

Clear Data Collection

Measurement User Guide

3/2/2018





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Purpose of this Guide

To describe the step-by-step process for using the ***Clear Data Collection Tool***.

The ***Clear Data Collection Tool***:

- Tracks antipsychotic use among residents at your care home and adjusts for potentially inappropriate use as per RAI exclusionary criteria
- Supports teams in their improvement work through measurement and data (collection, analysis, and display)
- Reports aggregate outcomes on antipsychotic use back to Clear Improvement Advisors so they can support teams in achieving their improvement goals

This is for teams to track the use of antipsychotics among residents. Residents' scheduled and PRN medications are tracked over time. The data collection process is similar to the second wave of Clear. However, data collection now factors in potentially inappropriate use (based on RAI).

It is an Excel template designed to be user-friendly and minimalistic. It is not meant to replace existing systems, processes, or records (i.e., RAI or resident charts) but to supplement them. As such, only necessary information is captured to avoid excess double-charting and duplication. Data fields are also limited to pre-specified drop-down lists to minimize error and calculations are automated where possible.

The Measurement Strategy (separate document) and this guide will prepare you for data collection. The Appendix contains a number of resources and references as well. Connect with your Improvement Advisor for any questions or concerns (clearbc@bcpsqc.ca).

Step-By-Step Process for Data Collection

1. Starting Off / Navigation

1.1. Pre-Work

- Attend the Leadership Preparation Webinar on measurement that walks through how to use the tool. To watch a recording of the webinar, visit <https://bcpsqc.webex.com>.

1.2. Navigating Between Worksheets

- There are several worksheets (tabs). Navigate between them by clicking on buttons (above) or tabs (below). The current worksheet button is always greyed out. The example below shows we are on the **ResidentData** tab.

Buttons:



Tabs:

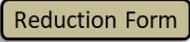
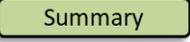


1.3. Collecting a Family of Measures

- A family of measures is used throughout the life of an improvement project. This template collects:
 - o **OUTCOME MEASURES:** Antipsychotic use (total and potentially inappropriate)
 - o **PROCESS MEASURES:** Dose reduction trials and medication reviews
 - o **BALANCING MEASURES:** New admissions (new enrollments)

It is also possible to collect and display additional measures. This is covered in Section 7: Blank Chart Templates.

1.4. Datasheet Tabs

- **ResidentData:**  Outcome data on residents and antipsychotic use are tracked on this sheet. Monthly data collection is mandatory. **We recommend tracking residents by unit/care area. If there are several units within a care home, track each unit on separate data files.**
- **PDSADData:**  Process measures are tracked here. This is optional data collection (can be done on a monthly basis). Data on Dose Reduction Trials and Medication Reviews are the two measures.
- **ReductionForm:**  This form is used for printing hard-copy (paper) forms for dose reduction trials.
- **Summary:**  Data collected in this template are useful for doing quality improvement work but are also used to measure progress and success. The indicators are found on the **Summary** tab.

2. Baseline Data Collection (February 2018)

This is a one-time process to be completed at the start of Clear. First, gather data sources (resident charts, pharmacy reports, MARs, prescriptions, etc.). Open up **Clear Data Collection Tool** Excel template and navigate to **ResidentData**.

2.1. Data Entry Tips

- Data Requirements: pay particular attention to columns and their types.
 - o REQUIRED: must have data entered for calculations to work properly
 - o OPTIONAL: not necessary for calculations, but may be helpful to you
 - o AUTO: greyed out; no need fill out as they are auto-calculated
- Drop-down lists:
 - o Entering data is made easier with drop-down lists. Many fields such as dates and statuses have pre-defined lists. Fill these in by using the drop-down lists instead of typing in them. This prevents errors (i.e. typos or non-listed options).
- Entering data into cells:
 - o To enter information into a cell, highlight the cell and double-click. You can also press F2. You should see a cursor for text entry.

2.2. Entering Resident Information

Sample view of **ResidentData**:

	A	B	C	E	F	G	H	I	DD	DE		
	RESIDENT DATA	Home	Instructions	Resident Data	PDSA Data	Summary	Reduction Form	S	H	P	R1	R2
1	Resident Information	Clinical Context						Scheduled Antipsychotics				
2	REQUIRED	REQUIRED	REQUIRED	REQUIRED	OPTIONAL	REQUIRED	OPTIONAL	OPTIONAL	REQUIRED	REQUIRED	REQU	
3		Enrollment	Discharge	Cohort	Physician	Diagnosis (RAI)	Dementia	Clinical Notes	Scheduled	Scheduled	Sched	
4	Resident Name (last, first)	(mmm-yyy)	(mmm-yyy)					(free text)	(free text)	Med Started	Med	
5	Adkins, Luis	Sep 2015		Original	Dr. A	Huntington's Chorea (I1x)		e.g., record additional diagnoses or clinical context here.	Haloperidol		Sep 2015	
6	Ball, Jerald	Sep 2015	Jan 2016	Original	Dr. B	Other (see clinical notes)	Yes		Olanzapine		Sep 2015	
7	Barnett, Guy	Sep 2015		Original	Dr. C	Schizophrenia (I1ii)			Risperidone		Sep 2015	

- Enter names of **all residents** on the unit. This includes residents not on antipsychotics. Do not include residents in respite/convalescent beds (only permanent beds). The goal is to have a comprehensive record of residents. One row represents one resident (i.e. one record).
- Complete each row from left to right with Resident Information (**NAME, ENROLLMENT, and COHORT**).
 - o **ENROLLMENT**: use drop-down list to pick the month and year. Choose "Feb 2018" for residents admitted prior to the start of Clear.
 - o **DISCHARGE**: leave blank and fill in when resident is discharged.
 - o **COHORT**: use drop-down to pick "Original" (for residents already enrolled at start of Clear) or "Additional" (new admissions). See Section F: Resident Cohorts for details.

2.3. Entering Clinical Context

- Next, fill in Clinical Context (**PHYSICIAN, DIAGNOSIS, DEMENTIA, and CLINICAL NOTES**). This info will likely come from RAI assessments or clinical documentation.
 - o **DIAGNOSIS (RAI)**: enter exclusionary criteria for antipsychotic use based on RAI. Options include: End-stage disease (J5c), Hospice care (P1ao), Schizophrenia (I1ii), Huntington's chorea (I1x), Hallucinations (J1i), and

Delusions (J1e). Only one diagnosis can be entered – choose the most important one. Enter additional diagnoses in the **CLINICAL NOTES** section. You do not need to enter non-relevant diagnoses (i.e., osteoporosis, hypertension, or diabetes).

- **DEMENTIA:** use this to indicate “Yes/No” for presence of dementia.
 - **CLINICAL NOTES:** free text field for capturing notes (e.g., further diagnoses, behaviours, symptoms, etc.).
- See Appendix Section C: Exclusion Criteria for Diagnosis of Psychosis for further details.

2.4. Listing Antipsychotics

- For residents on antipsychotics, fill in Scheduled and PRN meds. This info will likely come from pharmacy reports or the MAR (medication administration record). Leave section blank if resident is not on antipsychotics. For both Scheduled and PRN, fill in the following:
 - **MED NAME(S):** enter antipsychotic name. The drop-down list is limited to the five most common antipsychotics; it is also free text. Press F2 to edit text. Reasons for entering text are to record multiple or non-listed meds. Multiple meds can be listed on the same line.
 - **MED STARTED:** use drop-down list to pick the month and year. Choose “Feb 2018” for meds existing before the start of Clear.
 - **MED DISCONTINUED:** leave blank and fill in when discontinued.
 - **MED NOTES:** free text field for capturing notes (e.g., indication for med use, doses, prescriber, etc.).
- See Appendix E: List of Antipsychotic Medications for Clear Data Collection for a comprehensive list of antipsychotics. You can also click on the **MedList** tab to view the list of antipsychotics.

Congratulations on completing baseline data collection!

The last step is to report the data.

See Section 6: Reporting Data for instructions on how to report data to your Improvement Advisor.

3. Monthly Data Collection and Updates (March 2018 – April 2019)

Baseline data collection takes the most amount of time. **The process for monthly data collection is similar to baseline but the focus is on updating residents and antipsychotic use.** It requires less time and data entry since most residents are already entered. On a monthly basis, you need to update and report the information below:

3.1. Updating Resident Information & Clinical Context

- Review and update list of residents. Add newly enrolled (admitted) residents and discharge residents (enter **DISCHARGE** date). **Do not delete discharged residents from the list!** Review and update clinical info (i.e., diagnosis change or correction). For instance, symptoms or behaviours can change over time. Ensure changes are updated in RAI as well.
 - **DISCHARGE:** if discharged, enter a date using the drop-down list.
 - **DIAGNOSIS (RAI):** change if necessary.
 - **COHORT:** should not change.
 - **DEMENTIA:** change if necessary.
 - **CLINICAL NOTES:** change if necessary.

3.2. Updating Antipsychotics

- Review and update existing medications. Add new meds and discontinue meds (enter **MONTH DISCONTINUED** date). **Do not delete discontinued meds from the list!**
- Determine net change of Scheduled and PRN meds and update **ANTIPSYCHOTIC PROGRESS** accordingly.
 - **MED NAME(S):** change if necessary (i.e., switching meds).
 - **MED STARTED:** should not change (unless there are retrospective corrections).
 - **MONTH DISCONTINUED:** if discontinued, enter a date using the drop-down list.
 - **MED NOTES:** update accordingly.
 - **ANTIPSYCHOTIC PROGRESS:** update accordingly. When determine net change, compare baseline dose with current dose.
 - **PROGRESS NOTES:** update accordingly.

3.3. Report Data

- Report data in the same fashion as baseline data collection (Section 6: Reporting Data).

4. Entering PDSA Data / Dose Reduction Form

After completing data collection for **ResidentData**, consider which residents would be suitable for dose reduction trials. Track these residents on the **PDSAData** tab (for dose reduction trials and medication reviews). Think about residents that are settled, ready, and likely to have successful reductions.

4.1. Listing Residents for Reduction

In the first column, use the drop-down list to select residents to target for reduction. Clinical Context fields (**PHYSICIAN**, **DIAGNOSIS**, and **CLINICAL NOTES**) are automatically filled.

4.2. Dose Reduction Trial and Med Review

As you work with each resident over the months, check off:

- “D” in the D columns (1 to 24) if there was a filled and completed dose reduction trial.
- “M” in the M columns (1 to 24) if there was a medication review.

Remember this is optional data collection intended to help track your progress and work. This data is not for judgment or accountability.

4.3. Dose Reduction Form

- For residents on a dose reduction trial, create and print a Reduction Form to track progress.
- Navigate to the **ReductionForm** tab and select target resident from the drop-down list. This will fill out the information on the form (**ENROLLMENT**, **PHYSICIAN**, **DIAGNOSIS**, **CLINICAL NOTES**, **SCHEDULED MEDS**, and **PRN MEDS**).
- Print the form (Ctrl+P) and place it on the resident chart. Moving forward, use the printed physical form on a monthly basis to update dose reductions. The concept is to use printed forms for quick tracking and progress notes. The *Clear Data Collection Tool* is used to record overall reductions and generate statistics and outcome data.

4.4. Printing Excel Worksheets

- Printing worksheets is a great idea! Each tab is print-friendly. To print, go to the top-left corner and select “Print” (or press Ctrl+P). Use print preview to double-check formatting; it should print on letter-sized paper.
- Printing worksheets is helpful when presenting data or working on it while not on the computer.

5. Data Analysis & Interpretation

- Data collected in this template are useful for doing quality improvement work but are also used to measure progress and success. The indicators are found on the **Summary** tab.
- There are several tables and charts on the **Summary** tab. Use this area to analyze and interpret your data. Measures are listed down the left-hand side (rows) and months are listed across the top (columns).

5.1. Auto-calculated Numbers

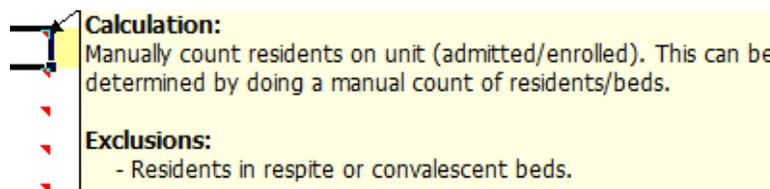
- Most measures are automatically calculated, so there is little manual input needed. Numbers that need to be inputted are shaded in yellow cells (i.e., Total # of Residents).

5.2. Data Sections

- **Monthly Data Tables/Charts:** Data tables with measures for all residents over the course of Clear. There are charts below these tables.
 - o The left chart shows the total antipsychotic rate for all residents.
 - o The right chart shows the potentially inappropriate antipsychotic rate, which only looks at the prescribing rate for residents without a diagnosis of psychosis as per RAI exclusionary criteria.
- **Cohort Level Analysis:** Contain cumulative counts of progress throughout Clear, split by two cohorts. There are data tables comparing baseline to year-to-date, as well as a diagram for illustration.
- **Monthly Data Table/Charts by Cohort:** Data tables similar to All Residents but separated by cohort. There are charts below as well.
- Summary data tables and charts print on letter-sized paper (landscape).

5.3. More Details on Measures

- Some cells have comment boxes providing additional details explaining the measure or table. These cells have little red triangles in the top-right corner. Hover the mouse over the cell to read the comment boxes. This reveals more detailed info (i.e., how the measure was calculated).



5.4. Definition of Measures

Understanding and using measures will help drive improvement efforts. Below are some of the important measures and their operational definitions:

- **Total # of Residents:** Manual count of residents on unit. This is determined by doing a manual count of residents/beds. Count permanent beds only. Exclusions: Residents in respite or convalescent beds.
- **# Residents without Dx:** Calculated count of residents on unit who do not have any RAI exclusion criteria.
- **# Residents with Dx:** Calculated count of residents on unit who have any RAI exclusion criteria.
- **Total # of New Enrollments (Admissions):** Calculated count of residents enrolled/admitted in the month.



- **# New Enrollments (Admissions) on AP:** Calculated count of residents enrolled/admitted in the month on antipsychotics upon enrollment.
- **# Residents on antipsychotics:** Calculated count of residents on unit and prescribed a scheduled or PRN antipsychotic.
- **# Residents not on antipsychotics:** Calculated count of residents on unit and not prescribed a scheduled or PRN antipsychotic.
- **% Resident on any antipsychotics:** Calculated percent: # Residents on antipsychotics divided by Total # of Residents.
- **# Residents on antipsychotics without a Dx:** Calculated count of residents on unit, do not have any RAI exclusion criteria, and prescribed a scheduled or PRN antipsychotic.
- **% Residents on antipsychotics without a Dx:** Calculated percent: # Residents on antipsychotics without a Dx divided by # of Residents without Dx.

RAI Exclusion Criteria (details in Appendix C: Exclusion Criteria for Diagnosis of Psychosis):

- End-stage disease (J5c)
- Hospice care (P1ao)
- Schizophrenia (I1ii)
- Huntington's chorea (I1x)
- Hallucinations (J1i)
- Delusions (J1e)

Ask your Improvement Advisor if you have any questions or need any help with interpreting measures.

6. Reporting Data

6.1. Reporting Summary Data

- After completing data collection for the month, send data from the **Summary** tab to your Improvement Advisor.
- Open the *Monthly Team Report* (Word doc).
- Copy the aggregate outcome numbers from the tables into the *Monthly Team Report* (on the blank page at the end). There are three ways you can do this (the first two are the easiest):
 - o **PRINTSCREEN (screenshot)**: press Print Screen (next to F12 on the keyboard). This will copy a picture of your entire computer screen. Paste (Ctrl+V) into *Monthly Team Report*.
 - o **COPY FROM EXCEL**: Highlight (click and hold the mouse button) the top-left cell (A1), drag down to the bottom right-cell (A132). Ctrl+C to copy. Paste (Ctrl+V) into the *Monthly Team Report*. This will insert the data tables. Do this too for Cohort Level Analysis cells (range A58 to AB69).
 - o **MANUAL ENTRY**: type numbers into blank data tables that accompany the *Monthly Team Report*. The blank data table can be provided upon request.
- Submit the *Monthly Team Report* to your Improvement Advisor at the beginning of each month. Data collected for the month should be submitted on the second Friday of the following month. For example, data for February should be submitted on the second Friday of March. Please email the file to your Improvement Advisors.
- Remember to save your files (both *Data Collection Tool* and *Monthly Team Report*). Don't forget to include the current month in the title of your *Monthly Team Report*.

6.2. Disclaimer

- The Clear team only requires data from the **Summary** tab which is aggregated and anonymous. We do not ask for resident-level data. We recommend not sending your *Clear Data Collection Tool* Excel file to your Improvement Advisor.
- Data collected and stored in this template should be safeguarded (similarly to any health or medical record). It contains personal, resident-level information and **should only be shared with those involved in the delivery of care.**

7. Blank Chart Templates

There are blank chart templates with different chart types. These may be useful for capturing and displaying data for your project. You can navigate to these by clicking the orange buttons from the **Home** tab. There are also orange buttons at the top (abbreviated with letters S, H, P, R1, R2, R3, R4) that each navigate to a blank chart template.

7.1. Chart Data Entry

To plot the data on these blank chart templates, enter data in the tables on the left. This data will automatically be displayed on the chart to the right. There are four types of charts available:

- **Scatterplot:** plots two variables to look for relationships (x and y).
- **Histogram:** plots distribution/frequency of a numerical variable.
- **Pareto:** plots frequency of a categorical variable.
- **Run Charts:** plots data over time to look for change.
 - x-axis (horizontal) corresponds to time (month or report period).
 - y-axis (vertical) corresponds to the data value being plotted.
 - Chart title can be modified by typing into the box above the chart.
 - Median line (in grey) is automatically generated.

7.2. Interpreting Run Charts

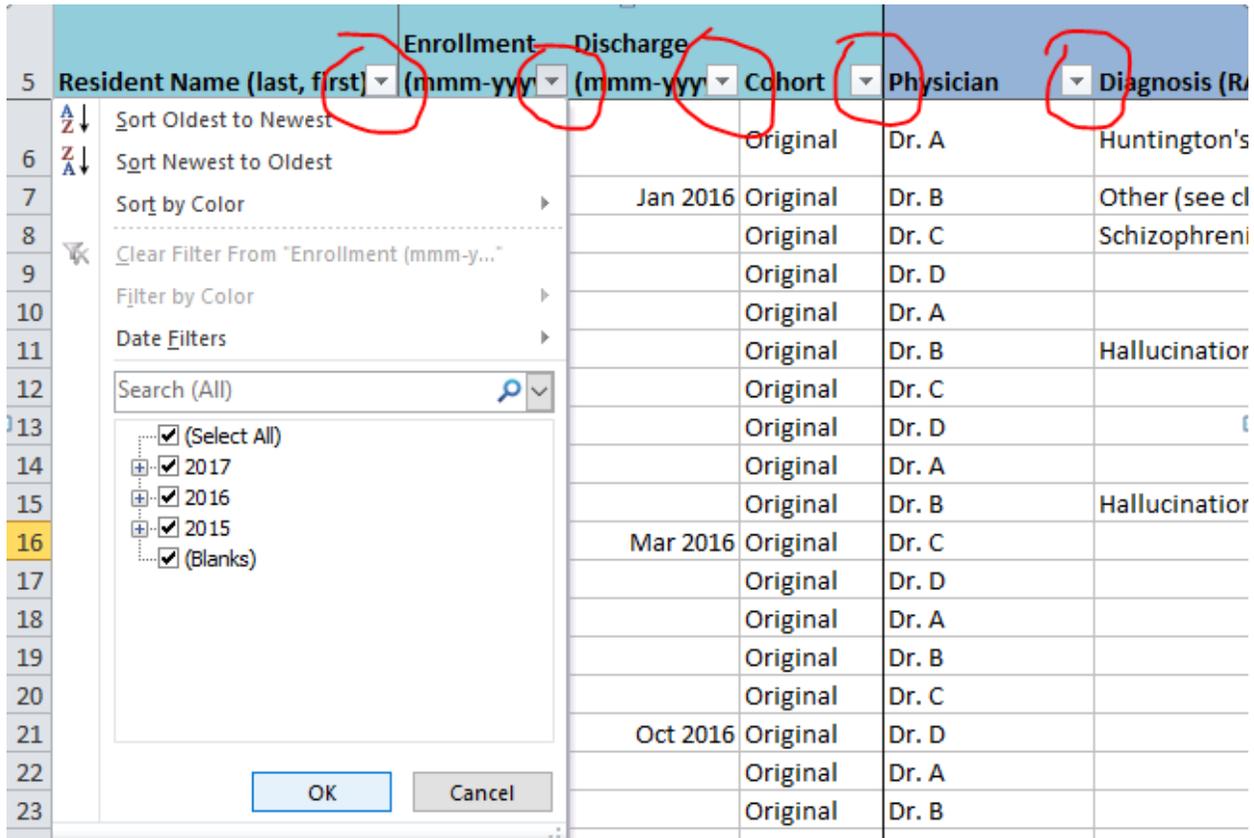
Click on the **RunChartRules** tab (RCR button) to view the rules for determining if there is a signal of non-random change.

8. Additional Functionality

Below are step-by-steps instructions on helpful functions in the Excel template to be aware of.

8.1. Filtering Data

- Filtering is a way of showing or hiding rows based on column data (i.e. text, date, and colour).
- At the top of each column are filtering controls (▼). Click on the target column header to open the filter menu.



5	Resident Name (last, first) ▼	Enrollment (mmm-yyy) ▼	Discharge (mmm-yyy) ▼	Cohort ▼	Physician ▼	Diagnosis (R) ▼
6				Original	Dr. A	Huntington's
7		Jan 2016		Original	Dr. B	Other (see cl
8				Original	Dr. C	Schizophreni
9				Original	Dr. D	
10				Original	Dr. A	
11				Original	Dr. B	Hallucinator
12				Original	Dr. C	
13				Original	Dr. D	
14				Original	Dr. A	
15				Original	Dr. B	Hallucinator
16		Mar 2016		Original	Dr. C	
17				Original	Dr. D	
18				Original	Dr. A	
19				Original	Dr. B	
20				Original	Dr. C	
21				Original	Dr. D	
22				Original	Dr. A	
23				Original	Dr. B	

- In the list of text or numbers, check the “Select All” box at the top of the list, and then check the boxes of items you want to show in your table. Click OK. Alternatively, you can uncheck boxes of items you don’t want to show.
- The checked items will show; unchecked items are hidden.
- The icon will change to ▼, indicating a filter is applied. You can apply multiple filters on separate columns.
- To remove the filter and restore all of the original items, open the filter menu again and click on the “Clear Filter From...” button.
- Some helpful online resources:
 - o <https://support.office.com/en-my/article/Filter-data-in-an-Excel-table-7d8e9739-2898-4bfe-9d0f-c6204e6e5c8a?ui=en-US&rs=en-MY&ad=MY>
 - o <http://www.excel-easy.com/data-analysis/filter.html>.

8.2. Sorting Data

Sorting records is not possible since the spreadsheet is locked and password protected. Please connect with your Improvement Advisor for further help here.

9. Data Collection Do's and Don'ts

(v) DO	(X) DON'T
When entering data...	
<ul style="list-style-type: none"> - Use drop-down lists where appropriate (i.e., dates, meds, antipsychotic progress, etc.) - Watch for data entry warnings or mistyped errors. - Type in data instead of pasting wherever possible. - Clear cell contents by highlighting the cell and pressing the Backspace key. - Enter all required data. Note which are REQUIRED, OPTIONAL, and AUTO. 	<ul style="list-style-type: none"> - Don't type if you can use a drop-down list. - Don't ignore errors and force-enter data. This can cause miscalculations. - Don't copy and paste data from other files. This can lead to formatting errors. - Don't clear cells by deleting rows. - Don't leave fields blank if they are REQUIRED.
When a resident is discharged...	
<ul style="list-style-type: none"> - Add a date for DISCHARGE using the drop-down list. 	<ul style="list-style-type: none"> - Don't delete discharged resident from the list. - Don't delete or change the prescriptions for the discharged resident. Don't mark med "Discontinued". Leave record as is.
When a Scheduled medication is discontinued...	
<ul style="list-style-type: none"> - Add a date for SCHEDULED MED DISCONTINUED. - Update ANTIPSYCHOTIC PROGRESS accordingly. 	<ul style="list-style-type: none"> - Don't delete med from the list.
When a PRN med is discontinued...	
<ul style="list-style-type: none"> - Add a date for PRN MED DISCONTINUED. - Update ANTIPSYCHOTIC PROGRESS accordingly. 	<ul style="list-style-type: none"> - Don't delete med from the list.
When updating dosage for a scheduled or PRN medication...	
<ul style="list-style-type: none"> - Note dosages changes on resident's printed <i>Dose Reduction Form</i>. - Add free text notes in SCHEDULED/PRN MED NOTES. - Update ANTIPSYCHOTIC PROGRESS. Compare latest dosage with baseline when determining change. 	
When there are multiple medications for a resident...	
<ul style="list-style-type: none"> - Enter multiple meds on same line. You may need to edit text (hit F2 to type). Remember to record scheduled meds and PRN meds in appropriate fields. 	<ul style="list-style-type: none"> - Don't enter medications on different lines.
When there are multiple diagnoses for a resident...	
<ul style="list-style-type: none"> - Enter most appropriate/important diagnosis from RAI. - Enter in additional diagnoses and clinical info in CLINICAL NOTES. - Update diagnosis if it changed. - Update diagnosis in the <i>ResidentData</i> tab 	
What if the resident has none of the listed diagnoses (RAI)?	
<ul style="list-style-type: none"> - Choose "Other (see clinical notes)", and enter in the diagnosis under CLINICAL NOTES. 	<ul style="list-style-type: none"> - Don't type in an unlisted diagnosis in DIAGNOSIS. The template won't accept the entry and will give an error.
What if the resident has dementia?	
<ul style="list-style-type: none"> - Choose "Yes" in the DEMENTIA field; note that dementia is not a matching diagnosis for antipsychotic use (thus considered potentially inappropriate). 	
When I want to re-order the list of residents...	
<ul style="list-style-type: none"> - Use filters to help view a subset of residents. 	<ul style="list-style-type: none"> - Don't try to sort data; this isn't possible.

10. Frequently Asked Questions & Commonly Known Issues

The following section contains questions and answers to some commonly known issues and lessons learned.

How does this template differ from the one seen in Clear Wave 2?

Data entry is simplified by keeping to one record per resident. There are no longer three spreadsheets to track residents, scheduled medications, and PRN medications separately. Instead, information is tracked in one place on the **ResidentData** tab. This means residents and meds (even multiple meds) must be listed on the same line now.

Why isn't there space to track scheduled medication dose changes month over month?

This was the approach used in Clear Wave 2. However, for Wave 3 we eliminated monthly tracking on the spreadsheet. Instead, we are encouraging the use of the **ReductionForm** tab to generate a printable form for dose reduction trials. This form is to be placed on the resident's chart. You will still need to enter progress on the *Clear Data Collection Tool* to generate statistics and track overall progress.

Which drop-down option for ANTIPSYCHOTIC PROGRESS should I choose when there have been medication changes?

Refer to Section 11: Data Dictionary for details on the drop-down choices.

What counts as a reduction (i.e., should dose or frequency be considered)?

Always compare the current dose to the baseline (original) dose when judging for reductions. Reductions should take into account both dose and frequency; we leave this to your discretion. One method is to look at total dosage (dose x frequency).

What if a resident has multiple medications?

Multiple medications should be listed on the same line (row). Multiple scheduled meds should be in the same box; the same applies for multiple PRN meds. For example: scheduled haloperidol and loxapine go together. PRN risperidone and quetiapine go together. Use a **MED STARTED** date that is the earliest.

If a resident has multiple medications, how does it show up on the *Dose Reduction Form*?

Both medications will populate on the *Dose Reduction Form*. All information entered in **ResidentData** will copy over. You can print two forms if you need more space for tracking these medications independently.

Should I enter prescriptions in the *Clear Data Collection Tool* for residents who are prescribed Haldol for nausea and restlessness under the Actively Dying Protocol? –exclusion

No, you don't have to enter those prescriptions for Haldol that are triggered by the Actively Dying Protocol. This use of Haldol for nausea and restlessness in residents that are considered actively dying is a short-term/time-limited use of an antipsychotic and thus not included in *Clear Data Collection Tool* as part of a care home's monthly antipsychotic usage.

We did not start collecting data in February 2018. What date should I enter for the baseline data?

It's never too late to start collecting! If you haven't collected baseline data, use the current month as baseline.

Why do I need to enter in residents that aren't on (antipsychotic) medications?

The goal of is to track – as comprehensively as possible – antipsychotic usage. To accurately track the percent of residents on antipsychotics, it is necessary to also know how many residents are not on antipsychotics. This is done by listing all residents (even those without meds) to get an accurate denominator for calculations.

Why do I need to enter in resident Diagnosis from RAI?

Diagnosis is used to exclude residents from numerator and denominator when calculating potentially inappropriate use of antipsychotics (without a diagnosis of psychosis). The measurement strategy for Clear is to align with RAI, so we are



using the same exclusion criteria for this calculation. See Appendix C: Exclusion Criteria for Diagnosis of Psychosis. Only enter diagnoses that are RAI exclusion criteria for antipsychotic use. You do not need to enter non-relevant diagnoses (i.e., osteoporosis, hypertension, or diabetes).

On the drop-down list for Diagnosis (RAI), should “psychosis” be on here? What about other psychiatric disorders?

The list uses the same exclusion criteria as per RAI and CIHI’s definition for potentially inappropriate use. There is no specific diagnosis code for psychosis in RAI.

I’m not sure whether I should add a resident to the list. Who is included and who isn’t?

Enter *all* residents on the unit. This includes residents not on antipsychotics. Count only permanent beds and exclude respite/convalescent.

Can I add, delete, or insert cells, rows, or columns?

The spreadsheet is locked so you are not able to add, delete, or insert cells. There are formulas and calculations embedded in the spreadsheets and doing any of these actions can affect them.

I can’t edit a particular cell.

Certain cells are locked and protected from being edited. The cell is not editable because it was not intended to be.

Can I unlock the spreadsheet/workbook?

The spreadsheet is locked and password protected in order to prevent accidental tampering of the template’s functionality and integrity.

How do I clear cell contents?

Click on the cell and press Backspace on the keyboard.

I want to change the number of data points being shown on the chart on the *Summary* tab.

Go to the *Summary* tab, and change the number in the yellow box labelled “Number of Months to Display”. Click and choose a number from the drop-down list. The chart will automatically adjust to the number of months.

The counts, measures, and statistics seem off. They do not match what I count.

This may be due to a data entry error. The first thing is to check the data itself. If there are still errors, connect with your Improvement Advisor review the data.

I’ve got a long list of residents. How do I change the order of this list?

We recommend leaving lists in their original order. However, it is possible to apply filters. See Section 8.1 Filtering Data.

The list is unsorted, so it’s difficult to find residents.

We recommend using the search function. You can open this by pressing Ctrl+F. This opens a dialog box. You can type in a text (i.e., resident name) and the program will jump to cells matching the search text. Alternatively, you can apply filters to shrink the list. See Section 8.1: Filtering Data.

Can I track/write down multiple diagnoses and symptoms for a resident?

Yes. See the Do’s and Don’ts.

What counts as an antipsychotic medication? What medications should I be tracking?

Track common antipsychotics from the drop-down list. It might be useful to track other antipsychotics as well. Do this by choosing “Other” and adding free text in the **MED NOTES** field. A more complete list of antipsychotics can be found in Appendix E: List of Antipsychotic Medications for Clear Data Collection.



What is the procedure when a resident is transferred, passes away, or discharged?

Add a date to the **DISCHARGE** field using the drop-down list. Do not change anything else. For instance, don't change meds for resident to "Discontinued". Don't delete meds from the list. This is not necessary and doing so will increase the count of "Discontinued" medications. See Do's and Don'ts.

Should I delete medications if they are discontinued or if a resident is discharged?

No. Medications for discharged residents should be kept as is. The resident and their medications will be excluded from calculations in following months. Remember, only mark medications as "Discontinued" if there was a successful titration. Do not change information on medications for discharged residents.

What if a resident switches antipsychotic medications?

Update med information to reflect the new prescription. You should also update the **ANTIPSYCHOTIC PROGRESS** to "Reduced", "Restarted", "Unsuccessful Trial", depending on what actually happened with the medication.

A resident that has never received antipsychotics before is now being prescribed antipsychotics. How should this be tracked?

Residents who receive antipsychotics (after enrollment) will need their medications added to the list. Ensure the **MONTH START** date matches the current month.

On the *PDSAData* tab, there is a slot for dose reduction trials or medication reviews every month. Does this mean we should be doing them monthly for each resident?

No, there is no set frequency or deadline for completing dose reduction trials or medication reviews for residents. They can be done monthly or less frequently. We encourage you to use this *PDSAData* tab as a starting point. It is not intended to be used for accountability!

How much time is needed to do the data collection?

The time it takes to complete data collection will vary based on the size of the unit (i.e., number of charts and records that need to be collected). Baseline data collection will take the most time and should take no more than a few hours. Subsequent monthly data collection will require less time, as you become much more familiar with the process. Measurement is an important part of the improvement work and intended to speed up your work, not slow it down!

Should a new file be saved monthly? The status chosen for a resident's Antipsychotic Progress might change over the initiative.

No, there is no need to save a separate file every month. You should stick with one copy to update. However, it is not a bad idea to keep historic copies for auditing or back-up.

For any other questions, comments, or concerns connect with your Improvement Advisor.

11. Data Dictionary

Below are descriptions of all data elements collected on each tab of the *Clear Data Collection Tool*.

A. ResidentData

Contains a list of residents on a unit (a master list). Each row (record) corresponds to one resident. Newly admitted (enrolled) residents will be continually added to this list. Discharged residents are kept on the list but need to have a date entered for **DISCHARGE**. It's important to keep resident information up to date.

Data Field	Description	Type	Requirement
Resident Information			
Resident Name	Resident's name. Name should be: last, first.	Free text	Required
Enrollment	Date resident is enrolled (admitted) in Clear. Only need to specify month and year. Used to calculate monthly resident count.	Date [mmm-yyyy] using drop-down list	Required
Discharge	Date resident is discharged (e.g. deceased, discharged, or transferred). Only need to specify month and year. Used to calculate monthly resident count.	Date [mmm-yyyy] using drop-down list	Required if discharged
Cohort	Identifies whether residents belong to the "Original" cohort (resident enrolled since at start of Clear: Feb 2018), or "Additional" (resident enrolled after start of Clear).	Drop-down list	Required
Clinical Context			
Physician	Resident's physician name (MRP goes here).	Free text	Optional
Diagnosis (RAI)	Contains diagnosis from RAI assessment. Can only enter one. Enter in primary diagnosis or the most relevant for excluding antipsychotic use. Additional diagnoses can be entered under CLINICAL NOTES .	Drop-down list	Required
Dementia	Specifies whether resident has dementia (any form) or not.	Yes/No	Optional
Clinical Notes	Free text field for further details (i.e., additional diagnoses, symptoms, or behaviours). See Appendix C details on tracking symptoms. Symptoms can be resolved, so this should be updated regularly.	Free text	Optional
Scheduled Antipsychotics			
Scheduled Med Name(s)	Name of scheduled med. If a resident is on multiple scheduled meds, list them on the same line.	Drop-down list and free text	Required
Scheduled Med Started	Month the prescription started. If there are multiple medications, list the date that is the earliest.	Date [mmm-yyyy] using drop-down list	Required
Scheduled Med Discontinued	Month the prescription ended. If there are multiple medications, list the date that is the latest.	Date [mmm-yyyy] using drop-down list	Required
Scheduled Med Notes	Free text field for further details on med use (i.e., indication for med use, doses, and anything else here).	Free text	Optional

PRN Antipsychotics			
PRN Med Name(s)	Name of PRN med. If a resident is on multiple PRN meds, list them on the same line.	Drop-down list and free text	Required
PRN Med Started	Month the prescription started. If there are multiple medications, list the date that is the earliest.	Date [mmm-yyyy] using drop-down list	Required
PRN Med Discontinued	Month the prescription ended. If there are multiple medications, list the date that is the latest.	Date [mmm-yyyy] using drop-down list	Required
PRN Med Notes	Free text field for further details on med use (i.e., indication for med use, doses, and anything else here). A good use would be to note the number of times the PRN was used this month, and for what reasons they were used for.	Free text	Optional
Antipsychotic Progress			
Antipsychotic Progress	Status of overall antipsychotic reduction progress. Must be updated monthly. This field is used to count cumulative number of residents with meds reduced or discontinued. Statuses: <ul style="list-style-type: none"> - Unchanged: no change compared to baseline - Increased: higher dose compared to baseline - Decreased: lower dose compared to baseline - Discontinued: full discontinuation of scheduled & PRN meds - Restarted: switched to another med or restarted same med - Unsuccessful Trial: trialed but brought back to original dose 	Drop-down list	Required
Progress Notes	Free text field for further details on titration progress (i.e., trials, dose restarts, etc.).	Free text	Optional
Processes			
Last Med Review	Auto-populated field pulled from PDSAData tab and shows latest month with a Dose Reduction Trial completed.	Date	Auto-populated
Last Dose Reduction Trial	Auto-populated field pulled from PDSAData tab and shows latest month with a Medication Review completed.	Date	Auto-populated



B. PDSAData

Contains a subset of residents’ suitable and targeted for dose reduction trials. The idea is to track residents and their progress with regular medication reviews and dose reduction trials. This data collection for this worksheet is not mandatory for Clear.

Data Field	Description	Type	Requirement
Resident Information			
Resident Name	Resident’s name. You can type in the resident name, but it must match an entry existing on the ResidentData tab. The drop-down list can also be used. Typos and incorrect entries are rejected.	Drop-down list	Required
Clinical Context			
Physician	Auto-populated field pulled from ResidentData tab.	Text	Auto-populated
Diagnosis	Auto-populated field pulled from ResidentData tab.	Text	Auto-populated
Clinical Notes	Auto-populated field pulled from ResidentData tab.	Text	Auto-populated
Dose Reduction Trial & Med Review			
24 cells x Months for Dose Reduction Trials (D__)	Indicates whether a dose reduction trial was completed in the month. This is a simple yes (indicated with a “D”) or no (leave blank).	Drop-down list	Optional
24 cells x Months for Med Reviews (M__)	Indicates whether a medication review was completed in the month. This is a simple yes (indicated with an “M”) or no (leave blank).	Drop-down list	Optional
Last DRT	Auto-populated field based on the latest month with a dose reduction trial completed.	Date	Auto-populated
Last MR	Auto-populated field based on the latest month with a medication review completed.	Date	Auto-populated

Appendix

A. Key Terminology

Permanent bed	A bed designated to a resident.
Respite/Convalescent bed	A bed temporarily assigned to a resident who is in transition. They are considered out of scope for the Clear initiative and should not be counted in the measures.
Enrollment	Enrollment (date) is when a resident on the unit was added to the <i>Clear Data Collection Tool</i> . For residents living in the care home before Clear, enrollment would be the beginning of Clear. For new admissions, it would be their admission date. For the purposes of Clear, Enrollment date is used interchangeably with Admission date.
Original Cohort	Cohort of residents already living in the care home on or before the beginning of the Clear initiative start (baseline date is Feb 1, 2018). This should be all residents in the baseline month.
Additional Cohort	Cohort of residents living in the care home admitted after the beginning of the Clear initiative start (baseline date is Feb 1, 2018).
Discharged	Resident is discharged or transferred out of unit; this includes residents who pass away.
Medication, Prescription, AP	Used interchangeably with “antipsychotics”.
Scheduled Medication	A medication prescription that is given regularly to a resident (as per schedule).
PRN Medication	A medication prescription that is given <i>pro re nata</i> (as circumstances arise; as needed).
DOS Tool	Dementia Observation System Tool: used to assess a person’s behaviour over a 24 hour cycle for up to 7 days to determine the occurrence, frequency, and duration of behaviours of concern. There are other tools that can be used to track behaviour change (i.e. ,RAI has the ABS: Aggressive Behaviour Scale).

B. 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.

C. Exclusion Criteria for Diagnosis of Psychosis

While the goal of Clear is to reduce antipsychotics use, there are also appropriate uses for antipsychotics. The *Clear Data Collection Tool* captures diagnosis of psychosis for determining potentially inappropriate use; this is in contrast to previous Clear initiatives where only total use of antipsychotics was collected.

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, 2018):

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 resident has any of the above – they are considered “excluded” and not factored into any of the calculations for antipsychotic rates (i.e., excluded from numerator and denominator).
- If resident assessment is unclear or if assessment needs correction, the assessor should make note to look into this more thoroughly. There is opportunity to correct the RAI coding in the future.

While there is no specific field to capture symptoms, we recommend tracking symptoms and behaviours. They can be entered in **CLINICAL NOTES** field (free text), on an appropriate clinical assessment, or on the printed *Dose Reduction Form*. Symptoms can change or resolve, so this information should be regularly reviewed. Common symptoms associated with the above diagnoses include:

- Hallucinations and/or delusions
- Physical aggression
- Verbal aggression
- Sexually disinhibited behaviour

D. Meaningful Medication Review

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

E. List of Antipsychotic Medications for Clear 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

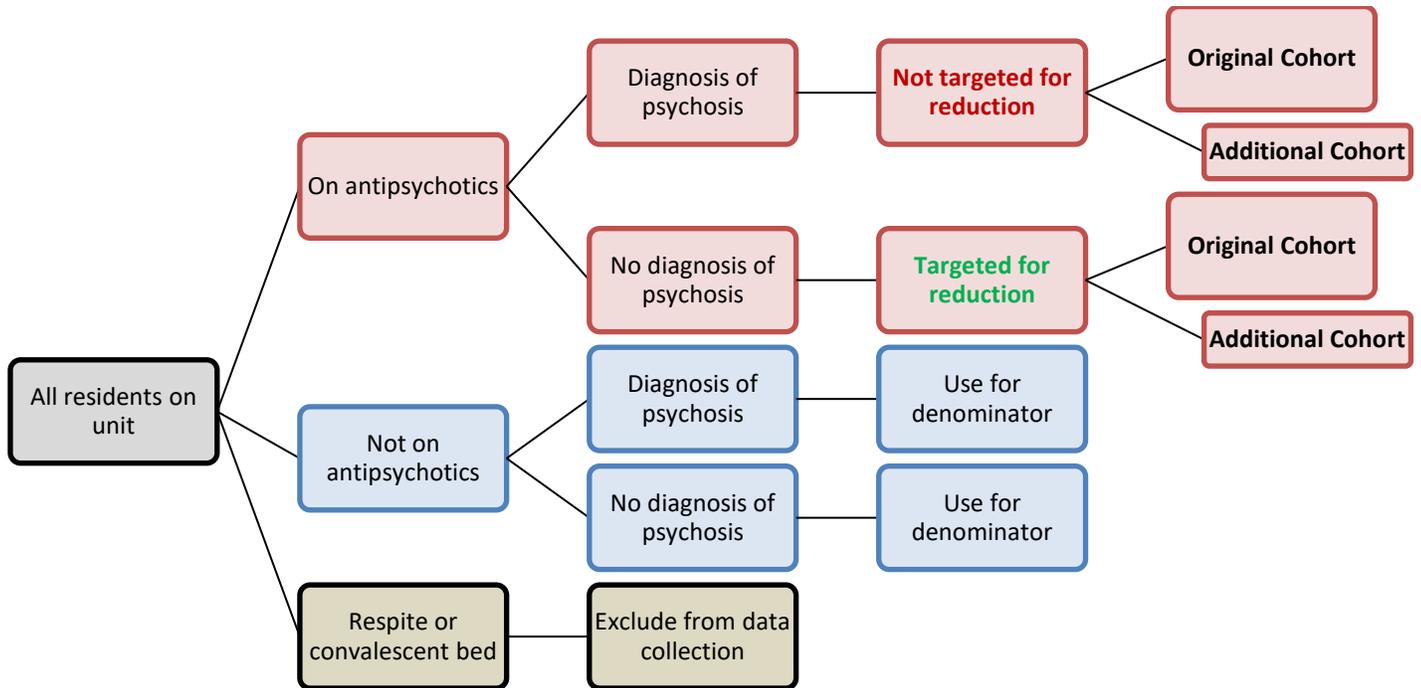
fluphenazine LA	Modecate
flupenthixol LA	Fluanxol Depot
haloperidol LA	Haldol LA
paliperidone palmitate	Invega Sustena
risperidone	Risperdal Consta
zuclopenthixol LA	Clopixol Depot

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

F. Resident Cohorts

The diagram below illustrates the resident populations of interest.

- All residents on the unit will be tracked on the *Clear Data Collection Tool*. These residents can be divided into three groups:
 1. On antipsychotics:
 - a. Diagnosis of psychosis: Include in collection and track meds. Can be split by diagnosis:
 - b. No diagnosis of psychosis: Targeted for med reduction (potentially inappropriate use).
 2. Not on antipsychotics: Include in collection but with no meds to track. Use as denominator.
 3. Respite or convalescent beds: Exclude from collection.



G. Sample Measurement Plan

References

- Canadian Institute for Health Information. (2018, January 18). *Potentially Inappropriate Use of Antipsychotics in Long-Term Care*. Retrieved January 18, 2018, from <http://indicatorlibrary.cihi.ca/display/HSPIL/Potentially+Inappropriate+Use+of+Antipsychotics+in+Long-Term+Care>
- Nanaimo Division of Family Practice. (n.d.). *Residential Care Initiative: Physician Service Agreement Between the Nanaimo Division of Family Practice and RCI Physician*. Retrieved October 2017, from <https://www.divisionsbc.ca/CMSMedia/WebPageRevisions/PageRev-13244/Letter%20of%20Agreement.pdf>