

**Measure #221 (NQF 0426): Functional Status Change for Patients with Shoulder Impairments – National Quality Strategy Domain: Communication and Care Coordination**

**2017 OPTIONS FOR INDIVIDUAL MEASURES:**  
**REGISTRY ONLY**

**MEASURE TYPE:**  
Outcome

**DESCRIPTION:**

A self-report outcome measure of change in functional status (FS) for patients 14 years+ with shoulder impairments. The change in functional status (FS) assessed using FOTO's (shoulder) PROM (patient reported outcomes measure) is adjusted to patient characteristics known to be associated with FS outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality

**INSTRUCTIONS:**

This outcomes measure is to be reported **once per treatment episode** for all patients with a functional deficit related to the shoulder. This is an outcomes measure and its calculation requires reporting of the patient's functional status score, as a minimum, at admission to and again at discharge from an episode of rehabilitation. The admission score, estimated using patient self-report surveys, is recorded during the first rehabilitation treatment encounter and the discharge score is recorded at or near the conclusion of the final rehabilitation treatment encounter. It is anticipated that physical and occupational therapists providing treatment for functional shoulder deficits will report this measure.

**Definitions:**

**Functional deficit** – Limitation or impairment of physical abilities/function resulting in evaluation and inclusion in a treatment plan of care.

**Treatment Episode** – A Treatment Episode is defined as beginning with an Admission for a functional shoulder deficit, progressing to development of a plan of care, including treatment, without interruption of care (for example, a hospitalization or surgical intervention), and ending with Discharge from clinical care by the eligible clinician. A patient currently under clinical care for a shoulder deficit remains in a single episode of care until the Discharge is conducted and documented by the eligible clinician.

**Admission** – An Admission is the first encounter for a functional deficit involving the shoulder and includes an evaluation (CPT 97161, 97162, 97163 for physical therapy or 97165, 97166, 97167 for occupational therapy) and development of a plan of care by the eligible clinician. A patient presenting with a shoulder impairment, who has had an interruption of a Treatment Episode for the same functional shoulder deficit secondary to an appropriate reason like hospitalization or surgical intervention, is a new Admission.

**Discharge** – Discharge is accompanied by a re-evaluation CPT 97164 for physical therapy, 97168 for occupational therapy, or Functional Limitation Reporting Discharge Status G-Code (G8980, G8983, G8986, G8989, G8992 or G8995) identifying the close of a Treatment Episode for the same shoulder deficit identified at admission and documented by a discharge report by the eligible clinician. An interruption in clinical care for an appropriate reason like hospitalization or surgical intervention requires a discharge from the current Treatment Episode.

**Encounter** – A face to face visit between the patient and the provider for the purpose of assessing and/or improving a functional deficit.

**Patient Reported** – The patient directly, or through a proxy, provides answers to functional status survey items using standardized, reliable and valid, computerized adaptive testing or paper and pencil survey methods.

**Measure Reporting:**

The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not

need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

All patients 14 years and older with shoulder impairments who have initiated rehabilitation treatment and completed the FOTO shoulder FS outcome instrument at admission and discharge

**Option 1 – Physical Therapy Denominator Criteria (Eligible Cases):**

All patients aged  $\geq 14$  years on date of encounter

**AND**

Patient encounter during the performance period identifying evaluation (CPT): 97161, 97162, 97163

**AND**

Patient encounter during the performance period identifying discharge (CPT or HCPCS): 97164, G8980, G8983, G8986, G8989, G8992, G8995

**AND**

Functional deficit affecting the shoulder

**AND NOT**

**DENOMINATOR EXCLUSIONS:**

Patient refused to participate: G9734

**OR**

Patient unable to complete the FOTO shoulder Intake PROM at admission and discharge due to blindness, illiteracy, severe mental incapacity or language incompatibility and an adequate proxy is not available: G9735

**OR**

**Option 2 – Occupational Therapy Denominator Criteria (Eligible Cases):**

All patients aged  $\geq 14$  years on date of encounter

**AND**

Patient encounter during the performance period identifying evaluation (CPT): 97165, 97166, 97167

**AND**

Patient encounter during the performance period identifying discharge (CPT or HCPCS): 97168, G8980, G8983, G8986, G8989, G8992, G8995

**AND**

Functional deficit affecting the shoulder

**AND NOT**

**DENOMINATOR EXCLUSIONS:**

Patient refused to participate: G9734

**OR**

Patient unable to complete the FOTO shoulder Intake PROM at admission and discharge due to blindness, illiteracy, severe mental incapacity or language incompatibility and an adequate proxy is not available: G9735

**NUMERATOR:**

Patients who were presented with the FOTO Shoulder Functional Status measure at Admission (Intake) and Discharge (Status) for the purpose of calculating the patient's Risk-adjusted Functional Status Change Residual Score

**Definitions:**

**Patient's Functional Status Score** – A functional status score is produced when the patient completes the FOTO functional status survey (either by paper and pencil or computerized adaptive testing administration). The functional status score is continuous and linear. Scores range from 0 to 100 with higher scores meaning

higher functional abilities. The survey is standardized, and the scores are validated for the measurement of function for this population.

**Patient's Functional Status Change Score** – A functional status change score is calculated by subtracting the Patient's Functional Status Score at Admission from the Patient's Functional Status Score at Discharge.

**Predicted Functional Status Change Score** – Functional Status Change Scores for patients are risk adjusted using multiple linear regression methods that include the following independent variables: Patient's Functional Status Score at Admission, patient age, symptom acuity, surgical history, gender, number of co-morbidities and level of fear-avoidance. The Patient's Functional Status Change Score is the dependent variable. The statistical regression produces a Risk-Adjusted Predicted Functional Status Change Score.

**Risk-Adjusted Functional Status Change Residual Score** – The difference between the raw non-risk-adjusted Patient's Functional Status Change Score and the Risk-Adjusted Predicted Functional Status Change Score (raw minus predicted) is the Risk-Adjusted Functional Status Change Residual Score, which is in the same units as the Patient's Functional Status Scores, and should be interpreted as the unit of functional status change different than predicted given the risk-adjustment variables of the patient being treated. As such, the Risk-Adjusted Residual Change Score represents Risk-Adjusted Change corrected for the level of severity of the patient. Risk-Adjusted Residual Change Scores of zero (0) or greater ( $> 0$ ) should be interpreted as functional status change scores that were predicted or better than predicted given the risk-adjustment variables of the patient and risk-adjusted residual change scores less than zero ( $< 0$ ) should be interpreted as functional status change scores that were less than predicted given the risk-adjustment variables of the patient. Aggregated Risk-Adjusted Residual Scores allow meaningful comparisons amongst clinicians or clinics.

**Not Appropriate (Denominator Exception)** – Prior to conclusion of Plan of Care, intervention was interrupted or discontinued for any reason including by the referring physician, the provider, the payer or the patient, and attempts by the provider to complete a follow-up functional status survey near Discharge were unsuccessful.

**Numerator Options:**

***Performance Met:***

Risk-Adjusted Functional Status Change Residual Score for the shoulder successfully calculated and the score was equal to zero (0) or greater than zero ( $> 0$ ) (**G8663**)

**OR**

***Performance Met:***

Risk-Adjusted Functional Status Change Residual Score for the shoulder successfully calculated and the score was less than zero ( $< 0$ ) (**G8664**)

**OR**

***Denominator Exception:***

Risk-Adjusted Functional Status Change Residual Scores for the shoulder not measured because the patient did not complete FOTO's Functional Status Survey near discharge, patient Not Appropriate (**G8665**)

**OR**

***Performance Not Met:***

Risk-Adjusted Functional Status Change Residual Scores for the shoulder not measured because the patient did not complete FOTO's Functional Intake on admission and/or follow up Status Survey near discharge, reason not given (**G8666**)

**RATIONALE:**

Functional deficits are common in the general population and are costly to the individual, their family and society. Improved functional status has been associated with greater quality of life, self-efficacy, improved financial well-being

and lower future medical costs. Improving functional status in people seeking rehabilitation has become a goal of the American Physical Therapy Association. Therefore, measuring change in functional status is important for providers treating patients in rehabilitation and can be used to assess the success of treatment and direct modification of treatment.

Change in functional status represents the activity domain of the International Classification of Function. If treatment is designed to improve the functional deficit, it is logical to assess functional status at discharge using a standardized score to determine if treatment improved the functional status of the patient over the treatment episode.

The National Quality Measures Clearinghouse has approved the measurement of change in functional status, using this survey. (NQMC-2633)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The American Physical Therapy Association (APTA), in their Guide to Physical Therapy Practice, described five recommended elements of patient management: examination, evaluation, diagnosis, prognosis and intervention. The elements were intended to direct therapists in their approach to patient treatment for the purpose of optimizing patient outcomes. The APTA clearly identifies functional status data as one of the major forms of data to be collected for patients receiving rehabilitation. The functional status measures should be used to assist in the planning, implementation and modification of treatment interventions and should be used as measures of outcomes. The current functional status scores can be used by therapists to fulfill the recommended methods of the APTA in the management of patients in rehabilitation.

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Link to access all Measures: [Link to All FOTO Measures](#)

Link to specific Measure Short-Form Surveys:

Measure 221: Functional Deficit – Shoulder Impairments

[Link to Measure 221: Functional Deficit - Shoulder Impairments](#)

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# **2017 Registry Individual Measure Flow** **#221 NQF #0426: Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Shoulder Impairments**



\* See the posted Measure Specification for specific coding and instructions to report this measure.

NOTE: Reporting Frequency: Episode

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 The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.  
 v1

**2017 Registry Individual Measure Flow**  
**#221 NQF #0426: Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Shoulder Impairments**

**SAMPLE CALCULATIONS:**

**Data Completeness=**

Performance Met ( $a^1+a^2=3$  episodes) + Denominator Exception (b=2 episodes) + Performance Not Met (c=2 episodes) = 7 episodes = 87.50%  
Eligible Population / Denominator (d=8 episodes) = 8 episodes

**Performance Rate=**

Performance Met ( $a^1+a^2=3$  episodes) = 3 episodes = 60.00%  
Data Completeness Numerator (7 episodes) – Denominator Exception (b=2 episodes) = 5 episodes

\* See the posted Measure Specification for specific coding and instructions to report this measure.  
NOTE: Reporting Frequency: Episode

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**2017 Registry Individual Measure Flow**  
**#221 NQF #0426: Functional Status Change for Patients with Shoulder Impairments**

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

1. Start with Denominator
2. Check Patient Age:
  - a. If the Age is greater than or equal to 14 years of age at Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
  - b. If the Age is greater than or equal to 14 years of age on Date of Service and equals Yes during the measurement period, proceed to check Patient Evaluation Encounter During Performance period (CPT) 97001.
3. Check Patient Physical Therapy (PT) Evaluation Encounter During Performance period:
  - a. If Patient PT Evaluation Encounter During Performance period equals No, proceed to Patient Occupational Therapy (OT) Encounter Evaluation during the Performance period.
  - b. If Patient PT Evaluation Encounter During Performance period equals Yes, proceed to Patient PT Encounter During the Performance period Identifying Discharge.
4. Check Patient PT Encounter During the Performance period Identifying Discharge:
  - a. If Patient PT Encounter During the Performance period Identifying Discharge and as listed in the denominator equals No, proceed to Patient OT Encounter Evaluation during the Performance period.
  - b. If Patient PT Encounter During the Performance period Identifying Discharge and as listed in the denominator equals Yes, proceed to Functional Deficit Affecting the Lumbar Region.
5. Check Patient OT Encounter Evaluation during the Performance period:
  - a. If Patient OT Encounter Evaluation during the Performance period and as listed in the denominator equals No, do not include in Eligible Population. Stop Processing.
  - b. If Patient OT Encounter Evaluation during the Performance period and as listed in the denominator equals Yes, proceed to Patient OT Encounter During Performance period Identifying Discharge.
6. Check Patient OT Encounter During Performance period Identifying Discharge:
  - a. If Patient OT Encounter During Performance period Identifying Discharge as listed in the denominator equals No, do not include in Eligible Population. Stop Processing.
  - b. If Patient OT Encounter During Performance period Identifying Discharge as listed in the denominator equals Yes, proceed to Functional Deficit Affecting the Shoulder.
7. Check Functional Deficit Affecting the Shoulder:
  - a. If Functional Deficit Affecting Shoulder equals No, do not include in Eligible Patient Population. Stop Processing.



- b. If Functional Deficit Affecting the Shoulder equals Yes, proceed to check Denominator Exclusion, Patient Refused to Participate.
- 8. Check Denominator Exclusion, Patient Refused to Participate:
  - a. If Denominator Exclusion, Patient Refused to Participate equals Yes, do not include in Eligible Population. Stop Processing.
  - b. If Denominator Exclusion, Patient Refused to Participate equals No, proceed to next Denominator Exclusion, Patient Unable to Complete the FOTO Shoulder Intake PROM at Admission and Discharge.
- 9. Check Denominator Exclusion, Patient Unable to Complete the FOTO Shoulder Intake PROM at Admission and Discharge:
  - a. If Denominator Exclusion, Patient Unable to Complete the FOTO Shoulder Intake PROM at Admission and Discharge equals Yes, do not include in Eligible Population. Stop Processing.
  - b. If Denominator Exclusion, Patient Unable to Complete the FOTO Shoulder Intake PROM at Admission and Discharge equals No, include in Eligible Population and proceed to Denominator Population.
- 10. Denominator Population:
  - a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 episodes in the sample calculation.
- 11. Start Numerator
- 12. Check Risk-Adjusted Functional Status Change Residual Score for the Shoulder Successfully Calculated and the Score was  $\geq 0$ :
  - a. If Risk-Adjusted Functional Status Change Residual Score for the Shoulder Successfully Calculated and the Score was  $\geq 0$  equals Yes, include in Data Completeness Met and Performance Met.
  - b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a<sup>1</sup> equals 1 episode in Sample Calculation.
  - c. If Risk-Adjusted Functional Status Change Residual Score for the Shoulder Successfully Calculated and the Score was  $\geq 0$  equals No, proceed to Risk-Adjusted Functional Status Change Residual Score for the Shoulder Successfully Calculated and the Score was  $< 0$ .
- 13. Check Risk-Adjusted Functional Status Change Residual Score for the Shoulder Successfully Calculated and the Score was  $< 0$ :
  - a. If Risk-Adjusted Functional Status Change Residual Score for the Shoulder Successfully Calculated and the Score was  $< 0$  equals Yes, include in Data Completeness Met and Performance Met.
  - b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a<sup>2</sup> equals 2 episodes in the Sample Calculation.

- c. If Risk-Adjusted Functional Status Change Residual Score for the Shoulder Successfully Calculated and the Score was < 0 equals No, proceed to Risk-Adjusted Functional Status Change Residual Score for the Shoulder Not Measured, Patient Not Eligible/Not Appropriate.
14. Check to Risk-Adjusted Functional Status Change Residual Score for the Shoulder Not Measured, Patient Not Eligible/Not Appropriate:
  - a. If Risk-Adjusted Functional Status Change Residual Score for the Shoulder Not Measured, Patient Not Eligible/Not Appropriate equals Yes, include in the Data Completeness Met and Denominator Exception.
  - b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b equals 2 episodes in the Sample Calculation.
  - c. If Risk-Adjusted Functional Status Change Residual Score for the Shoulder Not Measured, Patient Not Eligible/Not Appropriate equals No, proceed to Risk-Adjusted Functional Status Change Residual Score for the Shoulder Not Measured, Reason Not Given.
15. Check Risk-Adjusted Functional Status Change Residual Score for the Shoulder Not Measured, Reason Not Given:
  - a. If Risk-Adjusted Functional Status Change Residual Score for the Shoulder Not Measured, Reason Not Given equals Yes, include in Data Completeness Met and Performance Not Met.
  - b. Data Completeness Met and Performance Not met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 2 episodes in the Sample Calculation.
  - c. If Risk-Adjusted Functional Status Change Residual Score for the Shoulder Not Measured, Reason Not Given equals No, proceed to Data Completeness Not Met.
16. Check Data Completeness Not Met:
  - a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not reported. 1 episode has been subtracted from the data completeness numerator in the sample calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a}^1\text{+a}^2\text{=3 episodes) + Denominator Exception (b=2 episodes) + Performance Not Met (c=2 episodes)}}{\text{Eligible Population / Denominator (d=8 episodes)}} = \frac{7 \text{ episodes}}{8 \text{ episodes}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a}^1\text{+a}^2\text{=3 episodes)}}{\text{Data Completeness Numerator (7 episodes) – Denominator Exception (b=2 episodes)}} = \frac{3 \text{ episodes}}{5 \text{ episodes}} = 60.00\%$$