on performance improvement. This measure is not currently used in a program, but a primary goal of the measure is to provide information necessary to implement focused quality improvement efforts. Once the measure is implemented, the developer plans to examine trends in improvements by comparing RSRR over time.

5. Related and Competing Measures

- No related or competing measures noted.

Standing Committee Recommendation for Endorsement: Yes-11; No-5

Rationale
• The Committee noted that the measure passed each of the criteria and is suitable for endorsement.

6. Public and Member Comment
One comment was submitted during the post-evaluation comment period:

The American Medication Association (AMA) appreciates the Standing Committee discussion and evaluation of this measure but continues to have significant concerns with the lack of adherence to the Consensus Development Process and whether the measure meets the NQF Measure Evaluation Criteria, particularly for evidence and scientific acceptability.

The NQF has had a longstanding commitment to ensuring that the CDP and associated criteria are followed consistently and the process is conducted in a transparent manner. Unfortunately, we do not believe that it is demonstrated in this project and associated report. Specifically, the AMA is concerned with the limited number of members who were able to participate in the evaluation of this measure on the June 21 webinar; specifically, the roll call prior to discussion of this measure identified only 11 of the 21 members. Based on our review of the votes available for the individual clinician and group levels of analysis, an additional five members evaluated the measures against the criteria but were not present during the discussion of the measure on June 21. It is concerning to have just 50% of the committee participate in the public discussion of the measure and almost 25% of the remaining members participate in voting on a measure for which it is not clear they were able to fully evaluate, ask questions of the developer, and hear public comments. In addition, the draft report released for comment does not include the committee votes for feasibility, usability and use, and the recommendation for endorsement for the group level of analysis (see pages 13-14) but the narrative indicates that it is recommended for endorsement. Omissions like these lead us to question the integrity and consistency of the process and makes it extremely difficult for NQF members and the public to engage in the CDP in a meaningful way.

As mentioned in our comments submitted prior to the committee's evaluation, we believe that:

• Insufficient evidence was provided to support attribution of the measure to physicians or practices in the absence of some coordinated program or targeted intervention led by the health system or hospital;

• Assignment of responsibility of the reduction of readmissions to multiple physicians and practices in MIPS is not appropriate nor has the developer provided sufficient information to support the attribution of this measure to up to three physicians or practices;

• The measure score reliability results are too low when based on the minimum case number of 25 patients. Measures should meet minimum acceptable thresholds of 0.7 for reliability; and

• The conceptual basis used to explain which social risk factors were tested in Section 2b3.3a is inadequate and additional testing is needed to evaluate clinical factors in conjunction with
social risk factors as well as the impact that the inclusion of these factors had on the absolute change of the rates.

As a result, the AMA is unable to support endorsement of the measure at this time and requests that NQF distribute the missing information in the report and the Committee reconsiders its recommendation for endorsement.

COMMITTEE RESPONSE:
The Standing Committee acknowledges the main concerns raised by the commenter related to: evidence to support attribution to physicians or practices, assignment of responsibility of readmissions to multiple physicians, reliability results at case numbers of less than 25 patients, and approach to testing of social risk factors.

The Committee agrees that improvement of readmissions requires shared accountability among all members of the care team but also struggled with the attribution to an individual clinician. Thus, the Committee agreed to split consideration of the measure based on individual clinician and clinician group level of analysis, noting different conceptual attribution issues and reliability performance at the two levels of analysis. The Committee generally agreed that individual physicians often rely on peers, office and hospital-based support staff for important care transition roles and may have limited direct influence on the social risk and community supports available to the patients they serve. However, physician group practices do have a role in improving readmission outcomes and are more likely able to provide the resources to improve care transitions.

On the issue of testing of social risk factors, the Committee reviewed testing information on the conceptual basis for social risk adjustment, the variables selected and tested, and the rationale for not including these variables in the final model risk model. The developed noted that the inclusion of the social risk factors in the final model did not meaningfully change risk model performance or measure score distribution. The Committee agrees that further future testing should be undertaken by the developer in accordance with the commenter recommendations.

Finally, the Committee reviewed the reliability testing data provided by the developer in the submission form. Committee members noted that the reliability methods and statistics submitted by the developer were considered by the NQF Scientific Methods Panel. Members of the Standing Committee agreed that the reliability statistics at lower case volume will demonstrate lower reliability, but the overall mean reliability statistics were acceptable. The Standing Committee requested the developer provide additional reliability statistics at lower case volume, both the range of performance and the mean values to improve transparency for all stakeholders. During the call, the Standing Committee generally agreed that the method and overall reliability performance was sufficient at the physician group level.

However, after reviewing the updated reliability testing information submitted via email after the call, and noting that incorrect reliability testing information was given verbally during the call which informed the Committee’s discussion and voting, NQF, in consultation with the measure steward and developer and Standing Committee Co-chairs, elected to defer the final
recommendation and send the measure back to the Committee for re-review in the fall 2019 cycle.

**NQF RESPONSE:**

Thank you for your comments. NQF strives to achieve quorum at each step of the Consensus Development Process (CDP). Recognizing the burden on volunteer members of the CDP Committees with the increased activities in the bi-annual cycle of the CDP, NQF will be exploring process improvement opportunities to ensure future Committee calls do achieve quorum. With regards to voting, NQF followed our established procedure for cases when quorum is not achieved. Votes were not taken during the call where quorum was not reached. Following the call, the transcript and recording were provided to all Committee members along with a voting survey. Committee members who were not present are able to review the call materials and the transcript or recording prior to submitting their votes. Votes were accepted until quorum of the Committee was achieved.

There was an oversight by NQF staff in providing a full count of votes in the published version of the report. NQF corrected and reposted the report with the full information as soon as this comment was received. We thank the commenter for alerting us of this oversight.

**MEASURE STEWARD/DEVELOPER RESPONSE:**

We appreciate this summary of your earlier comments, which we address below.

We also agree with the conclusions outlined within NQF’s final report, Improving Attribution Models (NQF, 2018), in that attribution models should reflect clinicians and providers with reasonable influence on the care and outcomes for patients in order to enforce accountability and facilitate quality improvement. During development, we solicited a wide variety of clinician, technical, and patient feedback through stakeholder engagement. The Technical Expert Panel, in particular, felt strongly that it was appropriate to attribute readmissions to multiple clinicians to encourage coordination and shared accountability. Additionally, the same panel identified the three clinicians attributed by this measure as being most accountable.

We agree that it is important that the final volume threshold correspond to adequate reliability. Constructing meaningful, reliable, valid provider quality measures is challenging and requires balancing competing factors and values. In the NQF Submission forms, we provide evidence that these measures do capture reliable and valid quality signals at the clinician and group level under the proposed attribution.

We tested for the effects of including two social risk factors within the model (dual eligibility status and low Agency for Healthcare Research and Quality SES) on final risk-adjusted rates for both clinicians and clinician groups. The correlation between the adjusted and unadjusted scores were 0.99, indicating extremely high agreement and that adding these social risk factors would have minimal impact on measure scores. Ongoing research aims to identify valid patient-level social risk factors and highlight disparities related to social risk. As additional variables become available, they will be considered for testing and inclusion within the measure. There are also alternative ways to adjust for social risk as part of measure program implementation,
such as stratification or peer grouping, which CMS recently applied to the Hospital Readmission Reduction Program (HRRP).

Since the release of the Evaluation of the NQF Trial period for Risk Adjustment for Social Risk Factors report in July 2017, NQF announced the launch of a new, three-year initiative to explore unresolved issues that surfaced in the 2015-2017 social risk factor trial.\(^a\) The stated goal of the new Social Risk Trial is to “help inform a decision on whether to permanently change NQF’s policy to allow social risk adjustment for outcome measures.”\(^b\) For risk-adjusted outcome measures, CMS first considers adjustment for clinical conditions and then examines additional risk imparted by social risk factors after the potential for greater disease burden is included in the risk model. We believe that this is consistent with NQF current guidance and is appropriate given the evidence cited in our submission that people who experience greater social risk are more likely to have more disease burden compared with those who do not; and that this is clearly not a signal of hospital quality. In addition, according to NQF guidance, developers should assess social risk factors for their contribution of unique variation in the outcome – that they are not redundant.\(^c\) Therefore, if clinical risk factors explain all or most of the patient variation in the outcome, then NQF guidance does not support adding social risk factors that do not account for variation.

In addition to the correlation between adjusted and unadjusted scores, we also tested the change in risk-adjusted readmission rates. When incorporating the dual eligible risk factor, risk-adjusted readmission rates dropped an absolute value of 0.03% for clinicians and 0.02% for clinician groups. When incorporating low AHRQ SES, risk-adjusted readmission rates dropped an absolute value of -0.02% for clinicians and -0.01% for clinician groups.

NQF doesn’t specify or require testing for impact on program inclusion, program benchmarking, or star rating systems. At this time, it is not known how CMS will use this measure in the MIPS program.

We agree with the importance of balancing these competing considerations. We are committed to constant refinement and improvement of risk adjustment models used in all measures.

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will reevaluate this model and available risk factors on an ongoing basis, with the goal of producing the most accurate and fair risk adjustment models for assessing provider performance.

7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-X; No-X (Month, Date, Year: [Endorsed or Not Endorsed])

8. Appeals
Measure Not Recommended – for Individual Clinician Specification only

3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System [Individual Clinician LOA]

Submission Specifications

Description: This measure is a re-specified version of the hospital-level measure, “Hospital-Wide All-Cause, Unplanned Readmission Measure” (NQF 1789), which was developed for patients who are 65 years or older, are enrolled in fee-for-service (FFS) Medicare and are hospitalized in non-federal hospitals.

This re-specified measure attributes hospital-wide index admissions to up to three participating MIPS Eligible Clinicians or Eligible Clinician Groups (“providers”), rather than to hospitals. It assesses each provider’s rate of 30-day readmission, which is defined as unplanned, all-cause readmission within 30 days of hospital discharge for any eligible condition.

The measure reports a single summary risk adjusted readmission rate (RARR), derived from the volume-weighted results of five different models, one for each of the following specialty cohorts based on groups of discharge condition categories or procedure categories: surgery/gynecology; general medicine; cardiorespiratory; cardiovascular; and neurology, each of which will be described in greater detail below.

Numerator Statement: The outcome for this measure is readmission within 30-days of a hospital discharge. We define readmission as an inpatient admission for any cause, except for certain planned readmissions, within 30 days from the date of discharge from an eligible index admission.

Denominator Statement: The measure includes admissions for Medicare beneficiaries who are 65 years and older and are discharged from any non-federal, acute care inpatient US hospitals (including territories) with Medicare part A enrollment for the 12 months prior to admission and part A enrollment for the 30 days after discharge. These are called ‘index admissions’

Outcome attribution:

Each index admission is attributed to up to 3 eligible clinicians or eligible clinician groups.

1) One is the eligible clinician who filed a claim for the ‘discharge procedure’ (CPT code 99238 or 99239) for the patient; conceptually, this clinician is measured because, having billed for the discharge of the patient, they have some responsibility for the transition of the patient to non-acute settings.

2) Second is the eligible clinician who, during the inpatient stay, billed the most patient-facing charges; conceptually, this clinician has the most responsibility for the care of patients during their stay and may also be the Discharge Clinician.

3) Third is the eligible clinician that provides the plurality of outpatient primary care during the 12 months prior to the admission, as measured by plurality of primary care services; conceptually, a primary care provider may manage the transition from acute to non-acute care and participate in decisions to return to acute care.

Index admissions are attributed to a clinician by each of these rules; two or all three rules may attribute the index admission to the same clinician. Then, all admissions assigned to an eligible clinician are used to construct a single measure score for that clinician, regardless of the reason the admission was attributed. The measure has also been tested for eligible clinician groups, implemented here by grouping eligible clinicians who use the same Taxpayer Identification Number (TIN).

Exclusions: From the cohort, we exclude admissions if:
1. The patient is discharged against medical advice (AMA)
2. The patient is discharged from a PPS-exempt cancer hospital
3. The patient is admitted primarily for the medical treatment of cancer
4. The patient is admitted primarily for the treatment of psychiatric disease
5. The patient is admitted primarily for “rehabilitation care; fitting of prostheses and adjustment devices” (CCS 254)
6. Admissions without 30 Days of Post-Discharge Enrollment are excluded
7. Admissions cannot be identified in IDR database
8. The admission cannot be attributed to an eligible clinician.

Further exclusion details can be found in S.9 Denominator Exclusion Details

Adjustment/Stratification: Statistical risk model
Level of Analysis: Clinician: Individual
Setting of Care: Inpatient/Hospital
Type of Measure: Outcome
Data Source: Claims, Enrollment Data
Measure Steward: Centers for Medicare & Medicaid Services (CMS)

STANDING COMMITTEE MEETING [June 21, 2019]

1. Importance to Measure and Report: The measure meets the Importance criteria
(1a. Evidence, 1b. Performance Gap)
1a. Evidence: Y-11; N-5; 1b. Performance Gap: H-0; M-11; L-4; I-1;
Rationale:
- The Standing Committee reviewed the distribution of risk adjusted readmission ratios (RARRs) for eligible clinician’s ranges from a mean of 11.4 in the first decile to 19.5 in the tenth decile.

2. Scientific Acceptability of Measure Properties: The measure does not meet the Scientific Acceptability criteria
(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)
2a. Reliability: H-0; M-8; L-5; I-3; 2b. Validity: H-0; M-5; L-10; I-1
Rationale:
- Similar to the review of the physician-group specification of this measure, the Standing Committee reviewed the input provided by the NQF Scientific Methods Panel (SMP).
- The Standing Committee generally agreed with the SMP subgroup members that the approach to reliability testing was appropriate. The Standing Committee members generally found the results of reliability testing to be reasonable.
- Similar to the Validity summary provided above the Standing Committee reviewed the validity testing provided by the developer, the risk adjustment methodology, and the calibration statistics.
- The Standing Committee raised several concerns about the individual clinician specifications and testing. Specifically, the Committee was concerned about the attribution approach. The face validity of holding an individual clinician accountable for all-cause hospital readmission raised
concern with the Standing Committee. The Committee was not clear how an individual physician could directly influence these outcomes without collaboration of other physicians and hospital partnerships.

3. Feasibility: H-X; M-X; L-X; I-X: The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability
(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified; 3d. Data collection strategy can be implemented)
Rationale:
- The Standing Committee generally agreed that the measure uses claims data that can be operationalized; however, the measure is not yet in use. There are no fees, licensing, or requirements to use the measure.

4. Usability and Use: The Standing Committee did not vote on this criteria since the measure did not pass Scientific Acceptability
(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)
4a. Use: Pass-X; No Pass-X; 4b. Usability: H-X; M-X; L-X; I-X
Rationale:
- The Standing Committee acknowledged that this measure is planned for use in the CMS MIPS program.
- The Standing Committee had concerns about the usability of a clinician-level readmission measure to information necessary to implement focused quality improvement efforts. The Standing Committee noted that the benefits of the performance measure may not outweigh evidence of unintended negative consequences to individuals or populations given the locus of control of an individual clinician to the outcome.

5. Related and Competing Measures
- No related or competing measures noted.
Standing Committee Recommendation for Endorsement: Yes-X; No-X
Rationale

6. Public and Member Comment

7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-X; No-X (Month, Date, Year: [Endorsed or Not Endorsed])

8. Appeals
Measure Withdrawn

2539 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy

**Submission**

**Description**: Facility-level risk-standardized rate of acute, unplanned hospital visits within 7 days of a colonoscopy procedure performed at a hospital outpatient department (HOPD) or ambulatory surgical center (ASC) among Medicare Fee-For-Service (FFS) patients aged 65 years and older. An unplanned hospital visit is defined as an emergency department (ED) visit, observation stay, or unplanned inpatient admission. The measure is calculated separately for ASCs, and HOPDs.

**Numerator Statement**: Unplanned hospital visits within 7 days of a qualifying colonoscopy.

**Denominator Statement**: Colonoscopies performed at hospital outpatient departments (HOPDs) and ambulatory surgical centers (ASCs) for Medicare FFS patients aged 65 years and older.

**Exclusions**: S.4. Numerator Statement: Unplanned hospital visits within 7 days of a qualifying colonoscopy.

S.6. Denominator Statement: Colonoscopies performed at hospital outpatient departments (HOPDs) and ambulatory surgical centers (ASCs) for Medicare FFS patients aged 65 years and older.

S.8. Denominator Exclusions: We established the following exclusion criteria after reviewing the literature, examining existing measures, discussing alternatives with the working group and technical expert panel (TEP) members, and reviewing feedback from the national dry run held in July 2015. The goal was to be as inclusive as possible; we excluded only those high-risk procedures and patient groups for which risk adjustment would not be adequate or for which hospital visits were not typically a quality signal. The exclusions, based on clinical rationales, prevent unfair distortion of performance results.

1) Colonoscopies for patients who lack continuous enrollment in Medicare FFS Parts A and B in the 7 days after the procedure.

Rationale: We exclude these patients to ensure full data availability for outcome assessment.

2) Colonoscopies that occur concurrently with high-risk upper gastrointestinal (GI) endoscopy procedures.

Rationale: Patients undergoing concurrent high-risk upper GI endoscopy procedures, such as upper GI endoscopy procedures for the control of bleeding or treatment of esophageal varices, and have a higher risk profile than typical colonoscopy patients. Therefore, these patients have a disproportionally higher risk for the outcome.

3) Colonoscopies for patients with a history of inflammatory bowel disease (IBD) or diagnosis of IBD at time of index colonoscopy or on the subsequent hospital visit outcome claim.

Rationale: We exclude these patients because:

- IBD is a chronic condition; patients with IBD undergo colonoscopy both for surveillance due to increased cancer risk and for evaluation of acute symptoms. IBD is likely to be coded as the primary diagnosis prompting the procedure irrespective of whether the patients are undergoing a screening procedure or a diagnostic procedure in the setting of an acute exacerbation of IBD. Therefore, we may not be able to adequately risk adjust for these patients, as we cannot identify relatively well versus acutely unwell patients among visits coded as IBD.

- Our aim is to capture hospital visits which reflect the quality of care. Admissions for acutely ill IBD patients who are evaluated with an outpatient colonoscopy and are subsequently admitted for medical treatment of an IBD flare do not reflect the quality of the colonoscopy. In our 2010 Medicare 20% FFS
Full Development Sample (see the 2014 Facility 7-day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy Measure Technical Report posted at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&id=1228775197506) for full description of the dataset), more than one-third of IBD patients admitted to the hospital with colonoscopy had a discharge diagnosis of IBD, indicating their admission was for medical treatment of their IBD. We therefore excluded this group so that providers who treat a disproportionate number of IBD patients will not be disadvantaged in the measure.

- A post-index diagnosis of IBD, which represents a very small fraction of cases (less than 0.5% of the cohort) in the measure population, indicates that the condition was likely present at the time of the index colonoscopy but not coded.

4) Colonoscopies for patients with a history of diverticulitis or diagnosis of diverticulitis at time of index colonoscopy or on the subsequent hospital visit outcome claim.

Rationale: We exclude these patients because:

- It is unclear what the health status is of patients coded with a history or current diagnosis of diverticulitis, making it difficult to fully risk adjust for patients’ health. Colonoscopies performed on patients with a history or current diagnosis of diverticulitis are likely to be coded as diverticulitis as the primary diagnosis irrespective of whether the patients are undergoing a screening procedure or a diagnostic procedure (i.e., are acutely unwell with active disease). Furthermore, the codes for diverticulitis and diverticulosis may not be consistently used; patients with diverticulosis may be erroneously coded as diverticulitis. Therefore, we may not be able to adequately risk adjust as we cannot identify relatively well versus acutely unwell patients among visits coded as diverticulitis.

- Admissions for acutely ill patients with a history or current diagnosis of diverticulitis who are evaluated with an outpatient colonoscopy and are subsequently admitted for medical treatment of do not reflect the quality of the colonoscopy. In our 2010 Medicare 20% FFS Full Development Sample (see the Facility 7-day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy Measure Technical Report posted on the web page provided in data field S.1) more than one-quarter of patients with a history or current diagnosis of diverticulitis admitted to the hospital post colonoscopy had a discharge diagnosis of diverticulitis, indicating they were admitted for medical treatment of the condition. These admissions are likely unrelated to the quality of the colonoscopy. We therefore excluded this group so that providers who treat a disproportionate number of diverticulitis patients will not be disadvantaged in the measure.

- A post-index diagnosis of diverticulitis, which represents a very small fraction of cases (less than 0.5% of the cohort) in the measure population, indicates that the condition was likely present at the time of the index colonoscopy but not coded.

5) Colonoscopies that occur on the same hospital claim as an ED visit, unless the ED visit has a diagnosis indicative of a complication of care (applies to colonoscopies at HOPDs only).

Rationale: We exclude these patients because:

- The sequence of events in these cases is not clear. It is not possible to use claims data to determine whether the colonoscopy was the cause of, subsequent to, or during the ED visit.

6) Colonoscopies that occur on the same day and at the same hospital as an ED visit that is billed on a separate claim than the index colonoscopy, unless the ED visit has a diagnosis indicative of a complication of care (applies to colonoscopies at HOPDs only).

Rationale: We exclude these patients because:

- It is unclear whether the same-day ED visit occurred before or after the colonoscopy. However, for ED visits billed on the same day but at a different facility, it is unlikely that a patient would experience an ED
visit for an acute diagnosis at one facility and then travel to another facility for a routine colonoscopy on the same day. Therefore, these colonoscopies are not excluded because they likely represent a routine procedure followed by a complication of care.

7) Colonoscopies that occur on the same hospital outpatient claim as an observation stay (applies to colonoscopies at HOPDs only).

Rationale: We exclude these patients because:
- The sequence of events in these cases is not clear. It is not possible to use claims data to determine whether the colonoscopy was the cause of, subsequent to, or during the observation stay.

8) Colonoscopies followed by a subsequent outpatient colonoscopy procedure within 7 days.

Rationale: We exclude these patients because:
- The two colonoscopies are considered part of a single episode of care, for which the subsequent colonoscopy is considered the index procedure.

Adjustment/Stratification: Statistical risk model
Level of Analysis: Facility
Setting of Care: Outpatient Services
Type of Measure: Outcome
Data Source: Claims, Other
Measure Steward: Centers for Medicare & Medicaid Services

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STANDING COMMITTEE MEETING [June 20, 2019]

1. Importance to Measure and Report: The Standing Committee did not vote as the measure was withdrawn

(1a. Evidence, 1b. Performance Gap)


Rationale:
- The Standing Committee reviewed this measure of hospital visits within 7 days of a colonoscopy procedure performed at a hospital outpatient department (HOPD) or ambulatory surgical center (ASC) among Medicare Fee-For-Service (FFS) patients aged 65 years and older captures adverse patient outcomes associated with HOPD and ASC care and an important area for quality improvement.
- The Standing Committee agreed that the measure provides a logic model demonstrating provider-level and facility-level interventions that can reduce the risk of unplanned hospital visits.
- These provider-level factors include protocol for patient’s colonoscopy prep, and technical quality of the procedure. The facility-level factors include anesthesia, discharge, and follow-up protocols.
- The Standing Committee reviewed the overall 25th to 75th percentile performance range of risk-standardized hospital visit rates per 1000 colonoscopies from 11.8% to 12.8%, with mean performance of 12.3% and agreed that there is a narrow performance gap.

2. Scientific Acceptability of Measure Properties: The Standing Committee did not vote as the measure was withdrawn

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)
2a. Reliability: H-X; M-X; L-X; I-X  2b. Validity: H-X; M-X; L-X; I-X

Rationale:
- The Standing Committee reviewed the reliability testing and noted differences in the measure specifications (one year of data) and the three years of simulated signal-to-noise testing data. The Standing Committee requested that the developer consider aligning the testing with the measure specifications and resubmit the measure using a three year time frame for consideration in a future cycle of measure review.
- The Standing Committee noted that this alignment would help facilitate transparency and understanding among stakeholders and those being measured.
- The developer agreed to withdraw the measure from consideration and resubmit in a future cycle with testing data and measure specifications using a three year time frame. Given the withdrawal from the process, voting on the measure was suspended.
- The measure was withdrawn from consideration and will be updated and submitted in a future measure review cycle.

3. Feasibility: H-X; M-X; L-X; I-X: The Standing Committee did not vote as the measure was withdrawn
(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified; 3d. Data collection strategy can be implemented)

4. Usability and Use: The Standing Committee did not vote as the measure was withdrawn
(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)
4a. Use: Pass-X; No Pass-X; 4b. Usability: H-X; M-X; L-X; I-X

5. Related and Competing Measures
- No related or competing measures noted.

Standing Committee Recommendation for Endorsement: Yes-X; No-X
Rationale:

6. Public and Member Comment

7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-X; No-X (Month, Date, Year: Not approved for endorsement)

8. Appeals
### Appendix B: All-Cause Admissions and Readmissions Portfolio—Use in Federal Programs\(^d\)

<table>
<thead>
<tr>
<th>NQF #</th>
<th>Title</th>
<th>Federal Programs: Finalized or Implemented as of July 16, 2019</th>
</tr>
</thead>
</table>
| 2539  | Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy | • Ambulatory Surgical Center Quality Reporting (Implemented)  
• Hospital Compare (Implemented)  
• Hospital Outpatient Quality Reporting (Implemented) |
| 3495  | Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System (MIPS) Program (Finalized) | Merit-Based Incentive Payment System (MIPS) Program (Finalized) |

\(^d\) Per [CMS Measures Inventory Tool](https://www.cms.gov) as of 07/16/2019
Appendix C: All-Cause Admissions and Readmissions Standing Committee and NQF Staff

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Appendix D: Measure Specifications

3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System (MIPS) Eligible Clinicians and Eligible Clinician Groups

STEWARD

Centers for Medicare & Medicaid Services (CMS)

DESCRIPTION

This measure is a re-specified version of the hospital-level measure, “Hospital-Wide All-Cause, Unplanned Readmission Measure” (NQF 1789), which was developed for patients who are 65 years or older, are enrolled in fee-for-service (FFS) Medicare and are hospitalized in non-federal hospitals.

This re-specified measure attributes hospital-wide index admissions to up to three participating MIPS Eligible Clinicians or Eligible Clinician Groups (“providers”), rather than to hospitals. It assesses each provider’s rate of 30-day readmission, which is defined as unplanned, all-cause readmission within 30 days of hospital discharge for any eligible condition.

The measure reports a single summary risk adjusted readmission rate (RARR), derived from the volume-weighted results of five different models, one for each of the following specialty cohorts based on groups of discharge condition categories or procedure categories: surgery/gynecology; general medicine; cardiorespiratory; cardiovascular; and neurology, each of which will be described in greater detail below.

The measure reports a single summary risk adjusted readmission rate (RARR), derived from the volume-weighted results of five different models, one for each of the following specialty cohorts based on groups of discharge condition categories or procedure categories: surgery/gynecology; general medicine; cardiorespiratory; cardiovascular; and neurology, each of which will be described in greater detail below.

TYPE

Outcome

DATA SOURCE

Claims, Enrollment Data Medicare administrative claims and enrollment data

Claims, Enrollment Data
LEVEL
Clinician: Group/Practice,

SETTING
Inpatient/Hospital

NUMERATOR STATEMENT
The outcome for this measure is readmission within 30-days of a hospital discharge. We define readmission as an inpatient admission for any cause, except for certain planned readmissions, within 30 days from the date of discharge from an eligible index admission. Additional details are provided in S.5 Numerator Details

NUMERATOR DETAILS
The measure counts readmissions to any acute care hospital for any cause within 30 days of the date of discharge of the index admission, excluding planned readmissions as defined below. The measure outcome is a dichotomous yes or no of whether each discharged patient has an unplanned readmission within 30 days. However, if the first readmission after discharge is considered planned, any subsequent unplanned readmission is not counted as an outcome for that index admission because the unplanned readmission could be related to care provided during the intervening planned readmission rather than during the index admission.

Numerator Time Window: The outcome is defined as an unplanned readmission within 30 days of discharge from an index admission.

Planned Readmission Algorithm (Version 4.0)
The Planned Readmission Algorithm is a set of criteria for classifying readmissions as planned among the general Medicare population using Medicare administrative claims data. The algorithm identifies admissions that are typically planned and may occur within 30 days of discharge from the hospital.

The Planned Readmission Algorithm has three fundamental principles:
1. A few specific, limited types of care are always considered planned (obstetric delivery, transplant surgery, maintenance chemotherapy/immunotherapy, rehabilitation);
2. Otherwise, a non-acute readmission for a procedure that is typically scheduled in advance is considered planned; and
3. Admissions for acute illness or for complications of care are never planned.

The algorithm was developed in 2011 as part of the Hospital-Wide Readmission measure. In 2013, CMS applied the algorithm to its other readmission measures.

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The algorithm was developed in 2011 as part of the Hospital-Wide Readmission measure. In 2013, CMS applied the algorithm to its other readmission measures.

The Planned Readmission Algorithm and associated code tables are attached in data field S.2b (Data Dictionary or Code Table).

DENOMINATOR STATEMENT

The measure includes admissions for Medicare beneficiaries who are 65 years and older and are discharged from any non-federal, acute care inpatient US hospitals (including territories) with Medicare part A enrollment for the 12 months prior to admission and part A enrollment for the 30 days after discharge. These are called ‘index admissions’

Outcome attribution:

Each index admission is attributed to up to 3 eligible clinicians or eligible clinician groups.

1) One is the eligible clinician who filed a claim for the ‘discharge procedure’ (CPT code 99238 or 99239) for the patient; conceptually, this clinician is measured because, having billed for the discharge of the patient, they have some responsibility for the transition of the patient to non-acute settings.

2) Second is the eligible clinician who, during the inpatient stay, billed the most patient-facing charges; conceptually, this clinician has the most responsibility for the care of patients during their stay and may also be the Discharge Clinician.

3) Third is the eligible clinician that provides the plurality of outpatient primary care during the 12 months prior to the admission, as measured by plurality of primary care services; conceptually, a primary care provider may manage the transition from acute to non-acute care and participate in decisions to return to acute care.

The measure includes admissions for Medicare beneficiaries who are 65 years and older and are discharged from any non-federal, acute care inpatient US hospitals (including territories) with Medicare part A enrollment for the 12 months prior to admission and part A enrollment for the 30 days after discharge. These are called ‘index admissions’

Outcome attribution:

Each index admission is attributed to up to 3 eligible clinicians or eligible clinician groups.
1) One is the eligible clinician who filed a claim for the ‘discharge procedure’ (CPT code 99238 or 99239) for the patient; conceptually, this clinician is measured because, having billed for the discharge of the patient, they have some responsibility for the transition of the patient to non-acute settings.

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3) Third is the eligible clinician that provides the plurality of outpatient primary care during the 12 months prior to the admission, as measured by plurality of primary care services; conceptually, a primary care provider may manage the transition from acute to non-acute care and participate in decisions to return to acute care.

Index admissions are attributed to a clinician by each of these rules; two or all three rules may attribute the index admission to the same clinician. Then, all admissions assigned to an eligible clinician are used to construct a single measure score for that clinician, regardless of the reason the admission was attributed. The measure has also been tested for eligible clinician groups, implemented here by grouping eligible clinicians who use the same Taxpayer Identification Number (TIN).

Additional details are provided in S.7 Denominator Details.

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**DENOMINATOR DETAILS**

**Admissions are eligible for inclusion in the measure if:**

1. Patient is 65 or older
   
   Rationale: Younger Medicare patients represent a distinct population with dissimilar characteristics and outcomes.

2. Patient survives admission
   
   Rationale: Patients who die during the initial admission cannot be readmitted.

3. Patient is not transferred to another hospital
   
   Rationale: In an episode of care in which the patient is transferred between hospitals, responsibility for the readmission is assigned to the final discharging hospital. Therefore, intermediate admissions within a single episode of care are not eligible for inclusion.

4. Patient is continuously enrolled in FFS Medicare Part A for the 12 months prior to the index admission and Part A for 30 days after discharge; FFS Medicare Part B for 12 months prior to index admission.

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1. Patient is 65 or older
   
   Rationale: Younger Medicare patients represent a distinct population with dissimilar characteristics and outcomes.

2. Patient survives admission
Rationale: Patients who die during the initial admission cannot be readmitted.

3. Patient is not transferred to another hospital
Rationale: In an episode of care in which the patient is transferred between hospitals, responsibility for the readmission is assigned to the final discharging hospital. Therefore, intermediate admissions within a single episode of care are not eligible for inclusion.

4. Patient is continuously enrolled in FFS Medicare Part A for the 12 months prior to the index admission and Part A for 30 days after discharge; FFS Medicare Part B for 12 months prior to index admission.
Rationale: This is necessary to ensure complete data for risk adjustment, attribution, and outcome determination.

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EXCLUSIONS
From the cohort, we exclude admissions if:

1. The patient is discharged against medical advice (AMA)
2. The patient is discharged from a PPS-exempt cancer hospital
3. The patient is admitted primarily for the medical treatment of cancer
4. The patient is admitted primarily for the treatment of psychiatric disease
5. The patient is admitted primarily for “rehabilitation care; fitting of prostheses and adjustment devices” (CCS 254)
6. Admissions without 30 Days of Post-Discharge Enrollment are excluded
7. Admissions cannot be identified in IDR database

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2. The patient is discharged from a PPS-exempt cancer hospital
3. The patient is admitted primarily for the medical treatment of cancer
4. The patient is admitted primarily for the treatment of psychiatric disease
5. The patient is admitted primarily for “rehabilitation care; fitting of prostheses and adjustment devices” (CCS 254)
6. Admissions without 30 Days of Post-Discharge Enrollment are excluded
7. Admissions cannot be identified in IDR database
8. The admission cannot be attributed to an eligible clinician.

Further exclusion details can be found in S.9 Denominator Exclusion Details

8. The admission cannot be attributed to an eligible clinician.

EXCLUSION DETAILS
From the cohort, we exclude admissions for which:

1. Patients discharged against medical advice (AMA)
   Rationale: Clinicians have limited opportunity to implement high quality care
2. Admissions for patients to a PPS-exempt cancer hospital
Rationale: These hospitals care for a unique population of patients that cannot reasonably be compared to the patients admitted to other hospitals.

3. Admissions primarily for medical treatment of cancer are excluded
   Rationale: These admissions have a very different mortality and readmission profile compared to the rest of the Medicare population (higher rates of planned readmissions and higher rates of competing mortality), and outcomes for these admissions do not correlate well with outcomes for other admissions. Patients with cancer who are admitted for other diagnoses or for surgical treatment of their cancer remain in the measure.

4. Admissions primarily for psychiatric disease are excluded
   Rationale: Patients admitted principally for psychiatric treatment are typically cared for in separate psychiatric centers which are not comparable to acute care hospitals. See Data Dictionary for excluded CCSs.

5. Admissions for “rehabilitation care; fitting of prostheses and adjustment devices” (CCS 254) are excluded
   Rationale: These admissions are not typically admitted to an acute care hospital for acute care.

6. Admissions without 30 Days of Post-Discharge Enrollment are excluded
   Rationale: The 30-day readmission outcome cannot be assessed in patients who do not maintain enrollment for at least 30 days following discharge.

7. Admissions cannot be identified in IDR database
   Rationale: Information from the attribution cannot be applied for patients without data of physician information, which we extracted from IDR database.

8. Patient cannot be attributed to a clinician.
   Rationale: Only patients assigned to eligible clinicians or eligible clinician groups should be included in the measure.

Note that a readmission within 30-days will also be eligible as an index admission if it meets all other eligibility criteria. This allows our measure to capture repeated admissions for the same patient, whether with the same clinician(s) or not. Since there are few patients with multiple admissions in the same year and in the same specialty cohort, we chose to treat multiple admissions as statistically independent.

RISK ADJUSTMENT
   Statistical risk model
   146637 | 110639 | 141015
   146637 | 110639 | 141015

STRATIFICATION
   N/A

TYPE SCORE
   Rate/proportion  better quality = lower score

ALGORITHM
   The index admissions are identified as described above in 5.5-5.9.
   Specialty Cohorts
The measure uses an algorithm identical to that of the hospital level measure (NQF #1789) to group index admissions into subgroups for risk adjustment. The measure aggregates the ICD-9 and ICD-10 principal diagnosis and all procedure codes of the index admission into clinically coherent groups of conditions and procedures (condition categories or procedure categories) using the AHRQ CCS. There is a total of 285 mutually exclusive AHRQ condition categories, most of which are single, homogenous diseases such as pneumonia or acute myocardial infarction. Some are aggregates of conditions, such as “other bacterial infections.” There is a total of 231 mutually exclusive procedure categories. Using these AHRQ CCS procedure and condition categories, the measure assigns each index hospitalization to one of five mutually exclusive specialty cohorts: surgery/gynecology, cardiorespiratory, cardiovascular, neurology, and medicine. The rationale behind this organization is that conditions typically cared for by the same team of clinicians are expected to experience similar added (or reduced) levels of readmission risk.

Step 1. The measure first assigns admissions with qualifying AHRQ procedure categories to the Surgery/Gynecology Cohort. This cohort includes admissions likely cared for by surgical or gynecological teams.

Step 2. The measure then sorts admissions into one of the four remaining specialty cohorts based on the AHRQ diagnosis category of the principal discharge diagnosis:

The Cardiorespiratory Cohort: includes several condition categories with very high readmission rates such as pneumonia, chronic obstructive pulmonary disease, and heart failure. These admissions are combined into a single cohort because they are often clinically indistinguishable and patients are often simultaneously treated for several of these diagnoses.

The Cardiovascular Cohort: includes condition categories such as acute myocardial infarction that in large hospitals might be cared for by a separate cardiac or cardiovascular team.

The Neurology Cohort: includes neurologic condition categories such as stroke that in large hospitals might be cared for by a separate neurology team.

The Medicine Cohort: includes all non-surgical patients who were not assigned to any of the other cohorts.

The full list of the specific diagnosis and procedure AHRQ CCS categories used to define the specialty cohorts are attached in data field S.2b (Data Dictionary or Code Table).

Risk adjustment

Risk adjustment is done separately for each specialty cohort using a logistic regression model with 30-day readmission as the outcome. Risk adjusters in each model are identical to those used in the specialty cohorts for the hospital level measure (NQF #1789) and include the CCS for the principle diagnosis. The full list of risk adjusters can be found in the Data Dictionary.

Measure Score

Because the same admission may be attributed to more than one unique Eligible Clinician or unique Eligible Clinician group, we could not apply the method used by the existing hospital-level HWR measure (NQF#1789) to construct risk standardized readmission rates. Instead, we adopted a method that, while requiring an assumption of independence across entities, allowed us to account for correlation within entity. The measure uses an approach similar to that used by the Patient Safety and Adverse Events Composite measure (NQF #0531). Let
Y_i be the observed \((0, 1)\) outcome for patient i
Y_bar be the observed rate for all discharges in the reference population
H be the total number of providers
E^\_i be the expected (predicted) patient level probability;
n_h be the number of discharges at provider h
We define the observed rate at provider h as
The expected rate at provider h as
The Standardized Readmission Ratio (SRR) as
Then the formula for the smoothed rate is:
Where
Note that \(t^{^2}\) appears on both sides of the signal variance equation and is solved by iteration.
For calculating the provider RARR using SR scores from 5 specialty cohorts, we combined the SRs using volume-weighted logarithmic mean as following:
where Y_bar = overall national observed readmission rate for all index admissions in all cohort, mcj = the number of discharges for provider j in cohort c, SRcj = the calculated smoothed rate score for provider j in cohort c.
Creating Credible Interval Estimates
For purposes of estimating confidence intervals, we used bootstrapping. Because of overlapping assignment of patients, bootstrapping was at the specialty cohort level. Specifically, we select \(m=1,\ldots,M\) random samples of discharges with replacement from each specialty cohort. Using the existing attribution, we calculated (1), (2) and (3) above for each provider. The 95% credible interval estimate of the RARRj for each provider was used as the estimated 95% confidence interval. 146637| 110639| 141015.
Appendix E: Pre-Evaluation Comments

Comments received as of June 12, 2019.

2539 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy
Submitted by American Medical Association (AMA)

The American Medical Association (AMA) appreciates the opportunity to comment on this measure. We are writing to express our concerns on the evidence and testing provided in support of this measure. While the AMA agrees that it is useful to understand the rate of complications following outpatient colonoscopies for quality improvement, we did not see explicit information outlining how these facilities can implement structures or processes that can lead to improved outcomes for these patients. Rather, most of the cited references focused on incidence rates and prevalence of specific risk factors and did not address what factors or processes leveraged by a facility can reduce the occurrence of complications.

Regarding the validity of the measure and specifically the risk adjustment approach, we do not believe that the measure is adequately tested and adjusted for social risk factors. The conceptual basis for the selection of the social risk factors was inadequately described in section 2.b.3. Risk Adjustment/Stratification and it is unclear to us why the developer would test social risk factors after adjusting for clinical risk factors rather than assessing the impact of both clinical and social risk factors in the model at the same time. These variations in how risk adjustment factors are examined could also impact how each variable (clinical or social) perform in the model and remain unanswered questions.

In addition, the AMA questions whether the information provided as a result of this measure is truly useful for accountability and informing patients of the quality of care provided by hospital outpatient departments (HOPDs) or ambulatory surgical centers (ASCs). Specifically, our concern relates to the relatively limited amount of variation across applicable facilities. Only two HOPDs out of the 3,908 facilities were identified as performing “Better than the National Rate” or “Worse than the National Rate” and of 2,061 ASCs, none were identified as performing “Better than the National Rate” and four performed “Worse than the National Rate.” Endorsing a measure that currently only identifies a small number of outliers does not enable users to distinguish meaningful differences in performance and is inconsistent with the validity subcriterion and usability/use criterion.

We ask the Standing Committee to carefully consider these concerns during their evaluation.

3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit-Based Incentive Payment System (MIPS) Eligible Clinicians and Eligible Clinician Groups
Submitted by American Medical Association (AMA)

The American Medical Association (AMA) appreciates the opportunity to comment on this measure. Below we outline our concerns on whether this measure meets the NQF Measure Evaluation Criteria, particularly for evidence and scientific acceptability.

The AMA believes that attribution must be determined based on evidence that the accountable unit is able to meaningfully influence the outcome, which aligns with the most recent National Quality Forum (NQF) report, Improving Attribution Models (NQF, 2018). This principle is also aligned with the evidence requirements for outcome measures in the NQF Measure Evaluation Criteria, which requires that there be at least one structure or process that can influence the outcome and this relationship must be
demonstrated through empirical evidence. CMS must begin to demonstrate these relationships with the accountable unit prior to implementing this measure in MIPS and we do not believe that CMS has adequately demonstrated this link.

While the AMA agrees that there is evidence to demonstrate that improved care coordination and programs focused on discharge planning can lead to reductions in hospital readmissions, most of the cited evidence involved multiple partners and clinicians such as the health system, hospital, nurse, and/or pharmacist. Therefore, we do not believe that sufficient evidence was provided to support that physicians or practices using the proposed attribution approach in the absence of some coordinated program or targeted intervention led by the health system or hospital can implement structures or processes leading to improved outcomes for these patients.

In addition, continuity of care requires smooth transitions to prepare for patients’ changing clinical and social needs, but the Stark law often impedes the continuity and care transitions. Specifically, in certain circumstances, physicians are prohibited from employing promising care coordination strategies on behalf of their patients, e.g., an arrangement that pays for a nurse coordinator to coordinate a recently discharged patient’s care among a hospital, physician specialists, or a primary care physician due to concerns that this may induce future referrals to their own office to avoid an unnecessary readmission to the hospital. As a result, we do not believe that assignment of responsibility of the reduction of readmissions to multiple physicians and practices in MIPS is appropriate nor has the developer provided sufficient information to support the attribution of this measure to up to three physicians or practices.

The AMA is disappointed to see the low measure score reliability results based on the minimum case number of 25 patients. We believe that measures must meet minimum acceptable thresholds of 0.7 for reliability and during the public comment period in December 2018, the data provided when using at least 100 patients yielded mean signal-to-noise results of 0.991 for eligible clinicians and 0.997 for eligible clinician groups (CMS, 2018). We request that the Standing Committee evaluate whether the case minimum of 25 patients is acceptable given the low reliability results.

The AMA is also troubled to see that no evidence or testing has been provided to support the attribution of this measure to the three distinct groups (discharge physician, primary inpatient care provider, and outpatient primary care provider). While correlations to the hospital’s overall star ratings and readmission score from the star ratings are useful, we do not believe that the developer has provided sufficient information as it relates to the measure’s application to each of the accountable units to which the measure is attributed.

In addition, we noted that the conceptual basis used to explain which social risk factors were tested in Section 2b3.3a solely focused on the hospital and was not specific to physicians or practices. It is difficult to determine whether additional factors should be considered without this information and we do not believe that it is responsive to NQF criteria requirements.

We also remain concerned that CMS continues to test social risk factors after assessment of clinical and demographic risk factors and it is unclear why this multi-step approach is preferable. On review of the Evaluation of the NQF Trial period for Risk Adjustment for Social Risk Factors report, it is clear that the approaches to testing these data should be revised to strategies such as multi-level models or testing of social factors prior to clinical factors and that as access to new data becomes available, it may elucidate more differences that are unrelated to factors within a hospital’s or physician’s control (NQF, 2017). Additional testing is needed to evaluate clinical factors in-conjunction with social risk factors; as opposed to the current approach that prioritizes clinical factors. Even though the c-statistics for each cohort were not improved, it would be useful to understand further the impact that the inclusion of these factors had on the absolute change of the rates since the differences ranged from a minimum of -1.13% to a maximum of 3.99% for eligible clinicians and a minimum of -2.88% to a maximum of 4.24%
for eligible clinician groups. These shifts could potentially impact the points physicians score in the Quality Category in MIPS and as a result, either positively or negatively impact the overall penalty or incentive they receive and the resources available for those individuals and groups who serve larger numbers of disadvantaged patients.

Given the measure is specifically developed for MIPS, the developer must perform testing that demonstrates how the measure would perform under the MIPS benchmark methodology and Physician Compare Star Ratings since CMS utilizes two different methodologies for ranking and profiling physicians.

In conclusion, CMS must balance the desire to apply these measures to the broadest number of clinicians possible with the unintended consequences of inappropriately attributing measures to physicians for which they cannot meaningfully influence patient outcomes. The AMA requests that the Standing Committee carefully consider the potential misinformation that could be provided to patients and caregivers if the measures do not have a clear evidence base to support attribution of the outcome to a specific physician and could potentially produce scores that are invalid and unreliable.

References:

