

**Measure #284: Dementia: Management of Neuropsychiatric Symptoms – 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 who have one or more neuropsychiatric symptoms who received or were recommended to receive an intervention for neuropsychiatric symptoms within 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**. 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, regardless of age, with a diagnosis of dementia who have one or more neuropsychiatric symptoms

**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

**AND**

One or more neuropsychiatric symptoms: G8947

**NUMERATOR:**  
Patients who received or were recommended to receive an intervention for neuropsychiatric symptoms within a 12 month period

**Numerator Options:**  
***Performance Met:***

Neuropsychiatric intervention ordered (4525F)

<u>OR</u>	<u>Performance Met:</u>	Neuropsychiatric intervention received (4526F)
<u>OR</u>	<u>Performance Not Met:</u>	Neuropsychiatric intervention not ordered, reason not otherwise specified (4525F <b>with</b> 8P)
<u>OR</u>	<u>Performance Not Met:</u>	Neuropsychiatric intervention not received, reason not otherwise specified (4526F <b>with</b> 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 Neurol 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.) Nonpharmacologic interventions should be considered in all cases and in some will be the mainstay of management. Examples of approaches that may be useful include behavioural management for depression, education programs for caregivers and staff to teach them how to recognize, manage, and sometimes prevent behavioral problems, stress reduction for caregivers, and, for patients living at home, enrollment in adult day programs offering structured activities and social stimulation. The evidence evaluating non-pharmacological interventions varies considerably in quality and amount, but broadly supports an individualized approach that includes one or more such interventions. A management plan that assesses the severity and intrusiveness of problematic behaviors can assist clinicians in determining what pharmacologic or non-pharmacologic interventions might be appropriate. (Lawlor B. *J Clin Psychiatry*. 2004;65(Suppl 11):5-10.) Mild forms of neuropsychiatric symptoms may be alleviated with psychosocial or environmental interventions. For aggressiveness, presentations of psychosis, or agitation, pharmacologic approaches may be more appropriate. (Sink K et al. *JAMA*. 2005;293:596- 608.) If pharmacologic approaches are necessary, they should be administered at the lowest effective dose and their use should be reevaluated and their benefit documented on an ongoing basis.

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

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

The management of BPSD [Behavioral and Psychological Symptoms of Dementia] should include a careful documentation of behaviours and identification of target symptoms, a search for potential triggers or precipitants, recording of the consequences of the behaviour, an evaluation to rule out treatable or contributory causes, and consideration of the safety of the patient, their caregiver, and others in their environment. (Grade B, Level 3) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

**For severe Alzheimer's disease**

The management of BPSD should begin with appropriate assessments, diagnosis, and identification of target symptoms and consideration of safety of the patient, their caregiver and others in their environment. (Grade B, Level 3) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

There are no fully comprehensive consensus guidelines for use of specific non-pharmacological approaches to neuropsychiatric symptoms. Patient heterogeneity, variations in care settings, and the broad range of non-pharmacological interventions having some empirical support impede uniform generalization. However, the following evidence statements serve as the evidence to support the measure and are quoted verbatim from the referenced clinical guidelines.

Nonpharmacologic interventions should be initiated first. Approaches that may be useful for severe Alzheimer disease include behavioural management for depression, and education programs for caregivers and staff to teach them how to recognize behavioural problems and to teach them behaviour-modification techniques. Music therapy and controlled multisensory stimulation (Snoezelen) are useful during treatment sessions, but longer-term benefits have not been demonstrated. (Grade B, Level 1) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

Except for emergency situations, non-pharmacological strategies are the preferred first-line treatment approach for behavioral problems. Medications should be used only as a last resort, if non-pharmacological approaches prove unsuccessful and they are clinically indicated. (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

Pharmacologic therapies should be initiated concurrently with nonpharmacologic interventions in the presence of severe depression, psychosis or aggression that puts the patient or others at risk of harm. (Grade B, Level 3) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

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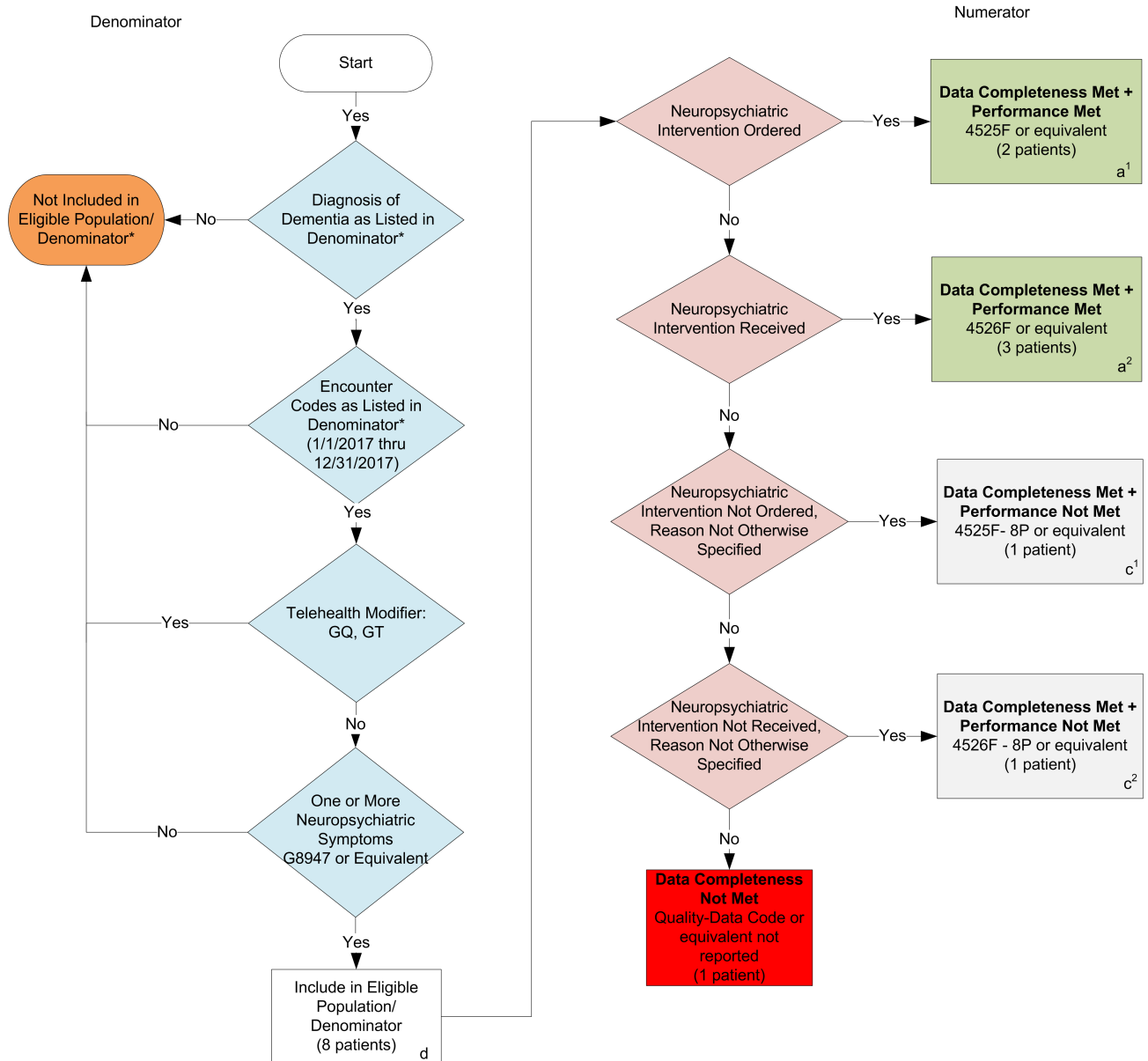
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**2017 Registry Individual Measure Flow**  
**#284: Dementia: Management of Neuropsychiatric Symptoms**



**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a}^1+\text{a}^2=5 \text{ patients)} + \text{Performance Not Met (c}^1+\text{c}^2=2 \text{ patients)}}{\text{Eligible Population / Denominator (d=8 patients)}} = \frac{7 \text{ patients}}{8 \text{ patients}} = 87.50\%$$

**Performance Rate=**

Performance Met ( $a^1 + a^2 = 5$  patients) =  $\frac{5 \text{ patients}}{7 \text{ patients}} = 71.42\%$

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

NOTE: Report Frequency – Patient-Process

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v1

**2017 Registry Individual Measure Flow**  
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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, proceed to check One or More Neuropsychiatric Symptoms.
5. Check One or More Neuropsychiatric Symptoms:
  - a. If One or More Neuropsychiatric Symptoms equals Yes, do not include in Eligible Patient Population. Stop Processing.
  - b. If One or More Neuropsychiatric Symptoms equals No, include in Eligible Population.
6. 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.
7. Start Numerator
8. Check Neuropsychiatric Intervention Ordered:
  - a. If Neuropsychiatric Intervention Ordered 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 a1 equals 2 patients in Sample Calculation.
  - c. If Neuropsychiatric Intervention Ordered equals No, proceed to Neuropsychiatric Intervention Received.

9. Check Neuropsychiatric Intervention Received:
  - a. If Neuropsychiatric Intervention Received 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 a2 equals 3 patients in Sample Calculation.
  - c. If Neuropsychiatric Intervention Received equals No, proceed to Neuropsychiatric Intervention Not Ordered, Reason Not Otherwise Specified.
11. Check Neuropsychiatric Intervention Not Ordered, Reason Not Otherwise Specified:
  - d. If Neuropsychiatric Intervention Not Ordered, Reason Not Otherwise Specified equals Yes, include in Data Completeness Met and Performance Not Met.
  - e. 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 c1 equals 1 patient in the Sample Calculation.
  - f. If Neuropsychiatric Intervention Not Ordered, Reason Not Otherwise Specified equals No, proceed to Neuropsychiatric Intervention Not Received, Reason Not Otherwise Specified.
12. Check Neuropsychiatric Intervention Not Received, Reason Not Otherwise Specified:
  - a. If Neuropsychiatric Intervention Not Received, 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 c2 equals 1 patient in the Sample Calculation.
  - c. If Neuropsychiatric Intervention Not Received, Reason Not Otherwise Specified equals No, proceed to Data Completeness Not Met
13. 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=**

Performance Met ( $a^1+a^2=5$  patients) + Performance Not Met ( $c^1+c^2=2$  patients) = 7 patients = 87.50%  
 Eligible Population / Denominator (d=8 patients) = 8 patients

##### **Performance Rate=**

Performance Met ( $a^1+a^2=5$  patients) = 5 patients = 71.42%  
 Data Completeness Numerator (7 patients) = 7 patients