



TO: Consensus Standards Approval Committee (CSAC)
FR: Helen Burstin, Chief Scientific Officer
Marcia Wilson, Senior Vice President, Quality Measurement
RE: Appeal of Measure #2502 for the Readmissions 2015-2017 Project
DA: February 7, 2017

ACTION REQUIRED

The CSAC will review the letter of appeal and this memo in consideration of this appeal. The CSAC will determine whether to uphold measure endorsement for the following measure:

- 2502: [All-Cause Unplanned Readmission Measure for 30 Days Post Discharge from Inpatient Rehabilitation Facilities](#) (CMS)

The following documents are appended to this memo:

1. [Appendix A](#): Appeal Letter from the Association of Rehabilitation Nursing
2. [Appendix B](#): Measure evaluation summary table
3. [Appendix C](#): Background on the Appealed Measure

BACKGROUND

In accordance with the NQF Consensus Development Process (CDP), the measures recommended by the Readmissions 2015-2017 Standing Committee were released for a 30-day appeals period, which closed on January 11, 2017. The readmission project remains under the existing appeals process. The National Quality Forum (NQF) has received an appeal from the Association of Rehabilitation Nurses of its endorsement of Measure #2502. Background information for this measure is provided in [Appendix C](#).

SUMMARY OF APPEAL

- 2502: *All-Cause Unplanned Readmission Measure for 30 Days Post Discharge from Inpatient Rehabilitation Facilities* (CMS) (**SDS Trial Measure**)
 - Summary of Appeal: This measure is included in the Inpatient Rehabilitation Facility Quality Reporting Program (IPFQR). The appellants raised concerns that patient level data is not available from CMS on the readmission measure limiting facilities ability to improve on this measure.

MEASURE DEVELOPER RESPONSE TO THE APPEAL

CMS appreciates the opportunity to respond to the appeal of the decision to endorse All-Cause Unplanned Readmission Measure for 30 Days Post Discharge from Inpatient Rehabilitation Facilities (NQF #2502). We understand the primary objections to be the following:

- a. Unrestricted access to the data is necessary for readmission measures to have an impact on quality improvement efforts.
- b. All-cause measures are inappropriate because a patient could get into a car accident or slip on ice and break a hip and the facility would be penalized for that as an all-cause readmission.
- c. The measure should be replaced with a process measure such as comprehensive coordination or evidence of care transition and follow-up.

Below, we present our responses for NQF's consideration.

Responses

1. *Unrestricted access to the data is necessary for readmission measures to have an impact on quality improvement efforts.*

CMS recognizes the desire for more detailed patient-level data and is working toward an approach to make such information available to inpatient rehabilitation facilities. However, *unrestricted* access to the Medicare claims and enrollment data used to calculate this measure is not feasible nor reasonable given these data contain protected health information and are covered by HIPAA.

It is our understanding that the NQF endorsement process does not require data access, and we are aware of no reason why it should be considered a factor for the endorsement of this particular measure. Facilities are given feedback via public reporting of quality performance, for which this measure has been implemented in the IRF Quality Reporting Program. Operational limitations of the programs in which a quality measure may be implemented do not, by our understanding, bear upon the endorsement criteria published and applied by the NQF through its endorsement process.

2. *All-cause measures are inappropriate because a patient could get into a car accident or slip on ice and break a hip and the facility would be penalized for that as an all-cause readmission.*

Considerable effort has been expended in discussing the relative merits of all-cause vs. more narrowly targeted readmission measures. That said, the endorsement of all-cause measures has been occurring through the NQF for more than a decade. To the concerns raised by the Association of Rehabilitation Nurses (ARN), we readily agree that random events unrelated to treatment by an IRF will be captured by an all-cause measure and counted as a readmission.



However, as has been successfully argued in the past at NQF and elsewhere, truly random and unrelated events will by definition be random and not events that will systematic impact providers' performance on the measure.

CMS would like to note that there are two potentially preventable hospital readmission measures adopted for the IRF QRP, related to the IMPACT Act of 2014. These measures are similar, but limits consideration of readmissions to those identified as "potentially preventable". These measures will be submitted to NQF for consideration of endorsement in the future.

- 3. The measure should be replaced with a process measure such as comprehensive coordination or evidence of care transition and follow-up.*

CMS appreciates the feedback about other measures that may be useful for the IRF QRP, but believe this feedback is also unrelated to the NQF endorsement of the all-cause unplanned hospital readmission measure (NQF #2502). We suggest that requests for consideration of other measures be placed through the rulemaking process.

NQF RESPONSE TO THE APPEAL

NQF has endorsed all-cause readmission measures across a wide variety of settings. While NQF supports the timely receipt of quality measure results to drive usefulness of the measures, NQF does not require access to patient-level data.

APPENDIX A: APPEAL LETTERS

Measure 2502 Appeal Request

Association of Rehabilitation Nurses, Submitted January 20, 2017

On behalf of the Association of Rehabilitation Nurses (ARN) – representing more than 5,400 rehabilitation nurses and more than 13,000 Certified Registered Rehabilitation Nurses (CRRN) that work to enhance the quality of life for those affected by physical disability and/or chronic illness - we appreciate the opportunity to provide comments on the National Quality Forum's (NQF) All-Cause Admissions and Readmissions 2015- 2017 Draft Report.

ARN supports efforts to ensure people with physical disability and chronic illness have access to comprehensive, quality care in whichever care setting is most appropriate for them. Rehabilitation nurses take a holistic approach to meeting patients' medical, vocational, educational, environmental, and spiritual needs. Rehabilitation nurses begin to work with individuals and their families soon after the onset of a disabling injury or chronic illness. We continue to provide support and care, including patient and family education, which empowers these individuals when they return home, to work, or to school. Rehabilitation nurses often teach patients and their caregivers how to access systems and resources.

Rehabilitation nursing is a philosophy of care, not a work setting or a phase of treatment. We base our practice on rehabilitative and restorative principles by: (1) managing complex medical issues; (2) collaborating with other specialists; (3) providing ongoing patient/caregiver education; (4) setting goals for maximum independence; and (5) establishing plans of care to maintain optimal wellness. Rehabilitation nurses practice in all settings, including freestanding rehabilitation facilities, hospitals, long-term subacute care facilities/skilled nursing facilities (SNFs), inpatient rehabilitation facilities (IRFs), long-term care hospitals (LTCHs), comprehensive outpatient rehabilitation facilities, home health, and private practices, just to name a few.

ARN appreciates the work of NQF in its review and recommendation of performance measures focused on all-cause admissions and readmission. ARN has serious concerns with requiring post-acute care providers to utilize Medicare claims data to calculate their 30-day readmission rates. Using claims data to calculate readmission rates is difficult for health care providers, as claims data are cumbersome to use and access. The Centers for Medicare and Medicaid Services stated while they are working on the issue, patient level data is not yet available on the readmission measure which disallows facilities from having the opportunity to identify trends or causes. Employing a 30-day readmission rate measure will not provide meaningful insight or have an impact on quality improvement efforts if the PAC settings do not have unrestricted access to the data. We also disagree with the use of an all-cause measure because even if the discharge planning process went as planned, the patient could get into a car accident or slip on ice and break a hip and the facility would be penalized for that as an all-cause readmission. ARN recommends that the all-cause admission and readmission measure be replaced with a process measure such as comprehensive coordination or evidence of care transition and follow up.

Conclusion

ARN very much appreciates the opportunity to appeal NQF's All-Cause Admissions and



NATIONAL
QUALITY FORUM

Memo

Readmissions 2015-2017 measures for endorsement. We are available to work with you, your colleagues, the rehabilitation community, and other stakeholders to develop meaningful and useful quality measures. We thank you for your consideration of our concerns, recommendations and requests. Should you have any questions, please do not hesitate to contact me or have your staff contact our NQF Liaisons Terrie Black (terriern518@yahoo.com) or Michele Cournan (Michele.cournan@sphp.com).

Sincerely,
Stephanie Vaughn, PhD RN CRRN FAHA
President

i Centers for Medicare & Medicaid Services. (2016). *MLN connects national provider call transcript*. Retrieved from <https://www.cms.gov/Outreach-and-Education/Outreach/NPC/Downloads/2016-12-01-IRF-LTCH-Transcript.pdf>.

APPENDIX B: MEASURE EVALUATION TABLES

| 2502 All-Cause Unplanned Readmission Measure for 30 Days Post Discharge from Inpatient Rehabilitation Facilities (IRFs) |
|--|
| SDS TRIAL MEASURE |
| <p>Review of Previously Endorsed Measure for Risk Adjustment of Sociodemographic Factors: In April 2015, NQF began a two year trial period during which sociodemographic status (SDS) factors should be considered as potential factors in the risk-adjustment approach of measures submitted to NQF if there is a conceptual reason for doing so. Prior to this, NQF criteria and policy prohibited the inclusion of such factors in the risk adjustment approach and only allowed for inclusion of a patient’s clinical factors present at the start of care.</p> <p>Because the previous All-Cause Admissions and Readmissions project began and ended prior to the start of the trial period, the Standing Committee did not consider SDS factors as part of the risk-adjustment approach during their initial evaluation. When the NQF Board of Directors (BoD) Executive Committee ratified the CSAC’s approval to endorse the measures, it did so with the condition that these measures enter the SDS trial period because of the potential impact of SDS on readmissions and the impending start of the SDS trial period.</p> <p>To meet this condition for endorsement, the Admissions and Readmissions Standing Committee reviewed the conceptual and empirical relationship between sociodemographic factors and the outcome of the measures. The measure developers were asked to submitted additional analysis in a multi-phased approach.</p> <p>Ultimately the Standing Committee voted to continue endorsement of the measures without inclusion of SDS factors in the risk-adjustment approach.</p> |
| <p>Conceptual Relationship: The potential relationship between SDS risk factors and the outcome of readmissions post discharge from Inpatient Rehabilitation Facilities (IRFs) is plausible; however, the literature on such relationships specific to this setting is limited. The literature suggests that race and socio-economic status are possible patient-level risk factors that should be tested.</p> <p>Data Sources and Variables:</p> <p>Medicare claims data:</p> <ul style="list-style-type: none"> • Age • Gender • Race • Dual Eligibility Indicator <p>Long-Term Care Hospital (LTCH) Continuity Assessment Record & Evaluation (CARE) Data Set:</p> <ul style="list-style-type: none"> • Marital status at time of admission • Preferred language <p>County-level variables, (possible sources)</p> <p>U.S. Census data, the Health Professional Shortage Area designation database:</p> <ul style="list-style-type: none"> • Median household income • Employment rate • Degree of urbanization |



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- Median education level
- Availability of primary care providers

Standing Committee Feedback on Conceptual Relationship and Variables: Standing Committee (SC) reviewed and was generally in agreement with the variables provided by the developer. These variables represent the underlying conceptual construct well.

SDS Variables tested:

- Race
- Dual status
- Poverty
- Education
- Housing
- Employment
- Community characteristic including: median household income, percent of residents with qualification for Supplemental Nutrition Assistance Program (SNAP), median home value, and levels of poverty (such as the percent of residents below several poverty thresholds), disability, employment, non-English speakers, and levels of educational attainment.
- Provider supply and access in communities using the Health Professional Shortage Area (HPSA) indicators specific to degrees of shortage of primary care and mental health providers, and measures of primary care, specialist, and physical therapist providers per capita.

Empirical Relationship:

- This measure uses a hierarchical logistic regression model developed to harmonize with NQF #1789.
- The equation is hierarchical in that both individual patient characteristics are accounted for as well as the clustering of patients into IRFs.
- The statistical model estimates both the average predictive effect of the patient characteristics across all IRFs and the degree to which each facility has an effect on readmissions that differs from that of the average facility.
- The sum of the probabilities of readmission of all
- patients in the facility measure, including both the effects of patient characteristics and the IRF, is the “predicted number” of readmissions after adjusting for case mix. The same equation is used without the IRF effect to compute the “expected number” of readmissions for the same patients at the average IRF. The ratio of the predicted-to-expected number of readmissions evaluates the degree to which the readmissions are higher or lower than what would otherwise be expected. This SRR is then multiplied by the mean readmission rate for all IRF stays to get the risk-standardized readmission rate (RSRR) for each facility.
- To test SDS factors for this measure, the developers performed a number of analyses including: assessing variation in prevalence of the factor across measured entities, evaluating facility performance as stratified by proportion of patients with certain SDS factors, examining the association of SDS factors with the outcome, and looking at the incremental effect of SDS variables in the original risk adjustment model, including analyzing how the addition of the group of selected SDS variables affected the performance of the model.
- The developer created a hierarchical logistic regression model that added patient-and county level SDS variables to the risk adjustment mode.



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- In order to evaluate models with all SDS variables added, the developer performed stepwise versions of logistic regression, a method that allows for the evaluation of the separate predictive contribution of each variable to the model.
 - The developer then evaluated the c-statistic for each model.
 - The stepwise regression models for the model with all patient- and county-level variables included had a c-statistic of 0.70. The original model had a c-statistic of 0.70, so no improvement was observed with the addition of SDS-related predictors.
 - The developer also analyzed the change in facility-level RSRRs after adjusting for these variables. The median change in facility RSRRs when adding the SDS variables selected through stepwise selection was approximately 0.01 percentage points
 - The performance of 0.3 percent of facilities improved by between one half and 1 percentage point, and 1.3 percent of facilities' scores worsened by between one half and 1 percentage point after adjusting for the refined set of SDS adjusters (from the stepwise model). Results from both analyses suggest that performance for the majority of facilities declined as a result of the additional SDS adjustment.
 - The developer examined the correlations of the original and SDS adjusted RSRRs. The developer notes that the high degree of correlation between the RSRRs (>0.97 for all three SDS-adjusted models that are the focus of this work) suggests that for most facilities, the base and SDS-adjusted models are not significantly different.
 - The developer chose not to include SDS variables in the final risk adjustment model.
- SDS Variables Included in the Final Model:** Age, gender, and original reason for entitlement are included in the original model. Additional SDS variables were not included.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-12; N-0

Decision: Approved for continued endorsement

8. Board of Directors Vote: Yes (December 8, 2016)

Decision: Ratified for continued endorsement

9. Appeals

Appeal received



APPENDIX C: Background Information on the Measure Review of Measure #2502

2502: All-Cause Unplanned Readmission Measure for 30 Days Post Discharge from Inpatient Rehabilitation Facilities

NQF #2502 underwent its first evaluation review during the All-Cause Admissions and Readmissions 2014-2015 project. During the initial endorsement review the Committee noted that the process-outcome linkage cited by the developer was evidence based on hospital not inpatient rehabilitation facility readmissions. Additionally, the Committee expressed some concerns as to why transfers were being excluded and cautioned that this could lead to unintended consequences, including potential 'gaming' of the measure by providers. Ultimately, however, the Committee agreed that the measure addressed a high priority area and recommended the measure for conditional endorsement pending the inclusion of the measure in NQF's trial period for risk adjustment for sociodemographic factors.

After examining the impact of a number of social risk factors the developer chose not to include additional variables in the risk adjustment model. The Committee recommended the endorsement of the measure as put forth by the developer.