QUALITY STANDARDS

Behavioural Symptoms of Dementia

Technical Specifications

2024 UPDATE

Ontario Health

Table of Contents

How to Use the Technical Specifications

This document provides technical specifications to support the implementation of the *Behavioural Symptoms of Dementia* quality standard. Care for people with behavioural symptoms of dementia is a critical issue, and there are significant gaps and variations in the quality of care that people with behavioural symptoms of dementia receive in hospitals and long-term care homes in Ontario. Recognizing this, Ontario Health released the quality standard to identify opportunities that have a high potential for quality improvement.

This document is intended for use by those looking to implement the *Behavioural Symptoms of Dementia* quality standard, including clinicians working in regional or local roles.

This document has dedicated sections to describe the following:

- Indicators that can be used to measure progress toward the overarching goals of the quality standard as a whole
- Statement-specific indicators that can be used to measure improvement for each quality statement within the quality standard

Indicators may be provincially or locally measurable:

- Provincially measurable indicators: how we can monitor the progress being made to improve care at the provincial level using provincial data sources
- Locally measurable indicators: what you can do to assess the quality of care that you provide locally

The following tools and resources are provided as suggestions to assist in the implementation of the *Behavioural Symptoms of Dementia* quality standard:

- The *Getting Started Guide* outlines the process for using quality standards as a resource to deliver high-quality care; it contains evidence-based approaches, as well as useful tools and templates to implement change ideas at the practice level
- Our Spotlight Report highlights examples from the field to help you understand what successful quality standard implementation looks like

Measurement to Support Improvement

This document accompanies Ontario Health's *Behavioural Symptoms of Dementia* quality standard. The Behavioural Symptoms of Dementia Quality Standard Advisory Committee identified 6 overarching indicators to monitor the progress being made to improve care for people with behavioural symptoms of dementia in Ontario. Some overarching indicators are provincially measurable (well-defined or validated data sources are available), and some are measurable only locally (the indicators are not well defined, and data sources do not currently exist to measure them consistently across health care teams and at the system level).

The *Behavioural Symptoms of Dementia* quality standard also includes statement-specific indicators that can be used to measure improvement for each quality statement in the quality standard.

Additional information on measuring indicators can be found in the *Quality Standards Measurement Guide*. The measurement guide also includes descriptions of data sources that can be used to support quality standard indicators that are measured consistently across health care teams, health care sectors, and the province.

Equity Considerations

Ontario Health is committed to promoting health equity and reducing disparities, and encourages collecting data and measuring indicators using equity stratifications that are relevant and appropriate for your population, such as patient socioeconomic and demographic characteristics. These may include age, income, region or geography, education, language, race and ethnicity, gender, and sex. Please refer to Appendix 3, Values and Guiding Principles*,* in the quality standard for additional equity considerations.

Quality Standard Scope

This quality standard focuses on care for people with dementia and the specific behaviours of agitation or aggression who are in an emergency department, admitted to a hospital, or in a long-term care home. It also provides guidance on the care given when a person is transitioned between these settings; for example, when someone is discharged from a hospital to a long-term care home.

The quality standard includes 14 quality statements. They address areas identified by the Behavioural Symptoms of Dementia Quality Standard Advisory Committee as having high potential for improving the quality of care in Ontario for people with behavioural symptoms of dementia.

For a quality standard that addresses care for people with dementia in the community, refer to *Dementia: Care for People Living in the Community*.

Cohort Identification

For measurement at the provincial level, people with behavioural symptoms of dementia can be identified using administrative data. For local measurement, people with behavioural symptoms of dementia can be identified using local data sources (such as electronic medical records or clinical patient records).

Cohort Identification Using Administrative Data

To identify people with behavioural symptoms of dementia for the provincially measurable indicators in this quality standard, the Discharge Abstract Database (DAD), the National Ambulatory Care Reporting System (NACRS), the Continuing Care Reporting System (CCRS), and the Ontario Mental Health Reporting System (OMHRS) can be used. Please refer to the measurement guide for more information on these databases.

Diagnosis Codes

To identify people who had a diagnosis of dementia during an acute hospitalization (DAD), mental health-related hospitalization (OMHRS), emergency department visit (NACRS), long-term care stay (CCRS–LTC), or complex continuing care stay (CCRS–CCC), the following diagnosis codes can be used. These codes are the inclusions from the *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Canada* (ICD-10-CA):

- F00: Dementia in Alzheimer disease
- F00.0: Dementia in Alzheimer disease with early onset
- F00.1: Dementia in Alzheimer disease with late onset
- F00.2: Dementia in Alzheimer disease, atypical or mixed type
- F00.9: Dementia in Alzheimer disease, unspecified
- F01: Vascular dementia
- F01.0: Vascular dementia of acute onset
- F01.1: Multi-infarct dementia
- F01.2: Subcortical vascular dementia
- F01.3: Mixed cortical and subcortical vascular dementia
- F01.8: Other vascular dementia
- F01.9: Vascular dementia, unspecified
- F02: Dementia in other diseases classified elsewhere
- F02.0: Dementia in Pick disease
- F02.1: Dementia in Creutzfeldt–Jakob disease
- F02.2: Dementia in Huntington disease
- F02.3: Dementia in Parkinson disease
- F02.4: Dementia in human immunodeficiency virus [HIV] disease

- F02.8: Dementia in other specified diseases classified elsewhere
- F03: Unspecified dementia
- F06.5: Organic dissociative disorder
- F06.6: Organic emotionally labile [asthenic] disorder
- F06.8: Other specified mental disorders due to brain damage and dysfunction and to physical disease
- F06.9: Unspecified mental disorder due to brain damage and dysfunction and to physical disease
- F09: Unspecified organic or symptomatic mental disorder
- G30: Alzheimer disease
- G30.0: Alzheimer disease with early onset
- G30.1: Alzheimer disease with late onset
- G30.8: Other Alzheimer disease
- G30.9: Alzheimer disease, unspecified
- G31: Other degenerative diseases of nervous system, not elsewhere classified
- G31.0: Circumscribed brain atrophy
- G31.1: Senile degeneration of brain, not elsewhere classified
- R54: Senility (old age without mention of psychosis)

Cohort Definition Using the Discharge Abstract Database (DAD)

A patient must meet all of the following conditions to be classified as having dementia:

- Any diagnosis codes that match the "Diagnosis Codes" section above
- The dementia diagnosis code used for acute inpatient hospitalizations included in the cohort must have at least 1 of the following diagnostic types:
  - M: Most responsible diagnosis
  - 1: Pre-admit comorbidity
  - 2: Post-admit comorbidity
  - 3: Secondary diagnosis
  - 5: Admitting diagnosis
  - W/X/Y: Service transfer diagnosis

Cohort Definition Using the National Ambulatory Care Reporting System (NACRS)

A patient must meet at least 1 of the following conditions to be classified as having dementia:

- Main Diagnosis Cluster includes any of the ICD-10-CA codes listed in the "Diagnosis Codes" section above

- Other Diagnosis Cluster A–I includes any of the ICD-10-CA codes listed in the "Diagnosis Codes" section above

Cohort Definition Using the Continuing Care Reporting System (CCRS)

A patient must meet at least 1 of the following conditions to be classified as having dementia:

- Section I1R (Alzheimer's Disease) with a value of "Yes"; this is a binary variable (Yes or No)
- Section I1V (Dementia Other Than Alzheimer's Disease) with a value of "Yes"; this is a binary variable (Yes or No)
- Section I3 (Other Diagnoses) codes match any of the ICD-10-CA codes listed in the "Diagnosis Codes" section above

Cohort Definition Using the Ontario Mental Health Reporting System (OMHRS)

A patient must meet at least 1 of the following conditions to be classified as having dementia:

- Section Q2 (Psychiatric Diagnosis) matches any of the ICD-10-CA codes listed in the "Diagnosis Codes" section above
- Sections I11h to I11m (Other Medical Diagnoses) match any of the ICD-10-CA codes listed in the "Diagnosis Codes" section above
- Section Q2 (Psychiatric Diagnosis) matches any of the following *International Statistical Classification of Diseases, Injuries, and Causes of Death, Ninth Revision* (ICD-9) codes listed in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV):
  - 290.0: Senile dementia uncomplicated (Alzheimer's, late onset)
  - 290.10: Presenile dementia uncomplicated
  - 290.11: Presenile dementia with delirium
  - 290.12: Presenile dementia with delusional features
  - 290.13: Presenile dementia with depressive features
  - 290.20: Senile dementia with delusional features
  - 290.21: Senile dementia with depressive features
  - 290.3: Senile dementia with delirium
  - 290.41: Vascular dementia, with delirium
  - 290.42: Vascular dementia, with delusions
  - 290.43: Vascular dementia, with depressed mood
  - 291.2: Alcohol-induced persisting dementia
  - 292.82: Drug-induced persisting dementia
  - 294.10: Dementia in conditions classified elsewhere without behavioural disturbance
  - 294.11: Dementia in conditions classified elsewhere with behavioural disturbance

- 294.8: Other persistent mental disorders due to conditions classified elsewhere
- 294.9: Unspecified persistent mental disorders due to conditions classified elsewhere
- 780.93: Memory loss

Note: When transitioning from ICD-9 to ICD-10-CA, some patients may retain both versions of section Q2 in their OMHRS records. This is due to changes in coding standards over time, where patients' records may include diagnoses coded under both systems.

- Section Q1Q (DSM-5 diagnostic category "Neurocognitive disorders") with a nonzero or nonmissing score
  - Applies specifically to individuals aged 65 years or older who do not have any Q2 diagnosis codes
  - Aims to identify short-stay patients under the assumption that the neurocognitive disorders category largely includes dementia clients
  - Less specific than the ICD code definition
- Section Q5 (Current Patient Type) = 3 (Geriatric Psychiatry)
  - Regardless of the length of stay, the person has a chronic condition typically associated with aging (e.g., Alzheimer's disease, multi-infarct dementia)
  - Applies specifically to individuals aged 65 years or older who do not have any Q2 diagnosis codes and have a Q1Q column score of 0 or it is missing
  - Aims to identify short-stay patients under the assumption that chronic conditions associated with aging, such as Alzheimer's disease or multi-infarct dementia, will largely be dementia
  - Less specific than the ICD code definition

Exclusion Criteria

Patients are typically excluded from the analysis if they meet any of the following conditions:
- Invalid health card number
- Not an Ontario resident
- Sex not recorded as male or female
- Age > 120 years

Overarching Indicators That Can Be Measured Using Provincial Data

Indicator 1a: Percentage of people in long-term care homes with dementia and symptoms of agitation or aggression who experience fewer or less frequent behavioural symptoms

Description

Indicator name: Percentage of people in long-term care homes with dementia and symptoms of agitation or aggression who experience fewer or less frequent behavioural symptoms

Note: This indicator is an adapted form of the Canadian Institute for Health Information (CIHI) indicator "Behavioural symptoms improved,"[a] but focuses specifically on behavioural symptoms of aggression for patients with dementia.

Directionality: Higher is better

Measurability: Measurable at the provincial level

Dimensions of quality: Effective, safe, patient-centred

Quality statement alignment:

- All quality statements

Calculation

Denominator

Total number of long-term care (LTC) residents with 2 valid Resident Assessment Instrument–Minimum Data Set (RAI-MDS) assessments

Inclusions
- Records that fulfill criteria listed in the "Cohort Definition Using the Continuing Care Reporting System (CCRS)" section above
- LTC residents with valid RAI-MDS 2.0 assessments
  - 2 valid assessments within consecutive quarters for a given resident are required to calculate the quality indicator
  - The following are required for an assessment to be selected as the "target" assessment in the current quarter:
    - The assessment must be the latest assessment in the quarter
    - The assessment must have been conducted more than 92 days after the admission date

- o The assessment must not be an admission full assessment
- o The assessment must be for a resident who had an assessment in the previous quarter
- o There must be 45 to 165 days between the assessment from the previous quarter and the target assessment (Note: If there are multiple assessments from the previous quarter that meet the time period criteria, the latest assessment is selected as the "prior" assessment)

Exclusions
- Residents who were comatose (B1 = 1)

Numerator

Number of LTC residents with fewer behavioural symptoms on their target RAI-MDS 2.0 assessment compared with their prior assessment

Inclusions
- Residents for whom $T\_COUNT - T\_Prev\_Count < 0$, where
  - – T_COUNT = number of behavioural symptoms at target assessment
  - – T_Prev_Count = number of behavioural symptoms at prior assessment

The number of behavioural symptoms for the population of interest is based on the following variables (for RAI-MDS 2.0 in LTC):

- E4b (Verbally Abusive; 0–3)
- E4c (Physically Abusive; 0–3)

Where each variable is scored according to the frequency of behavioural symptoms in the last 7 days:

- 0 = Behaviour not exhibited in the last 7 days
- 1 = Behaviour of this type occurred on 1 to 3 days out of the last 7 days
- 2 = Behaviour of this type occurred on 4 to 6 days out of the last 7 days, but less than daily
- 3 = Behaviour of this type occurred daily

Method

Numerator ÷ Denominator × 100

Data Source

CCRS–LTC

Limitations

This indicator does not account for the variability in the alterability of behavioural symptoms. Some behavioural symptoms might persist at intensities that are unresponsive to staff efforts to reduce

them through environmental modifications, activities programming, comfort measures, or drug treatment.

Comments

Despite optimal management and treatment, behavioural symptoms may persist and pose ongoing challenges for patients and care partners, given their episodic nature, complicating prevention and management.[b]

A similar indicator could be developed based on the Aggressive Behaviour Scale (ABS), which uses the following variables in the RAI-MDS tool: Verbally Abusive (E4b), Physically Abusive (E4c), Socially Inappropriate/Disruptive Behaviour (E4d), and Resists Care (E4e). ABS scores range from 0 to 12, with higher scores indicating a higher frequency and intensity of aggressive behaviour.

Sources

[a]Canadian Institute for Health Information. Behavioural symptoms improved [Internet]. 2022 [cited 2024 Jul 8]. Available from: https://www.cihi.ca/en/indicators/behavioural-symptoms-improved

[b]Tible OP, Riese F, Savaskan E, von Gunten A. Best practice in the management of behavioural and psychological symptoms of dementia. *Ther Adv Neurol Disord*. 2017;10(8):297-309.

Indicator 1b: Percentage of people in complex continuing care with dementia and symptoms of agitation or aggression who experience fewer or less frequent behavioural symptoms

Description

Indicator name: Percentage of people in complex continuing care with dementia and symptoms of agitation or aggression who experience fewer or less frequent behavioural symptoms

Directionality: Higher is better

Measurability: Measurable at the provincial level

Dimensions of quality: Effective, safe, patient-centred

Quality statement alignment:

- All quality statements

Calculation

Denominator

Number of complex continuing care patients with 2 valid RAI-MDS assessments

Inclusions
- Records that fulfill criteria listed in the "Cohort Definition Using the Continuing Care Reporting System (CCRS)" section above
  - An initial assessment and an assessment upon discharge are necessary to calculate the indicator

Exclusions
- Patients who were comatose (B1 = 1)
- Patients with no verbally abusive or physically abusive behavioural symptoms

Numerator

Number of patients with fewer behavioural symptoms on their discharge assessment compared with their initial assessment

Inclusions
- Patients for whom T_COUNT − T_Prev_Count < 0, where
  - T_COUNT = number of behavioural symptoms at target assessment
  - T_Prev_Count = number of behavioural symptoms at prior assessment

The number of behavioural symptoms for the population of interest is based on the following variables:

- E4b (Verbally Abusive; 0–3)
- E4c (Physically Abusive; 0–3)

Where each variable is scored according to the frequency of behavioural symptoms in the last 7 days:

- 0 = Behaviour not exhibited in the last 7 days
- 1 = Behaviour of this type occurred on 1 to 3 days out of the last 7 days
- 2 = Behaviour of this type occurred on 4 to 6 days out of the last 7 days, but less than daily
- 3 = Behaviour of this type occurred daily

Method

Numerator ÷ Denominator × 100

Data Source

CCRS–CCC

Comments

See Comments under Indicator 1a.

Hospital-based continuing care offers specialized services supporting medical complexity that are not available at home or in LTC. Complex continuing care services are provided to a varied population who are not yet ready for discharge from the hospital but no longer require acute care services. Each patient's length of stay in continuing care varies based on their specific health needs. For patients with shorter stays or those recovering quickly, assessments of behavioural symptoms may be less precise. Due to the brief duration of their stay, factors such as adapting to new environments, temporary stressors, or unfamiliarity with care partners and routines can greatly influence their behaviour. Therefore, it is important to carefully interpret any behavioural changes observed in short-stay patients.

Indicator 1c: Percentage of people in inpatient mental health beds with dementia and symptoms of agitation or aggression who experience fewer or less frequent behavioural symptoms

Description

Indicator name: Percentage of people in inpatient mental health beds with dementia and symptoms of agitation or aggression who experience fewer or less frequent behavioural symptoms

Directionality: Higher is better

Measurability: Measurable at the provincial level

Dimensions of quality: Effective, safe, patient-centred

Quality statement alignment:

- All quality statements

Calculation

Denominator

Total number of patients with dementia admitted to an inpatient mental health bed

Inclusions
- Records that fulfill criteria listed in the "Cohort Definition Using the Ontario Mental Health Reporting System (OMHRS)" section above
  - An initial assessment and an assessment upon discharge are necessary to calculate the indicator

Exclusions

- Patients with no verbally abusive or physically abusive behavioural symptoms

Numerator

Number of patients with fewer behavioural symptoms on their discharge assessment compared with their initial assessment

Inclusions
- Patients for whom T_COUNT − T_Prev_Count < 0, where
  - T_COUNT = number of behavioural symptoms at target assessment
  - T_Prev_Count = number of behavioural symptoms at prior assessment

The number of behavioural symptoms for the population of interest is based on the following variables:

- E4b (Verbally Abusive; 0–3)
- E4c (Physically Abusive; 0–3)

Where each variable is scored according to the frequency of behavioural symptoms in the last 7 days:

- 0 = Behaviour not exhibited in the last 7 days
- 1 = Behaviour of this type occurred on 1 to 3 days out of the last 7 days
- 2 = Behaviour of this type occurred on 4 to 6 days out of the last 7 days, but less than daily
- 3 = Behaviour of this type occurred daily

Method

Numerator ÷ Denominator × 100

Data Source

OMHRS

Comments

See Comments under Indicator 1a.

For short-stay patients, it is important to note that the assessment of behavioural symptoms may be less accurate. Due to the brief duration of their stay, factors such as adapting to new environments, temporary stressors, or unfamiliarity with care partners and routines can greatly influence their behaviour. Therefore, it is important to carefully interpret any behavioural changes observed in short-stay patients.

Indicator 2: Percentage of people with dementia and symptoms of agitation or aggression who are admitted to mental health beds in hospital under the *Mental Health Act* (Form 1)

Description

Indicator name: Percentage of people with dementia and symptoms of agitation or aggression who are admitted to mental health beds in hospital under the *Mental Health Act* (Form 1)

Directionality: Lower is better

Measurability: Measurable at the provincial level

Dimensions of quality: Effective, patient-centred, safe

Quality statement alignment:

- All quality statements

Calculation

Denominator

Total number of patients with dementia admitted to an inpatient mental health bed

Inclusions
- Records that fulfill criteria listed in the "Cohort Definition Using the Ontario Mental Health Reporting System (OMHRS)" section above

Numerator

Total number of patients with dementia admitted to an inpatient mental health bed with an inpatient status of Form 1 for risk to self or risk to others

Inclusions
- Section A3a (Status at Time of Admission) = 1 (Application for Psychiatric Assessment or Order for Psychiatric Examination)

In most instances, the process leading to an involuntary admission starts with the submission of an Application for Psychiatric Assessment (Form 1). The physician initiating this process must have personally examined the individual within the past 7 days before completing the form. In addition to their own observations, the physician can consider reports from others, but it is essential that they distinguish between their own assessment and external information in their documentation. The assessment is not restricted to hospital settings and can occur in emergency departments, in physician offices, or via videoconference.

The statutory authority for conducting a Form 1 assessment is outlined in Section 15 of the *Mental Health Act*. This section defines the criteria that must be satisfied before a Form 1 assessment may be completed.

Method

Numerator ÷ Denominator × 100

Data Source

OMHRS

Limitations

In the OMHRS database, when Section A3a (Status at Time of Admission) = 1 (Application for Psychiatric Assessment or Order for Psychiatric Examination), it indicates that the patient is experiencing significant mental health challenges that require intensive care and attention. However, this classification does not conclusively indicate the presence of behavioural symptoms such as agitation or aggression. Instead, it underscores the need for specialized psychiatric evaluation and support tailored to address complex mental health conditions and ensure that appropriate treatment interventions are implemented.

Indicator 3: Percentage of people with dementia who are readmitted to hospital within 30 days of hospital discharge

Description

Indicator name: Percentage of people with dementia who are readmitted to hospital within 30 days of hospital discharge

Directionality: Lower is better

Measurability: Measurable at the provincial level

Dimension of quality: Safe, patient-centred, effective, timely

Quality statement alignment:

- All quality statements

Calculation

Denominator

Total number of acute care discharges from a hospitalization associated with a diagnosis of dementia (hospitalization can include care in medical beds (DAD) and/or mental health beds (OMHRS))

Inclusions From DAD
- Records that fulfill criteria listed in the "Cohort Definition Using the Discharge Abstract Database (DAD)" section above
  - Admission category recorded as urgent or elective

Exclusions From DAD
- Discharge disposition in any of the following categories:
  - 07: Died
  - 72: Died in facility
  - 73: Medical assistance in dying (MAID)
  - 74: Suicide in facility
- Planned readmission that is prescheduled, or anticipated as part of the regular course of treatment

Inclusions From the OMHRS Database
- Records that fulfill criteria listed in the "Cohort Definition Using the Ontario Mental Health Reporting System (OMHRS)" section above

Exclusions From the OMHRS Database
- Section X90 (Discharge Reason) in any of the following categories:

- 2: Death due to suicide
- 3: Death not due to suicide

Numerator

Number of patients in the denominator who had a subsequent nonelective readmission to an acute care hospital within 30 days of discharge following the index visit

- The readmission does not have to be for dementia-related reasons
- The concept of elective versus nonelective applies only to patients from DAD; the OMHRS database does not use the concept of elective versus nonelective

Method

Numerator ÷ Denominator × 100

Data Sources

DAD and OMHRS

Limitations

A person can have more than 1 readmission following the index hospitalization. Unlike the readmission rate, this indicator includes only the earliest readmission within 30 days.

Comments

DAD and OMHRS serve distinct purposes in health data collection. DAD primarily records hospital discharge details, diagnoses, treatments, and patient demographics across various medical conditions, whereas OMHRS focuses specifically on mental health data, including clinical assessments and outcomes relevant to psychiatric care.

These databases differ not only in their primary focus, but also in their data structures and data collection methods. Although it is theoretically possible to merge data between DAD and OMHRS for specific analyses, combined DAD–OMHRS methodology is still being explored; thus, the indicator is developmental.

Comparing patients who transition between DAD and OMHRS (for example, discharged from DAD and readmitted in OMHRS, or assessed in OMHRS and readmitted in DAD) requires careful consideration.

Indicator 4: Rate of emergency department use by people with dementia, per 1,000 emergency department visits

Description

Indicator name: Rate of emergency department use by people with dementia, per 1,000 emergency department visits

Directionality: Nondirectional

Measurability: Measurable at the provincial level

Dimension of quality: Effective, patient-centred, safe

Quality statement alignment:

- All quality statements

Calculation

Denominator

Total number of emergency department visits

Exclusions
- Planned emergency department visit that is prescheduled, or anticipated as part of the regular course of treatment

Numerator

Total number of emergency department visits with a diagnosis of dementia

Inclusions
- Records that fulfill criteria listed in the "Cohort Definition Using the National Ambulatory Care Reporting System (NACRS)" section above

Method

Numerator ÷ Denominator × 1,000

Data Source

NACRS

Limitations

The rate of emergency department visits by people with dementia will naturally increase over time owing to the increasing incidence of dementia in the older population.

Dementia is often not the primary reason for emergency department visits. Patients with dementia who present to the emergency department may receive treatment for other conditions such as urinary tract infections, disorientation, or fatigue. This misclassification could potentially lead to underdiagnosis of dementia, as the focus may primarily be on addressing immediate acute symptoms rather than recognizing and addressing underlying neurocognitive disorder.

Comments

Although administrative data are relatively straightforward to collect and analyze, they are subject to various limitations such as accuracy and completeness of coding. Additionally, administrative data typically provide limited information on the severity of dementia.[a] Therefore, local data collection may be necessary to support comprehensive care for people with dementia.

Source

[a]LaMantia MA, Stump TE, Messina FC, Miller DK, Callahan CM. Emergency department use among older adults with dementia. *Alzheimer Dis Assoc Disord*. 2016;30(1):35-40.

Overarching Indicators That Can Be Measured Using Only Local Data

You might want to assess the quality of care you provide to your patients with behavioural symptoms of dementia. You might also want to monitor your own quality improvement efforts. It could be possible to do this using your own clinical records, or you might need to collect additional data. We recommend the following potential indicators, some of which cannot be measured provincially using currently available data:

Number of incidents in hospitals and long-term care homes related to symptoms of aggression in dementia: patient-on-patient or patient-on-staff incidents

- Dimensions of quality: Safe, patient-centred care
- Denominator: Total number of bed days for people with a diagnosis of dementia in hospitals and LTC homes
- Numerator: Number of incidents in hospitals and LTC homes related to symptoms of aggression in dementia, including:
  - Patient-on-patient or resident-on-resident assault
  - Patient-on-staff or resident-on-staff assault
  - Patient or resident injury
  - Staff injury

Potential data sources: Critical incidents are recorded and reported by hospitals and LTC homes. However, only medication- or intravenous fluid–related critical incidents in hospitals are required to be reported to the National System for Incident Reporting (NSIR). No centralized database currently exists to calculate this indicator.

Note: Health care organizations may wish to track incidents of workplace violence to evaluate quality and quality improvement. An indicator on workplace violence is included as an option for hospital Quality Improvement Plans. For more information, refer to *Quality Improvement Plan Program: Indicator Technical Specifications*.

Percentage of long-term care home resident applications that are rejected by a long-term care home owing to an inability to meet client care needs

- Dimensions of quality: Safe, patient-centred care
- Denominator: Total number of LTC home placement applications
- Numerator: Number of rejected LTC home placement applications
  - Records with a facility response date within the last 24 months
  - LTC home open before and closed after the end of the reporting period

Limitations: This indicator does not directly link rejected LTC home placement applications to a client's behavioural symptoms. In addition, this indicator is currently grouped at the LTC home level, not the record level. The refusal rate may not stratify patients by their conditions; it could include patients with dementia, delirium, and other mental health conditions. We do not know if applications are rejected owing to dementia, but the details can be confirmed with the data provider, if needed.

Potential data source: Client Profile (CPRO) Database

Comments: This indicator captures both tier 1 and tier 2 rejections. A tier 1 rejection occurs when an LTC home rejects a client upon receiving an application from Ontario Health atHome (previously known as Home and Community Care Support Services). These clients are not on the LTC home waitlist. A tier 2 rejection occurs when a client is rejected by an LTC home while they are on the waitlist and reassessed upon the opportunity for placement.

Further investigation is needed to determine rejection reasons commonly associated with behavioural and psychological symptoms of dementia.

Once a person applies to an LTC home, their application is reviewed to ensure that the facility can meet their care needs. LTC homes can withhold approval only for 1 of 3 reasons (*Fixing Long-Term Care Act, 2021*, Section 51 (7)):

- The LTC home lacks the physical facilities necessary to meet the client's care requirements
- Staff members at the LTC home lack the nursing expertise necessary to meet the client's care requirements
- Circumstances exist which are provided for in the regulations as being a ground for withholding approval

If an LTC home rejects a client's application, they should provide a detailed explanation of the reasons for their decision to withhold approval, along with contact information for the director (*Fixing Long-Term Care Act, 2021*, Section 51 (9)).

When an LTC home rejects a client's application, the case manager and the LTC home may have a discussion about addressing the client's care needs, such as providing increased staff training or applying for high-intensity needs funding. These options should be considered prior to accepting the LTC home's rejection.

Statement-Specific Indicators

The *Behavioural Symptoms of Dementia* quality standard includes statement-specific indicators that are provided as examples; you may wish to create your own quality improvement indicators based on the needs of your population. We recommend that you identify areas to focus on in the quality standard and then use 1 or more of the associated indicators to guide and evaluate your quality improvement efforts.

Quality Statement 1: Comprehensive Assessment

Percentage of people with dementia and symptoms of agitation or aggression who receive a comprehensive assessment at first presentation or after a transition in care

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who initially present at a hospital or LTC home or who transition to another care setting
- Numerator: Number of people in the denominator who receive a comprehensive assessment
- Data sources: Local data collection, RAI-MDS in LTC homes

Quality Statement 2: Individualized Care Plan

Percentage of people with dementia and symptoms of agitation or aggression who have an individualized care plan

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who have had a comprehensive assessment
- Numerator: Number of people in the denominator who have an individualized care plan
- Data source: Local data collection

Percentage of people with dementia and symptoms of agitation or aggression who have an individualized care plan that has been implemented

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who have an individualized care plan
- Numerator: Number of people in the denominator who receive care in concordance with their individualized care plan
- Data source: Local data collection

Percentage of people with dementia and symptoms of agitation or aggression who have an individualized care plan that has been reviewed on a regular basis

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who have an individualized care plan

- Numerator: Number of people in the denominator who have an individualized care plan that has been reviewed on a regular basis (at least once each month in the inpatient setting, and at least once every 3 months in LTC)
- Data source: Local data collection

Availability of an electronic system that captures information about individualized care plans, including the plan itself and care associated with the plan

- Data source: Local data collection

Quality Statement 3: Individualized Nonpharmacological Interventions

Percentage of people with dementia and symptoms of agitation or aggression who are offered nonpharmacological interventions

- Denominator: Total number of people with dementia and symptoms of agitation or aggression
- Numerator: Number of people in the denominator who are offered at least 3 nonpharmacological interventions
- Data source: Local data collection

Percentage of people with dementia and symptoms of agitation or aggression who receive nonpharmacological interventions as specified in their individualized care plan

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who have an individualized care plan
- Numerator: Number of people in the denominator who receive nonpharmacological interventions as specified in their individualized care plan
- Data source: Local data collection

Availability of 3 or more evidence-based nonpharmacological interventions to manage the symptoms of agitation and aggression in people with dementia

- Data source: Local data collection

Quality Statement 4: Indications for Psychotropic Medications

Percentage of people with dementia and symptoms of agitation or aggression who are prescribed a psychotropic medication typically used to reduce distress, without clear documentation that they are in severe distress or pose a risk of harm to themselves or others

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who are prescribed a psychotropic medication typically used to reduce distress

- Numerator: Number of people in the denominator who are prescribed a psychotropic medication without clear documentation that they are in severe distress or pose a risk of harm to themselves or others
- Data source: Local data collection

Quality Statement 5: Titrating and Monitoring Psychotropic Medications

Percentage of people with dementia and symptoms of agitation or aggression receiving psychotropic medications who have their target symptoms monitored and documented

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who are prescribed a psychotropic medication
- Numerator: Number of people in the denominator whose target symptoms are monitored and documented
- Data source: Local data collection

Quality Statement 6: Switching Psychotropic Medications

Percentage of people with dementia and symptoms of agitation or aggression receiving psychotropic medications who have their psychotropic medication discontinued and are switched to an alternative psychotropic medication if symptoms have not improved after 8 weeks

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who continuously receive a psychotropic medication and whose symptoms do not improve after 8 weeks
- Numerator: Number of people in the denominator who have their psychotropic medication discontinued and are switched to an alternative psychotropic medication
- Data source: Local data collection

Quality Statement 7: Medication Review for Dosage Reduction or Discontinuation

Percentage of people with dementia and symptoms of agitation or aggression who are on psychotropic medications and who have had a medication review (within the past month in an inpatient setting or within the past 3 months in a long-term care home)

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who are receiving a psychotropic medication
- Numerator: Number of people in the denominator who have had a medication review (within the past month in an inpatient setting or within the past 3 months in an LTC home)
- Data source: Local data collection

Percentage of people with dementia and symptoms of agitation or aggression who are on psychotropic medications and who have their psychotropic medications tapered or discontinued during a medication review

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who are receiving a psychotropic medication and have undergone a medication review
- Numerator: Number of people in the denominator who have their psychotropic medications tapered or discontinued during a medication review
- Data source: Local data collection

Quality Statement 8: Physical Restraint

Percentage of people with dementia and symptoms of agitation or aggression who are placed in physical restraints for agitation or aggression

- Denominator: Total number of people with dementia and symptoms of agitation or aggression
- Numerator: Number of people in the denominator who are placed in physical restraints for symptoms of agitation or aggression
- Data sources: Local data collection; proxy measures could be calculated based on data currently collected for restraint use in acute mental health care (OMHRS, provided by CIHI) and for daily physical restraints in LTC (CCRS, provided by CIHI)

Quality Statement 9: Informed Consent

Percentage of people with dementia and symptoms of agitation or aggression receiving a medical treatment whose informed consent (obtained directly or from the substitute decision-maker) is documented prior to the initiation of the treatment

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who are receiving a medical treatment
- Numerator: Number of people in the denominator whose informed consent (obtained directly or from their substitute decision-maker) is documented prior to initiation of the treatment
- Data source: Local data collection

Quality Statement 10: Specialized Interprofessional Care Team

Access to an interprofessional team that provides specialized care for the behavioural and psychological symptoms of dementia; it consists of at least 1 physician and 1 other regulated professional

- Data source: Local data collection

Quality Statement 11: Education and Training for Clinicians

Percentage of clinicians who care for people with dementia who have received education and training in the assessment and management of dementia and its behavioural symptoms

- Denominator: Total number of clinicians who care for people with dementia
- Numerator: Number of people in the denominator who have received education and training in the assessment and management of dementia and its behavioural symptoms
- Data source: Local data collection

Clinicians who care for people with dementia have access to staff with education and training in the assessment and management of dementia and its behavioural symptoms

- Data source: Local data collection

Quality Statement 12: Education and Training for Care Partners

Percentage of care partners of people with dementia and symptoms of agitation or aggression who are offered access to comprehensive education and training on dementia and its associated behavioural symptoms

- Denominator: Total number of care partners of people with dementia and symptoms of agitation or aggression
- Numerator: Number of people in the denominator who have access to comprehensive education and training on dementia and its associated behavioural symptoms
- Data source: Local data collection

Percentage of care partners of people with dementia and symptoms of agitation or aggression who receive comprehensive education and training on dementia and its associated behavioural symptoms

- Denominator: Total number of care partners of people with dementia and symptoms of agitation or aggression
- Numerator: Number of people in the denominator who receive comprehensive education and training on dementia and its associated behavioural symptoms
- Data source: Local data collection

Availability of comprehensive education and training programs on dementia and its associated behavioural symptoms for care partners

- Data source: Local data collection

Quality Statement 13: Appropriate Care Environment

Percentage of people with dementia and symptoms of agitation or aggression whose behavioural symptoms have been successfully treated and who are transitioned to the most appropriate environment as soon as possible

- Denominator: Total number of people with dementia and symptoms of agitation or aggression whose behavioural symptoms have been successfully treated
- Numerator: Number of people in the denominator who are transitioned to the most appropriate environment as soon as possible
- Data source: Local data collection

Availability of appropriate environments to which people with dementia and symptoms of agitation or aggression can be transitioned once their behavioural symptoms have been successfully treated

- Data source: Local data collection

Quality Statement 14: Transitions in Care

Percentage of people with dementia and symptoms of agitation or aggression whose information is received by the new facility prior to their transition

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who transition to a new facility
- Numerator: Number of people in the denominator for whom complete and accurate information is received by the new facility prior to their transition
- Data source: Local data collection

Percentage of people with dementia and symptoms of agitation or aggression whose information is incomplete or inaccurate when received by the new facility

- Denominator: Total number of people with dementia and symptoms of agitation or aggression who transition to a new facility that has received information regarding their care and treatment
- Numerator: Number of people in the denominator whose care and treatment information is incomplete or inaccurate during the transition process
- Data source: Local data collection

Looking for More Information?

Visit hqontario.ca or contact us at QualityStandards@OntarioHealth.ca if you have any questions or feedback about this quality standard.

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