Clear Measurement Strategy

1/31/2018

Improving care for seniors living with dementia in long-term care

Contents

1. Overview

The Call for Less Antipsychotic Medications in Residential Care (Clear) is an improvement initiative that provides residential care homes with the support, resources, improvement coaching, and opportunities to collectively learn and problem solve to improve the care and quality for their residents and families.

2. Goals

- To improve dignity for seniors who live in residential care with cognitive impairment through a focused collaborative and support for best practice care for BPSD (behavioural and psychological symptoms of dementia), leading to a reduction in the use of antipsychotics in this population
- To build improvement capability and capacity in residential care

Problem Statement:

The provincial average for potentially inappropriate use of antipsychotics is 25.9%, which is above the national average of 21.8% (Canadian Institute for Health Information, 2017). 120 of BC's care homes have rates greater than the provincial average, which outlines a need for us to focus efforts to work with these care homes to continue and reduce antipsychotic rates.

Initiative Aim Statement:

To reduce the rate of antipsychotic use in residents without a diagnosis of psychosis in participating care homes across the province from baseline to the national average (21.8%) by the end of the Clear initiative (April 2019).

Internal Driver:

While the Aim Statement above outlines what we would like to achieve with Clear, the ultimate purpose is to reduce the provincial rate of antipsychotic use to below the national average (21.8%) and make BC a high performer in this area.

Care Home Goal Setting:

Clear will help participating care homes to establish and achieve their own improvement goal(s) for the reduction of antipsychotic rates that are specific, measureable, attainable, realistic, and time-bound.

Guidance:

To establish a best practice approach to management of the behavioural and psychological symptoms of dementia, employ key strategies including non-pharmacological approaches, a medication review plan for all residents on an antipsychotic medication, and the use of antipsychotics for specific indications.

3. Stakeholders & Purpose

Purpose

This document outlines the measurement strategy for Clear Wave 3, which includes how data are collected and used over the course of the initiative (and afterwards if desired). There are two distinct purposes of measurement in Clear:

- Measurement for improvement among participating Action & Improvement Teams
- Measurement for evaluation and accountability of Clear Wave 3

While the two purposes of measurement are related, they should be considered separate as they require different methods for data collection and analysis (Solberg, Mosser, & McDonald, 1997). An evaluation plan will outline the latter.

Stakeholders

The following table contains a list of stakeholders involved in the measurement strategy.

Stakeholder	Involvement in Measurement	Measurement Focus
Action and Improvement Teams	Action & Improvement Teams perform the improvement work and are required to measure their quality improvement efforts through PDSA cycles. Their experiences, feedback, and project outcomes are central to evaluation. Participating staff are considered part of the Action & Improvement team.	Improvement and evaluation
Residents and family	Residents and their families are recipients of care at participating care homes. Their experiences and resident outcomes will inform improvement and evaluation.	Improvement and evaluation
Partnership Alliance	A diverse group of organizations that provide guidance and support the spread of the initiative. The Alliance may be consulted for feedback and are inform evaluation.	Evaluation
Health Authorities	Health Authorities (various departments and teams) will be involved in the engagement and support of Clear Action & Improvement Teams in their respective regions.	Improvement and evaluation
Physicians, Pharmacists, and other specialists	Physicians need to be engaged in the transformation care for residents. They are an important part of the team for participating care homes.	Improvement
Faculty	This group provides continuing guidance and expertise. The Faculty will be able to provide input for evaluation.	Evaluation
BCPSQC (Council Team)	The BCPSQC Council Team supports Action & Improvement teams along their quality improvement journeys. While care homes are ultimately responsible for implementing change, BCPSQC is accountable to delivering Clear in such a way that facilitates and enables teams to achieve their goals.	Improvement and evaluation
Shared Care Committee	Shared Care has provided funding for the Clear initiative. While not playing a large role in organizing, this Committee has a stake in the initiative's success.	Evaluation

4. Measurement for Improvement

Action and Improvement Teams (A&I Teams) need to collect data as part of their improvement work. The purpose of measurement for improvement is to learn and understand what change ideas and processes will achieve the intended aim and bring about improvement.

Characteristics for measurement for improvement include observable testing via PDSA cycles, accepting consistent bias, collecting small samples, collecting data over time, displaying data over time (on run charts), having flexible hypotheses, and sharing data to only those who are involved in the improvement work (Solberg, Mosser, & McDonald, 1997).

4.1. Supporting Measurement for Improvement

The high-level plan for supporting measurement for improvement is to provide:

- Training to A&I Teams through workshop, webinars, and learning materials so they have the necessary skills and knowledge
- Resources and tools (i.e., Clear Data Collection Tool) for doing the measurement work
- Coaching and support through calls, huddles, report feedback so they can analyse and interpret their own data

Clear Specific Data Collection

While there are existing data sources (i.e., RAI-MDS 2.0), measurement for improvement will rely primarily on I&A teams manually collecting data so it is timely and specific.

> *RAI alone doesn't provide rapid, month-to-month data needed to guide and demonstrate change. For instance, collecting 12 data points quarterly rather than monthly requires 3 years instead of 12 months.*

In addition, progress may not be adequately captured in RAI (i.e., dose reductions, differences in resident cohorts, and process measures). To support measurement efforts, a custom Clear Data Collection Tool will be provided to A&I Teams. Data collection will borrow concepts from existing initiatives including past iterations of Clear, Alberta's Appropriate Use of Antipsychotics (AUA) project, and Canadian Foundation for Healthcare Improvement's (CFHI) Antipsychotic Reduction Collaborative. The custom tool is intended to enable teams to rapidly collect data to inform improvement work and is supplementary and not a replacement to RAI-MDS 2.0 data; similar approaches were used in the aforementioned collaboratives.

Other Data Collection

The Clear initiative will utilize RAI-MDS 2.0 data and will support teams in using any other existing datasets for the purposes of improvement work.

Addressing Potentially Inappropriate Use

The Clear measurement strategy now incorporates potentially inappropriate use of antipsychotics. This is achieved by mandating the collection of residents' diagnoses of psychosis in alignment with RAI exclusionary criteria (see Appendix 0: Exclusion Criteria for Diagnosis of Psychosis). This is in contrast to previous Clear initiatives where outcome data was limited to total use of antipsychotics.

Challenges, Risks, and Mitigation Strategies

Challenges in measurement were identified based on feedback from Clear Wave 2. The revised data collection strategy for Clear Wave 3 will address these challenges by keeping data collection simple. Risks and mitigation strategies are identified below, ordered from most likely to least likely.

Challenge	Impact	Risks	Mitigation Strategies
Learning curve and knowledge gap around measurement	High	- Low interest and engagement for measurement - Team members refuse to participate in Clear - Inability to do the measurement work	- Provide thorough and easy to understand instructions - Provide multiple sessions on measurement or as needed for each team - Leverage support from Health Authorities
Teams overburdened with data collection from Clear or other existing reports or requirements	Med	- Teams do not complete data collection	- Engage and discuss with teams "what and why" data are reported (current state) - Make evident from beginning the time required for data collection - Motivate teams to collect and report data (intrinsic or extrinsic factors)
No continuity/staff to do the data collection	High	- Teams lack data - Teams are not able to report consistently back to Clear for feedback	- Encourage teams to train and engage more than one person for data collection - Checking in often to ensure teams are timely with data
Need to modify or update tool after initial rollout (fixes)	Med/ High	- Incorrect or low data quality	- Test template thoroughly with select care homes and experts (pilot homes, past participants, clinical experts)
Inability to effectively use RAI for Clear and quality improvement	Med	- RAI not consistently being used to identify improvement and inform changes	- Emphasize value of RAI - Use RAI only when appropriate and with guidance with experts
Teams don't know what to do with amount data and information	Low	- Confusion and inability to use their data	- Embed measurement discussion in team check-ins - Highlight successes and learnings from the past

4.2. Data Collection Plan

Outcome, Process, and Balancing Measures

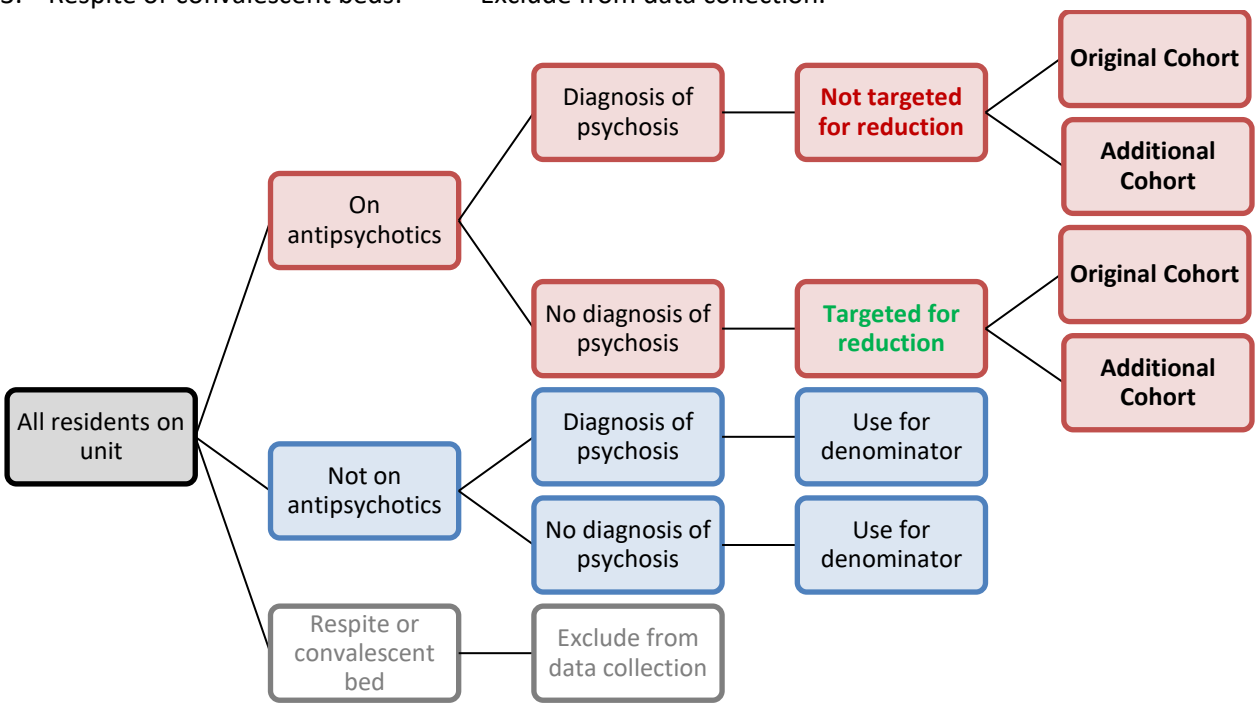
The following table outlines outcome, process, and balancing measures A&I Teams will collect.

Measure	Operational Definition	Collection Strategy	Frequency
OUTCOME MEASURES (mandatory)			
Residents on antipsychotics without a diagnosis of psychosis	Numerator: number of residents prescribed antipsychotics (scheduled, PRN) Denominator: number of residents in unit Exclusions Criteria: do not include in numerator or denominator as per RAI definition: - End-stage disease (J5c), Hospice care (P1ao), Schizophrenia (I1ii), Huntington's chorea (I1x), Hallucinations (J1i), Delusions (J1e) Exclude residents who are respite, convalescent, or pathway to home. Note: See Appendix 0 for detailed outline of RAI exclusion criteria.	Manual (Clear Data Collection Tool)	Monthly
Potentially inappropriate use of antipsychotics in long-term care	Use RAI-MDS 2.0 definition adjusted rate and unadjusted rate. Note: Adjusted rate data are delayed by one quarter due to risk-adjustment calculations from CIHI.	RAI-MDS 2.0	Quarterly
Residents on antipsychotics (total)	Numerator: number of residents prescribed antipsychotics (scheduled, PRN) Denominator: number of residents in unit Note: This does not factor in diagnosis; it is the total (crude) antipsychotic prescribing rate. This measure was use for Clear Wave 1 and 2.	Manual (Clear Data Collection Tool)	Monthly
PROCESS MEASURES (optional)			
Residents on antipsychotics with an [antipsychotic] medication review completed	Numerator: number of residents on antipsychotics with an antipsychotic medication review completed (locally defined) Denominator: number of residents on antipsychotics in unit (locally defined) Note: See Appendix 0 on meaningful reviews. It's encouraged to only look at residents on antipsychotics without a diagnosis of psychosis (i.e., apply exclusion criteria as per RAI)	Manual	Monthly
Residents on antipsychotics with a dose reduction trial	Numerator: number of residents on antipsychotics with a dose reduction trial (locally defined) Denominator: number of target residents on antipsychotics in unit (locally defined)	Manual	Monthly
BALANCING MEASURES			
New Enrollments (Admissions) on Antipsychotics	Numerator: number of residents newly enrolled (admitted) with antipsychotics Denominator: number of residents newly enrolled in unit within report period (i.e., month)	Manual (Clear Data Collection Tool)	Monthly
Residents with worsened behaviours	Numerator: number of residents with worsened behaviour (e.g., adopt DOS: Dementia Observation Tool, RAI's ABS: Aggressive Behaviour Scale, or an appropriate assessment) Denominator: number of target residents in unit	Manual or RAI-MDS 2.0	Quarterly

Cumulative Statistics and Cohort Stratification

Collecting mandatory measures outlined using the *Clear Data Collection Tool* provides important cumulative statistics on residents, reductions, and discontinuations. The diagram below illustrates the resident populations. All residents on the unit will be tracked on the data collection template:

1. On antipsychotics: Include in collection and track meds. Split by diagnosis:
    a. Diagnosis of psychosis: Not targeted for med reduction.
    b. No diagnosis of psychosis: Targeted for med reduction (potentially inappropriate use).
2. Not on antipsychotics: Include in collection but no med tracking. Use as denominator.
3. Respite or convalescent beds: Exclude from data collection.



4.3. Additional Measures

A&I Teams are encouraged to track additional measures that may guide their improvement effort. The custom template provides functionality for this. Examples of measures existing in other similar initiatives are:

Process Measures

- Family/alternate decision-maker receiving education
    - i.e., education on antipsychotics and person-centred care
- Staff receiving education
    - i.e., education on antipsychotics and person-centred care
- Staff engagement
    - i.e., attendance at huddles, educational rounds, or sign/initial team board
- Residents with care reviews
    - i.e., conducted using Dementia Observation Screening (DOS) Tool, or with family and/or caregiver involvement
- Non-pharmacological approaches implemented and used
- Calls to MRP to request involvement (in lieu of a prescription for an antipsychotic)
- Leadership involvement

Balancing Measures

- BPSD related incidents
- Calls to MRP to request antipsychotic use
- Residents with other psychotropic medications (e.g., antidepressants, antianxiety medications, hypnotics, etc.)
- Falls in the last 30 days
- Restraint Use
- Transfers to the Emergency Department
- Hospitalizations
- Incidents of verbal aggression
- Incidents of physical aggression
- Quality Indicators from RAI-MDS 2.0 that were used in the CFHI Collaborative:
    - CPS Score of 3 or greater (moderate cognitive impairment or greater)
    - ADL Long Form Score greater than 14 (higher impairment in ADL performance)
    - DRS Score of 3 or greater (potential or actual problem with depression)
    - ABS Score of 6 or greater (very severe aggressive behaviour)
    - Pain Scale Score of 2 or 3 (daily pain/severe daily pain)
    - ISE Score of 4 or greater (higher social engagement)
    - Restraints in physical restraints (any restraint, P4c, P4d, P4e)
    - Behavioural symptoms daily or less than daily (any symptom E4ba, E4ca, E4da, E4ea)

5. Measurement for Evaluation and Accountability

Evaluation is linked to measurement. An evaluation plan is documented separately.

6. Appendices: Resources

Identifying Residents for Antipsychotic Reduction

Below is a high-level outline for identifying residents for antipsychotic reduction:

1. Identify residents on antipsychotics without a diagnosis of psychosis (as per RAI).
    - This may help prompt accurate coding of RAI assessments, similar to the Interior Health Antipsychotic Project (Phase 1).
2. Perform medication reviews (meaningful and multidisciplinary with nurse, pharmacist, and physician) and identify candidates for dose reduction trials.
3. Choose one or two residents to start with. The work will require concurrently involving staff and family for education and participation, implement DOS monitoring, and notifying the physician.
4. On a monthly basis, track progress on Dose Reduction Form, making note of current reductions and behaviour changes (DOS).
    - DOS Tool: suggest monitoring 3 days prior to a dose reduction trial and 7 days post.
    - Also review staff readiness, resources, and ability to take on other reduction trials.

Exclusion Criteria for Diagnosis of Psychosis

RAI-MDS 2.0 criteria for excluding residents for potentially inappropriate use of antipsychotics:

- Check the latest RAI assessment for resident and look for any indication below for diagnosis of psychosis (Canadian Institute for Health Information, 2017):

Code	Name	Description
J5c	End stage disease	Stability of condition – end stage disease, 6 months or less to live
P1ao	Hospice care	Special care in last 15 days – hospice care
I1x	Huntington's chorea	Disease – Huntington's chorea
I1ii	Schizophrenia	Disease – schizophrenia
J1i	Hallucinations	Problem condition in last 7 days – hallucinations
J1e	Delusions	Problem condition in last 7 days – delusions

- If the resident has any of the above – they are considered "excluded" and not factored into any of the calculations for antipsychotic rates (i.e., not included in numerator or denominator). In any instance where the answer is unclear, then include the resident assessment.
- The assessor should make note to look into this more thoroughly. There is opportunity to exclude them at a later date (should they need correction to RAI coding).

Meaningful Medication Review

As taken from the Residential Care Initiative: Physician Service Agreement between the Nanaimo Division of Family Practice and RCI Physician (Nanaimo Division of Family Practice). The named physician commits to medication reviews, and will:

1. Complete a meaningful medication review:
    a. As soon as possible after admission (may be combined with admitting case conference)
    b. At least every six months following initial review
    c. Upon any change in the resident's health status
    d. After any transfer back from acute care
2. Consult with pharmacists and other team members for feedback and information about the patient's medical history
3. Endeavour to attend an onsite medication review. If this is not possible, the review will be completed by videoconference or teleconference.
4. Document rationale for the introduction or withdrawal of medications

Medication List

List of Antipsychotic Medications for Data Collection

Drug Category: Typical Antipsychotics

chlorpromazine	Largactil
fluphenazine	Moditen
flupenthixol	Fluanxol
haloperidol	Haldol
loxapine	Loxapac
methotrimeprazine	Nozinan
perphenazine	Trilafon
pimozide	Orap
thiothixene	Navane
zuclopenthixol	Clopixol
zuclopenthixol acuphase	Clopixol Acuphase
other – ie. sulpride	Dogmatil

Drug Category: Atypical Antipsychotics

aripiprazole	Abilify
asenapine	Saphris
clozapine	Clozaril
lurasidone	Latuda
olanzapine	Zyprexa/Zydis
paliperidone	Invega
quetiapine	Seroquel
risperidone	Risperdal
ziprasidone	Geodon

Drug Category: Antipsychotic Depots

fluphenazine LA	Modecate
flupenthixol LA	Fluanxol Depot
haloperidol LA	Haldol LA
paliperidone palmitate	Invega Sustena
risperidone	Risperdal Consta
zuclopenthixol LA	Clopixol Depot

** List created by Clear Faculty for the first wave of the initiative (September 2013)*

7. References

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