# Person- and Family-Centered Care: Off-Cycle Review, 2015-2016

FINAL TECHNICAL REPORT

May 31, 2016

This report is funded by the Department of Health and Human Services under contract HHSM-500-2012-00009I Task Order HHSM-500-T0008

NATIONAL QUALITY FORUM

## Contents

# Person- and Family-Centered Care: Off-Cycle Review, 2015-2016

FINAL TECHNICAL REPORT

## Executive Summary

This is the third in a series of reports describing NQF's 2014-2016 measure evaluation project for person- and family-centered care measures. The background and description of the project and review of NQF's person- and family-centered care portfolio are available on NQF's project webpage. NQF is undertaking this project in multiple phases. Phase 1 examined experience with care measures; Phase 2 examined functional status measures; and this current off-cycle project focused on patient activation and review of annual updates on previously endorsed measures.

For this project, the Standing Committee evaluated 1 newly-submitted measure against NQF's standard evaluation criteria. In addition, during Phase 2 of the project, 2 measures received conditional endorsement and required finalization of a risk-adjustment methodology. These 2 measures with their finalized risk-adjustment strategies were reviewed by the Committee to determine if the conditional status could be removed. The Committee recommended the 1 new measure be endorsed and that the conditional endorsement be removed for 2 measures. The measures are as follows:

**Endorsed Measure**

- 2483: Gains in Patient Activation (PAM) Scores at 12 Months (Insignia Health)

**Endorsement Conditions Removed**

- 2643: Average change in functional status following lumbar spine fusion surgery (MNCM)
- 2653: Average change in functional status following total knee replacement surgery (MNCM)

Brief summaries of the measures reviewed in this off-cycle review are included in the body of the report; a detailed summary of the Committee's discussion and ratings of the criteria for the new measure (#2483: Gains in Patient Activation (PAM) at 12 Months) is in Appendix A.

## Measure Evaluation for Person- and Family-Centered Care Off-Cycle Review

On November 13, 2015, the Person- and Family-Centered Care Standing Committee evaluated 1 new measure and conducted an expedited review of 2 measures endorsed with conditions against NQF's standard evaluation criteria. To facilitate the evaluation, NQF staff conducted a preliminary review of the measures against the evaluation subcriteria prior to consideration by the entire Standing Committee. The Committee's discussion and ratings of the criteria are included in Appendix A.

**Table 1. Person- and Family-Centered Care Measure Evaluation Summary**

| | Conditional Endorsement Review | New Measures | Total |
|---|---|---|---|
| Measures under consideration | 2 | 1 | 3 |
| Measures endorsed | 2 | 1 | 3 |
| Reasons for not recommending | N/A | N/A | N/A |

## Comments Received

### *Comments Received Prior to Committee Evaluation*

NQF solicits comments on endorsed measures on an ongoing basis through the Quality Positioning System (QPS). In addition, NQF solicits comments prior to the evaluation of the measures via an online tool located on the project webpage. For this evaluation cycle, the pre-evaluation comment period was open from October 21 to November 5, 2015, for measure 2483: Gains in Patient Activation (PAM) Scores at 12 Months. No comments were received during this comment period.

## Overarching Issues

During the Standing Committee's discussion of the measures in this and previous phases, several overarching issues emerged that the Committee factored into its ratings and recommendations.

### *Endorsement of Measures Versus Tools*

Many measures relating to person- and family-centered care and many patient-reported outcome performance measures (PRO-PMs) derive from assessment tools or surveys. Developers frequently provide robust testing data and a strong rationale for the use of the tool or instrument, but may struggle with collecting data to meet the Scientific Acceptability criteria for the PRO-PM itself. This challenge presented itself again in this off-cycle review of measure #2483, which is based on data from the Patient Activation Measure (PAM). NQF staff worked closely with both the developer and the Standing Committee to ensure that the appropriate data were provided for the evaluation of the measure. Staff provided significant technical assistance to the Insignia Health team in filling out the NQF Measure Information Form, but the Committee requested further clarification of the measure under review versus the associated PAM instrument. Ultimately, the developer was able to supply the appropriate studies to support the criteria as applicable to the PRO-PM.

### *Consideration for Proprietary Measures*

The Standing Committee expressed concerns about the proprietary nature of the Patient Activation Measure® (PAM) and associated algorithms. Dr. Helen Burstin, Chief Scientific Officer of NQF, clarified that approximately 7 years ago, the NQF Board decided that there should be a way for measures with an associated fee to undergo review. At that time, the Board determined that committees should discuss any associated fees and consider it when assessing the feasibility of measure. The developers did provide both scoring and pricing as required by NQF.

## Summary of Measure Evaluation

The following summary of the measure evaluation highlights the major issues that the Committee considered. Details of the Committee's discussion and ratings of the criteria for the measure are included in Appendix A.

### *Measure Endorsed*

#### 2483: Gains in Patient Activation (PAM) Scores at 12 Months (Insignia Health): Endorsed

**Description**: The Patient Activation Measure® (PAM®) is a 10 or 13 item questionnaire that assesses an individual´s knowledge, skill and confidence for managing their health and health care. The measure assesses individuals on a 0-100 scale. There are 4 levels of activation, from low (1) to high (4). The measure is not disease specific, but has been successfully used with a wide variety of chronic conditions, as well as with people with no conditions. The performance score would be the change in score from the baseline measurement to follow-up measurement, or the change in activation score over time for the eligible patients associated with the accountable unit. The outcome of interest is the patient's ability to self-manage; **Measure Type**: Patient Reported Outcome; **Level of Analysis**: Clinician: Group/Practice, Clinician: Team; **Setting of Care**: Ambulatory Care: Ambulatory Surgery Center (ASC), Ambulatory Care: Clinician Office/Clinic, Dialysis Facility, Home Health, Post Acute/Long Term Care Facility: Inpatient Rehabilitation Facility, Behavioral Health/Psychiatric : Outpatient, Ambulatory Care: Outpatient Rehabilitation, Pharmacy; **Data Source**: Electronic Clinical Data: Electronic Health Record, Healthcare Provider Survey, Patient Reported Data/Survey

In evaluating this measure, the Committee worked to clarify its understanding of the construct and translation of this PRO-PM and the evidence supporting it as opposed to the PAM instrument. The Committee evaluated both the performance measure testing and the data element testing against the NQF criteria. It requested clarification of the evidence supporting the PRO-PM and specifically sought additional information on testing of the metric in the adolescent population (ages 15 to 17). Clarification was required on the PRO-PM under consideration, which was described as a measure that looks at the summary score change for the aggregate of eligible patients. The PAM is proprietary, with a cost for use of the tool and its algorithm for scoring. As such, the Committee considered this in evaluating the feasibility and usability criteria. The Committee voted on the measure via online survey tool and recommended the measure for endorsement. After the Committee evaluated the measure, the measure developer revised the measure inclusion/exclusion criteria to include only patients 19 years and older. The developer indicated that it lacked sufficient data to support inclusion of the adolescent population

at this time. The Committee determined that the revision did not necessitate a re-evaluation of the scientific acceptability of the measure and confirmed its recommendation for endorsement.

### *Endorsement Conditions Removed*

#### 2643: Average change in functional status following lumbar spine fusion surgery (MNCM)

**Description:** For patients age 18 and older undergoing lumbar spine fusion surgery, the average change from pre-operative functional status to one year (nine to fifteen months) post-operative functional status using the Oswestry Disability Index (ODI version 2.1a) patient reported outcome tool; **Level of Analysis**: Clinician: Group/Practice; **Care Setting**: Ambulatory Care: Clinician Office/Clinic; **Data Source**: Electronic Clinical Data: Electronic Health Record, Paper Medical Records, Patient Reported Data/Survey

#### 2653: Average change in functional status following total knee replacement surgery (MNCM)

**Description:** Average change in functional status following total knee replacement surgery; **Level of Analysis**: Clinician: Group/Practice; **Care Setting**: Ambulatory Care: Clinician Office/Clinic; **Data Source**: Electronic Clinical Data: Electronic Health Record, Paper Medical Records, Patient Reported Data/Survey

Measures 2643 and 2653 were reviewed and recommended for endorsement by the Standing Committee during its second phase of work (2015). During the Committee deliberations, it was noted that, although the measures were fully tested and use within Minnesota had begun, the risk adjustment methodology had not been finalized. In the original submission, Minnesota Community Measurement (MNCM) provided a rationale for the lack of finalized methodology, a timeline for full collection of data, and potential strategies it was considering. During the endorsement and ratification process, NQF placed a condition on the endorsement of the measures requiring that risk adjustment be finalized and evaluated by the Committee within 1 year of endorsement. MNCM finalized the risk adjustment in October 2015 and presented its findings to the Committee at the November 13, 2015, webinar. The developer introduced the measures and provided the following information related to risk adjustment:

- The 2 measures for risk adjustment review are:
    - 2643: Average change in functional status following a lumbar spine fusion surgery, which is a patient-reported, outcome-based measure using the Oxford Knee Support tool.
    - 2653: Average change in functional status following total knee replacement surgery, another patient-reported outcome measure, which uses the Oswestry Disability Index (ODI) tool.
- Although these procedurally based measures reflect different patient populations, they are very similar in measure construct and rely on patient-reported outcome tools to measure functional status. The patient functional status is assessed preoperatively and 1 year after the procedure. The absolute change between pre-op and post-op functional status score is calculated and then averaged to compute practice level, average change, and functional status. MNCM publicly reports data that is risk-adjusted using an actual-to-expected methodology, which allows the unadjusted rate to be preserved and displayed but also displays an “expected” result for comparison.

- The developer indicated that it uses a Risk Adjustment Committee Methodology and Process, which includes a measure development advisory workgroup. The standard demographic variables used in the MNCM methodology include gender, age, zip code, race/ethnicity, country of origin, primary language, and insurance product as a proxy for socioeconomic status.
- The workgroup recommended the following variables for total knee replacement: the initial preoperative functional status as measured by Oxford knee, BMI, comorbidity of diabetes, and tobacco status.
- The workgroup recommended the following variables for lumbar spine fusion surgery: the initial preoperative functional status as measured by the ODI, BMI, the clinical condition or reason for procedure, the history of prior back surgery, and tobacco status.
- For total knee replacement, variables that failed to meet significance testing included age, tobacco status, gender, and diabetes. For lumbar spine fusion surgery, the variables that failed to meet the F-Test were age, tobacco status, gender, history of prior back surgery and clinical condition reason for procedure.
- Next, variables for both measures were tested in the risk adjustment model including insurance product, initial preoperative functional status, and BMI. There was a strong association with an F-Test P-value of less than 0.3. The preoperative functional status was the only variable found to demonstrate a strong consistent empirical association with the outcome being measured for both measures under review.

Committee members asked questions to ensure that they understood the mechanics of both the risk adjustment strategy as well as final variables included in the model.

- A Committee member requested clarification about regression means and issues that arise when starting with extreme values. It was noted that the inclusion of patients with very low functional statuses could affect the regression mean. In this scenario, the attribution back to quality is hypothesis-driven. The concern raised is that the measure will get some movement for those extreme values back to the norm, at the low end, and at the high end, there would be a smaller opportunity for improvement with respect to quality and post- surgery outcomes.
- A concern about the inclusion of pain status in a broader functional status assessment was also raised. A Committee member inquired about the approach to including pain as opposed to functional status. It was noted that there is evidence that trying to address back pain is a main driver for surgery. The developer indicated that components of both of the tools for functional status include a heavy focus on pain and patient tolerance in terms of different activities of function and their relation to pain. In addition, there are separate measures of back pain and leg pain that are calculated based on a 1 to 10 pain scale.

Upon analysis of testing data (2314 total knee replacement records, 880 spinal surgery records), MNCM finalized a statistical risk model using one risk factor: patients with poorer functional status prior to surgery have greater potential for a larger magnitude of absolute change in functional status than do patients with better initial functional status. As a result, any attempt to isolate the provider's contribution to the outcome of interest as measured by the absolute average change in functional status must take this into account. MNCM publicly reports risk-adjusted data using an actual-to-expected

methodology, which allows the unadjusted rate to be preserved and displayed and also displays an "expected result" for fair comparison.

After discussion and consideration of the information provided by MNCM, the Committee voted to support endorsement of the measures and to remove the conditions for the annual update. Both measures are now endorsed without conditions.

# Appendix A: Details of Measure Evaluation

## Measure Endorsed

**Rating Scale**: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable; Y=Yes; N=No

---

### 2483 Gains in Patient Activation (PAM) Scores at 12 Months

Submission | Specifications

**Description**: The Patient Activation Measure® (PAM®) is a 10 or 13 item questionnaire that assesses an individual´s knowledge, skill and confidence for managing their health and health care. The measure assesses individuals on a 0-100 scale. There are 4 levels of activation, from low (1) to high (4). The measure is not disease specific, but has been successfully used with a wide variety of chronic conditions, as well as with people with no conditions. The performance score would be the change in score from the baseline measurement to follow-up measurement, or the change in activation score over time for the eligible patients associated with the accountable unit.

The outcome of interest is the patient's ability to self-manage. High quality care should result in gains in ability to self-manage for most chronic disease patients. The outcome measured is a change in activation over time. The change score would indicate a change in the patient´s knowledge, skills, and confidence for self-management. A positive change would mean the patient is gaining in their ability to manage their health.

A "passing" score for eligible patients would be to show an average net 3-point PAM score increase in a 6-12 month period. An "excellent" score for eligible patients would be to show an average net 6-point PAM score increase in a 6-12 month period.

**Numerator Statement**: The numerator is the summary score change for the aggregate of eligible patients in that unit (e.g., patients in a primary care provider´s panel, or in a clinic). The change score would be calculated from a baseline score and then a second score taken within 12 months of the baseline score (but not less than 6 months). The change score is the difference between the baseline and the second score in a 12-month period. The aggregate score would be the total score for the eligible patient population. The total aggregate score could be a positive or a negative number. A "passing" score for eligible patients would be to show an average net 3-point PAM score increase in a 6-12 month period. An "excellent" score would be for eligible patients to show an average of a 6-point PAM score increase in a 6-12 month period.

**Denominator Statement**: All patients can be included in the denominator, except children under the age of 14 and adults with a diagnosis of dementia or cognitive impairments (based on ICD codes). Also excluded would be patients who do not have two PAM scores. Finally, we exclude all patients who are at level 4 at baseline (as they are unlikely to gain in activation over time). To be considered for evaluation, an accountable unit would need to have two PAM scores per patient (taken no less than 6 months and not more than 12 months apart) on at least 50% of their eligible patients who had two visits during that time period.

**Exclusions**: All patients who are at PAM level 4 at baseline, as their scores are unlikely to increase, and children under 14 and any adults who have a diagnostic code indicating dementia or cognitive impairment.

ICD Codes include:

90.0 SENILE DEMENTIA UNCOMPLICATED

290.10 PRESENILE DEMENTIA UNCOMPLICATED

290.11 PRESENILE DEMENTIA WITH DELIRIUM

290.12 PRESENILE DEMENTIA WITH DELUSIONAL FEATURES

331.83 MILD COGNITIVE IMPAIRMENT

**Adjustment/Stratification**:

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

**Setting of Care:** Ambulatory Care : Ambulatory Surgery Center (ASC), Ambulatory Care : Clinician Office/Clinic, Dialysis Facility, Home Health, Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Behavioral Health/Psychiatric : Outpatient, Ambulatory Care : Outpatient Rehabilitation, Pharmacy

**Type of Measure**: PRO

**Data Source**: Electronic Clinical Data : Electronic Health Record, Healthcare Provider Survey, Patient Reported Data/Survey

**Measure Steward**: Insignia Health

---

**STANDING COMMITTEE MEETING [11/13/2015]**

**1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>**

(1a. Evidence, 1b. Performance Gap

1a. Evidence: **Y=13 N=0** 1b. Gap: **H=6; M=4; L=2; I=1**

<u>Rationale</u>:

- The developer indicated the PAM measures an individual's knowledge, skill, and confidence, and their ability to manage their health and their health care. The rationale is that the PAM score is predictive of health behavior, clinical outcome, many measures of utilization or costly utilization, and overall cost. The underlying assumption is that high-quality care includes interventions such as coaching and support intended to increase patients' activation (ability to manage their disease), and that patients receiving such care should be gaining in their ability to self-manage over time. This is what the change in the PAM score would demonstrate.
- The proposed measure is based on examination of data from several sources. The numerator of the measure is the aggregate change in PAM score for a defined population, and the change over a 12-month period but not less than a 6-month period. The denominator is the patients in that facility or that panel who have at least 2 visits during that time period.
- Clarification of the timing of administration was requested and the developer indicated that for the measure, people need 2 scores in order to see a change. The measure requires measurement at 2 points in time; that could be over a year but not shorter than 6 months.
- The Committee had questions about the nature of the score, and the developer responded that an improvement of 3 points on a 1-100 scale is needed to pass the measure, and that an improvement of 6 points is considered excellent. During their reviews, the developer has seen that a 3-point change is related to changes in behavior. In addition, 3 points is also a reasonable level of improvement for setting a bar for how many clinicians would pass the measure. A very high level of performance would be needed to reach a change of 6 points, which is why it considered excellent.

- There was a request for specific literature supporting that a change in 3 points or 6 points leads to better outcomes. The developers indicated the citations were provided in their submission, but they will further highlight them for committee consideration.

---

**2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criteria</u>**

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

2a. Reliability: **H-4**; **M-6**; **L-1**; **I-2** 2b. Validity: **H-1**; **M-8**; **L-2**; **I-2**

<u>Rationale</u>:

- The Committee agreed there was good data that were presented on individual item reliability as well as test-retest reliability. The original PAM articles provided in the submission indicated very high internal consistency reliability.
- It was noted there were no reliability or validity data presented for children, specifically for adolescents over the age of 14, who are included in the measure denominator. The Committee member questioned what was known about meaningfulness of activation for this age group specifically, since the items are cognitively difficult and may mean something very different for a child whose parent or caregiver tends to take primary responsibility for managing their health condition. The developer team indicated that quite a few studies over the years have included children (ages 12 and above) with decent samples sizes, but this data is not in the published literature. They have also asked a number of clients to offer an opinion on the measure's applicability to adolescents and whether a 14 or 15 or 16-year-old will respond as adults do. At the aggregate level, the developer stated the answer was yes. They thus believe the age range is suitable, and indicated a willingness to pull some of that data together for Committee review.

---

**3. Feasibility: H-5; M-5; L-3; I-0**

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

<u>Rationale</u>:

- The Committee inquired as to what parts of the measure are proprietary: is the questionnaire itself proprietary, is the scoring proprietary, or is all of the above proprietary? The developer indicated all of the above are proprietary. The surveys and all the PAM versions are owned by the university and state of Oregon, and the algorithm is also proprietary. On occasion clients are permitted to have the algorithm to integrate into their systems, particularly into EMRs.
- The Committee was advised to review the licensing and other requirements for use of the survey as available on the Committee SharePoint site, and to consider cost and lack of transparence into their feasibility assessment vote.
- A member requested clarification on measure collection and who is actually responsible for contacting the patient or administrating the questionnaire, especially for the second round of surveys. The developer explained that the follow up PAM can mailed to a patient's home, administered via telephone, or via regular patient interaction in the course of a year.

---

**4. Use and Usability: H-6; M-4; L-3; I-0**

*(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)*

<u>Rationale</u>:

- It was noted that the PAM tool seems to be easy to use, due to short length and the fact that it can be administered via a variety of modalities. It was noted that little was known about use in the adolescent age group.

---

**5. Related and Competing Measures**

- No related or competing measures noted.

---

**Standing Committee Recommendation for Endorsement**: **Y-11**; **N-2**

- Some Committee members noted concerns with the proprietary nature of the PAM, as well as a wish to see more data and more of the calculation algorithm in order to more fully understand the linkage between the measure and feasible processes of care.

---

**6. Public and Member Comment**

- One comment was received during the post-evaluation Public Comment period. The commenter questioned if sufficient evidence exists to conclude that the knowledge, skills, and attitudes measured by PAM relate directly to action taken for health improvements?
- The developer submitted the following response:
    - Over 240 articles have been published that quantify patient activation using the Patient Activation Measure® (PAM®). At least 85 percent of these studies show a statistically significant relationship between PAM scores and positive health actions, including getting preventive screening tests, immunizations, and health checkups. PAM is also a significant predictor of healthy behaviors such as healthy eating and regular exercise. These studies show that higher PAM scores are linked with better self-management of chronic conditions, including more consistent monitoring of conditions, better adherence to treatment regimens, and greater knowledge about condition and treatment options.
      Many studies document that better health and clinical outcomes are associated with higher PAM scores. For example, more activated individuals are more likely to follow through on post-surgical treatment regimens and to have better functioning after joint replacement. Finally, there is evidence that those scoring higher on the PAM survey are more likely to have a primary care provider, to ask questions in the medical encounter, and to use comparative quality information in making a provider choice.
      These research findings are quite robust, and include study populations from different cultures, ages, socio-economic groups, and different racial and ethnic groups. The studies referred to here are primarily from the U.S. but also from European, Middle Eastern, and Asian countries.
      A bibliography of PAM studies is available at http://s3-us-west-2.amazonaws.com/insignia/Research-Studies-Using-PAM.Bibliography.pdf?mtime=20150629140537
- The Committee agreed this response was satisfactory and did not change their recommendation.

---

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

---

**8. Board of Directors Vote: Ratified for Endorsement on April 6, 2016**

**9. Appeals**

- No appeals were received.

## Appendix B: Use in Federal Programs—Person- and Family-Centered Care Portfolio

The measure evaluated in this cycle of the project is not currently used in federal quality improvement programs.

## Appendix C: Project Standing Committee and NQF Staff

### STANDING COMMITTEE

**Lee Partridge (Co-Chair)**
National Partnership for Women and Families
Washington, District of Columbia

**Christopher Stille, MD, MPH, FAAP (Co-Chair)**
University of Colorado School of Medicine and Children's Hospital
Aurora, Colorado

**James Merlino, MD (Co-Chair)**
Press Ganey
Cleveland, Ohio

**Katherine Bevans, PhD**
University of Pennsylvania School of Medicine, Children's Hospital of Philadelphia
Philadelphia, Pennsylvania

**Samuel Bierner, MD**
UT Southwestern Medical Center
Dallas, Texas

**Rebecca Bradley, LCSW**
HealthSouth Corporation
Birmingham, Alabama

**David Cella, PhD**
Northwestern University
Chicago, Illinois

**Sharon Cross, LISW**
The Ohio State University Wexner Medical Center
Columbus, Ohio

**Dawn Dowding, PhD, RN**
Visiting Nurse Service of New York, Columbia University School of Nursing
New York, New York

**Sherrie Kaplan, PhD, MPH**
UC Irvine School of Medicine
Irvine, California

**Brian Lindberg, BSW, MMHS**
Consumer Coalition for Quality Health Care
Washington, District of Columbia

**Sherri Loeb, RN,BSN**
Advocate Lutheran General
Chicago, Illinois

**Ann Monroe**
Health Foundation for Western & Central New York
Buffalo, New York

**Lisa Morrise, MA**
Patient & Family Engagement Affinity Group, National Partnership for Patients
Salt Lake City, Utah

**Elizabeth Mort, MD, MPH**
Massachusetts General Hospital/Massachusetts General Physician Organization
Boston, Massachusetts

**Lenard Parisi, RN, MA, CPHQ, FNAHQ**
Metropolitan Jewish Health System
Brooklyn, New York

**Debra Saliba , MD, MPH**
UCLA/JH Borun Center, VA GRECC, RAND Health
Santa Monica, California

**Peter Thomas, JD**
Powers, Pyles, Sutter & Verville PC
Washington, District of Columbia

**Carin van Zyl, MD, FACEP**
USC Keck School of Medicine, LA County and USC Medical Center, Keck Hospital of USC
Duarte, California

## NQF STAFF

**Helen Burstin, MD, MPH**
Chief Scientific Officer

**Marcia Wilson, PhD, MBA**
Senior Vice President
Quality Measurement

**Sarah Sampsel, MPH**
Senior Director
Quality Measurement

**Suzanne Theberge, MPH**
Senior Project Manager
Quality Measurement

**Kaitlynn Robinson-Ector, MPH**
Project Analyst
Quality Measurement

## Appendix D: Measure Specifications

### 2483 Gains in Patient Activation (PAM) Scores at 12 Months

STATUS

Endorsed

STEWARD

Insignia Health

DESCRIPTION

The Patient Activation Measure® (PAM®) is a 10 or 13 item questionnaire that assesses an individual´s knowledge, skill and confidence for managing their health and health care. The measure assesses individuals on a 0-100 scale. There are 4 levels of activation, from low (1) to high (4). The measure is not disease specific, but has been successfully used with a wide variety of chronic conditions, as well as with people with no conditions. The performance score would be the change in score from the baseline measurement to follow-up measurement, or the change in activation score over time for the eligible patients associated with the accountable unit.

The outcome of interest is the patient's ability to self-manage. High quality care should result in gains in ability to self-manage for most chronic disease patients. The outcome measured is a change in activation over time. The change score would indicate a change in the patient´s knowledge, skills, and confidence for self-management. A positive change would mean the patient is gaining in their ability to manage their health.

A "passing" score for eligible patients would be to show an average net 3-point PAM score increase in a 6-12 month period. An "excellent" score for eligible patients would be to show an average net 6-point PAM score increase in a 6-12 month period.

TYPE

PRO

DATA SOURCE

Electronic Clinical Data : Electronic Health Record, Healthcare Provider Survey, Patient Reported Data/Survey PAM data have been successfully collected on the web through an online portal, over the phone, in-person (self-administered and interviewer-administered). A controlled trial showed no mode effects between web and phone administration (Greene, et al 2008). More than 120 organizations are administering PAM today over the phone, by paper, by Interactive Voice Response and online portal.

See also:

Greene J, Speizer H, Wiital W. "Telephone and Web: Mixed Mode Challenge." Health Services Research 43:1, 2008. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2323139/

Available in attached appendix at A.1

LEVEL

Clinician : Group/Practice, Clinician : Team

SETTING

Ambulatory Care : Ambulatory Surgery Center (ASC), Ambulatory Care : Clinician Office/Clinic, Dialysis Facility, Home Health, Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Behavioral Health/Psychiatric : Outpatient, Ambulatory Care : Outpatient Rehabilitation, Pharmacy

NUMERATOR STATEMENT

The numerator is the summary score change for the aggregate of eligible patients in that unit (e.g., patients in a primary care provider´s panel, or in a clinic). The change score would be calculated from a baseline score and then a second score taken within 12 months of the baseline score (but not less than 6 months). The change score is the difference between the baseline and the second score in a 12-month period. The aggregate score would be the total score for the eligible patient population. The total aggregate score could be a positive or a negative number. A “passing” score for eligible patients would be to show an average net 3-point PAM score increase in a 6-12 month period. An “excellent” score would be for eligible patients to show an average of a 6-point PAM score increase in a 6-12 month period.

NUMERATOR DETAILS

All patients are eligible to be included in the numerator, except children under the age of 19 and adults with dementia, or serious cognitive impairments. There is no need to risk adjust, as any patient, regardless of where they are starting, can make progress over time. In fact research shows that those who score in the lower levels of PAM are more likely to increase with appropriate interventions.

DENOMINATOR STATEMENT

All patients can be included in the denominator, except children under the age of 19 and adults with a diagnosis of dementia or cognitive impairments (based on ICD codes). Also excluded would be patients who do not have two PAM scores. Finally, we exclude all patients who are at level 4 at baseline (as they are unlikely to gain in activation over time). To be considered for evaluation, an accountable unit would need to have two PAM scores per patient (taken no less than 6 months and not more than 12 months apart) on at least 50% of their eligible patients who had two visits during that time period.

DENOMINATOR DETAILS

The denominator is the number of patients in the accountable unit (e.g., primary care provider panel, or clinic) that had two PAM scores during a 12-month period, taken no less than 6 months and not more than 12 months apart.

EXCLUSIONS

All patients who are at PAM level 4 at baseline, as their scores are unlikely to increase, and children under 19 and any adults who have a diagnostic code indicating dementia or cognitive impairment.

ICD Codes include:

90.0 SENILE DEMENTIA UNCOMPLICATED

290.10 PRESENILE DEMENTIA UNCOMPLICATED

290.11 PRESENILE DEMENTIA WITH DELIRIUM

290.12 PRESENILE DEMENTIA WITH DELUSIONAL FEATURES

331.83 MILD COGNITIVE IMPAIRMENT

EXCLUSION DETAILS

Children under 19 and adult patients who have significant cognitive impairment should not be included in the measure. Those patients who did not have two visits during the year, and those patients who did not have two PAM scores during the year, would be excluded from the denominator. Accountable units should also exclude patients in the highest level of activation (level 4) if they are at level 4 in the baseline period. Patients at level 4 are less likely to gain in activation over time.

RISK ADJUSTMENT

No risk adjustment or risk stratification

Rasch Analysis was used to develop the Patient Activation Measure. The analysis linking PAM with outcomes is based on multivariate (logistic and OLS regression) models that control for demographics and illness severity. These models are used to show the validity of the measure. The multivariate models are not necessary for using the PAM for a performance measure. Some of the research examines the link between PAM and outcomes for specific sub-populations, including disadvantaged populations.

For reference, see:

Hibbard JH and Cunningham P. "How Engaged Are Consumers in Their Health and Health Care, and Why Does it Matter?" Center for Studying Health Systems Change Research Brief October 2008. http://www.hschange.com/CONTENT/1019/

Hibbard JH, Greene J, Overton V. "Patients With Lower Activation Associated With Higher Costs; Delivery Systems Should Know Their Patients' Scores." Health Affairs Feb. 2013. http://www.ncbi.nlm.nih.gov/pubmed/23381513

Hibbard JH, Greene J. "What the Evidence Shows about Patient Activation: Better Health Outcomes and Care Experiences; Fewer Data on Costs." Health Affairs Feb. 2013. http://www.ncbi.nlm.nih.gov/pubmed/23381511

STRATIFICATION

N/A

TYPE SCORE

Continuous variable, e.g. average  better quality = higher score

ALGORITHM

Difference between an aggregate baseline PAM score of eligible patients and the follow-up aggregate PAM score of eligible patients (not longer than 12 months after baseline or less than 6 months).

PASSING: would be an average change score of 3 or more points.

EXCELLENT: would be an average change score of 6 or more points.

NO SPECIAL INTERVENTION: USUAL CARE

Out of 295 primary care clinicians in a large integrated system, 62% would pass (their patients had on average 3 or more points increase). Patients in this system, were getting usual care. There was no special intervention to increase activation.

| Mean PAM Change Points for Patients by PCP CATEGORY | Freq. | Percent | Cum%. |
|---|---|---|---|
| -25 thru 0 | 54 | 18.31 | 18.31 |
| 1 thru 2 | 59 | 20.00 | 38.31 |
| 3 or more | 182 | 61.69 | 100.00 |
| Total | 295 | 100.00 | . |

In the same delivery system we looked at how many clinics would get a passing grade. Out of 62 clinics (average of 3-4 PCPs) 66% would get a passing score (average PAM score change of 3 points or higher).

TARGETED INTERVENTION TO INCREASE ACTIVATION

In a separate analysis of 33 Insignia Health clients, where they were using a targeted intervention to increase activation, and included 19,882 patients, the findings were as follows:

33 clients of Insignia Health provided data on 19,882 patients who had at least 2 PAM scores. Across this diverse group of clients (e.g. state Medicaid, integrated delivery systems, behavioral health, VA Clinics, etc), all were using the same targeted intervention to increase activation. Excluding patients who were at PAM level 4 at baseline, the average change score across all these programs was a positive 6.4 points (equivalent to our proposed EXCELLENT score). All of these 33 of these systems would have a passing or excellent score.

References for point change criteria:

Fowles J, Terry P, Xi M, Hibbard JH, Bloom CT, Harvey L. “Measuring self-management of patients’ and employees’ health: Further validation of the Patient Activation Measure (PAM) based on its relation to employee characteristics.” Patient Education and Counseling Vol. 77 No.2:116-122. 2009. http://www.ncbi.nlm.nih.gov/pubmed/19356881

Hibbard, JH, Mahoney E, Stock R, Tusler M. “Do Increases in Patient Activation Result in Improved Self-management Behaviors?” Health Services Research 2007; 42(4). http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1955271/ No diagram provided

COPYRIGHT/DISCLAIMER

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value: There are no competing measures.

National Quality Forum
1030 15th St NW, Suite 800
Washington, DC 20005
http://www.qualityforum.org

ISBN 978-1-68248-018-2