Treatment Optimization of Psychosis Collaborative

Guide to Measurement

June 2021

Land acknowledgement

We acknowledge we live and work in Vancouver on the Ancestral Traditional Unceded Territories of the Coast Salish People, the TOP Collaborative sites operate on the Lands of the ~ thexʷməθkʷəyəm (Musqueam), Skwxwú7mesh Úxwumixw (Squamish) Mi ce:p kʷətxʷiləm (Tsleil-Waututh) and Shíshálh (Sechelt) Nations.

CONTENT

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Why do we measure **for improvement?**

Measurement for improvement is an important part of participation in the TOP Collaborative. Measurement tells us if we are improving and reaching our aims, helps teams communicate about their improvement efforts, and ultimately demonstrate the impact on the community. **Measurement for improvement should be useful, but need not be perfect. The goal is to obtain just enough "good enough" data to act.**

Each team will collect six QI measures, accompanied by a qualitative narrative summary, on a monthly basis. Reports are due the 1st of each month.

How will you know if the changes you are making are improving outcomes? How will you demonstrate to clients, leaders, and peers that your efforts are contributing to better care? As we begin to make changes in the care and services we deliver, measurement helps us:

- Understand current performance
- Observe if the changes we are making are having a desired impact on the outcomes
- Compare our performance with similar sites to foster learning
- Communicate clearly about our improvement effort and outcomes
- Identify negative or unexpected outcomes related to changes we are making
- Know if we have reached our aims

How do we measure for improvement?

Step 1: Develop an aim statement

An Aim Statement is a description of the current status and what you intend to accomplish at the end of your improvement work. Your aim should align well with the overarching Collaborative aims and include all the characteristics of a good aim (SMART):

- **S**pecific: target a specific area for improvement
- **M**easurable: quantify or at least suggest an indicator of progress
- **A**chievable: ensure this is doable in the time that you have
- **R**ealistic: state what results can realistically be achieved, given available resources
- **T**ime-related: specify when the result(s) can be achieved

TOP Collaborative Aims:

The aim of the TOP Collaborative is to increase the system-wide optimization of anti-psychotic treatment in community settings amongst our clients living with schizophrenia/schizoaffective disorder, in order to improve outcomes and quality of life. In partnership with interdisciplinary MHSU teams and community partners, participating teams will implement evidence-based practice. By June 2022 we aim to reach the following:

- 100% of clients with treatment resistant schizophrenia (TRS)[1] will be offered clozapine
- 90% of clients who are eligible for a clozapine start in the community, and who accept the treatment, will undergo titration in the community
- 45% of clients undergoing clozapine treatment will see an improvement in their functioning as assessed by HONOS andPANSS-SV

Examples of SMART aims aligned with the TOP aims:

1. By xx date, the team will have identified the entire population of focus.
2. By xx date, 50% of clients who have evidence of nonadherence to schizophrenia/schizoaffective disorder medications will have been assessed (with family when available) and if appropriate, offered a depot.
3. By xx date, 33% of clients who started on clozapine in the community will undergo titration in the community.

Treatment Resistant Schizophrenia (TRS) is defined as inadequate medication response to an adequate medication trial of 2 different antipsychotics.

Inadequate medication response is based on clinician judgement if relevant measurement scale data does not exist or <20% improvement on PANSS-SV when this data exists.

An **adequate antipsychotic medication trial** is defined as lasting at least 6 weeks, at a therapeutic dosage.

Therapeutic dosage is defined as:

- For oral antipsychotic drugs, at least 6 weeks of treatment at the midpoint or greater of the licensed therapeutic dose range.
- For LAI antipsychotic drugs, given for at least 6 weeks after it has achievedteady state (generally at least 4 months from commencingtreatment)

[1] Treatment Resistant Schizophrenia (TRS) is defined as inadequate medication response to an adequate medication trial of 2 different antipsychotics. Inadequate medication response is based on clinician judgement if relevant measurement scale data does not exist or more than 20% improvement on PANSS-SV when this data exists. An adequate antipsychotic medication trial is defined as lasting at least 6 weeks, at a therapeutic dosage.

Step 2: Define your population of focus

The TOP Population of Focus (POF) refers to clients who may have treatment resistant schizophrenia or schizoaffective disorder. This includes clients with schizophrenia/schizoaffective disorder who:

- have latest HONOS scores on Question 6 of 3 or higher,
- are not currently on clozapine, and
- do not currently have active destabilizing medical and psychosocial factors (e.g. substance use, comorbidities, no fixed address, etc.)

Here we want to have a list of who your clients are and match the above criteria.

If we include people in our measurements we are NOT actually seeing, then we dilute any changes and If we miss measuring people we ARE seeing, we miss detecting any improvements from their cases. Figuring out this list of clients is called empanelment.

Step 3: Identify your Data Collection Plan

What data will you need and where will it come from? The easiest way to ensure you are consistently tracking the same measure is to use the definition of core measures used in this document. Data can be collected using the method of your choice. Contact the TOP core team if you need assistance with this.

In quality improvement we do not need "perfect" data in order to get started, and we can make changes to improve our data quality as we go along but you may need to standardize how the data is collected and recorded in order to maximize the utility of the data.

Step 4: Report your Data

A reporting platform has been developed to share and track your progress over the course of the Collaborative. Team Leads will be provided with a web link and log in credentials to a secure reporting platform. Reporting of quantitative data and qualitative will occur monthly. Reports are due on the 1st of each month. The first reporting date is August 1st.

Step 5: Analyze your Data

Your team should dedicate regular weekly/bi-weekly team meetings to review your data. Reviewing the data from the reporting template is also useful as this tool will automatically calculate and present your data in a run chart; a very common way to present improvement data.

Measurement should help you decide if you are getting closer to your aims and it can also inform your next steps.

What do we measure for improvement?

There are two levels of measurement:

1. TOP Collaborative Core Measures
2. Plan-Do-Study-Act (PDSA) Cycle Measures

The TOP Collaborative Core Measures

These measures monitor your progress towards the overall Collaborative aims and goals. Your team will track these throughout the Collaborative and they are strictly quantitative.

Your team will track four quality improvement measures that are aligned with your aims.

Population of Focus: Clients who may have TRS. This includes clients with schizophrenia/schizoaffective disorder who:

- have a latest HONOS scores on Question #6 of 3 or higher,
- are not currently on clozapine, and
- do not currently have active destabilizing medical and psychosocial factors (e.g. substance use, comorbidities, no fixed address, etc.)

#	Core Measure	Numerator	Denominator	Target
1	Non-adherent clients offered depot injection	# of clients offered depot injections	# clients non-adherent to oral medication	100%
2	Treatment Resistant Schizophrenia (TRS) clients offered clozapine	# of clients diagnosed with TRS who have been offered clozapine	# of clients diagnosed with TRS	100%
3	Clients who undergo titration in the community	# of clients who start clozapine titration in the community	# of clients who are suitable for clozapine in the community	90%
4	Clients retained on clozapine	# of clients who remain on clozapine for more than the 8-week titration period	# of clients who are started on clozapine	70%
5	Clients on clozapine that made progress on HONOS	# of clients retained on clozapine and made any progress on HONOS score	# of clients diagnosed with TRS who are retained on clozapine	45%
6	Clients on clozapine with a 20% improvement on PANSS -SV	# of clients retained on clozapine and achieved 20% or more improvement on PANSS-SV	# clients diagnosed with TRS who are retained on clozapine	45%

Quality Improvement Measurement: Population of Focus

The TOP Population of Focus (POF) refers to clients who may have treatment resistant schizophrenia or schizoaffective disorder. This includes clients with schizophrenia/schizoaffective disorder who:

- have a latest HONOS scores on Question #6 of 3 or higher,
- are not currently on clozapine, and
- do not currently have active destabilizing medical and psychosocial factors (e.g. substance use, comorbidities, no fixed address, etc.)[1]

POF Identification Process:

See flowsheet for guidance

Step 1. Make a list of all your clients diagnosed with schizophrenia/schizoaffective disorder who have a latest HONOS scores on Question #6 of 3 or higher

Step 2. For any clients without a HONOS score or with a HONOS scores more than 6 months old: have the team complete HONOS with these clients and review results as per step #1

Step 3. Remove those who are currently on clozapine

Step 4. Of the remaining, remove those who have active destabilizing medical and psychosocial factors (e.g. substance use, comorbidities, no fixed address, etc.). Offer them appropriate treatment options, they will not be part of your POF

Remaining Clients are your population of focus

Step 5. Of the remaining, note those who have been on clozapine in the past, they may have TRS; explore retrial

Step 6. Of the remaining, note those with suspected adherence issues and those who are currently on depot injection; they may have TRS; evaluate prior med trials, poly- pharmacy, PANSS-SV, etc.

Step 7. Note the remaining (not on clozapine, never been on clozapine, no active destabilizing substance use, may have adherence issues, and not currently on depot injection); consider LAI .

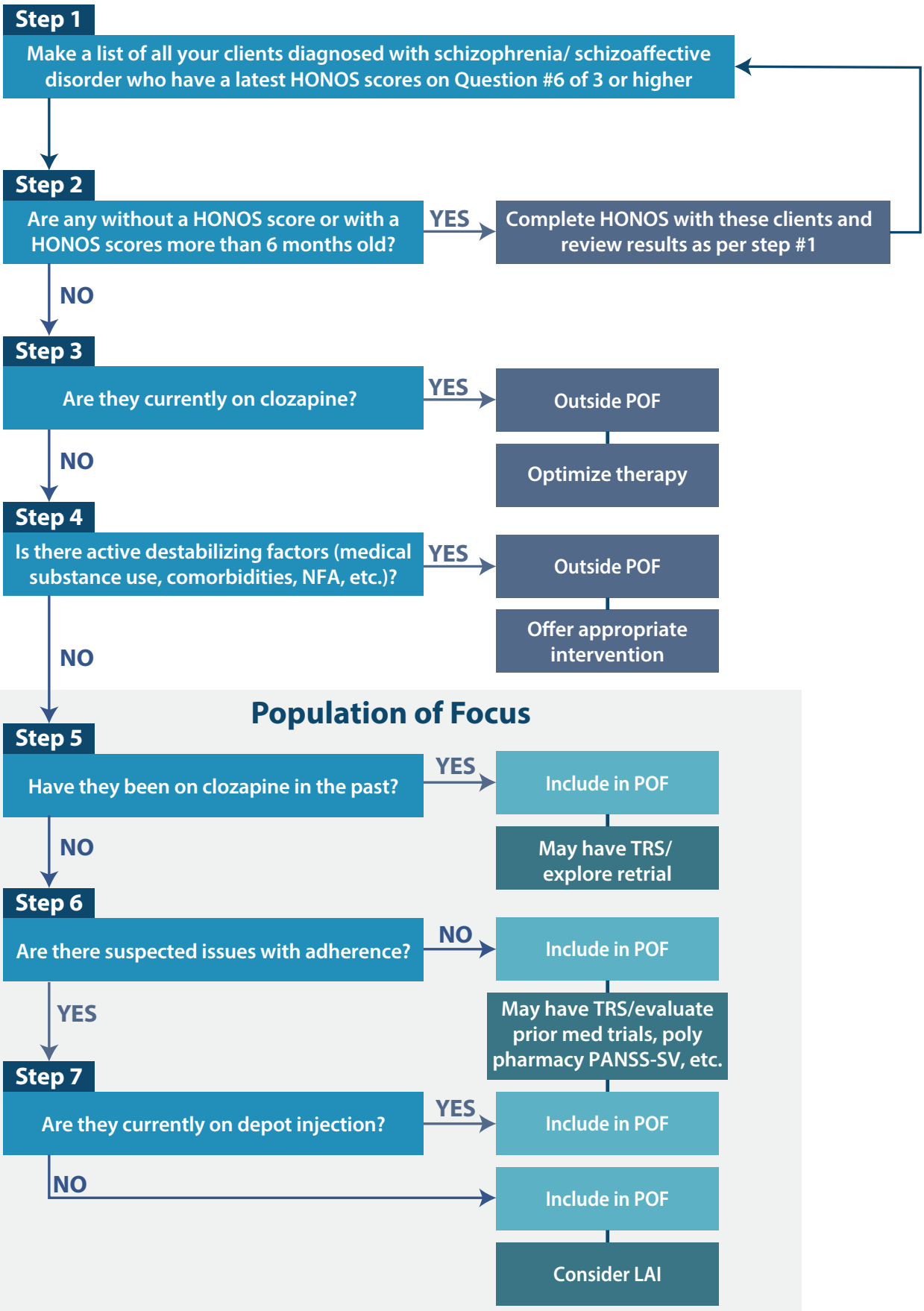
Example

Total clients with schizophrenia/schizoaffective disorder who have a latest HONOS scores on Question #6 of 3 or higher
Less: clients without a HONOS score or with a HONOS scores more than 6 months old → have the team complete HONOS with these clients, and include any with a HONOS score of 3 or 4
Less: those who are currently on clozapine
Less: those who have active destabilizing medical and psychosocial factors (e.g. substance use, comorbidities, no fixed address, etc.).
Equals your POF

To calculate the POF use the flowsheet on the following page:

[2] LAI stands for Long Acting Injectables

TOP Collaborative POF Identification Process Flowsheet:



Core Quality Improvement Measure 1: Non-adherent clients offered depot injection

TARGET: 100%

This is defined as the number of clients diagnosed with non-adherence on oral medications who have been offered depot injections, of the clients suspicious of non-adherence over the prior 6 months (for instance, the data collection cycle 1 in June 2021 will cover the time period of December 1st to May 31st).

Non-adherence is defined as taking less than 80% of prescribed dose as determined by pill counts, dispensing chart review, Pharmacare or pharmacy report, or client/caregiver report (client report alone is unlikely to be sufficient). In addition, given that there may still be covert nonadherence, antipsychotic blood levels may provide additional evidence. (TRRIP Guidelines, Am J Psychiatry, 2017)

To calculate the percentage of non-adherent clients offered depot injection use the following formula:

$$\%\ \text{Non-adherent clients offered depot injection} = \frac{\#\ \text{of clients offered depot injections in the last 6 months}}{\#\ \text{of clients with suspected non-adherence in the last 6 months}} * 100$$

Example

For example, if 40 of your clients are suspected of nonadherence, and 30 of those clients were offered depot injections, the calculation would be:

$$\frac{30}{40} * 100 = 75\%$$

Core Quality Improvement Measure 2: TRS clients offered clozapine

TARGET: 100%

This is defined as the number of clients diagnosed with TRS who have been offered clozapine. To calculate the percentage of TRS clients offered clozapine use the following formula:

$$\%\ \text{TRS clients offered clozapine} = \frac{\#\ \text{of clients diagnosed with TRS who have been offered clozapine}}{\#\ \text{of clients diagnosed with TRS}} * 100$$

Example

For example, if 40 of your clients are diagnosed with TRS, and 30 of thoseclients were offered clozapine, the calculation would be:

$$\frac{30}{40} * 100 = 75\%$$

Core Quality Improvement Measure 3: Clients who undergo clozapine titration in the community

TARGET: 90%

This is defined as the number of clients who are suitable for clozapine in the community and start titration in the community.

To calculate the percentage of clients who undergo titration in the community use the following formula:

$$\text{\% of clients who undergo titration in the community} = \frac{\text{\# of clients who start clozapine titration in the community}}{\text{\# of clients who are suitable for clozapine in the community}} * 100$$

Example

For example, if 20 of your clients are suitable for clozapine in the community and 15 of those clients start clozapine in the community, the calculation would be:

$$\frac{15}{20} * 100 = 75\%$$

Core Quality Improvement Measure 4: Clients retained on clozapine

TARGET: 70%

This is defined as the number of clients who started on clozapine and remain on clozapine for more than the 8-week titration period.

To calculate the percentage of clients retained on clozapine use the following formula:

$$\text{\% Clients retained on clozapine} = \frac{\text{\# of clients who remain on clozapine for more than the 8-week titration period}}{\text{\# of clients who are started on clozapine}}$$

Example

For example, if 40 of your clients were started on clozapine, and 30 of those clients remain on clozapine for more than the titration period, the calculation would be:

$$\frac{30}{40} * 100 = 75\%$$

Core Quality Improvement Measure 5: Clients on clozapine who made progress on HONOS

TARGET: 45%

This is defined as the number of TRS clients who are retained on clozapine and made any progress on HONOS.

To calculate the percentage of clients on clozapine and made progress on HONOS use the following formula:

$$\text{\% clients who started clozapine and made progress on HONOS} = \frac{\text{\# of clients who started clozapine during collaborative period and made any progress on HONOS score}}{\text{\# of clients diagnosed with TRS who initiated clozapine during the collaborative period}} * 100$$

Example

For example, if 40 of your TRS clients are on clozapine, and 30 of those clients made any progress on HONOS score, the calculation would be:

$$\frac{30}{40} * 100 = 75\%$$

Core Quality Improvement Measure 6: Clients on clozapine with a 20% improvement on PANSS -SV

This is defined as the number of clients diagnosed with TRS who are retained on clozapine and achieved a 20% or more improvement on PANSS -SV.

To calculate the percentage of clients initiated on clozapine who had a 20% improvement on PANSS -SV use the following formula:

$$\text{\% clients initiated on clozapine and had a 20\% improvement on PANSS -SV} = \frac{\text{\# of clients initiated on clozapine during the collaborative period and achieved 20\% or more improvement on PANSS-SV}}{\text{\# of clients diagnosed with TRS who initiated clozapine during the collaborative period}} * 100$$

Example

For example, if 40 of your clients were started on clozapine, and 30 of those clients achieved 20% or more improvement on PANSS-SV, the calculation would be:

$$\frac{30}{40} * 100 = 75\%$$

Plan-Do-Study-Act (PDSA) Cycle Measure

These measures monitor the results of specific tests of change. They are done on an as needed basis for the assessment of the changes tested. These measures are always qualitative and quantitative as needed.

The PDSA cycle has three types of measures:

A. **Outcome Measures:** These measures are usually based on your Aim Statement. What is better for the client/customer? What is the result of the new process/procedure? What, ultimately will be better? (not what are you trying to "do")
B. **Process Measures**: These are the voice of the system. What is being done differently that we want to capture? What is now being done consistently?
C. **Balancing Measures:** What unintended consequences might occur? What are we worried about that we can do something about?

Example

Your aim is: By June 2022, the team will increase the number of clients who started of clozapine in the community to undergo titration from currently 25% to 70%.
Outcome Measure: number of clients who have successful complete clozapine titration in the community
Process Measure: number of clients whose family members were engaged in the treatment process
Balancing Measure: the number of hospitalizations due to medication non-adherence

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