CBE ID

4210

Title

Patient Understanding of Key Information Related to Recovery After a Facility-Based Outpatient Procedure or Surgery, Patient Reported Outcome-Based Performance Measure

Project

Management of Acute Events, Chronic Disease, Surgery, and Behavioral Health

Endorsement Status

Endorsed

Is Under Review

No

Next Maintenance Cycle

Fall 2028

Previous Endorsement Cycle

Fall 2023

Steward

Centers for Medicare & Medicaid Services

1.0 New or Maintenance

New

1.3 Electronic Clinical Quality Measure (eCQM)

No

1.6 Measure Description

This measure assesses how well facilities provide clear, personalized discharge instructions to patients aged 18 years or older who had a surgery or procedure at an outpatient facility. It uses a 9-item survey to obtain patient's feedback on 3 domains: applicability; medications; and daily activities. Facility scores are calculated by averaging the individual patient scores for each facility. Individual patient scores are calculated using a top-box approach, measuring the percentage of the total number items given the most favorable responses ("Yes" or "Very Clear") out of the total number of relevant items.

1.7 Composite Measure

No

1.7 Measure Type

Patient-reported Outcome Performance Measure (PRO-PM)

1.8 Level of Analysis

Facility

1.9 Care Setting

Hospital: Outpatient

1.10 Measure Rationale

Not applicable. For the URL link below, since this is a new measure, a webpage does not exist. We had to use a placeholder to bypass this question on the form.

1.11 Measure Webpage

https://www.cms.gov/medicare/quality/initiatives/hospital-quality-initiative/ho...

1.13 Data Dictionary

Attached

1.13a Attach Data Dictionary

InformationTransferPROPM Code Set_0.zip

1.14 Numerator

The numerator is the sum of all individual patient scores a facility received from eligible respondents.

1.14a Numerator Details

The numerator is the sum of all individual scores a facility received from eligible respondents. An individual score is calculated for each respondent by taking the sum of items for which the respondent gave the most positive response (“Yes” or “Very Clear”) and dividing by the number of items the respondent deemed applicable to their procedure or surgery. Applicable items are calculated by subtracting the sum of items for which the respondent selected “Does not apply” from the total number of items (nine).

1.15 Denominator

The denominator is the total number of eligible respondents for the facility. Respondents are eligible if they are 18 years or older, had a procedure or surgery, were discharged alive with a stay less than two midnights.

1.15a Denominator Details

The denominator is the total number of eligible respondents for the facility. Respondents are eligible if they are 18 years or older, had a procedure or surgery, and were discharged alive with a stay less than two midnights.

1.15b Denominator Exclusions

None

1.15c Denominator Exclusions Details

None

1.16 Type of Score

Other

1.16a Other Scoring Method

Continuous variable, e.g., average

1.17 Measure Score Interpretation

Better performance = Higher score

1.18 Calculation of Measure Score

(1) The target population is identified by having an age >=18, who had a procedure or surgery, and a length of stay less than 2 midnights. This is calculated by subtracting the date of discharge from the date of admission and dividing it by 24 hours. Patients discharged alive is defined as not expired at disposition. This population is sent the survey.

(2) Determine the eligible respondents by removing any incomplete surveys. This is the denominator.

(3) Calculate individual scores for patients in the denominator. The individual score is calculated for each respondent by summing the items to which they responded positively with "Yes" or "Very Clear" and then dividing this sum by the total number of items that respondents found applicable to their procedure or surgery. Applicable items are determined by subtracting the sum of items marked as "Does not apply" from the total number of items, which is 9 for this instrument. The sum of these scores is the numerator.

(4) The facility's measure score is the arithmetic mean of all individual scores calculated by dividing the numerator by the denominator.

1.19 Measure Stratification Details

There is no stratification for this measure.

1.20 Types of Data Sources

Patient-Reported Data and/or Survey Data

1.21a Data Collection Tool URL(s)

https://www.cms.gov/medicare/quality/initiatives/hospital-quality-initiative/ho...

1.21b Attach Data Collection Tool(s)

Info Transfer PROPM Survey_0.zip

1.22 Proxy Responses

Yes

1.23 Survey Respondent

Patient, Family or Other Caregiver

1.24 Data Collection and Response Rate

This measure has not yet been implemented but could be implemented through a third party or self-administered by a hospital. The measure was tested in two pilots.

During the pilots, survey administration, data collection, and submission were facilitated by a third-party vendor. A hospital could also choose to perform these activities itself. The survey is designed to be electronically distributed to batches of patients on a rolling basis using a web-based platform. Patients can choose to receive an SMS text and/or email with a survey invitation, followed by a reminder after 7 days. A minimum of 100 responses are needed for reporting. Response rates are calculated by dividing respondents by the total number of individuals who were sent a survey, regardless of whether the survey bounced back or failed to send due to missing contact information.

1.25 Data Source Details

We developed a nonproprietary, novel, 9-item instrument and piloted it in both English and Spanish. During pilot testing in hospital outpatient departments (HOPDs), survey administration, collection, and submission were facilitated via a third-party vendor. The survey was piloted using a web-based mode, in which patients provided the facility with their phone number and email, as well as permission to contact them via text and/or email. Patients were sent a link to the survey using the contact method(s) they opted into. All patients that failed to respond to the survey within 7 days were sent a single reminder. Responses were recorded on the platform and could be downloaded as a CSV file.

1.26 Minimum Sample Size

A minimum of 100 survey responses are necessary to calculate the measure.

2.1 Attach Logic Model

Information Transfer PRO PM Logic Model Tables Figs Full Submission.pdf

2.2 Evidence of Measure Importance

The number of outpatient surgeries and procedures have been steadily rising since 2009[1-3]. During the COVID-19 pandemic, the percentage of outpatient procedures such as lumpectomy, mastectomy, and cholecystectomy rose significantly.[3] As the scale and complexity of outpatient surgical procedures increase, so does the concern that the patient sent home after undergoing general anesthetic may not have full understanding of the information they received.

A study comparing inpatient and outpatient surgery procedures found that inpatient providers were better at communicating discharge instructions to patients more frequently, including continuing medication names and instructions (96% vs. 40%); new medication names and instructions (99% vs. 29%); and pending diagnostic test names and instructions (90% vs. 61%).[4] A lack of consistently written documentation in the outpatient setting is associated with worse patient understanding and lower patient activation, defined as a measure of an individual's understanding, competence, and willingness to participate in care decisions, during their recovery.[4-6] As a result, information that is simpler to read and more complete has been associated with fewer follow-up calls to providers as well as less frequent hospital readmissions.[7-9]

The strongest evidence that providers can improve patient understanding of discharge information comes from a systematic review of 58 studies and 5,721 participants discharged after an inpatient surgical procedure, which found patients had a greater understanding of self-care and better symptom experience after receiving education in which the content was individualized and given in a combination of media on an individual basis and in more than one session.[10]

There is also evidence that the outcome this PRO-PM focuses on is tied to clinical outcomes. Several studies show decreased readmissions in patients who received enhanced, clear discharge instructions. Receipt of discharge instructions that were easier to read following inpatient admission for surgery was associated with a lower proportion of patients calling after hospital discharge versus usual care that did not include discharge instructions with improved readability (9.0% v 21.9%; $P<.0001$).[11-13]

Citations:

1.) DelSole EM, Makanji HS, Kurd MF. Current trends in ambulatory spine surgery: a systematic review. J Spine Surg. 2019;5(Suppl 2):S124-S132. Doi:10.21037/jss.2019.04.12

2.) Kondamuri NS, Miller AL, Rathi VK, et al. Trends in Ambulatory Surgery Center Utilization for Otolaryngologic Procedures among Medicare Beneficiaries, 2010-2017. Otolaryngol Head Neck Surg. 2020;162(6):873-880. Doi:10.1177/0194599820914298

3.) Shariq OA, Bews KA, Etzioni DA, Kendrick ML, Habermann EB, Thiels CA. Performance of General Surgical Procedures in Outpatient Settings Before and After Onset of the COVID-19 Pandemic. JAMA Netw Open. 2023;6(3):e231198. Doi:10.1001/jamanetworkopen.2023.1198

4.) Downey E, Olds DM. Comparison of Documentation on Inpatient Discharge and Ambulatory End-of-Visit Summaries. J Healthc Qual. 2021;43(3):e43-e52.

5.) Hoek AE, Anker SCP, van Beeck EF, Burdorf A, Rood PPM, Haagsma JA. Patient Discharge Instructions in the Emergency Department and Their Effects on Comprehension and Recall of Discharge Instructions: A Systematic Review and Meta-analysis. Ann Emerg Med. 2020;75(3):435-444.

6.) Kang E, Gillespie BM, Tobiano G, Chaboyer W. Discharge education delivered to general surgical patients in their management of recovery post discharge: A systematic mixed studies review. Int J Nurs Stud. 2018;87:1-13.

7.) Choudhry AJ, Younis M, Ray-Zack MD, et al. Enhanced readability of discharge summaries decreases provider telephone calls and patient readmissions in the posthospital setting. Surgery. 2019;165(4):789-794.

8.) Mitchell JP. Association of provider communication and discharge instructions on lower readmissions. J Healthc Qual. 2015;37(1):33-40.

9.) VanSuch M, Naessens JM, Stroebel RJ, Huddleston JM, Williams AR. Effect of discharge instructions on readmission of hospitalised patients with heart failure: do all of the Joint Commission on Accreditation of Healthcare Organizations heart failure core measures reflect better care? Qual Saf Health Care. 2006;15(6):414-417.

10.) Fredericks S, Guruge S, Sidani S, Wan T. Postoperative patient education: a systematic review. Clin Nurs Res. 2010;19(2):144-164. doi:10.1177/1054773810365994

11.) Choudhry AJ, Younis M, Ray-Zack MD, et al. Enhanced readability of discharge summaries decreases provider telephone calls and patient readmissions in the posthospital setting. *Surgery.* 2019;165(4):789-794.

12.) Mitchell JP. Association of provider communication and discharge instructions on lower readmissions. *J Healthc Qual.* 2015;37(1):33-40.

13.) VanSuch M, Naessens JM, Stroebel RJ, Huddleston JM, Williams AR. Effect of discharge instructions on readmission of hospitalized patients with heart failure: do all of the Joint Commission on Accreditation of Healthcare Organizations heart failure core measures reflect better care? *Qual Saf Health Care.* 2006;15(6):414-417.

2.3 Anticipated Impact

If implemented, the expected effect of the Information Transfer PRO-PM is outpatient providers and facilities enhancing patient education around post-discharge self-care instructions. Patients prefer discharge education that provides relevant, concise, and personalized information.[1] Patients with improved understanding have demonstrated having greater activation, making fewer calls to facilities, and having lower readmissions.

Citation

1.) Newnham H, Barker A, Ritchie E, Hitchcock K, Gibbs H, Holton S. Discharge communication practices and healthcare provider and patient preferences, satisfaction and comprehension: A systematic review. *Int J Qual Health Care*. 2017;29(6):752-768

2.5 Health Care Quality Landscape

The Information Transfer PRO-PM is unique in that it quantifies patients' perceived understanding in 3 key domains of post-operative self-care that have been identified in the literature and by patients and experts as fundamental. This measure is similar to, but distinct from, the OAS CAHPS 37 item survey that deals with a variety of patient related experiences, including a global assessment of patient-provider communication. Our survey provides feedback to providers on what elements of discharge instruction could be improved.

2.6 Meaningfulness to Target Population

Our four-person Patient Working Group (PWG) was surveyed regarding the meaningfulness of the performance score. All four PWG members found the Information Transfer PRO-PM hospital mean score conveyed important information AND could help improve the clarity of self-care instructions for all patients undergoing an outpatient surgery or procedure.

We interviewed 13 patients in second pilot who took the survey. Patients interviewed stated they took the survey because they wanted to improve the hospital or share what they did well. Most patients felt the survey length was appropriate and brief enough for them to complete; they also felt that the pertinency of this type of healthcare survey was a large part of the reason for completing it and additionally agreeing to complete an interview on their experience. Furthermore, several interviewees had completed the OAS CAHPS survey and found this survey to be much more reasonable in length and the complexity of the questions. All interviewees found the survey language to be clear, direct, and easy to comprehend. Several patients had poor experiences with care and felt strongly about advocating to improve such experiences for patients in the future; some of the topics they mentioned included poor communication around wound care for specific procedures, medication changes, and generally a poor perception of care from their healthcare team. Other interviewees had profoundly great experiences in care, in the communication from their provider and nursing staff. Overall, patients with differing opinions and experiences found this survey to be of great importance to safe, quality care, especially as more complicated procedures they experienced are performed in the outpatient setting.

3.1 Contributions Towards Closing Care Gaps

We did not select that we would provide information on Equity in our intent to submit form.

4.1 Feasibility Assessment

Feasibility Assessment

After the survey was completed, we interviewed QM staff responsible for gathering data. All facility staff interviewed felt that survey administration with a vendor was burdenless on front end staff and providers and required minimal effort from quality improvement staff.

During the survey administration period, we monitored key performance indices of each facility, such as the monthly volume of a site, and organizational indices, such as the survey batch response rate, the survey batch failure rate, missingness of patient data elements, and the lag time (the time between the surgery or and procedure and the survey response date). This monitoring identified some implementation challenges.

The challenges encountered during the second pilot survey administration can be effectively addressed with the following strategies:

Email Capture in Facilities:
Issue: Six facilities belonging to one organization had a 50% failure rate of the survey due to front line staff not capturing patient emails in their records.
Overcoming: Implement a systematic approach to capture patient email addresses during the registration process. This can include training staff to ask for email addresses, introducing digital forms for patient intake, or partnering with IT to integrate email capture into the electronic health records system.

Facility Eligibility Criteria:
Issue: Some facilities with the participating organizations were eliminated due to low monthly case volumes and high failure rates resulting in an inability to reach the minimum number of responses.
Overcoming: Expanding the data capture period beyond the period used in the pilot could increase the number of facilities that can achieve the minimum survey response necessary for the measure. Survey administrators can monitor the batch failure rate and monthly case volumes to determine if a site needs to adjust their front-end procedures.

OAS CAHPS Participation and Special Permissions:
Issue: Nine facilities faced delays in survey administration to patients due to their participation in OAS CAHPS, which requires special permission to administer a survey with overlapping survey items to same or similar population. Patients received the survey well outside the optimal time window of 2-7 days.
Overcoming: We harmonized the measure to eliminate overlapping items, reduced the total number of items to further reduce patient burden, allowing the 9-item survey to be administered in conjunction with OAS CAHPS.

By addressing these issues encountered in the second pilot survey administration future survey administration is expected to be more efficient and effective.

Data element feasibility

Patient demographics, such as the first name, last name, race, birth sex, date of birth, ethnicity, preferred language, email address, and phone number, and procedure were all required data elements in the USCD v1, encounter type, encounter location, and time were required data elements in USCD v2. The current ONC certification required EHR or HIT to support the capture and exchange of all elements used for administering the survey. With the exception of race for procedures which had a high degree of missingness, this information was universally available in all participating organizations. The measure calculation is based solely on the information provided by patients responding to the instrument.

4.3 Feasibility Informed Final Measure

In order to reduce the overlap between our instrument and OAS CAHPS and to reduce patient burden, the original 21-item survey used in the first pilot was reduced to eliminate any overlapping questions. It was then further shortened using an empirical approach to produce the shortest survey with the highest internal reliability/consistency. Lastly, we dropped all questions in the about-you section of the survey as the measure is not risk adjusted. This resulted in a streamlined 9-item survey instrument.

4.4 Proprietary Information

Not a proprietary measure and no proprietary components

4.4a Fees, Licensing, or Other Requirements

Not applicable, not a proprietary measure and no proprietary components.

5.1.1 Data Used for Testing

The survey was administered between 08-01-2022 - 03-01-2023 at 26 facilities. Seven facilities and one hospital shared a single CCN and were grouped together as a single facility for analysis, resulting in a final count of 19 measured entities or HOPDs.

Data from these HOPDs are described in the patient demographic table and were used to assess the reliability of the instrument; however, the reliability of the performance score is reported for HOPDs with a minimum of 100 respondents.

5.1.2 Differences in Data

The data sources are the same, the count or sample varies as above.

5.1.3 Characteristics of Measured Entities

We required facilities included in measure testing to have a minimum monthly case volume of 250 outpatient procedures to facilitate reaching the required response rate within the testing period. The survey was administered and tested in 26 facilities in the Western or Northeastern regions of the United States. Of these, 19 facilities were collocated within a HCUP-defined medium-to-large urban teaching medical center. The remaining 7 facilities that were not located on the premises of a hospital, all shared a single CCN with one of the 19 facilities. All 8 were grouped together as a single facility for analysis, yielding a final facility count of 19. See Table 1 of tables/figures attachment.

5.1.4 Characteristics of Units of the Eligible Population

All patient-level analysis was conducted on the full sample of respondents from all 19 HOPDs. However, all accountable-entity level analysis for performance score calculations are reported for facilities with the minimum number of survey responses (100). (See the demographic Table 2 for patient level analysis).

5.2.1 Level(s) of Reliability Testing Conducted

Person or encounter level (i.e., data element) (e.g., inter–abstractor reliability), Accountable entity level (i.e., measure score) (e.g., signal-to-noise analysis)

5.2.2 Method(s) of Reliability Testing

Data elements of PRO Reliability

We measured the instrument or data element reliability using the Cronbach Alpha score, which assesses the internal consistency of the 9-item scale, or the extent to which the 9 items within the scale reliably measure the same underlying construct.

Accountable Entity Level

We used signal-to-noise ratio to assess the reliability of the performance score for 15 facilities that met the completed 100-survey threshold. We used a mixed-effect intercept only model to estimate the variance among facilities and facility specific errors, based on which we then calculated the reliability scores for all facilities.

5.2.3 Reliability Testing Results

Data Element-PRO Reliability

We examined the internal consistency of the entire survey instrument (9 items), the Cronbach alpha tests the internal consistency or agreement of patient responses of items in the survey. An alpha score of 0.80 is considered very good. The overall alpha score of the 9-item survey was 0.8941, which indicates that all measure the same concept, global quality (clarity and applicability) of discharge instructions.

Accountable Entity Level Signal to Noise Ratio

Here, and in Table 3 in the attachment, we provide the distribution of signal-to-noise reliability among facilities with at least 100 completed surveys. Reliability scores range from a minimum of 0.572 to a maximum of 0.817, with a mean of 0.689. The median signal to noise reliability was 0.697 and the interquartile range (IQR, or 25th percentile to the 75th percentile) was 0.603-0.767. We were unable to split the reliability results into deciles due to the small number of hospitals in our test dataset (15 hospitals with at least 100 completed surveys). Please see Table 3 on tables/figures attachment.

5.2.4 Interpretation of Reliability Results

Data Element-PRO Reliability Interpretation

An alpha score of 0.80 is considered very good. The overall alpha score of the 9-item survey was 0.8941, which indicates that all measure the same concept, global quality (clarity and applicability) of discharge instructions. Our instrument is unidimensional.

Accountable Entity Level Signal to Noise Ration Interpretation

Mean signal to noise reliability of 0.689 indicates moderate reliability with 68.9% of the variance of the mean score due to between hospital difference. A value less than 0.5 would be considered poor reliability, a value of 0.5 to 0.75 would be considered moderate reliability.

5.3.1 Level(s) of Validity Testing Conducted

Accountable entity level (i.e., measure score) (e.g., criterion validity)

5.3.3 Method(s) of Validity Testing

Empirical validity testing of the measure score:

To validate the performance score, our team compared hospital performance on the 9-item instrument to their performance on the OAS CAHPS. OAS CAHPS is a previously validated survey of outpatient surgery patients' experience with care they received following a surgery or procedure. The OAS CAHPS has 37 items and includes several questions in a domain titled “communication about your procedure.” We evaluated the criterion validity using a Pearson’s correlation coefficient to assess the strength and direction of the linear relationship between the Information Transfer PRO-PM hospital mean score to the OAS CAHPS linear mean score for the domain “communication about your procedure” for 9 of the 15 HOPDs. Empiric validity testing of the performance score was tested for these 9 facilities as they were the only facilities with publicly available OAS CAHPS linear mean scores for “communication about your procedure” (using data from patients surveyed between January 2021 – December 2021).

Systematic assessment of face validity:

Face validity was captured by administering specific questions to the TEP (n=10), requesting their vote on the measure’s ability to distinguish between good and poor quality of care at measured facilities.

We polled the TEP on two separate questions:

1) “The unadjusted Information Transfer PRO-PM, as specified, will provide valid assessment of the transfer of key information to patients at discharge from the facility,” and

2) “The unadjusted Information Transfer PRO-PM, as specified, can be used to distinguish between better and worse quality care at measured facilities”

The possible answer categories were: Strongly disagree, moderately disagree, somewhat disagree, somewhat agree, moderately agree, strongly agree.

Analysis of missing data

We identified the extent and distribution of missing items among respondents. We evaluated the pattern of missingness to assess if items were missing completely at random. Finally, we conducted a complete case analysis.

Assessment of Non-Response bias

We carefully examined if there were systematic differences in the patient-characteristics of the respondents versus the non-respondents, by comparing their age and sex, however CPT codes, race/ethnicity/language/insurance data was not consistently available and/or standardized across entities to make accurate comparisons

5.3.4 Validity Testing Results

Empiric Validity assessment

Our hypothesis was that the Info Transfer PRO-PM rates hospital's ability clearly communicate key information about recovery is similarly related to the OAS CAHPS domain about global communication around a patient's outpatient surgical procedure. A Pearsons correlation of 0.64 with p-value 0.06, indicates that while the Information Transfer PRO-PM's 9-item survey instrument mean score appeared moderately positively correlated with the previously validated OAS CAHPS provider communication domain, the results were not statistically significant. We failed to reject the null hypothesis. Only 9 out of the 15 facilities had publicly available CAHPS data.

Systematic assessment of face validity

In responses to the first TEP question ("The unadjusted Information Transfer PRO-PM, as specified, will provide valid assessment of the transfer of key information to patients at discharge from the facility"), six of 10 TEP members (60 percent) agreed that the measure was a valid assessment of the transfer of key information to patients at discharge from the facility.

Specifically, TEP responses to the first question were:

Strongly agree: 2

Moderately agree: 4

Somewhat agree: 2

Somewhat disagree: 1

Moderately disagree: 1

Strongly disagree: 0

In response to the second TEP question, eight of 10 TEP members (80 percent) agreed that the measure could be used to distinguish between better and worse quality of care at facilities.

Specifically, TEP responses to the second question were:

Strongly agree: 1

Moderately agree: 5

Somewhat agree: 2

Somewhat disagree: 1

Moderately disagree: 1

Strongly disagree: 0

Analysis of missing data

Item-missingness was evaluated across all respondents, graphing the missingness as bar plots for each item. Items in the same domain had similar percents missingness, and the percentage of missingness increased with each subsequent domain. Approximately 12.2% of all respondents skipped questions about applicability, 12.9% of respondents skipped questions about medications, and 13.7% skipped questions about activity. The data pattern suggests patients skipped entire domains, rather than skipping specific items. The minimum number of items skipped was 4, corresponding to questions in the last domain activity.

Non-response

The team evaluated non-response by assessing differences in patient characteristics between respondents and non-respondents and whether such differences were associated with the performance scores. While there were statistically significant differences between respondents and non-respondents by age, and sex, however these patient risk factors were not associated with performance score (see Table 4 on table/figures attachment). The age and sex are not associated with outcome, with p-value 0.734 and 0.128, respectively. Due to issues with data quality, it was not possible to examine differences in race, ethnicity, or insurance status (see Table 5 on table/figures attachment).

5.3.5 Interpretation of Validity Results

With this submission we provide two independent sources of evidence in support of the validity of the Information Transfer PRO-PM. First, our TEP face validity assessment supports that the measure can be used to distinguish between better- and worse-performing facilities. Second, our empiric validity testing shows, as we hypothesized, a strong association in the correct direction (positive correlation) between the Information Transfer PRO-PM measure score and the OAS

CAHPS domain about global communication around a patient's outpatient surgical procedure. Taken together, these results support the validity of the Information Transfer PRO-PM.

5.3.2 Type of Accountable Entity Level Validity Testing Conducted (derived)

Empirical validity testing at the accountable entity-level (e.g., criterion validity, construct validity, known groups analysis), Systematic assessment of face validity of the measure’s performance score as an indicator of quality or resource use

5.4.1 Methods Used to Address Risk Factors

No risk adjustment or stratification

5.4.1b Rationale For No Adjustment or Stratification

Following extensive discussions with clinicians and patient stakeholders, the measure developers and CMS reached a consensus that Hospital Outpatient Departments (HOPD) should tailor discharge instructions to accommodate patients' unique characteristics, such as age, education, health status, and prior experience with surgeries.

It is essential for clinicians to connect with patients on their level and provide clear, personalized guidance for post-discharge self-care. This is a measure of patient centered communication. Risk adjusting for patient-level social factors that can be influenced by the HOPD discharge process could unintentionally encourage different/ disparate outcomes between social disadvantaged patient care. Therefore, the unadjusted measure effectively captures the average patient's assessment of the clarity of discharge instructions provided by HOPD.

Furthermore, we analyzed data collected from the second pilot to evaluate the potential impact of adjusting the performance measure for patient factors identified in our exploration of the literature. These candidate variables, including self-reported race, ethnicity, age, education, self-reported health status, and history of procedures, were identified in an environmental scan and literature review as having an association with perceived and assessed understanding of medical and surgical patients discharge instructions. However, we found that there were no statistically significant differences between the scores obtained from the adjusted and unadjusted measures. Figure 2 on tables/figures attachment illustrates this relationship, showing a strong correlation with a coefficient of 0.992.

Our analysis of the pilot data revealed that patients with higher education levels tended to be less satisfied with the discharge information they received. However, there is no evidence to suggest that hospitals would limit access to socially advantaged group (those with higher education) as a consequence of publicly reporting an unadjusted PRO-PM. Ultimately, the performance differences between the adjusted and unadjusted measures were minimal, and both exhibited moderate reliability.

6.1.2 Current or Planned Use(s)

Public Reporting, Quality Improvement with Benchmarking (external benchmarking to multiple organizations), Quality Improvement (Internal to the specific organization)

6.2.1 Actions of Measured Entities to Improve Performance

This measure is currently not in use for performance improvement; however, the results may inform providers and facilities about the quality of discharge/post-procedure information provided to patients receiving an outpatient procedure or surgery. Specifically, the survey allows for tracking and improvement on discharge instructions related to information specific to the patient, medication, and daily activities, which is a gap in measured quality. We interviewed quality officers of the organizations that participated in the pilot about the meaningfulness of the performance score. They indicated that the scores aligned with known issues raised by patients in an open-ended survey and accurately quantify known issues with the discharge process.

Each organization's quality officer was interested in their overall score, its correlation with OAS CAHPS, and in learning how to improve their process of communicating discharge instructions based on feedback of the survey. The body of literature referenced in the evidence section demonstrates that providers can effectively improve patient’s understanding of instructions for self-care by giving clear, personalized instruction via more than one medium, such as conversation, written instruction, or video. Discharge instructions are better retained and understood by patients when they receive the same instructions on different occasions. Providers would need to ask patients about their home environment and ask patients about their preferences concerning pain medication, physical therapy, and other medical problems, before advising them accordingly.

Developer POC email

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Measure Developer POC

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Measured/accountable entity (reliability and/or validity) methodology and results (if available)

Measured entity (reliability and validity) methodology and results (if available), Person or encounter-level (reliability and validity) methodology and results (if available)

Responder for Survey

Patient

The measure developer is different from the measure steward

Yes

Steward Address

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Steward Organization

Centers for Medicare & Medicaid Services

Steward Organization URL

https://www.cms.gov/medicare/quality/initiatives/hospital-quality-initiative/ho...

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