



November 18, 2020

- To: Consensus Standards Approval Committee (CSAC)
- From: All-Cause Admissions and Readmissions Project Team
- Re: All-Cause Admissions and Readmissions Fall 2019 Track 2 Measures^a

COVID-19 Updates

Considering the recent COVID-19 global pandemic, many organizations needed to focus their attention on the public health crisis. In order to provide greater flexibility for stakeholders and continue the important work in quality measurement, the National Quality Forum (NQF) extended commenting periods and adjusted measure endorsement timelines for the fall 2019 cycle.

Commenting periods for all measures evaluated in the fall 2019 cycle were extended from 30 days to 60 days. Based on the comments received during this 60-day extended commenting period, measures entered one of two tracks:

Track 1: Measures that Remained in Fall 2019 Cycle

Measures that did not receive public comments or only received comments in support of the Standing Committees' recommendations moved forward to the CSAC for review and discussion during its meeting on July 28-29, 2020.

• Exceptions

Exceptions were granted to measures if non-supportive comments received during the extended post-comment period were similar to those received during the preevaluation meeting period and have already been adjudicated by the respective Standing Committees during the measure evaluation fall 2019 meetings.

Track 2: Measures Deferred to Spring 2020 Cycle

Fall 2019 measures that required further action or discussion from a Standing Committee were deferred to the spring 2020 cycle. This includes measures where consensus was not reached or those that require a response to public comments received. Measures undergoing maintenance review retained endorsement during that time. Track 2 measures will be reviewed by the CSAC.

During the CSAC meeting on November 17-18, 2020, the CSAC will review fall 2019 measures assigned to Track 2. Evaluation summaries for measures in Track 2 have been described in this memo and the related All-Cause Admissions and Readmissions draft report.

CSAC Action Required

The CSAC will review recommendations from the All-Cause Admissions and Readmissions, project at its

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^a This memo is funded by the Centers for Medicare and Medicaid Services under contract HHSM-500-2017-00060I Task Order HHSM-500-T0001.

November 17-18, 2020 meeting and vote on whether to uphold the recommendations from the Committee.

This memo includes a summary of the project, measure recommendations, themes identified and responses to the 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 Fall 2019 Track 2 Draft Report. The draft report includes measure evaluation details on all measures that followed Track 2. The complete draft report and supplemental materials are available on the project webpage.
- Comment Table. This <u>table</u> lists ten comments received during the post-meeting comment period.

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 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 the February 4, 2020 web meeting, the All-Cause Admissions and Readmissions Standing Committee evaluated one newly submitted measure. The Committee recommended for endorsement 3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission Rate (HWR) for the Merit-Based Incentive Payment System (MIPS) Eligible Clinician Groups.

Draft Report

The All-Cause Admissions and Readmissions Fall 2019, Track 2 draft report presents the results of the evaluation of one measure considered under the Consensus Development Process (CDP). One measure was recommended for endorsement.

	Maintenance	New	Total
Measures under consideration	0	1	1
Measures recommended for endorsement	0	1	1

The measures were evaluated against the 2019 version of the measure evaluation criteria.

CSAC Action Required

Pursuant to the CDP, the CSAC is asked to consider endorsement of one candidate consensus measure.

Measures Recommended for Endorsement

• <u>NQF 3495</u> Hospital-Wide 30-Day, All-Cause, Unplanned Readmission Rate (HWR) for the Merit-Based Incentive Payment System (MIPS) Eligible Clinician Groups (Yale Centers for Outcome Research and Evaluation (CORE)/CMS)

Overall Suitability for Endorsement: Yes-16; No-1

Comments and Their Disposition

NQF received ten comments from eight organizations (all NQF member organizations) pertaining to the draft report and to the measures under consideration.

A table of comments submitted during the comment period, with the NQF responses to each comment, is posted to the All-Cause Admissions and Readmissions <u>project webpage</u>.

Comments Received and NQF's Response

Themed Comments

Three major themes were identified in the post-evaluation comments, as follows:

- 1. Reliability at minimum case volumes
- 2. Evidence to support attribution
- 3. Risk adjustment testing and social risk factors

Theme 1 – Reliability at minimum case volumes

Commenters raised concerns regarding the reliability testing and results across the five specialty cohorts. Several commenters noted that the reliability results were insufficient at case volumes of 25 and that results were still lower than optimal at minimum case volumes of 200. Additionally, one commenter expressed concerns about the generalizability of the measure across MIPS-eligible clinician groups at case volumes of 200 or more.

Developer Response:

The developer thanked the commenters for their comments. Their responses are structured to combine comments on similar topics. Many of these comments were raised by other commenters and addressed during the Standing Committee evaluation meeting. The developer has focused on new points and briefly recapped where issues have already been discussed. Their full list of responses can be found in the <u>comment table</u>.

Committee Response:

The Standing Committee thanked the commenters for their comments. The Committee reviewed and discussed the comments and took no further action on NQF 3495 because of the comments related to this issue.

Theme 2 – Evidence to support attribution

Commenters expressed concerns regarding the supporting evidence related to the measure's attribution to three types of clinician groups. Several commenters stated that the evidence relies on general statements and that the studies are inadequate to support the attribution logic to a discharging clinician. One commenter raised concerns that certain specialties will be inappropriately impacted due to the attribution logic and recommended that the measure should include a broader range of specialties.

Developer Response:

The developer thanked the commenters for their comments. Their responses are structured to combine comments on similar topics. Many of these comments were raised by other commenters and addressed during the Standing Committee evaluation meeting. The developer has focused on new points and briefly recapped where issues have already been discussed. Their full list of responses can be found in the <u>comment table</u>.

Committee Response:

The Standing Committee thanked the commenters for their comments. The Committee held a brief discussion on attribution and provider group thresholds. The Committee agreed that the evidence supports interventions that physician groups can take to influence this outcome and ultimately determined that the measure should proceed. The Committee took no further action on NQF 3495 because of the comments related to this issue.

Theme 3 – Risk adjustment testing and social risk factors

One commenter expressed concerns regarding the risk-adjustment model. Specifically, the commenter stated that the risk adjustment testing and the overall model was not robust, especially when considering social risk factors.

Developer Response:

The developer thanked the commenters for their comments. Their responses are structured to combine comments on similar topics. Many of these comments were raised by other commenters and addressed during the Standing Committee evaluation meeting. The developer has focused on new points and briefly recapped where issues have already been discussed. Their full list of responses can be found in the <u>comment table</u>.

Committee Response:

The Committee thanked the commenters for their comments. Concerning risk adjustment, a component of the validity criterion, the Standing Committee agreed that social risk factors, including community and personal factors, can have a strong impact on readmissions and are important to consider. The Committee ultimately determined that the measure should proceed and pass on validity to which risk adjustment is a component. There were no objections from Committee members to the developer, Yale CORE's, responses, nor any requests to reconsider or revote on NQF 3495.

Member Expression of Support

Throughout the 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. No NQF members provided their expression of support or non-support. <u>Appendix C</u> details the expression of support.

Removal of NQF Endorsement

One measure previously endorsed by NQF has not been resubmitted for maintenance endorsement or has been withdrawn during the endorsement evaluation process. Endorsement for this measure was removed.

Measure	Measure Description	Reason for Withdrawal
1768 Plan All-Cause Readmissions (PCR)	For patients 18 years of age and older, the number of acute inpatient stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission. Data are reported in the following categories: 1. Count of Index Hospital Stays* (denominator) 2. Count of 30-Day Readmissions (numerator) 3. Average Adjusted Probability of Readmission *An acute inpatient stay with a discharge during the first 11 months of the measurement year (e.g., on or between January 1 and December 1).	Developer is not seeking re- endorsement.

Table 3. Measures Withdrawn from Consideration

Appendix A: CSAC Checklist

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

Key Consideration	Yes/No	Notes
Were there any process concerns raised during the CDP project? If so, briefly explain.	No	
Did the Standing Committee receive requests for reconsideration? If so, briefly explain.	No	
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.	No	
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.	Yes	This is a re-specified version of the hospital-level measure, Hospital-Wide All-Cause, Unplanned Readmission Measure (NQF 1768) and is harmonized to the furthest extent possible.
Were any measurement gap areas addressed? If so, identify the areas.	No	
Are there additional concerns that require CSAC discussion? If so, briefly explain.	No	

Appendix B: Measures Not Recommended for Endorsement

Not applicable. NQF 3495 was recommended for endorsement.

Appendix C: NQF Member Expression of Support Results

Four NQF members provided their expressions of non-support for NQF 3495. Results are provided below.

3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate at the Clinician Group/Practice Level of Analysis

Member Council	Support	Do Not Support	Total
Health Professional	0	4	4
Provider Organization	0	1	1

Appendix D: Details of Measure Evaluation

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

Submission

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 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.

Additional details are provided in S.5 Numerator Details

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 U.S. 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:

There are three eligible clinician groups for attribution: 1) the Primary Inpatient Care Provider, 2) the Discharge Clinician and 3) the Outpatient Primary Care Physician.

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.

Adjustment/Stratification: Statistical risk model

Level of Analysis: Clinician: Group/Practice

Setting of Care: Inpatient/Hospital

Type of Measure: Outcome

Data Source: Claims, Other

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

STANDING COMMITTEE MEETING 02/04/2020

1. Importance to Measure and Report: The measure meets the Importance criteria

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

1a. Evidence: Pass-17; No Pass-0; 1b. Performance Gap: H-2; M-14; 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 nonfederal hospitals. This specified measure attributes admissions to up to three participating MIPS eligible clinicians.

	ospital-Wide 30-Day, All-Cause, Unplanned Readmission Rate (HWR) for the Merit-Based Incentive nt System (MIPS) Eligible Clinician Groups
•	The Standing Committee reviewed the logic model presented by the developer demonstrating that physician group interventions can reduce the risk of unplanned hospital visits. The Committee reviewed the range of performance for clinician groups which is from 13.1 in the first decile to 18.0 in the tenth decile. Committee members requested clarification of the types of hospitalization included in the measure. The developer confirmed that the measure only accounts for inpatient stays and not observation stays or emergency department visits. The Committee agreed that the evidence supported that interventions can be undertaken to reduce the risk of unplanned hospital visits, and there is a gap in care that warrants a national performance measure.
	tific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
-	iability - precise specifications, testing; 2b. Validity - testing, threats to validity
	ability: H-0, M-5, L-1, I-0 (SMP) ; 2b. Validity: H-0 ; M-14 ; L-3 ; I-0
Rationa • • •	This measure was deemed complex and was evaluated by the NQF SMP in Spring 2019. The SMP rated the measure as moderate on reliability and validity. The Committee voted (Y-17, N-0) to uphold the SMP's rating on reliability but agreed to have a further discussion of validity. The Committee discussed several considerations for validity, including: the use of hospitalists as a primary inpatient care provider, the appropriateness of the attribution model, the lack of a paired mortality measure, and how patients are considered at the end of life. The Committee also noted that social risk factors were excluded from the risk model. The developer noted that they had found limited change in the distribution of measure score performance based on social risk factors but would continue to monitor for unintended consequence. The Committee acknowledged public comments noting concerns of the attribution model and reliability score performance. While several considerations were noted on the validity of the measure, the Committee generally agreed that the measure passed validity based on the developer's responses.
	bility: H-7; M-7; L-1; I-1
•	nical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ ded consequences identified; 3d. Data collection strategy can be implemented)
Rationa	
	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. Use a	Ind Usability
4a. Use, others;	: 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative lences to patients)

4a. Use: Pass-15; No Pass-2 4b. Usability: H-3; M-12; L-2; I-0

Rationale:

- The Standing Committee acknowledged that this measure is planned for use in the CMS MIPS.
- The 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 the risk-standardized readmission rate (RSRR) over time.

5. Related and Competing Measures

- This measure is related to the following measure:
 - NQF 1789 Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

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

• The developer notes that this measure is aligned with NQF 1789, but the attribution is to a clinician or clinician group rather than a facility. Further harmonization is not needed at this time.

6. Standing Committee Recommendation for Endorsement: Y-18; N-0

7. Public and Member Comment

Three major themes were identified in the post-evaluation comments, as follows:

- 1. Reliability at minimum case volumes
- 2. Evidence to support attribution
- 3. Risk adjustment testing and social risk factors

The Committee reviewed all comments and discussed the developer responses. The Committee ultimately determined that the measure should proceed and pass on reliability to which the minimum case volume addresses, evidence to which attribution is a component, and validity to which risk adjustment is a component. There were no objections from Committee members to the developer responses, nor any requests to reconsider or revote on NQF 3495.

8. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-X; No-X (November 17, 2020): [Endorsed or Not Endorsed])

The CSAC upheld [or did not uphold] the Standing Committee's decision to recommend the measure for endorsement.

9. Appeals



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All-Cause Admissions and Readmissions Fall 2019 Review Cycle

CSAC Review and Endorsement

November 18, 2020

Funded by the Centers for Medicare and Medicaid Services under contract HHSM-500-2017-00060I Task Order HHSM-500-T0001.



Standing Committee Recommendations

- One measure reviewed for Fall 2019 Track 2
 - One measure reviewed by the Scientific Methods Panel
- One measure recommended for endorsement
 - NQF 3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate – Clinician (New Measure)



Public and Member Comment and Member Expressions of Support

- Ten comments received
- Four NQF members provided expressions of non-support.



Questions?

Project team:

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- Poonam Bal, MSHA, Director
- Oroma Igwe, MPH, Manager
- Funmilayo Idaomi, Analyst
- Taroon Amin, PhD, MPH, Consultant
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Project webpage:

http://www.qualityforum.org/All_Cause_Admissions_and_Readmissi ons.aspx

Project email address: <u>readmissions@qualityforum.org</u>

THANK YOU.

NATIONAL QUALITY FORUM

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All-Cause Admissions and Readmissions Fall 2019 Cycle Track 2: CDP Report

DRAFT REPORT FOR CSAC REVIEW NOVEMBER 18, 2020

This report is funded by the Centers for Medicare and Medicaid Services under contract HHSM-500-2017-00060I Task Order HHSM-500-T0001

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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 to adverse events in an acute care setting. The National Quality Forum (NQF) currently has 50 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 All-Cause Admissions and Readmissions Standing Committee evaluated one new measure against NQF's measure evaluation criteria. This measure was initially submitted for review during the spring 2019 cycle. However, due to concerns with Committee quorum and a lack of clarity on measure testing information presented during the spring 2019 post-comment call, this measure was deferred to the fall 2019 cycle. This measure was recommended for endorsement by the Standing Committee:

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

Due to circumstances around the COVID-19 global pandemic, commenting periods for all measures evaluated in the fall 2019 cycle were extended from 30 days to 60 days. Based on the comments received during this 60-day extended commenting period, measures entered one of two tracks:

Track 1: measures that remained in fall 2019 Cycle:

• The measure under review in the fall 2019 cycle did not meet the criteria for a Track 1 measure.

Track 2: measures deferred to spring 2020 Cycle:

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

This report contains details of the evaluation of measures assigned to *Track 2* and moved to the spring 2020 cycle. Detailed summaries of the Committee's discussion and ratings of the criteria for each measure are in <u>Appendix A</u>.

Introduction

Hospital admissions and readmissions are a major focus of quality improvement efforts in the United States. Studies have shown that patients discharged from the hospital have an increased risk for being readmitted, and approximately a third of these readmissions are preventable.¹ Additionally, readmissions are costly. A study, conducted by the Agency for Healthcare Research and Quality (AHRQ), found that roughly 3.3 million readmissions occurred within 30 days of discharge in the United States in 2011, which contributed to a total cost of \$41.3 billion across all payers.²

To incentivize reductions in preventable hospitalizations, the Centers for Medicare & Medicaid Services (CMS) has expanded accountability for avoidable admissions and readmissions across its quality reporting and payment programs. The Hospital Readmissions Reduction (HRRP) program reduces payment rates to hospitals with higher-than-expected readmission rates.³ 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.⁴ Finally, CMS' pay-for-performance MIPS program, which adjusts Medicare payments at the physician level, automatically applies to groups of 16 or more clinicians with at least 200 cases (or patient volume or admissions) per year.⁵

This increased use of measures of preventable hospital admissions and readmissions in public reporting and payment applications continues to demonstrate the importance of this healthcare quality domain. To drive improvement in admissions and readmissions, performance measures are 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 whether these performance measures should be linked to provider payment.

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 contribute 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.^{5 6}

In this project, the NQF All-Cause Admissions and Readmissions Standing Committee reconsidered NQF measure 3495 *Hospital-Wide 30-Day, All-Cause, Unplanned Readmission Rate (HWR) for the Merit-Based Incentive Payment System (MIPS) Eligible Clinician Groups* at the Clinician Group/Practice level of analysis. This measure was initially considered in the spring 2019 cycle at both the Group and Individual Clinician level of analyses. However, the Committee did not achieve quorum during the spring 2019 measure evaluation web meetings and had to complete offline voting surveys in lieu of a real-time voting process, per NQF's standard process, following the measure evaluation web meetings.

Additionally, in response to comments that were received during the public comment period and questions raised by the Committee concerning reliability testing, the developer inadvertently stated incorrect measure score reliability results during the live post-comment call on October 2, 2019, which may have potentially influenced the Committee's deliberations. After the post-comment call, the developer clarified that they mistakenly announced incorrect reliability results during the live call, but they later confirmed that the correct results were in the original submission. In consultation with the developers and the Committee co-chairs, it was determined that the measure should be returned to the Standing Committee for reevaluation during the fall 2019 cycle, due to concerns with Committee quorum and confusion regarding the testing information that was discussed during the post-comment call.

NQF Portfolio of Performance Measures for All-Cause Admissions and Readmissions Conditions

The All-Cause Admissions and Readmissions Standing Committee (<u>Appendix C</u>) oversees NQF's portfolio of All-Cause Admissions and Readmissions measures (<u>Appendix B</u>) that includes measures for a number of different sites of care. This portfolio contains 50 measures:

	All-Cause	Condition-Specific
Hospital	4	14
Home health	4	0
Skilled nursing facility	4	0
Long-term care facility	1	0
Inpatient rehab facility	1	0
Inpatient psychiatric facility	1	0
Dialysis facility	2	0
Health plan	1	0
Population-based	4	11
Hospital outpatient/ambulatory surgery center	0	1
Integrated delivery system	1	0
Accountable care organizations (ACO)	1	0
Total	24	26

Table 1. NQF All Cause Admissions and Readmissions Portfolio of Measu

Additional measures are assigned to other projects. These include transition-of-care measures (Patient Experience and Function project), and a variety of condition-specific readmission measures (Surgery and Perinatal and Women's Health projects).

All Cause Admissions and Readmissions Measure Evaluation

On February 4, 2020, the All Cause Admissions and Readmissions Standing Committee evaluated one new measure (Table 2) against NQF's <u>standard measure evaluation criteria</u>.

	Maintenance	New	Total
Measures under consideration	0	1	1
Measures recommended for	0	1	1
endorsement			

Table 2. All Cause Admissions and Readmissions Measure Evaluation Summary, Fall 2019 Track 2

Comments Received Prior to Committee Evaluation

NQF solicits comments on endorsed measures on an ongoing basis through the <u>Quality Positioning</u> <u>System (QPS)</u>. 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 December 5, 2019 and closed on April 24, 2020. As of January 31, 2020, one comment was submitted and shared with the Committee prior to the measure evaluation meeting(s) (<u>Appendix F</u>).

All submitted comments were provided to the Committee prior to its initial deliberations during the web evaluation meeting.

Comments Received After Committee Evaluation

Considering the recent COVID-19 global pandemic, many organizations needed to focus their attention on the public health crisis. In order to provide greater flexibility for stakeholders and continue the important work in quality measurement, NQF extended commenting periods and adjusted measure endorsement timelines for the Fall 2019 cycle.

Commenting periods for all measures evaluated in the fall 2019 cycle were extended from 30 days to 60 days. Based on the comments received during this 60-day extended commenting period, measures entered one of two tracks:

Track 1: Measures Remained in Fall 2019 Cycle

Measures that did not receive public comments or only received comments in support of the Standing Committees' recommendations moved forward to the Consensus Standards Approval Committee (CSAC) for review and discussion during its meeting on July 28-29, 2020.

• Exceptions

Exceptions were granted to measures if non-supportive comments received during the extended post-comment period were similar to those received during the preevaluation meeting period and have already been adjudicated by the respective Standing Committees during the measure evaluation fall 2019 meetings.

Track 2: Measures Deferred to Spring 2020 Cycle

Fall 2019 measures that required further action or discussion from a Standing Committee were deferred to the spring 2020 cycle. This includes measures where consensus was not reached or those that require a response to public comments received. Measures undergoing maintenance review retained endorsement during that time. During the spring 2020 CSAC meeting on November 17-18, 2020, the CSAC will review all measures assigned to Track 2.

The extended public commenting period with NQF member support closed on May 24, 2020. Following the Committee's evaluation of the measures under consideration, NQF received ten comments from eight member organizations member organizations and individuals pertaining to the draft report and to the measures under consideration. All comments for each measure under consideration have been summarized in <u>Appendix A</u>.

Throughout the extended 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. No NQF members provided their expression of support or non-support.

Summary of Measure Evaluation: Fall 2019 Measures, Track 2

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 <u>Appendix A</u>.

3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission Rate (HWR) for the Merit-Based Incentive Payment System (MIPS) Eligible Clinician Groups (Yale New Haven Health/Center for Outcomes Research and Evaluation): Recommended

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 nonfederal hospitals. This re-specified measure attributes hospital-wide index admissions to up to three participating MIPS 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; **Measure Type**: Outcome; **Level of Analysis**: Clinician: Group/Practice; **Setting of Care**: Inpatient/Hospital; **Data Source**: Claims, Other

This is a re-specified version of the hospital-level measure, Hospital-Wide All-Cause, Unplanned Readmission Measure (NQF 1789). The Committee began the discussion by considering the evidence for the measure. Committee members asked the developers for clarification of the types of hospitalization included in the measure. The developers noted that the measure includes inpatient stays only and that observation stays or emergency department visits are not included. After some discussion of the potential uses of the measure and whether it is appropriate for quality improvement or value-based purchasing, the co-chairs recommended that the Committee focus their evaluation on evidence of interventions that physician groups can provide to reduce readmission rates. The Committee unanimously agreed that research supports interventions that physician groups can take to influence this outcome. The measure passed the evidence criterion. The Committee agreed there is a gap in care and evidence of disparities in performance rates; the measure passed this criterion with limited discussion and proceeded to the reliability criterion. The Committee accepted the Scientific Methods Panel (SMP) rating of "moderate" for reliability. During the discussion on the validity criterion, the Committee noted the issue of the use of hospitalists and how that may impact validity as a primary inpatient care provider. They also noted concerns with the lack of social determinants of health (SDOH) in the risk adjustment model. Further questions for validity focused on appropriateness of the attribution model, the lack of a paired mortality measure, and concerns on how patients at the end of life are considered.

The Committee asked NQF staff clarifying questions concerning the role of the SMP and ultimately decided to make their own recommendation on the validity of the measure. Committee members continued to discuss SDOH and its impact on the decision to readmit. Furthermore, the Committee noted that community and personal factors such as the reliability of the caretaker or single occupancy residence can play a strong role on this. The developer explained that they had run the risk adjustment model using AHRQ's Socioeconomic Status (SES) index based on the nine-digit zip code and based on dual eligible status. They found limited change with both the AHRQ and dual status adjustment. The correlation was found to be 0.99. The developer continues to monitor for unintended consequences. Ultimately, the measure passed the validity criterion. During discussion of the feasibility criterion, no major concerns were raised, as there is a very low occurrence of missing data. The Committee then proceeded to the use and usability criteria, and it raised some of its earlier questions around how the measure will be used, and the developer was asked to respond. Several Committee members stated that NQF 3495 is a great quality improvement measure, but they were uncertain of whether the measure should be used in value-based purchasing programs such as MIPS. The developer noted that they understand these concerns but affirmed that the measure is already in use. NQF staff reiterated that the Consensus Development Process (CDP) Committees are expected to evaluate the measure objectively based on the measure evaluation criteria regardless of which program will be associated with the measure. The Committee agreed to pass the measure on the Use and Usability criteria.

During the public comment period, a commenter expressed concerns related to the risk adjustment model, noting the lack of inclusion of social factors. The Standing Committee agreed that social risk factors, including community and personal factors, can have a strong impact on readmissions and are important to consider. The Committee ultimately determined that the measure should proceed and pass on validity to which risk adjustment is a component. There were no objections from Committee members to the developer responses nor any requests to reconsider or revote on NQF 3495.

Measures Withdrawn from Consideration

One measure previously endorsed by NQF has not been resubmitted for maintenance of endorsement. Endorsement for this measure was removed.

Table 3. Measures Withdrawn from Consideration

Measure	Reason for withdrawal
1768 Plan All-Cause Readmissions (PCR)	Developer is not seeking re-endorsement.

References

¹ van Walraven, C, Bennett, C, Jennings, A, Austin, PC, & Forster, A J, 2011. Proportion of hospital readmissions deemed avoidable: a systematic review. CMAJ: Canadian Medical Association journal = Journal de l'Association medicale canadienne, 183(7), E391–E402. https://doi.org/10.1503/cmaj.101860

² Hines AL (Truven HealthAnalytics), Barrett ML (ML Barrett, Inc.), Jiang HJ (AHRQ), and Steiner CA (AHRQ). Conditions with the Largest Number of Adult Hospital Readmissions by Payer, 2011. HCUP Statistical Brief #172. April 2014. Agency for Healthcare Research and Quality, Rockville, MD. http://www.hcup-us.ahrq.gov/reports/statbriefs/sb172-Conditions-Readmissions-Payer.pdf.

³ CMS. Hospital Readmissions Reduction Program (HRRP). February 11, 2020. Accessed on February 22, 2020 at: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.

⁴ CMS. Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT Act) Frequently Asked Questions. Accessed on February 22, 2020 at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Post-Acute-Care-Quality-Initiatives/Downloads/IMPACT-Act-FAQs-Oct-17-March-18.pdf

⁵ Boccuti C, Casillas G. Aiming for Fewer Hospital U-turns: The Medicare Hospital Readmissions Reduction Program. *Henry J Kais Fam Found*. March 2017. <u>https://www.kff.org/medicare/issuebrief/aiming-for-fewer-hospital-u-turns-the-medicare-hospital-readmission-reduction-program/</u>. Accessed February 24, 2020

⁶ McCarthy D, Cohen A, Johnson MB. Gaining Ground: Care Management Programs to Reduce Hospital Admissions and Readmissions among Chronically III and Vulnerable Patients. Washington, DC: Commonwealth Fund; 2013. Commonwealth Fund pub. 1658.

https://www.pcpcc.org/sites/default/files/1658_McCarthy_care_transitions_synthesis_v2.pdf. Accessed February 24, 2020

Appendix A: Details of Measure Evaluation

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

Track 2 – Measures Recommended

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

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 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.

Additional details are provided in S.5 Numerator Details

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 U.S. 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:

There are three eligible clinician groups for attribution: 1) the Primary Inpatient Care Provider, 2) the Discharge Clinician and 3) the Outpatient Primary Care Physician.

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.

Adjustment/Stratification: Statistical risk model

Level of Analysis: Clinician: Group/Practice

Setting of Care: Inpatient/Hospital

Type of Measure: Outcome

Data Source: Claims, Other

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

STANDING COMMITTEE MEETING 02/04/2020

1. Importance to Measure and Report: The measure meets the Importance criteria

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

1a. Evidence: Pass-17; No Pass-0; 1b. Performance Gap: H-2; M-14; L-1; I-0

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

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 nonfederal 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 that physician group interventions can reduce the risk of unplanned hospital visits.
- The Committee reviewed the range of performance for clinician groups which is from 13.1 in the first decile to 18.0 in the tenth decile.
- Committee members requested clarification of the types of hospitalization included in the measure. The developer confirmed that the measure only accounts for inpatient stays and not observation stays or emergency department visits.
- The Committee agreed that the evidence supported that interventions can be undertaken to reduce the risk of unplanned hospital visits, and there is a gap in care that warrants a national performance measure.

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-5, L-1, I-0 (SMP); 2b. Validity: H-0; M-14; L-3; I-0

Rationale:

- This measure was deemed complex and was evaluated by the NQF SMP in Spring 2019. The SMP rated the measure as moderate on reliability and validity.
- The Committee voted (Y-17, N-0) to uphold the SMP's rating on reliability but agreed to have a further discussion of validity.
- The Committee discussed several considerations for validity, including: the use of hospitalists as a primary inpatient care provider, the appropriateness of the attribution model, the lack of a paired mortality measure, and how patients are considered at the end of life.
- The Committee also noted that social risk factors were excluded from the risk model. The developer noted that they had found limited change in the distribution of measure score performance based on social risk factors but would continue to monitor for unintended consequence.
- The Committee acknowledged public comments noting concerns of the attribution model and reliability score performance.
- While several considerations were noted on the validity of the measure, the Committee generally agreed that the measure passed validity based on the developer's responses.

3. Feasibility: H-7; M-7; L-1; I-1

(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. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: Pass-15; No Pass-2 4b. Usability: H-3; M-12; L-2; I-0

Rationale:

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

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

 The 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 the riskstandardized readmission rate (RSRR) over time.

5. Related and Competing Measures

- This measure is related to the following measure:
 - NQF 1789 Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)
- The developer notes that this measure is aligned with NQF 1789, but the attribution is to a clinician or clinician group rather than a facility. Further harmonization is not needed at this time.

6. Standing Committee Recommendation for Endorsement: Y-18; N-0

7. Public and Member Comment

Three major themes were identified in the post-evaluation comments, as follows:

- 1. Reliability at minimum case volumes
- 2. Evidence to support attribution
- 3. Risk adjustment testing and social risk factors

The Committee reviewed all comments and discussed the developer responses. The Committee ultimately determined that the measure should proceed and pass on reliability to which the minimum case volume addresses, evidence to which attribution is a component, and validity to which risk adjustment is a component. There were no objections from Committee members to the developer responses, nor any requests to reconsider or revote on NQF 3495.

8. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-X; No-X (November 17, 2020: [Endorsed or Not Endorsed])

The CSAC upheld [or did not uphold] the Standing Committee's decision to recommend the measure for endorsement.

9. Appeals

Appendix B: All-Cause Admissions and Readmissions Portfolio—Use in Federal Programs^a

NQF #	Title	Federal Programs: Finalized or Implemented as of June 22, 2020
0171	Acute Care Hospitalization During the First 60 Days of Home Health	Home Health Quality Reporting Program (HH QRP), Home Health Value Based Purchasing (HHVBP), Home Health Compare (HHC)
0173	Emergency Department Use without Hospitalization During the First 60 Days of Home Health	HH QRP, HHVBP, HHC
0330	Hospital 30-day, all-cause, risk- standardized readmission rate (RSRR) following heart failure (HF) hospitalization	Hospital Readmissions Reduction Program (HRRP), Hospital Compare
0505	Hospital 30-day all-cause risk- standardized readmission rate (RSRR) following acute myocardial infarction (AMI) hospitalization.	HRRP, Hospital Compare
0506	Hospital 30-day, all-cause, risk- standardized readmission rate (RSRR) following pneumonia hospitalization	HRRP, Hospital Compare
0695	Hospital 30-Day Risk-Standardized Readmission Rates following Percutaneous Coronary Intervention (PCI)	None
0727	Gastroenteritis Admission Rate (PDI 16)	None
0728	728 Asthma Admission Rate (PDI 14)	None
1463	Standardized Hospitalization Ratio for Dialysis Facilities (SHR)	Dialysis Facility Compare (DFC), End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
1789	Hospital-Wide All-Cause Unplanned Readmission Measure (HWR) - ACO Level	Medicare Shared Savings Program (Shared Savings Program), MIPS
1789	Hospital-Wide All-Cause Unplanned Readmission (HWR)	MIPS
1891	Hospital 30-Day, All-Cause, Risk- Standardized Readmission Rate (RSRR) following Chronic Obstructive Pulmonary Disease (COPD) Hospitalization	HRRP, Hospital Compare
2375	PointRight [®] Pro 30™	None
2393	Pediatric All-Condition Readmission Measure	None

^a Per CMS Measures Inventory Tool as of 6/22/2020

NQF #	Title	Federal Programs: Finalized or Implemented as of June 22, 2020
2414	Pediatric Lower Respiratory Infection Readmission Measure	None
2496	Standardized Readmission Ratio (SRR)	DFC, ESRD QIP
2510	Skilled Nursing Facility 30-Day All-Cause Readmission Measure	Skilled Nursing Facility Value-Based Purchasing (SNF VBP)
2513	Hospital 30-Day All-Cause Risk- Standardized Readmission Rate (RSRR) following Vascular Procedures	None
2514	Risk-Adjusted Coronary Artery Bypass Graft (CABG) Readmission Rate	None
2515	Hospital 30-day, all-cause, unplanned, risk-standardized readmission rate (RSRR) following coronary artery bypass graft (CABG) surgery	HRRP, Hospital Compare
2539	Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy	Ambulatory Surgical Center Quality Reporting (ASCQR), Hospital Compare, Hospital Outpatient Quality Reporting (Hospital OQR)
2827	PointRight [®] Pro Long Stay (TM) Hospitalization Measure	None
2858	Discharge to Community	None
2860	Thirty-day all-cause unplanned readmission following psychiatric hospitalization in an inpatient psychiatric facility (IPF)	Hospital Compare
2879e	Hybrid Hospital-Wide Readmission (HWR) Measure with Claims and Electronic Health Record Data	Hospital Compare, Hospital Inpatient Quality Reporting (Hospital IQR)
2880	Excess days in acute care (EDAC) after hospitalization for heart failure (HF)	Hospital Compare, Hospital IQR
2881	Excess days in acute care (EDAC) after hospitalization for acute myocardial infarction (AMI)	Hospital Compare, Hospital IQR
2882	Excess days in acute care (EDAC) after hospitalization for pneumonia	Hospital Compare, Hospital IQR
2888	Risk-Standardized Acute Admission Rates for Patients with Multiple Chronic Conditions	MSSP
3188	30-Day Unplanned Readmissions for Cancer Patients	Prospective Payment System-Exempt Cancer Hospital Quality Reporting (PCHQR)
3366	Hospital Visits after Urology Ambulatory Surgical Center Procedures	Ambulatory Surgical Center Quality Reporting (ASCQR)

NQF #	Title	Federal Programs: Finalized or Implemented as of June 22, 2020
3449	Hospitalization for Ambulatory Care Sensitive Conditions for Dual Eligible Beneficiaries	None
3457	Minimizing Institutional Length of Stay	None
3470	Hospital Visits after Orthopedic Ambulatory Surgical Center Procedures	Ambulatory Surgical Center Quality Reporting (ASCQR)

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 Rate (HWR) for the Merit-Based Incentive Payment System (MIPS) 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 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.		
Туре	Outcome		
Data Source	Claims, Other Medicare administrative claims and 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. 		
	3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission Rate (HWR) for the Merit-Based Incentive Payment System (MIPS) Eligible Clinician Groups		
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	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 U.S. 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:		
	There are three eligible clinician groups for attribution: 1) the Primary Inpatient Care Provider, 2) the Discharge Clinician and 3) the Outpatient Primary Care Physician.		
	1) Primary Inpatient Care Provider: All patient-facing claims for the patient filed during the stay are identified and totaled by clinicians identified on each claim; the admission is attributed to the clinician with the greatest charges billed. The cost of charges billed (as opposed to number of charges) better reflects the appropriate clinician, especially for the surgical specialty cohort. The identified primary inpatient care provider may also be the discharge clinician.		
	2) Discharge Clinician: Identified by Current Procedural Terminology [CPT [®]] code 99238 or 99239 within the last three days of admission OR CPTs 99231, 99232, 99233 billed on the last day of admission. If none of these codes found, a Discharge Clinician is not assigned.		
	3) Outpatient Primary Care Physician: The clinician who provides the greatest number of claims for primary care services during the 12 months prior to the hospital admission date.		
	Eligible clinician groups are defined by grouping eligible clinicians who use the same Taxpayer Identification Number (TIN). Index admissions are attributed to a clinician group by each of these rules. Though an admission may be attributed to three distinct eligible clinician groups, it will often be the case that two or even all three of the above listed roles for a given patient are filled by clinicians assigned to the same clinician group. In the case o multiple assignments of an admission to the same eligible clinician group, each admission is included only once when measuring the eligible clinician group.		
	 Importantly, this implies that while there are three different rules for attribution, these are not distinguished when measuring clinician group performance. While a clinician group can have admissions attributed to them in multiple capacities – for instance, a clinician from th same group may be both a Discharge Clinician for some patients and a Primary Inpatient Care Provider for others – all attributed admissions are used to construct a single score for that eligible clinician group. Thus, while we report some results by attribution role, we report measure scores only for "unique eligible clinician groups". Additional details are provided in S.7 Denominator Details. 		
Denominator	Admissions are eligible for inclusion in the measure if:		
Details	 Patient is 65 or older Rationale: Younger Medicare patients represent a distinct population with dissimilar characteristics and outcomes. Patient survives index 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.		

	3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission Rate (HWR) for the Merit-Based Incentive Payment System (MIPS) Eligible Clinician Groups		
	Rationale: This is necessary to ensure complete data for risk adjustment, attribution, and outcome determination.		
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		
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 acut 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. Patients cannot be attributed to a clinician group.		
	Rationale: Only patients assigned to 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		



	3495 Hospital-Wide 30-Day, All-Cause, Unplanned Readmission Rate (HWR) for the Merit-Based Incentive Payment System (MIPS) Eligible Clinician Groups		
	method that, while requiring an assumption of independence across entities, allowed us to account for correlation within entity. The measure uses instead an approach similar to that used by the Patient Safety and Adverse Events Composite measure (NQF #0531).		
	Reference the attached Intent to Submit form for the complete response.		
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,,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 RARR for each provider was used as the estimated 95% confidence interval. 146637 110639 141015 149320		
Copyright / Disclaimer	N/A		

Appendix E: Related and Competing Measures

Comparison of NQF #3495 and NQF #1789

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

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

Steward

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

Centers for Medicare & Medicaid Services (CMS)

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

Centers for Medicare & Medicaid Services

Description

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

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 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.

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

This measure estimates a hospital-level, risk-standardized readmission rate (RSRR) of unplanned, all-cause readmission within 30 days of discharge from an index admission with an eligible condition or procedure. The measure reports a single summary RSRR, 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. The measure also indicates the hospital-level standardized readmission ratios (SRR) for each of these five specialty cohorts. The outcome is defined as unplanned readmission for any cause within 30 days of the discharge date from the index admission (the admission included in the measure cohort). A specified set of readmissions are planned and do not count in the readmission outcome. CMS annually reports the measure for Medicare fee-for-service (FFS) patients who are 65 years or older and are hospitalized in non-federal short-term acute care hospitals.



For the All-Cause Readmission (ACR) measure version used in the Shared Savings Program (SSP) beginning in 2017, the measure estimates an Accountable Care Organization (ACO) facility-level RSRR of unplanned, all-cause readmission after admission for any eligible condition or procedure within 30 days of hospital discharge. The ACR measure is calculated using the same five specialty cohorts and estimates an ACO-level standardized risk ratio for each. CMS annually reports the measure for patients who are 65 years or older, are enrolled in Medicare FFS, and are ACO assigned beneficiaries.

The updates in this form reflect changes both to the original HWR measure and the ACS measure version. For instances where the two versions differ, we provide additional clarifications below the original description.

Туре

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

Outcome

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

Outcome

Data Source

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

Claims, Other Medicare administrative claims and enrollment data

No data collection instrument provided Attachment Del18dHOP5MIPSHWRDataDictionary12172018-637086294768821435.xlsx

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

Claims Data sources for the Medicare FFS measure:

HWR

1. Medicare Part A claims data for calendar years 2007 and 2008 were combined and then randomly split into two equal subsets (development sample and validation sample). Risk variable selection was done using the development sample, the risk models for each of the five specialty cohorts in the measure were applied to the validation sample and the models' performance was compared. In addition, we re-tested the models in Medicare Part A claims data from calendar year 2009 to look for temporal stability in the models' performance. The number of measured entities and index admissions are listed below by specialty cohort.

2. Medicare Enrollment Database (EDB): This database contains Medicare beneficiary demographic, benefit/coverage, and vital status information. This data source was used to obtain information on several inclusion/exclusion indicators such as Medicare status on admission and following discharge from index admission

ACR

1. Medicare Part A claims data for calendar years 2013, 2014, and 2015.

2. Medicare Enrollment Database (EDB).

Reference:

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Fleming C., Fisher ES, Chang CH, Bubolz D, Malenda J. Studying outcomes and hospital utilization in the elderly: The advantages of a merged data base for Medicare and Veterans Affairs Hospitals. Medical Care. 1992; 30(5): 377-91.

Available in attached appendix at A.1 Attachment DelAP_4-107f_NQF1789HWR_DataDictionary_Final082819.xlsx

Level

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

Clinician : Group/Practice

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

Facility

Setting

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

Inpatient/Hospital

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

Inpatient/Hospital, Outpatient Services

Numerator Statement

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

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

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

The outcome for both the original HWR and ACR measures is 30-day readmission. 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. If a patient has more than one unplanned admission (for any reason) within 30 days after discharge from the index admission, only one is counted as a readmission. The measure looks for a dichotomous yes or no outcome of whether each admitted 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 rather than during the index admission.

Numerator Details

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

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.

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

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

Outcome definition

The measure counts readmissions to any short-term acute care hospital for any cause within 30 days of the date of discharge from an eligible index admission, excluding planned readmissions as defined below.

Rationale

From a patient perspective, an unplanned readmission from any cause is an adverse event. Outcomes occurring within 30 days of discharge can be influenced by hospital care and the early transition to the non-acute care setting. The 30-day time frame is a clinically meaningful period for hospitals to collaborate with their communities to reduce readmissions. However, planned readmissions are generally not a signal of quality of care. Including planned readmissions in a readmission measure could create a disincentive to provide appropriate care to patients who are scheduled for elective or necessary procedures within 30 days of discharge.

It is important to note that for the HWR measure, a readmission is included as an index admission if it meets all other eligibility criteria. This differs from the publicly reported condition-specific and procedure-specific readmission measures, which do not consider a readmission as a new index admission within the same measure.

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/radiotherapy/immunotherapy, rehabilitation);

2. Otherwise, a planned readmission is defined as a non-acute readmission for a scheduled procedure; and

3. Admissions for acute illness or for complications of care are never planned.

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

For more details on the Planned Readmission Algorithm, please see Appendix E of the report titled "2019 All-Cause Hospital-Wide Measure Updates and Specifications Report: Hospital-Wide Readmission"

Wallace Lori, Grady J, Djordjevic Darinka, et al. 2019 All-Cause Hospital Wide Measure Updates and Specifications Report.

https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnet Tier4&cid=1219069855841

The measure includes admissions for Medicare beneficiaries who are 65 years and older and are discharged from all non-federal, acute care inpatient US hospitals (including territories) with a complete claims history for the 12 months prior to admission.

ACR-Specific: The measure at the ACO level includes all relevant admissions for ACO assigned beneficiaries who are 65 and older, and are discharged from all non-Federal short-stay acute care hospitals, including critical access hospitals.

Additional details are provided in S.7 Denominator Details.

Denominator Statement

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

The measure includes admissions for Medicare beneficiaries who are 65 years and older and are discharged from any non-federal, acute care inpatient U.S. 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:

There are three eligible clinician groups for attribution: 1) the Primary Inpatient Care Provider, 2) the Discharge Clinician and 3) the Outpatient Primary Care Physician.

1) Primary Inpatient Care Provider: All patient-facing claims for the patient filed during the stay are identified and totaled by clinicians identified on each claim; the admission is attributed to the clinician with the greatest charges billed. The cost of charges billed (as opposed to number of charges) better reflects the appropriate clinician, especially for the surgical specialty cohort. The identified primary inpatient care provider may also be the discharge clinician.

2) Discharge Clinician: Identified by Current Procedural Terminology [CPT[®]] code 99238 or 99239 within the last three days of admission OR CPTs 99231, 99232, 99233 billed on the last day of admission. If none of these codes found, a Discharge Clinician is not assigned.

3) Outpatient Primary Care Physician: The clinician who provides the greatest number of claims for primary care services during the 12 months prior to the hospital admission date.



Eligible clinician groups are defined by grouping eligible clinicians who use the same Taxpayer Identification Number (TIN). Index admissions are attributed to a clinician group by each of these rules. Though an admission may be attributed to three distinct eligible clinician groups, it will often be the case that two or even all three of the above listed roles for a given patient are filled by clinicians assigned to the same clinician group. In the case of multiple assignments of an admission to the same eligible clinician group, each admission is included only once when measuring the eligible clinician group.

Importantly, this implies that while there are three different rules for attribution, these are not distinguished when measuring clinician group performance. While a clinician group can have admissions attributed to them in multiple capacities – for instance, a clinician from the same group may be both a Discharge Clinician for some patients and a Primary Inpatient Care Provider for others – all attributed admissions are used to construct a single score for that eligible clinician group. Thus, while we report some results by attribution role, we report measure scores only for "unique eligible clinician groups".

Additional details are provided in S.7 Denominator Details.

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

The measure includes admissions for Medicare beneficiaries who are 65 years and older and are discharged from all non-federal, acute care inpatient US hospitals (including territories) with a complete claims history for the 12 months prior to admission.

ACR-Specific: The measure at the ACO level includes all relevant admissions for ACO assigned beneficiaries who are 65 and older and are discharged from all non-Federal short-stay acute care hospitals, including critical access hospitals.

Additional details are provided in S.7 Denominator Details.

Denominator Details

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

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 index 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.



1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

To be included in the measure cohort, patients must meet the following inclusion criteria:

1. Enrolled in Medicare FFS Part A for the 12 months prior to the date of admission and during the index admission;

2. Aged 65 or older;

3. Discharged alive from a non-federal short-term acute care hospital; and

4. Not transferred to another acute care facility.

ACR- Specific: An additional criterion for the ACO version of this measure is that only hospitalizations for ACO-assigned beneficiaries that meet all of the other criteria listed above are included. The cohort definition is otherwise identical to that of the HWR described below.

The measure first assigns admissions with qualifying Agency for Healthcare Research and Quality (AHRQ) Clinical Classifications Software (CCS) procedure categories to the Surgery/Gynecology Cohort. This cohort includes admissions likely cared for by surgical or gynecological teams.

The measure then sorts admissions into one of the four remaining specialty cohorts based on the AHRQ CCS 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 can be found in the attached data dictionary.

Exclusions

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

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



1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

Both the original HWR and ACR versions of the measure exclude index admissions for patients:

- 1. Admitted to Prospective Payment System (PPS)-exempt cancer hospitals;
- 2. Without at least 30 days post-discharge enrollment in Medicare FFS;
- 3. Discharged against medical advice;
- 4. Admitted for primary psychiatric diagnoses;
- 5. Admitted for rehabilitation; or
- 6. Admitted for medical treatment of cancer.

Exclusion Details

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

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. Patients cannot be attributed to a clinician group.

Rationale: Only patients assigned to 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.

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

Both the original HWR and ACR versions of the measure exclude index admissions for patients:

1. Admitted to PPS-exempt cancer hospitals; identified by the Medicare provider ID

Rationale: These hospitals care for a unique population of patients that cannot reasonably be compared to patients admitted to other hospitals.

2. Without at least 30 days of post-discharge enrollment in Medicare FFS; determined using data captured in the Medicare Enrollment Database (EDB)

Rationale: The 30-day readmission outcome cannot be assessed in this group since claims data are used to determine whether a patient was readmitted.

3. Discharged against medical advice; identified using the discharge disposition indicator in claims data.

Rationale: Providers did not have the opportunity to deliver full care and prepare the patient for discharge.

4. Admitted for primary psychiatric diagnoses

Rationale: Patients admitted for psychiatric treatment are typically cared for in separate psychiatric or rehabilitation centers that are not comparable to short-term acute care hospitals.

5. Admitted for rehabilitation

Rationale: These admissions are not typically to a short-term acute care hospital and are not for acute care.

6. Admitted for medical treatment of cancer

Rationale: These admissions have a different mortality and readmission profile than the rest of the Medicare population, and outcomes for these admissions do not correlate well with outcomes for other admissions. Patients with cancer admitted for other diagnoses or for surgical treatment of their cancer remain in the measure.

Risk Adjustment

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

Statistical risk model

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

Statistical risk model

Stratification

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

N/A

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

N/A

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Type Score

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

Rate/proportion better quality = lower score

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

Rate/proportion better quality = lower score

Algorithm

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

The index admissions are identified as described above in S.5-S.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 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 instead an approach similar to that used by the Patient Safety and Adverse Events Composite measure (NQF #0531).

Reference the attached Intent to Submit form for the complete response.

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,...,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.

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

The measure estimates hospital-level 30-day all-cause RSRRs using hierarchical logistic regression models. In brief, the approach simultaneously models data at the patient and hospital levels to account for variance in patient outcomes within and between hospitals (Normand et al., 2007). At the patient level, it models the log-odds of hospital readmission within 30 days of discharge using age, selected clinical covariates, and a hospital-specific effect. At the hospital level, the approach models the hospital-specific effects as arising from a normal distribution. The hospital effect represents the underlying risk of a readmission at the hospital, after accounting for patient risk. The hospital-specific effects are given a distribution to account for the clustering (non-independence) of patients within the same hospital (Normand et al., 2007). If there were no differences among hospitals, then after adjusting for patient risk, the hospital effects should be identical across all hospitals.

Admissions are assigned to one of five mutually exclusive specialty cohort groups consisting of related conditions or procedures. For each specialty cohort group, the SRR is calculated as the ratio of the number of "predicted" readmissions to the number of "expected" readmissions at a given hospital. For each hospital, the numerator of the ratio is the number of readmissions within 30 days, predicted based on the hospital's performance with its observed case mix and service mix, and the denominator is the number of readmissions expected based on the nation's performance with that hospital's case mix and service mix. This approach is analogous to a ratio of "observed" to "expected" used in other types of statistical analyses. It conceptually allows a particular hospital's performance with the same case mix and service mix. Thus, a lower ratio indicates lower-than-expected readmission rates or better quality, while a higher ratio indicates higher-than-expected readmission rates or worse quality.

For each specialty cohort, the "predicted" number of readmissions (the numerator) is calculated by using the coefficients estimated by regressing the risk factors and the hospital-specific effect on the risk of readmission. The estimated hospital-specific effect for each cohort is added to the sum of the estimated regression coefficients multiplied by patient characteristics. The results are log-transformed and summed over all patients attributed to a hospital to calculate a predicted value.



The "expected" number of readmissions (the denominator) is obtained in the same manner, but a common effect using all hospitals in our sample is added in place of the hospital-specific effect. The results are log-transformed and summed over all patients attributed to a hospital to calculate an expected value. To assess hospital performance for each reporting period, we re-estimate the model coefficients using the data in that period.

The specialty cohort SRRs are then pooled for each hospital using a volume-weighted geometric mean to create a hospital-wide combined SRR. The combined SRR is multiplied by the national observed readmission rate to produce the RSRR. The statistical modeling approach is described fully in the original methodology report (Horwitz et al., 2012).

ACR-specific: The ACR quality measure was adapted from the HWR quality measure. The unit of analysis was changed from the hospital to the ACO. This was possible because both the HWR and ACR measures assess readmission performance for a population that clusters patients together (either in hospitals or in ACOs). The goal is to isolate the effects of beneficiary characteristics on the probability that a patient will be readmitted from the effects of being in a specific hospital or ACO. In addition, planned readmissions are excluded for the ACR quality measure in the same way that they are excluded for the HWR measure. The ACR measure is calculated identically to what is described above for the HWR measure.

References:

Horwitz L, Partovian C, Lin Z, et al. Hospital-Wide All-Cause Unplanned Readmission Measure: Final Technical Report. 2012;

https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnet Tier4&cid=1219069855841

Normand S-LT, Shahian DM. 2007. Statistical and Clinical Aspects of Hospital Outcomes Profiling. Stat Sci 22(2): 206-226.

Submission items

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

5.1 Identified measures:

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: For the NQF #1789 All Cause Unplanned Readmission Measure, attribution is to a facility, with measurement at the hospital level. If used to assess clinician groups, attribution of facility-based groups would be the hospital at which the plurality of facility-based clinicians were attributed. There would be no attribution to outpatient providers. In contrast to facility-based measures, the current measure is an eligible clinician group-level measure that is aligned with, but not identical to, the original hospital-level measure (#1789). The current measure was developed with input from a diverse Technical Expert Panel (TEP) that included patients and clinicians to ensure the resulting measure is as meaningful as possible to all stakeholders. The TEP members strongly advocated attributing the measure to multiple clinicians, including outpatient providers, to create incentives for shared accountability for patient readmissions.

5b.1 If competing, why superior or rationale for additive value: Clinicians, especially those with key roles in caring for the patient, can influence the risk of readmission both directly and through their influence on hospital culture and programs. Therefore, many of the best practices and strategies adopted by hospitals for reducing readmissions can be supported and promoted by clinician groups to improve patient outcomes. Further, by attributing each index admission to multiple clinicians,



this measure encourages and incentivizes care coordination among the clinicians with key roles in reducing the risk that the patient returns for unplanned acute care.

1789: Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

5.1 Identified measures: 0695: Hospital 30-Day Risk-Standardized Readmission Rates following Percutaneous Coronary Intervention (PCI)

0329: Risk-Adjusted 30-Day All-Cause Readmission Rate

0330: Hospital 30-day, all-cause, risk-standardized readmission rate (RSRR) following heart failure (HF) hospitalization

0505: Hospital 30-day all-cause risk-standardized readmission rate (RSRR) following acute myocardial infarction (AMI) hospitalization.

0506: Hospital 30-day, all-cause, risk-standardized readmission rate (RSRR) following pneumonia hospitalization

1551: Hospital-level 30-day risk-standardized readmission rate (RSRR) following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA)

1768: Plan All-Cause Readmissions (PCR)

1891: Hospital 30-day, all-cause, risk-standardized readmission rate (RSRR) following chronic obstructive pulmonary disease (COPD) hospitalization

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: This measure and the National Committee for Quality Assurance (NCQA) Plan All-Cause Readmissions (PCR) Measure #1768 are related measures, but are not competing because they don't have the same measure focus and same target population. In addition, both have been previously harmonized to the extent possible under the guidance of the National Quality Forum Steering Committee in 2011. Each of these measures has different specifications. NCQA's Measure #1768 counts the number of inpatient stays for patients aged 18 and older during a measurement year that were followed by an acute readmission for any diagnosis to any hospital within 30 days. It contrasts this count with a calculation of the predicted probability of an acute readmission. NCQA's measure is intended for quality monitoring and accountability at the health plan level. This measure estimates the riskstandardized rate of unplanned, all-cause readmissions to a hospital or ACO for any eligible condition within 30 days of hospital discharge for patients aged 18 and older. The measure will result in a single summary risk-adjusted readmission rate for conditions or procedures that fall under five specialties: surgery/gynecology, general medicine, cardiorespiratory, cardiovascular, and neurology. This measure is specified for evaluating hospital or ACO performance. However, despite these differences in cohort specifications, both measures under NQF guidance have been harmonized to the extent possible through modifications such as exclusion of planned readmissions. We did not include in our list of related measures any non-outcome (e.g., process) measures with the same target population as our measure. Because this is an outcome measure, clinical coherence of the cohort takes precedence over alignment with related non-outcome measures. Furthermore, non-outcome measures are limited due to broader patient exclusions. This is because they typically only include a specific subset of patients who are eligible for that measure (for example, patients who receive a specific medication or undergo a specific procedure). 5b.1 If competing, why superior or rationale for additive value: N/A

Appendix F: Pre-Evaluation Comments

Comments received as of January 31, 2020.

Торіс	Commenter	Comment
3495: Hospital-Wide 30-Day, All-Cause, Unplanned Readmission (HWR) Rate for the Merit- Based Incentive	American Medical Association	The American Medication Association (AMA) appreciates the updated information provided by the developer on this measure, but we continue to believe that the evidence and testing provided do not meet the NQF Measure Evaluation Criteria.
Payment System (MIPS) Eligible Clinicians and Eligible Clinician Groups		The additional information within the evidence submission outlining the justification for attribution to the three types of clinician groups relies on general statements and only two additional studies are cited specific to attribution to the discharging clinician. One article focuses on individuals with a diagnosis of heart failure and while it is a meta- analysis of multiple studies, it does not directly demonstrate that clinician action is what leads to decreased readmission rates. The second study is one that shows that the use of a decision support tool by physicians can assist in better discharge processes and ultimately reduced readmission rates. While this finding is encouraging, it is not broadly applicable since the intervention was only implemented across four medical units in one urban, university medical center. Interestingly, while the researchers were able to reduce referral or high- risk patients' readmissions, the rates (even when improved) are around 17%, which is similar to the current performance data provided in 1b. Performance Gap. Therefore, raising a question that we have asked and highlighted in previous reviews of the hospital level measure (NQF 1789) on whether there are any additional reductions in rates to be gained.
		In addition, the measure score reliability across the 5 specialty cohorts continues to be below a minimum acceptable threshold of 0.7 when a case minimum of 25 patients is applied. The results continue to remain less than optimal when a minimum sample of 200 patients is applied.
		The AMA believes that this additional information, while helpful, does not alleviate any of our concerns and encourage the Standing Committee to not recommend the measure for endorsement.

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