

**Measure #283: Dementia: Neuropsychiatric Symptom Assessment – National Quality Strategy**  
**Domain: Effective Clinical Care**

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

**MEASURE TYPE:**

Process

**DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of dementia and for whom an assessment of neuropsychiatric symptoms is performed and results reviewed at least once in a 12 month period

**INSTRUCTIONS:**

This measure is to be reported a minimum of **once per performance period** for patients with a diagnosis of dementia seen during the performance period. The most recent quality-data code submitted will be used for performance calculation. This measure may be reported by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

**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 with a diagnosis of dementia

**Denominator Criteria (Eligible Cases):**

All patients regardless of age

**AND**

**Diagnosis for dementia (ICD-10-CM):** A52.17, F01.50, F01.51, F02.80, F02.81, F03.90, F03.91, F05, F06.8, G30.0, G30.1, G30.8, G30.9, G31.01, G31.09, G31.83

**AND**

**Patient encounter during the performance period (CPT):** 90791, 90792, 90832, 90834, 90837, 96116, 96118, 96119, 96120, 96150, 96151, 96152, 96154, 97165, 97166, 97167, 97168, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

**WITHOUT**

**Telehealth Modifier:** GQ, GT

**NUMERATOR:**

Patients for whom an assessment of neuropsychiatric symptoms is performed and results reviewed at least once in a 12 month period

**Numerator Instructions:** Neuropsychiatric symptoms can be assessed by direct examination of the patient or knowledgeable informant.

Examples of reliable and valid instruments that are commonly used in research settings and that can be used to assess behavior include, but are not limited to:

- Dementia Signs and Symptoms (DSS) Scale

- Neuropsychiatric Inventory (NPI)

The assessment of behavioral status may include the assessment of Behavioral and Psychological Symptoms of Dementia (BPSD). For patients residing in nursing homes, it may include an assessment of the behavioral symptom items from the Minimum Data Set (MDS).

The following is a non-exhaustive list of dimensions (based on items included in available validated instruments) that may be evaluated during an assessment of neuropsychiatric symptoms:

*Activity disturbances:*

- agitation
- wandering
- purposeless hyperactivity
- verbal or physical aggressiveness
- resistiveness with care
- apathy
- impulsiveness
- socially inappropriate behaviors
- appetite
- eating disturbances
- sleep problems
- diurnal/sleep-wake cycle disturbances
- repetitive behavior

*Mood disturbances:*

- anxiety
- dysphoria
- euphoria
- irritability
- mood lability/fluctuations

*Thought and perceptual disturbances:*

- having fixed false beliefs (delusions)
- hearing or seeing non-present entities (hallucinations)
- paranoia

**Numerator Options:**

***Performance Met:***

Neuropsychiatric symptoms assessed and results reviewed **(1181F)**

**OR**

***Performance Not Met:***

Neuropsychiatric symptoms not assessed and results not reviewed, reason not otherwise specified **(1181F with 8P)**

**RATIONALE:**

Neuropsychiatric symptoms appear to be common for patients with dementia. In community samples of dementia patients, the prevalence of neuropsychiatric symptoms range from 40-88%. (Lyketsos CG et al. *JAMA*. 2002; 288:1475-1483., Ikeda M et al. *J Neural Neurosurg Psychiatry*. 2004; 75:146-148., Liu CY et al. *Int Psychogeriatr*. 2007; 19:605-613.) Neuropsychiatric symptoms are also common in long-term care facilities, with prevalence ranges from 80-85%. (Zuidema SU et al. *Int J Geriatr Psychiatry*. 2007; 22:632-638., Kverno KS et al. *J Am Med Dir Assoc*. 2008; 7:509-15.) Neuropsychiatric symptoms of dementia have been associated with accelerated cognitive decline; increased functional impairment; decreased mean survival time; increased co-morbid conditions; increased danger to self; increased danger to others; increased health care service utilization; higher risk for institutionalization; and

greater caregiver stress and burden. (Chui HC et al. *Arch Neurol*. 1994; 51:676–681., Weiner MF et al. *Acta Psychiatr Scand*. 2005; 111:367-371., Cummings JL et al. *Neurology*. 1994, 44(12):2308-14. Leger JM et al. *Int Psychogeriatr*. 2002; 14:405-416., Malone ML et al. *J Am Geriatr Soc*. 1993; 41:853-856.,Kunik ME et al. *Gerontologist*. 2003; 43:86-91., Kunik ME et al. *Psychiatr Serv*. 2005; 56:70-75., Steele C et al. *Am J Psychiatry*. 1990; 147:1049-1051., Knopman DS et al. *Neurology*. 1999; 52:718-718., Donaldson C et al. *Int J Geriatr Psychiatry*. 1998; 13:248-256., Miyamoto Y et al. *Int J Geriatr Psychiatry*. 2002; 17:765-773., Snyder L et al. *Am J Alzheimers Dis Other Demen*. 2007; 22:14-19.) An assessment of neuropsychiatric symptoms, therefore, is an important step in the development of a management plan for those with dementia.

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

It is important for the [clinician] treating a patient with dementia to regularly assess cognitive deficits or behavioral difficulties that potentially pose a danger to the patient or others. (APA, 2007)

Conduct and document an assessment and monitor changes in behavioral symptoms, psychotic symptoms, or depression. (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

#### **For mild to moderate Alzheimer's disease**

Assessment of patients with mild to moderate AD [Alzheimer's Disease] should include measures of behavior and other neuropsychiatric symptoms. (Grade B, Level 3) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

#### **For severe Alzheimer's disease**

Assessment should include cognition (eg, MMSE), function, behaviour, medical status, nutrition, safety and caregiver health. (Grade B, Level 3) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

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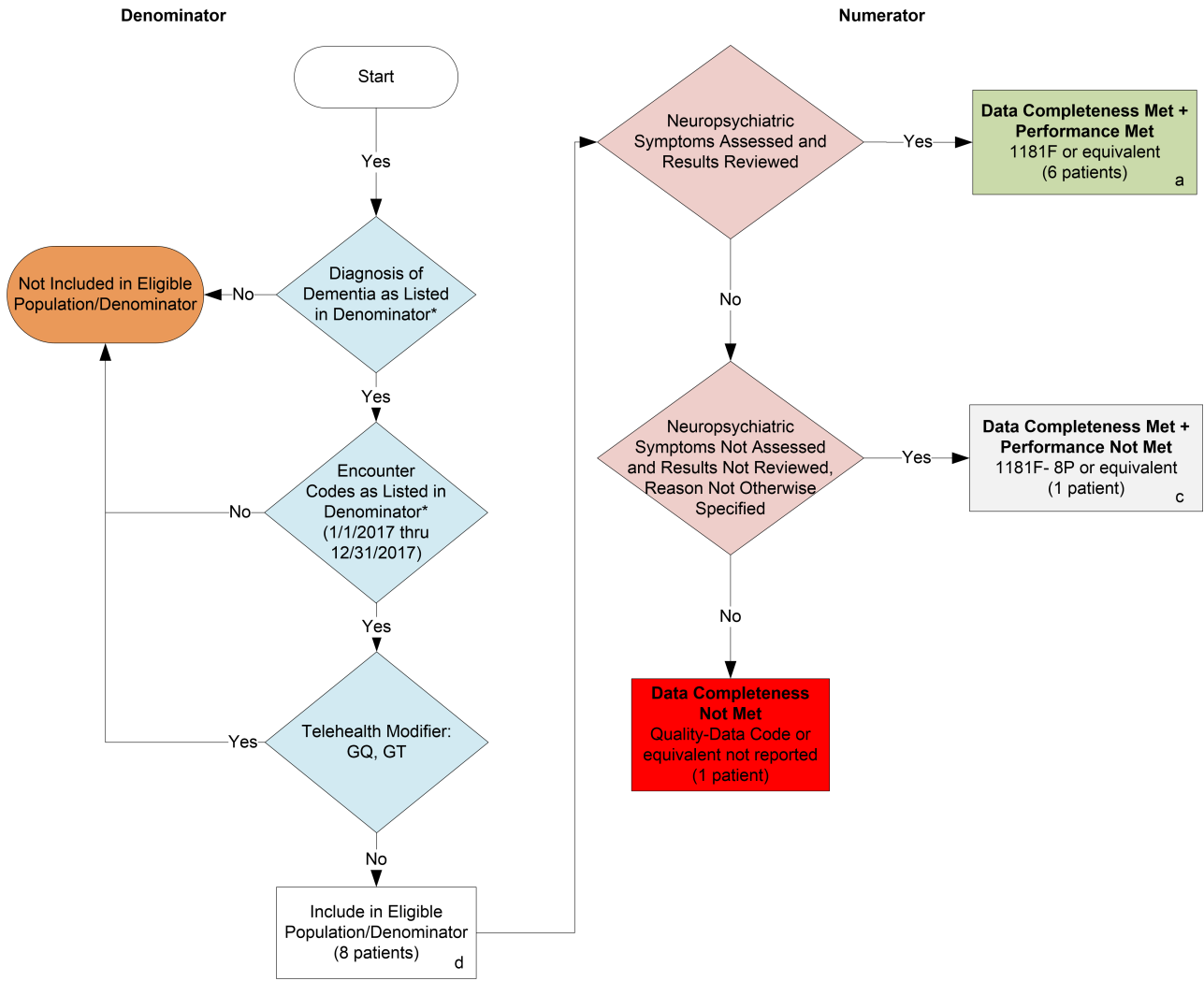
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## 2017 Registry Individual Measure Flow #283: Dementia: Neuropsychiatric Symptom Assessment



### SAMPLE CALCULATIONS:

**Data Completeness=**

Performance Met (a=6 patients) + Performance Not Met (c=1 patient) = 7 patients = 87.50%  
 Eligible Population / Denominator (d=8 patients) = 8 patients

**Performance Rate=**

Performance Met (a=6 patients) = 6 patients = 85.71%  
 Data Completeness Numerator (7 patients) = 7 patients

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

NOTE: Reporting Frequency: Patient-process

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**2017 Registry Individual Measure Flow**  
**#283: Dementia: Neuropsychiatric Symptom Assessment**

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 Diagnosis:
  - a. If Diagnosis of Dementia as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Diagnosis of Dementia as Listed in the Denominator equals Yes, proceed to check Current Encounter Performed.
3. Check Encounter Performed:
  - a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Encounter as Listed in the Denominator equals Yes, proceed to check Telehealth Modifier.
4. Check Telehealth Modifier:
  - a. If Telehealth Modifier equals Yes, do not include in Eligible Patient Population. Stop Processing.
  - b. If Telehealth Modifier equals No, include in Eligible Population.
5. 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 patients in the sample calculation.
6. Start Numerator
7. Check Neuropsychiatric Symptoms Assessed and Results Reviewed:
  - a. If Neuropsychiatric Symptoms Assessed and Results Reviewed equals Yes, include in Data Completeness Met and Performance Met.
  - b. Data Completeness Met and Performance Met is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 6 patients in Sample Calculation.
  - c. If Neuropsychiatric Symptoms Assessed and Results Reviewed equals No, proceed to Neuropsychiatric Symptoms Not Assessed and Results Not Reviewed, Reason Not Otherwise Specified.
8. Check Neuropsychiatric Symptoms Not Assessed and Results Not Reviewed, Reason Not Otherwise Specified:
  - a. If Neuropsychiatric Symptoms Not Assessed and Results Not Reviewed, Reason Not Otherwise Specified equals Yes, include in Data Completeness Met and Performance Not Met.

- b. Data Completeness Met and Performance Not Met is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 1 patient in the Sample Calculation.
  - c. If Neuropsychiatric Symptoms Not Assessed and Results Not Reviewed, Reason Not Otherwise Specified equals No, proceed to Data Completeness Not Met.
9. Check Data Completeness Not Met:
- a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not reported. 1 patient has been subtracted from the data completeness numerator in the sample calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a=6 patients) + Performance Not Met (c=1 patient)}}{\text{Eligible Population / Denominator (d=8 patients)}} = \frac{7 \text{ patients}}{8 \text{ patients}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a=6 patients)}}{\text{Data Completeness Numerator (7 patients)}} = \frac{6 \text{ patients}}{7 \text{ patients}} = 85.71\%$$