Quality ID #471: Functional Status After Lumbar Discectomy/Laminectomy

- National Quality Strategy Domain: Person and Caregiver-Centered Experience and Outcomes
- Meaningful Measure Area: Functional Outcomes

2020 COLLECTION TYPE:

MIPS CLINICAL QUALITY MEASURES (CQMS)

MEASURE TYPE:

Patient Reported Outcome – High Priority

DESCRIPTION:

For patients age 18 and older who had lumbar discectomy/laminectomy procedure, functional status is rated by the patient as less than or equal to 22 OR a change of 30 points or greater on the Oswestry Disability Index (ODI version 2.1a) * at three months (6 to 20 weeks) postoperatively

* hereafter referred to as ODI

INSTRUCTIONS:

This measure is to be submitted <u>each time</u> a patient undergoes a lumbar discectomy/laminectomy during the denominator identification period. This measure may be submitted by Merit-based Incentive Payment System (MIPS) eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

NOTE: This measure is a target-based measure with two ways to meet the numerator; either a postoperative ODI score that is less than or equal to 22 OR a change of 30 points or greater from the preoperative to postoperative score. It is expressed as a proportion or rate. Patients having received a lumbar discectomy/laminectomy procedure who are <u>not</u> assessed for functional status postoperatively remain in the denominator and are considered as not meeting the target. The measure intent is that MIPS eligible clinicians will submit <u>all</u> denominator eligible procedures to be utilized for performance calculation.

Measure Submission Type:

Measure data may be submitted by individual MIPS eligible clinicians, groups, or third party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality-data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

DENOMINATOR:

Patients 18 years of age or older as of January 1 of the denominator identification period who had a lumbar discectomy/laminectomy procedure performed during the denominator identification period

Definitions:

Denominator Identification Period - The twelve month period in which eligible patients have a procedure. This allows for enough time for a follow-up assessment to occur during the performance period. The denominator identification period includes dates of procedure 1/1/2019 to 12/31/2019.

Denominator Criteria (Eligible Cases):

Patients aged ≥ 18 years by January 1 of the Denominator Identification Period

AND

Patient procedure during the denominator identification period (CPT): 63005, 63012, 63017, 63030, 63042 and 63047

AND NOT

DENOMINATOR EXCLUSIONS:

Patient had any additional spine procedures performed on the same date as the lumbar discectomy/laminectomy: M1071

AND NOT

Patient had cancer, fracture or infection related to the lumbar spine OR patient had idiopathic or congenital scoliosis: G9945

- Patients with a diagnosis of lumbar spine region cancer at the time of the procedure The following codes would be sufficient to define the **Denominator Exclusion (M1051)** of lumbar spine region cancer- C41.2, C41.4, C79.51, C79.52, D16.6, D16.8, D48.0, D49.2
- Patients with a diagnosis of lumbar spine region fracture at the time of the procedure The following codes would be sufficient to define the **Denominator Exclusion (G9945)** of lumbar spine region fracture- M48.44XA, M48.45XA, M48.46XA, M48.47XA, M48.48XA, M48.54XA, M48.55XA, M48.56XA, M48.57XA, M48.58XA, S22.060A, S22.060B, S22.061A, S22.061B, S22.062A, S22.062B, S22.068A, S22.068B, S22.069A, S22.069B, S22.070A, S22.070B, S22.071A, S22.071B, S22.072A, S22.072B, S22.078A, S22.078B, S22.079A, S22.079B, S22.080A, S22.080B, S22.081A, S22.081B, S22.082A, S22.082B, S22.088A, S22.088B, S22.089A, S22.089B, S24.103A, S24.104A, S24.113A, S24.114A, S24.133A, S24.134A, S24.143A, S24.144A, S24.153A, S24.154A, S32.000A, S32.000B, S32.001A, S32.001B, S32.002A, S32.002B, S32.008A, S32.008B, S32.009A, S32.009B, S32.010A, S32.010B, S32.011A, S32.011B, S32.012A, S32.012B, S32.018A, S32.018B, S32.019A, S32.019B, S32.020A, S32.020B, S32.021A, S32.021B, S32.022A, S32.022B, S32.028A, S32.028B, S32.029A, S32.029B, S32.030A, S32.030B, S32.031A, S32.031B, S32.032A, S32.032B, S32.038A, S32.038B, S32.039A, S32.039B, S32.040A, S32.040B, S32.041A, S32.041B, S32.042A, S32.042B, S32.048A, S32.048B, S32.049A, S32.049B, S32.050A, S32.050B, S32.051A, S32.051B, S32.052A, S32.052B, S32.058A, S32.058B, S32.059A, S32.059B, S32.10XA, S32.10XB, S32.110A, S32.110B, S32.111A, S32.111B, S32.112A, S32.112B, S32.119A, S32.119B, S32.120A, S32.120B, S32.121A, S32.121B, S32.122A, S32.122B, S32.129A, S32.129B, S32.130A, S32.130B, S32.131A, S32.131B, S32.132A, S32.132B, S32.139A, S32.139B, S32.14XA, S32.14XB, S32.15XA, S32.15XB, S32.16XA, S32.16XB, S32.17XA, S32.17XB, S32.19XA, S32.19XB, S32.2XXA, S32.2XXB, S32.9XXA. S32.9XXB, S34.101A, S34.102A, S34.103A, S34.104A, S34.105A, S34.109A, S34.111A, S34.112A, S34.113A, S34.114A, S34.115A, S34.119A, S34.121A, S34.122A, S34.123A, S34.124A, S34.125A, S34.129A, S34.131A, S34.132A, S34.139A, S34.3XXA
- Patients with a diagnosis of lumbar spine region infection at the time of the procedure The following codes would be sufficient to define the **Denominator Exclusion (G9945)** of lumbar spine region infection- M46.25, M46.26, M46.27, M46.28, M46.35, M46.36, M46.37, M46.38, M46.45, M46.46, M46.47, M46.48, M46.55, M46.56, M46.57, M46.58
- Patients with a diagnosis of lumbar idiopathic or congenital scoliosis The following codes would be sufficient to define the **Denominator Exclusion (G9945)** of idiopathic or congenital scoliosis-M41.05, M41.06, M41.07, M41.08, M41.115, M41.116, M41.117, M41.125, M41.126, M41.127, M41.25, M41.26, M41.27, Q67.5, Q76.3

NUMERATOR:

All eligible patients whose functional status is less than or equal to 22 OR a change of 30 points or greater on the Oswestry Disability Index (ODI version 2.1a) at three months (6 to 20 weeks) postoperatively

Definitions:

Measure Assessment Period (Performance Period) - The period of time following the procedure date that is in which a postoperative ODI functional status score can be obtained.

Preoperative Assessment Oswestry Disability Index (ODI version 2.1a) - A preoperative ODI functional assessment score can be obtained from the patient any time up to three months preoperatively, inclusive of the date of the procedure. Assessment scores obtained more than three months before the procedure will not be used for measure calculation.

Postoperative Assessment Oswestry Disability Index (ODI version 2.1a) - A postoperative ODI functional assessment score can be obtained from the patient three months (6 to 20 weeks) after the date of procedure. Assessment scores obtained prior to six weeks and after twenty weeks postoperatively will not be used for measure calculation. ODI can be obtained below or at the following link https://eprovide.mapitrust.org/instruments/oswestry-disability-index.

Functional Status Target #1 - A patient who is assessed postoperatively at three months (6 to 20 weeks) after the procedure rates their functional status as less than or equal to 22. Functional Status Target #2 - A patient who does not meet Functional Status Target #1 or =is assessed both preoperatively within 3 months prior to the procedure AND postoperatively at three months (6 to 20 weeks) after the procedure AND the change is greater than or equal to 30 points.

NUMERATOR NOTE: It is recommended that both a preoperative and postoperative be administered to the patient increasing chances that one of the numerator targets will be met. The following situations are those in which the numerator target cannot be reached and Performance Not Met M1049 is submitted.

- ODI is not administered postoperatively at three months (6 to 20 weeks)
- Functional status is measured using a different patient reported functional status tool or ODI version
- Postoperative ODI is administered less than 6 weeks or greater than 20 weeks (3 month window)
- Postoperative ODI is greater than 22 and no valid preoperative ODI to measure change
- Preoperative ODI (to measure change) is administered beyond the three month timeframe prior to and including the date of procedure (e.g. 6 months before procedure)

Numerator Options:

Performance Met:

Functional status measured by the Oswestry Disability Index (ODI version 2.1a) at three months (6 - 20)weeks) postoperatively was less than or equal to 22 OR Functional status measured by the ODI version 2.1a within three months preoperatively AND at three months (6 - 20 weeks) postoperatively demonstrated a change of 30 points or greater (G2144)

OR

Performance Not Met:

Functional status was not measured by the Oswestry Disability Index (ODI version 2.1a) at three months (6 -20 weeks) postoperatively (M1049)

OR

Performance Not Met:

Functional status measured by the Oswestry Disability Index (ODI version 2.1a) at three months (6 – 20 weeks) postoperatively was greater than 22 AND Functional status measured by the ODI version 2.1a within three months preoperatively AND at three months (6 - 20 weeks) postoperatively demonstrated a change of less than 30 points (G2145)

RATIONALE

Mechanical low back functional status (LBP) remains the second most common symptom-related reason for seeing a physician in the United States. Of the US population, 85% will experience an episode of mechanical LBP at some point in their lifetime. For individuals younger than 45 years, LBP represents the most common cause of disability and is generally associated with a work-related injury. It is the third most common reason for disability for individuals older than 45 years. The prevalence of serious mechanical LBP (persisting > 2 wk) is 14%, while the prevalence of true sciatica is approximately 2%.

Overall, spine surgery rates have declined slightly from 2002-2007, but the rate of complex fusion procedures increased 15-fold, from 1.3 to 19.9 per 100,000 Medicare beneficiaries. Complications increased with increasing surgical invasiveness, from 2.3% among patients having decompression alone to 5.6% among those having complex fusions. After adjustment for age, comorbidity, previous spine surgery, and other features, the odds ratio (OR) of life-threatening complications for complex fusion compared with decompression alone was 2.95 (95% confidence interval [CI], 2.50-3.49). A similar pattern was observed for rehospitalization within 30 days, which occurred for 7.8% of patients undergoing decompression and 13.0% having a complex fusion (adjusted OR, 1.94; 95% CI, 1.74-2.17). Adjusted mean hospital charges for complex fusion procedures were US \$80,888 compared with US \$23,724 for decompression alone (Deyo, R. JAMA 2010). The MNCM Spine Surgery Measure development workgroup developed patient reported outcome measures for two populations of patients undergoing different lumbar spine procedures, a more complex procedure (lumbar fusion) and a second procedure that represented the most common procedure CPT code 63030 for the most common diagnosis of disc herniation. In 2018, the development workgroup reconvened and redesigned the measure construct to a target-based measure and additionally expanded the denominator for this measure to include all lumbar discectomy laminectomy procedures

Rationale for measure construct and calculation change:

The target was derived from a study "Determination of the Oswestry Disability Index score equivalent to a "satisfactory symptom state" in patients undergoing surgery for degenerative disorders of the lumbar spine-a Spine Tango registry-based study". vanHooff, ML et al Spine J. 2016 Oct;16(10):1221-1230. Patient Acceptable Symptom State (PASS), the highest level of symptom beyond which patients consider themselves well. PASS was compared to post-op ODI to determine an equivalent ODI threshold. ODI score less than or equal to 22 indicates the achievement of an acceptable symptom state and can be used as a criterion for treatment success. [AUC]: 0.89 [sensitivity: 78.3%, specificity: 82.1%] for 1 year follow-up]. The OR benchmark of change (30) derived from MNCM data (3 years); the average change in points of patients that did achieve the target of less than or equal to 22.

Rationale for the expansion of the denominator and addition of exclusions:

During the original development of this measure, the intent was to have a homogeneous population procedure that represented the most common procedure CPT code 63030 for the most common diagnosis of disc herniation. This strategy did not translate well from ICD-9 to ICD-10 diagnosis codes and the volume of eligible denominator patients dropped significantly. In 2018, the MNCM development workgroup reconvened for measure construct redesign and adopted a broader denominator population; all applicable discectomy laminectomy procedure codes and not limited by a type of diagnosis (includes all). With this decision, the workgroup decided to adopt the same exclusions for the spine fusion population and added exclusions for spine related cancer, acute fracture or infection, idiopathic or congenital scoliosis.

CLINICAL RECOMMENDATION STATEMENTS:

Journal of Neurosurgery guidelines indicate that there is no evidence that conflicts with the previous recommendations published in the original version of the guideline. This recommendation is for the use of a reliable, valid and responsive outcomes instrument to assess functional outcome in lumbar spinal fusion patients. It is recommended that when assessing functional outcome in patients treated for low-back pain due to degenerative disease, a reliable, valid, and responsive outcomes instrument, such as the disease-specific Oswestry Disability Index (ODI), be used (Level II evidence).

MEASURE CALCULATION EXAMPLE:

Patient	Pre-op ODI	Post-op ODI	Post-op < 22?	If No, (Pre-op minus Post-op)	If No, Met Change Target of ≥ 30?	Met Numerator Target?
Patient A	47	18	Yes	na	na	Yes
Patient B	45	52	No	-7	No	No
Patient C	56	12	Yes	na	na	Yes
Patient D	62	25	No	37	Yes	Yes
Patient E	42	57	No	-15	No	No
Patient F	51	10	Yes	na	na	Yes
Patient G	62	25	No	37	Yes	Yes
Patient H	43	20	Yes	na	na	Yes
Patient I	74	35	No	39	Yes	Yes
Patient J	59	23	No	36	Yes	Yes
Rate						80%

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MEASURE TOOL:

ODI version 2.1a

This questionnaire is designed to give us information as to how your back (or leg) trouble affects your ability to manage in everyday life. Please answer every section. Mark one box only in each section that most closely describes you today.

Section 1 - Pain intensity

- I have no pain at the moment.
- The pain is very mild at the moment.
- The pain is moderate at the moment.
- The pain is fairly severe at the moment.
- The pain is very severe at the moment.
- The pain is the worst imaginable at the moment.

Section 2 - Personal care (washing, dressing, etc.)

- I can look after myself normally without causing additional pain.
- I can look after myself normally but it is very painful.
- It is painful to look after myself and I am slow and careful.
- I need some help but manage most of my personal care.
- I need help every day in most aspects of my personal care.
- I do not get dressed, I wash with difficulty and stay in bed.

Section 3 - Lifting

- I can lift heavy weights without additional pain.
- I can lift heavy weights but it gives me additional pain.
- Pain prevents me from lifting heavy weights off the floor but I can manage if they are conveniently positioned, e.g. on a table.

- Pain prevents me from lifting heavy weights but I can manage light to medium weights if they
 are conveniently positioned.
- I can only lift very light weights.
- I cannot lift or carry anything at all.

Section 4 - Walking

- Pain does not prevent me from walking any distance.
- Pain prevents me from walking more than one mile.
- Pain prevents me from walking more than a guarter of a mile.
- Pain prevents me from walking more than 100 yards.
- I can only walk using a cane or crutches.
- I am in bed most of the time and have to crawl to the toilet.

Section 5 - Sitting

- I can sit in any chair as long as I like.
- I can sit in my favorite chair as long as I like
- Pain prevents me from sitting for more than 1 hour.
- Pain prevents me from sitting for more than half an hour.
- Pain prevents me from sitting for more than 10 minutes.
- Pain prevents me from sitting at all.

Section 6 - Standing

- I can stand as long as I want without additional pain.
- I can stand as long as I want but it gives me additional pain.
- Pain prevents me from standing for more than 1 hour.
- Pain prevents me from standing for more than half an hour.
- Pain prevents me from standing for more than 10 minutes.
- Pain prevents me from standing at all.

Section 7 - Sleeping

- My sleep is never interrupted by pain.
- My sleep is occasionally interrupted by pain.
- Because of pain I have less than 6 hours sleep.
- Because of pain I have less than 4 hours sleep.
- Because of pain I have less than 2 hours sleep.
- Pain prevents me from sleeping at all.

Section 8 - Sex life (if applicable)

- My sex life is normal and causes no additional pain.
- My sex life is normal but causes some additional pain.
- My sex life is nearly normal but is very painful.
- My sex life is severely restricted by pain.
- My sex life is nearly non existent because of pain.
- Pain prevents me from having any sex life at all.

Section 9 - Social life

- My social life is normal and causes me no additional pain.
- My social life is normal but increases the degree of pain.
- Pain has no significant effect on my social life apart from limiting my more energeticinterests,
 e.g. sport, etc.
- Pain has restricted my social life and I do not go out as often.
- Pain has restricted my social life to home.
- I have no social life because of pain.

Section 10 - Traveling

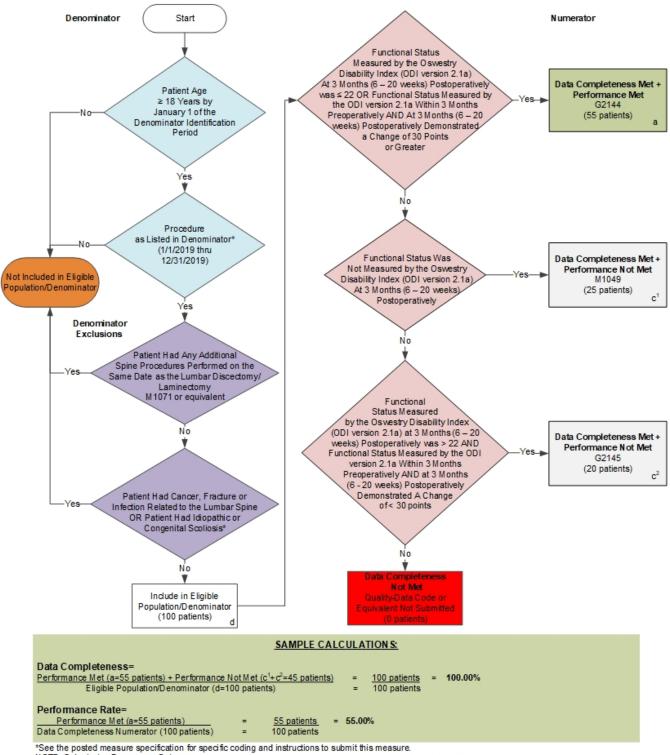
- I can travel anywhere without pain.
- I can travel anywhere but it gives me additional pain.
- Pain is bad but I am able to manage trips over two hours.
- Pain restricts me to trips of less than one hour.
- Pain restricts me to short necessary trips of under 30 minutes.
- Pain prevents me from traveling except to receive treatment.

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2020 Clinical Quality Measure Flow for Quality ID #471: Functional Status After Lumbar Discectomy/Laminectomy

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.



NOTE: Submission Frequency: Outcome

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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.

V4

2020 Clinical Quality Measure Flow Narrative for Quality ID #471: Functional Status After Lumbar Discectomy/ Laminectomy

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.

- 1. Start with Denominator
- 2. Check Patient Age:
 - a. If Patient Age is greater than or equal to 18 Years by January 1 of the Denominator Identification Period equals No, do not include in Eligible Population. Stop Processing.
 - b. If Patient Age is greater than or equal to 18 Years by January 1 of the Denominator Identification Period equals Yes, proceed to check Procedure Performed.
- 3. Check Procedure Performed:
 - a. If Procedure as Listed in Denominator equals No, do not include in Eligible Population. Stop Processing.
 - b. If Procedure as Listed in Denominator equals Yes, proceed to check Patient Had Any Additional Spine Procedures Performed on the Same Date as the Lumbar Discectomy/Laminectomy.
- 4. Check Patient Had Any Additional Spine Procedures Performed on the Same Date as the Lumbar Discectomy/Laminectomy:
 - a. If Patient Had Any Additional Spine Procedures Performed on the Same Date as the Lumbar Discectomy/Laminectomy equals Yes, do not include in Eligible Population. Stop Processing.
 - b. If Patient Had Any Additional Spine Procedures Performed on the Same Date as the Lumbar Discectomy/Laminectomy equals No, proceed to check Patient Had Cancer, Fracture or Infection Related to the Lumbar Spine OR Patient Had Idiopathic or Congenital Scoliosis.
- 5. Check Patient Had Cancer, Fracture or Infection Related to the Lumbar Spine OR Patient Had Idiopathic or Congenital Scoliosis:
 - a. If Patient Had Cancer, Fracture or Infection Related to the Lumbar Spine OR Patient Had Idiopathic or Congenital Scoliosis equals Yes, do not include in Eligible Population. Stop Processing.
 - b. If Patient Had Cancer, Fracture or Infection Related to the Lumbar Spine OR Patient Had Idiopathic or Congenital Scoliosis equals No, include in Eligible Population.
- 6. Denominator Population:
 - 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 100 patients in
 the Sample Calculation.
- 7. Start Numerator
- 8. Check Functional Status Measured by the Oswestry Disability Index (ODI version 2.1a) At 3 Months (6 20 weeks) Postoperatively was less than or equal to 22 OR Functional Status Measured by the ODI version 2.1a Within 3 Months Preoperatively AND At 3 Months (6 20 weeks) Postoperatively Demonstrated a Change of 30 Points or Greater:

- a. If Functional Status Measured by the Oswestry Disability Index (ODI version 2.1a) At 3 Months (6 20 weeks) Postoperatively was less than or equal to 22 OR Functional Status Measured by the ODI version 2.1a Within 3 Months Preoperatively AND At 3 Months (6 20 weeks) Postoperatively Demonstrated a Change of 30 Points or Greater 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 equals 55 patients in the Sample Calculation.
- c. If Functional Status Measured by the Oswestry Disability Index (ODI version 2.1a) At 3 Months (6 20 weeks) Postoperatively was less than or equal to 22 OR Functional Status Measured by the ODI version 2.1a Within 3 Months Preoperatively AND At 3 Months (6 20 weeks) Postoperatively Demonstrated a Change of 30 Points or Greater equals No, check Functional Status Was Not Measured by the Oswestry Disability Index (ODI version 2.1a) At 3 Months (6 20 weeks) Postoperatively.
- 9. Check Functional Status Was Not Measured by the Oswestry Disability Index (ODI version 2.1a) At 3 Months (6 20 weeks) Postoperatively:
 - a. If Functional Status Was Not Measured by the Oswestry Disability Index (ODI version 2.1a) At 3 Months (6 20 weeks) Postoperatively 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 c¹ equals 25 patients in the Sample Calculation.
 - c. If Functional Status Was Not Measured by the Oswestry Disability Index (ODI version 2.1a) At 3 Months (6 20 weeks) Postoperatively equals No, proceed to check Functional Status Measured by the Oswestry Disability Index (ODI version 2.1a) At 3 Months (6 20 weeks) Postoperatively was greater than 22 AND Functional Status Measured by the ODI version 2.1a Within 3 Months Preoperatively AND At 3 Months Postoperatively Demonstrated a Change of less than 30 Points.
- 10. Check Functional Status Measured by the Oswestry Disability Index (ODI version 2.1a) At 3 Months (6 20 weeks) Postoperatively was greater than 22 AND Functional Status Measured by the ODI version 2.1a Within 3 Months Preoperatively AND At 3 Months Postoperatively Demonstrated a Change of less than 30 Points:
 - a. If Functional Status Measured by the Oswestry Disability Index (ODI version 2.1a) At 3 Months (6 20 weeks) Postoperatively was greater than 22 AND Functional Status Measured by the ODI version 2.1a Within 3 Months Preoperatively AND At 3 Months Postoperatively Demonstrated a Change of less than 30 Points 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 c² equals 20 patients in the Sample Calculation.
 - c. If Functional Status Measured by the Oswestry Disability Index (ODI version 2.1a) At 3 Months (6 20 weeks) Postoperatively was greater than 22 AND Functional Status Measured by the ODI version 2.1a Within 3 Months Preoperatively AND At 3 Months Postoperatively Demonstrated a Change of less than 30 Points equals No, proceed to check Data Completeness Not Met.
- 11. Check Data Completeness Not Met:
 - a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted.

SAMPLE CALCULATIONS:

Data Completeness=

Performance Met (a=55 patients) + Performance Not Met (c¹+c²=45 patients)

Eligible Population/Denominator (d=100 patients) 100 patients = 100.00% 100 patients

Performance Rate=

Performance Met (a=55 patients) =
Data Completeness Numerator (100 patients) = <u>55 patients</u> = 55.00% 100 patients