

Development of a Paying for Quality (P4Q) Approach for Schizophrenia Care in Ontario, Canada

May 30, 2024

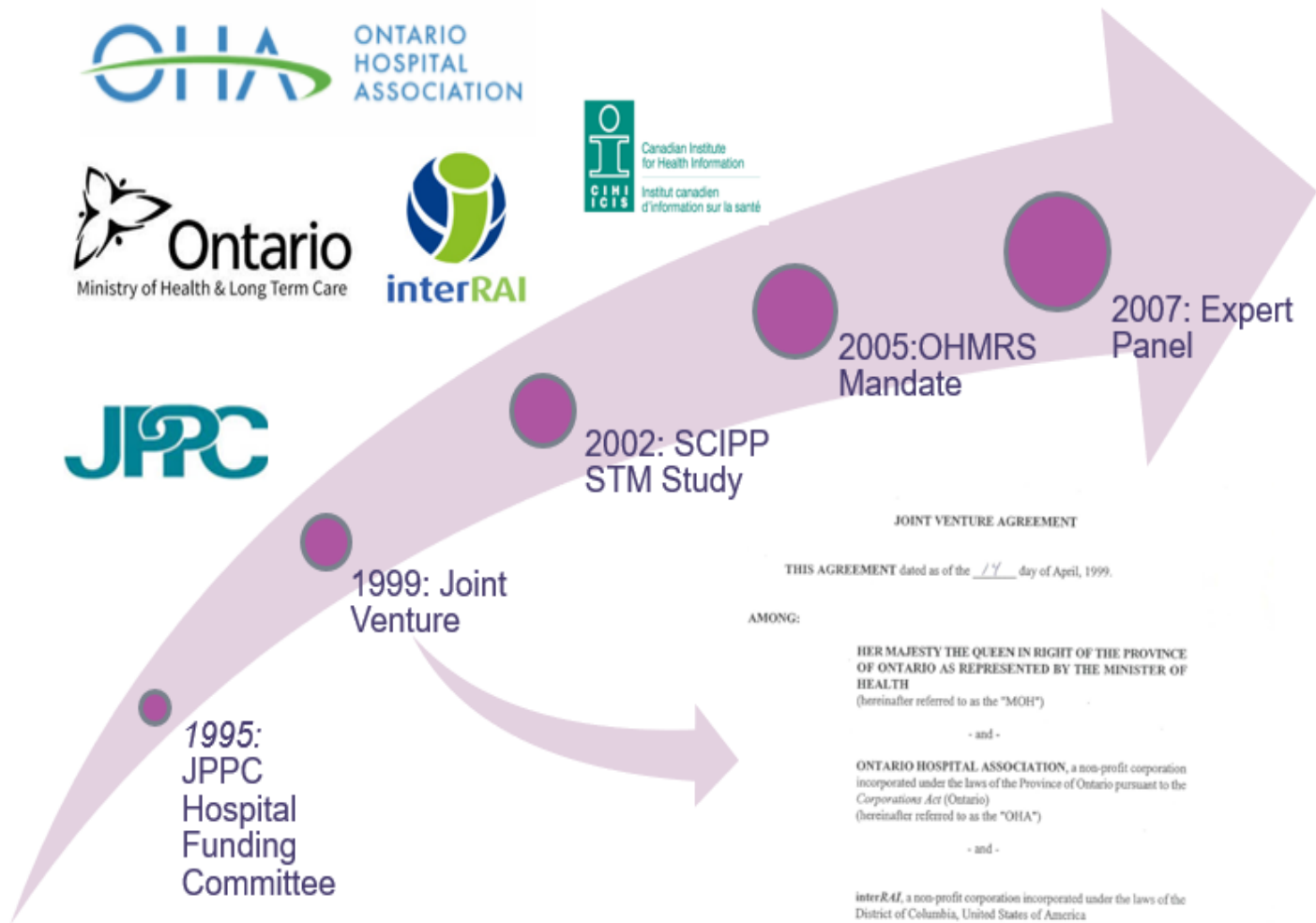
Patient Classification Systems International Conference

Slovenia



Background





Evolution of Ontario's Mental Health Patient Classification System and its associated weights

JOINT VENTURE AGREEMENT

THIS AGREEMENT dated as of the 14 day of April, 1999.

AMONG:

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF ONTARIO AS REPRESENTED BY THE MINISTER OF HEALTH
(hereinafter referred to as the "MOH")

- and -

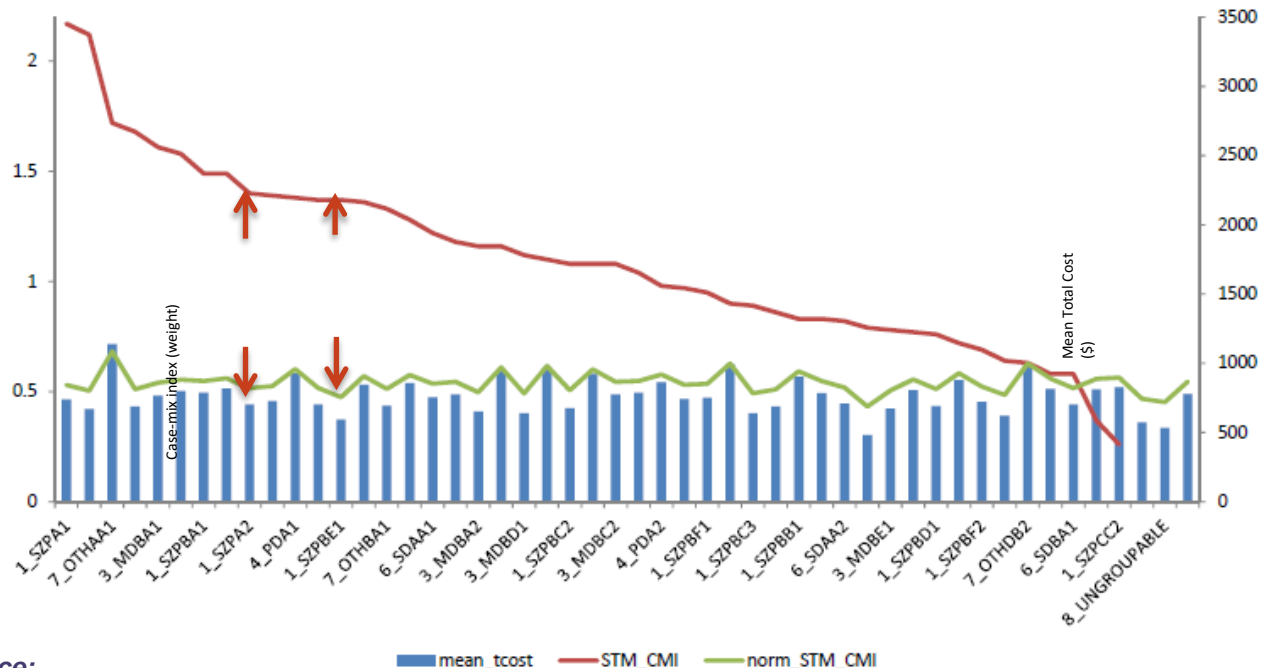
ONTARIO HOSPITAL ASSOCIATION, a non-profit corporation incorporated under the laws of the Province of Ontario pursuant to the *Corporations Act* (Ontario)
(hereinafter referred to as the "OHA")

- and -

interRAI, a non-profit corporation incorporated under the laws of the District of Columbia, United States of America
(hereinafter referred to as "interRAI")

Ontario cost data does not differentiate resource use across case-mix groups (Technical Working Grp)

Case-mix grouping and related weights should help differentiate resource use (i.e. mean total costs, CMI weights) across groups.



- The original STM study CMI would suggest a relative CMI difference 0.7 (from 2.2 to 1.5 = ~40%) [red line]
- Actual resource utilization from reported data suggests no relative difference between the two groups [green line]
- Expected STM results are different from reported data across all SCIPP groups

Reference:

Inpatient Mental Health Funding Task Group Report (2017)

■ mean_tcost ■ STM_CMI ■ norm_STM_CMI

OHA's 2018 Improving Quality of Care for Mental Health Patients through Funding Methodologies conference



Please click on [this link](#) to access the PDF version of the proceedings.



Movement to Focus on Improvement and Value



Why focus on Schizophrenia Care?



Patients diagnosed with schizophrenia

- Schizophrenia, schizotypal and delusional disorders were listed as **top 10** high-volume inpatient hospitalizations with the longest average length of stay

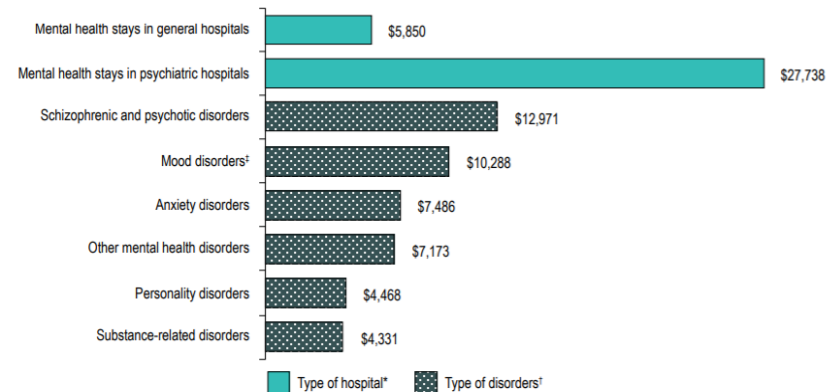
Province	Rank	Most responsible diagnosis for inpatient hospitalizations in 2020–2021	Number of inpatient hospitalizations in 2020–2021	Percentage* of inpatient hospitalizations in 2020–2021	Average acute length of stay of inpatient hospitalizations in 2020–2021
Ont.	1	Giving birth	131,753	13.2	1.9
	2	Heart failure	24,790	2.5	8.3
	3	Acute myocardial infarction	23,009	2.3	4.4
	4	Osteoarthritis of the knee	19,931	2.0	1.8
	5	Mood (affective) disorders	19,810	2.0	10.7
	6	COVID-19	18,506	1.9	10.8
	7	Schizophrenia, schizotypal and delusional disorders	17,342	1.7	14.3
	8	Neurocognitive disorders	17,198	1.7	13.6
	9	Other medical care (e.g., palliative care, chemotherapy)	15,720	1.6	7.7
	10	COPD and bronchitis	15,239	1.5	6.4

- This mental health condition was also **third** most prevalent for age group 18-64 in Canada

Age group	Rank	Most responsible diagnosis for inpatient hospitalizations in 2020–2021	Number of inpatient hospitalizations in 2020–2021	Percentage* of inpatient hospitalizations in 2020–2021	Average acute length of stay of inpatient hospitalizations in 2020–2021
18–64	1	Giving birth	342,775	25.1	2.1
	2	Substance use disorders	47,509	3.5	4.9
	3	Schizophrenia, schizotypal and delusional disorders	39,311	2.9	16.4
	4	Mood (affective) disorders	33,485	2.5	11.3
	5	Diseases of the appendix	27,136	2.0	2.0

- 50%** of cost for hospital stays related to mental health are for services that help patients with schizophrenia and psychotic disorders.

Estimated average cost of hospital stays by type of hospital and disorders (2017–2018)



Schizophrenia Care in Hospitals, FY 2023-2024 (Q1, Q2)



Ontario
facilities
69



Discharge
assessments
20404



Schizophrenia
assessments
4289

- Age 25-44: 52%
- Average Age: 42
- Male: 63%
- Employed: 9%
- Homeless: 9%
- Discharged to private residence: 75%
- Median LOS: 17 days
- Average LOS: 34 days

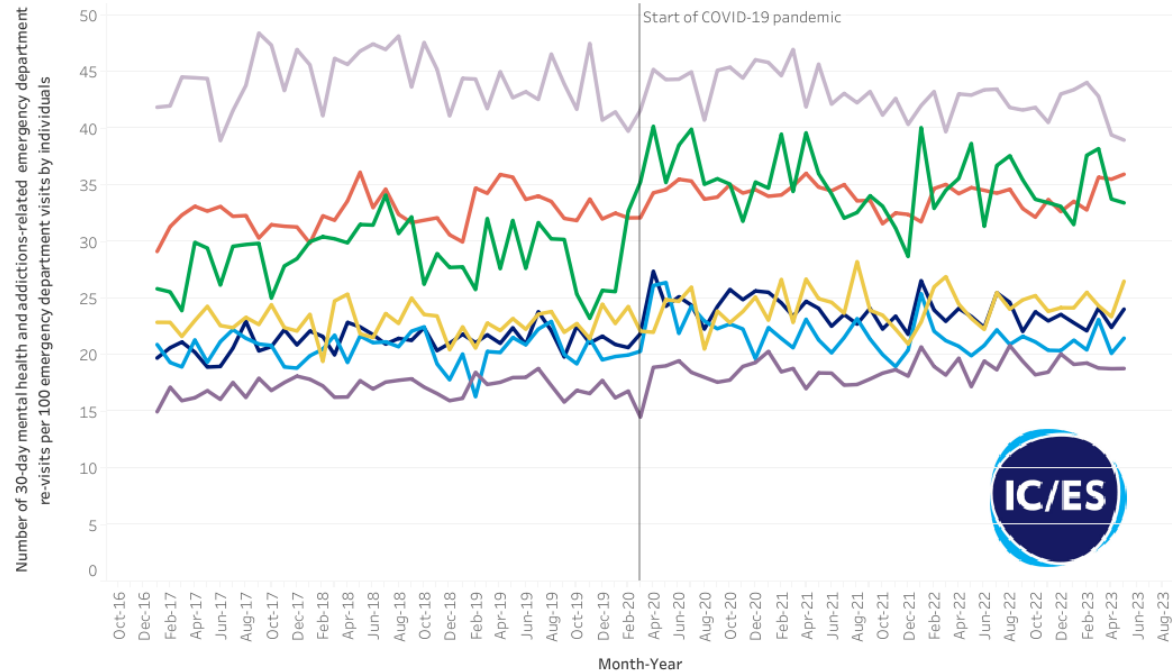
30-day ED department re-visits for Schizophrenia

- In August 2020, over 45 ED patients per 100 in Ontario return after 30-days for schizophrenia care.
- In August 2023, the rate is now 39 ED patients per 100



Use Ctrl+CLICK to select multiple values from legend and then select "Keep only" or "Exclude"

Monthly trends in 30-day mental health and addictions-related emergency department re-visits per 100 emergency department visits by individuals aged 0 to 105 years, by diagnosis, in Ontario



1. The vertical line indicates the month when the World Health Organization declared COVID-19 a pandemic.
 2. Obsessive compulsive and related disorders category was not presented due to small cells.

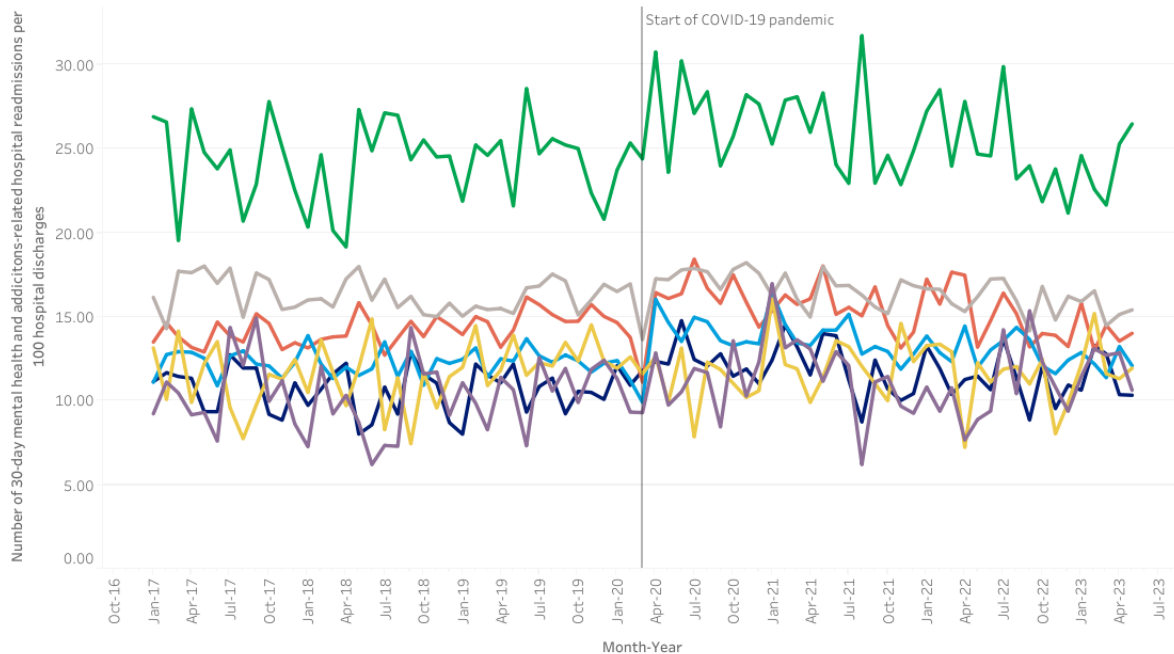
Schizophrenia Readmissions

- Approximately 17% of Schizophrenia Patients are readmitted within 30-days.
- In July 2023, readmissions is 15%.
- One of the highest readmissions for MHA related hospital readmissions



Use Ctrl+CLICK to select multiple values from legend and then select "Keep only" or "Exclude"

Monthly trends in 30-day mental health and addictions-related hospital readmissions per 100 hospital discharges aged 0 to 105 years, overall and by diagnosis, in Ontario



1. Obsessive compulsive and related disorders were suppressed due to small cells or sparse data.
 2. The vertical line indicates the month when the World Health Organization declared COVID-19 a pandemic.

Exploring how to link quality to funding in MHA



Evolution of funding approaches: from volume to value-based healthcare



CHANGING INCENTIVES

From Volume To Value: Better Ways To Pay For Health Care

Providers would be better able to reduce costs and improve quality under episode-of-care and comprehensive care payment systems.

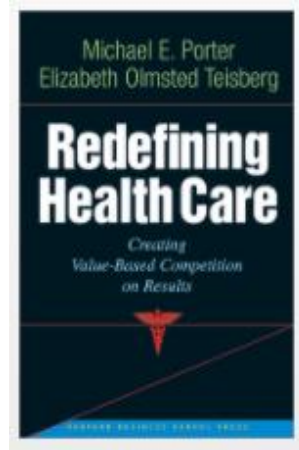
by Harold D. Miller

ABSTRACT: Payment systems for health care today are based on rewarding volume, not value for the money spent. Two proposed methods of payment, "episode of care payment" and "comprehensive care payment" (condition-adjusted capitation), could facilitate higher quality and lower cost by avoiding the problems of both fee-for-service payment and traditional capitation. The most appropriate payment systems for different types of patient conditions and some methods of addressing design and implementation issues are discussed. Although the new payment systems are desirable, many providers are not organized to accept or use them, so transitional approaches such as "virtual bundling," described in this paper, will be needed. (Health Aff (Millwood). 2009;28(5):1418-28. doi:10.1377/hlthaff.28.5.1418)

SERIOUS PROBLEMS EXIST WITH THE QUALITY and cost of health care today. One major cause of these problems is that current payment systems encourage volume-driven care, rather than value-driven care. Physicians, hospitals, and other providers gain increased revenues and profits by delivering more services to more people, fueling inflation in health care costs without any corresponding improvement in outcomes. Moreover, current payment systems often penalize providers financially for keeping people healthy, reducing errors and complications, and avoiding unnecessary care.¹ Fortunately, alternative payment systems exist that encourage both higher quality and lower costs by giving providers greater responsibility for the factors driving health care costs.

Factors Driving Health Care Costs

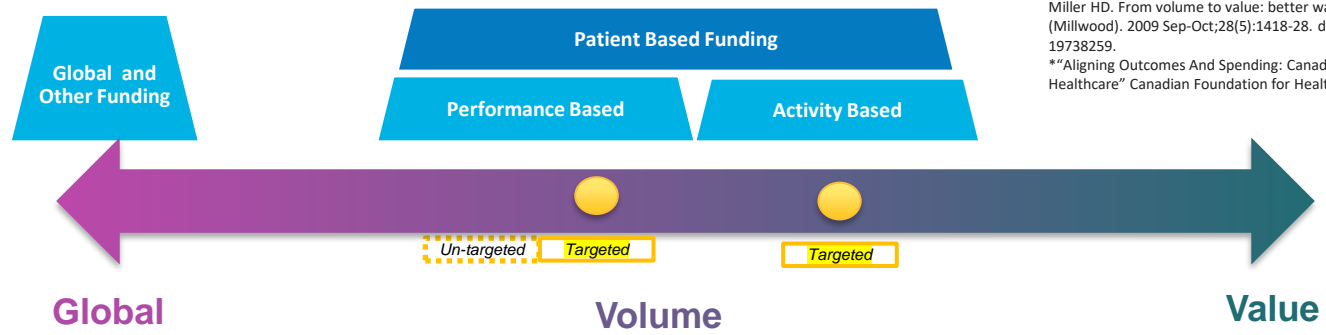
Total per capita health care costs are driven by five principal factors: the prevalence of health conditions in the population (for example, how many people have heart disease); the number of "episodes of care" they require per condition (for example, how many heart attacks a person with heart disease has); the number and types of health care services a person receives in each episode (for example, when



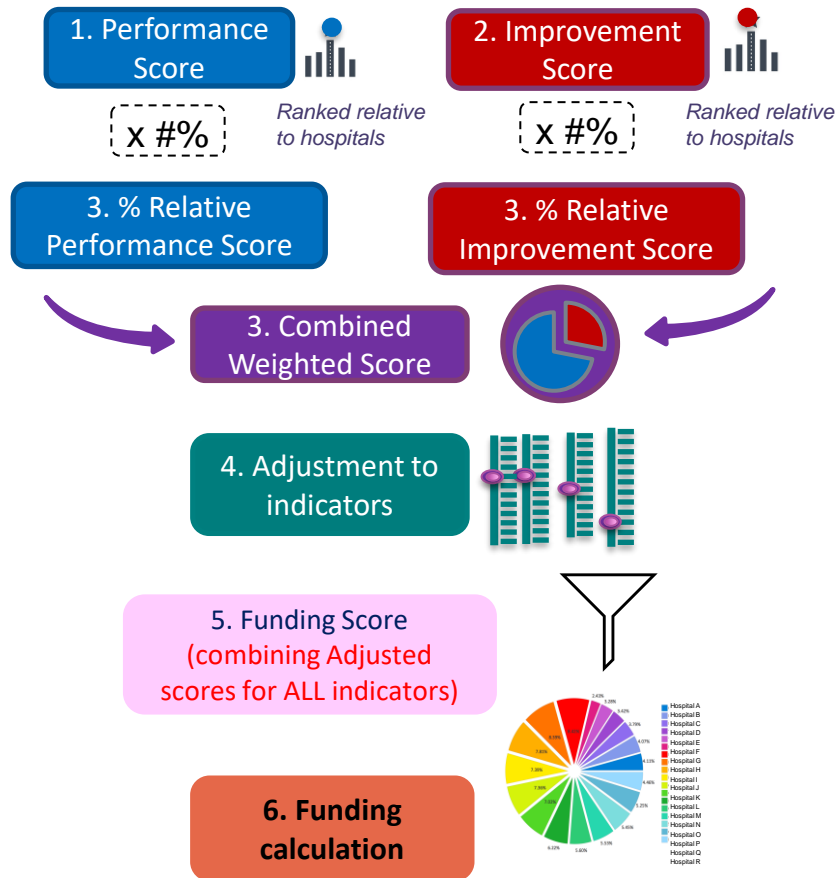
1418
 DOI:10.1377/hlthaff.28.5.1418
 PMID:19738259
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Miller HD. From volume to value: better ways to pay for health care. Health Aff (Millwood). 2009 Sep-Oct;28(5):1418-28. doi: 10.1377/hlthaff.28.5.1418. PMID: 19738259.

*"Aligning Outcomes And Spending: Canadian Experiences with Value-Based Healthcare" Canadian Foundation for Healthcare Improvement, August 2018



The P4Q Approach for Schizophrenia



- ✓ Links funding to quality
- ✓ A funding approach to incentive quality improvement in the mental health and addictions sector, a first for Ontario
- ✓ Uses quality statement developed by Ontario experts based on consensus of opinion and best practice evidence.
- ✓ Learnings can be scaled to other chronic diseases with similar or less severity and complexity

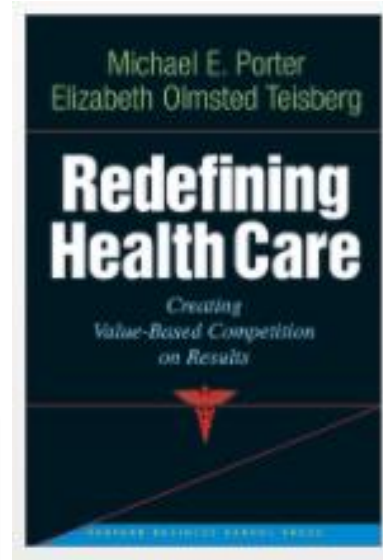
Supporting Value and Improving Patient Outcomes

$$\text{Value}^* = \frac{\text{Outcomes that Matter to Patients}}{\text{Costs Throughout the Patient Journey}}$$

- Measurement of outcomes needs to be connected to a strong quality improvement approach.
- If an Integrated Care Funding Model is to improve patient outcomes, funding for quality of care requires a strong **performance management** infrastructure that includes:

- **Reporting**
- **Benchmarking**
- **Targeted Management**
- **Prioritizing change ideas** for improvement and providing coaching, if required
- **Audit and Feedback**

The process will be an iterative and phased approach to incorporate lessons learned.



* “lays out a breakthrough framework for redefining health care competition based on patient value”

Ontario Health Quality Standards for mental health and addictions

The image displays a series of Ontario Health Quality Standards covers for various mental health and addiction conditions. Each cover features a 'Quality Standards' logo and the Ontario Health Quality Standards slogan: 'Let's make our health system best'. The covers are:

- Trauma:** Care in All
- Anxiety:** Care in All
- Behavioral:** Care for Patients and Residents
- Dementia:** Care for Patients
- Obsessive Disorder:** Care in All
- Opioid:** Care for Patients
- Major Depression:** Care for Adults
- Schizophrenia:** Care in the Community for Adults
- Schizophrenia:** Care for Adults in Hospitals

Two larger covers are shown in the foreground, providing more detail:

- Schizophrenia Care in the Hospital Quality Standard:** Guiding evidence-based care for adults with schizophrenia in Ontario.
- Schizophrenia Patient Reference Guide:** Care in the Community for Adults.

Development of measurement for Schizophrenia Integrated Care Performance management

- Modified-Delphi process to gain consensus of a few quality statements

Prioritize quality statements

Performance measurement

- Select Quality Standard indicators
- Feasibility of data
- Identify SMART measures

- Explore outcome measurement
- Plan for evaluation
- Test and iterate based on learnings

Testing and Evaluation

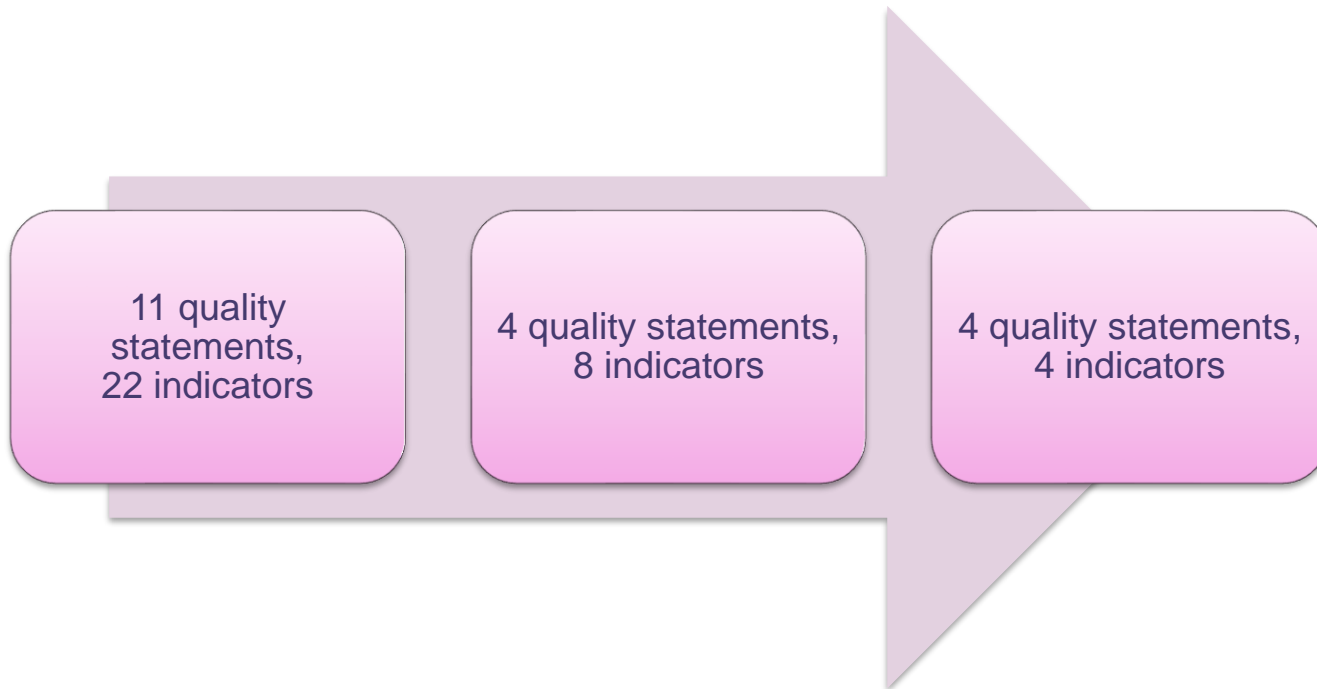
Implementation and considerations

- Report on findings and share considerations for implementation

Implementation and evaluation

The development of the MHA Pay for Quality (P4Q) funding methodology

We conducted a modified Delphi process to select quality statements and its indicators to measure performance to be used in MHA P4Q funding approach



Schizophrenia Care in Hospital - Quality Statements (in brief)

Quality Statement 1: Comprehensive Interprofessional Assessment

Adults who are admitted to an inpatient setting with a primary diagnosis of schizophrenia undergo a comprehensive interprofessional assessment that informs their care plan.

Quality Statement 2: Screening for Substance Use

Adults who present to an emergency department or in an inpatient setting with a primary diagnosis of schizophrenia are assessed for substance use and, if appropriate, offered treatment for concurrent disorders.

Quality Statement 3: Physical Health Assessment

Adults who are admitted to an inpatient setting with a primary diagnosis of schizophrenia undergo a physical health assessment focusing on conditions common in people with schizophrenia. This assessment informs their care plan.

Quality Statement 4: Promoting Physical Activity and Healthy Eating

Adults who are admitted to an inpatient setting with a primary diagnosis of schizophrenia are offered interventions that promote both physical activity and healthy eating.

Quality Statement 5: Promoting Smoking Cessation

Adults who are admitted to an inpatient setting with a primary diagnosis of schizophrenia are offered behavioural and pharmacological interventions to alleviate nicotine-withdrawal symptoms and to help them reduce or stop smoking tobacco.

Quality Statement 6: Treatment With Clozapine

Adults who are admitted to an inpatient setting with a primary diagnosis of schizophrenia who have failed to respond to previous adequate trials of treatment with two antipsychotic medications are offered clozapine.

Quality Statement 7: Treatment With Long-Acting Injectable Antipsychotic Medication

Adults who are admitted to an inpatient setting with a primary diagnosis of schizophrenia are offered the option of a long-acting injectable antipsychotic medication.

Quality Statement 8: Cognitive Behavioural Therapy

Adults who are admitted to an inpatient setting with a primary diagnosis of schizophrenia are offered individual cognitive behavioural therapy for psychosis either in the inpatient setting or as part of a post-discharge care plan.

Quality Statement 9: Family Intervention

Adults who are admitted to an inpatient setting with a primary diagnosis of schizophrenia are offered family intervention.

Quality Statement 10: Follow-Up Appointment After Discharge

Adults with a primary diagnosis of schizophrenia who are discharged from an inpatient setting have a follow-up appointment within 7 days.

Quality Statement 11: Transitions in Care

Adults with a primary diagnosis of schizophrenia who are discharged from an inpatient setting have a team or provider who is accountable for communication and the coordination and delivery of a care plan that is tailored to their needs

<p>Quality Statement 6: Treatment With Clozapine</p>	<ul style="list-style-type: none"> <input type="checkbox"/> 6-1 Clozapine offered <input checked="" type="checkbox"/> 6-2 Clozapine received <ul style="list-style-type: none"> • Recommended by panel of pharmacy experts • Primary data collection until standardized data mechanism available
<p>Quality Statement 7: Treatment With Long-Acting Injectable Antipsychotic Medication</p>	<ul style="list-style-type: none"> <input type="checkbox"/> 7-1 LAI offered <input checked="" type="checkbox"/> 7-2 LAI received <ul style="list-style-type: none"> • Recommended by panel of pharmacy experts • Primary data collection until standardized data mechanism available
<p>Quality Statement 10: Follow-Up Appointment After Discharge</p>	<ul style="list-style-type: none"> <input type="checkbox"/> 10-1 Follow-up with any care provider (to be monitored) <ul style="list-style-type: none"> ○ Potential future indicator when community data available <input checked="" type="checkbox"/> 10-2 Follow-up with physician <ul style="list-style-type: none"> • Proceed with IC/ES consultation
<p>Quality Statement 11: Transitions in Care</p>	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> 11-1 Care plan made available <ul style="list-style-type: none"> • Primary data collection until standardized data mechanism available <input type="checkbox"/> 11-2 Homelessness (to be monitored)

Changes to reporting for hospitals with inpatient mental health activity

- Clozapine and LAI indicators will be calculated using record level data

Quality Statement 6: Treatment With Clozapine	<input type="checkbox"/> 6-1 Clozapine offered <input checked="" type="checkbox"/> 6-2 Clozapine received <ul style="list-style-type: none"> • Recommended by panel of pharmacy experts • Primary data collection until standardized data mechanism available
Quality Statement 7: Treatment With Long-Acting Injectable Antipsychotic Medication	<input type="checkbox"/> 7-1 LAI offered <input checked="" type="checkbox"/> 7-2 LAI received <ul style="list-style-type: none"> • Recommended by panel of pharmacy experts • Primary data collection until standardized data mechanism available
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Ontario 

Health Data Branch Service Announcement

Ontario Mental Health Reporting System (OMHRS) - Resident Assessment Instrument – Mental Health (RAI-MH) Update

With more than one million Ontarians experiencing mental health and addictions challenges each year, the government has prioritized these population to be served under the integrated care agenda. As such, there is a crucial need to support measurement-based care, quality improvement and performance measurement for mental health and addictions.

The Ministry of Health, Ontario Hospital Association (OHA) and Canadian Institute for Health Information (CIHI), in consultation with the Chairs of the Hospital Advisory Committee's Mental Health Funding initiative, have been collaborating to collect manually information from mental health facilities on the following quality standards (incorporating the Health Quality Ontario Quality Statements based on the [Quality Standard – Schizophrenia: Care for Adults in Hospitals](#)):

- Statement 6: Treatment with Clozapine
- Statement 7: Treatment with Long-Acting Injectable Antipsychotic Medication
- Statement 10: Follow-Up Appointment After Discharge
- Statement 11: Transitions in Care

The Ministry has worked with CIHI to integrate the collection of 5 new data elements into the existing Ontario Mental Health Reporting System (OMHRS) to standardize the collection of this important quality of care information. OMHRS is a valuable tool implemented by CIHI on behalf of the Ministry to standardize the collection of mental health clinical and administrative information within a singular reporting framework.

Next steps:

- CIHI will add 5 new mandatory data elements (related to treatment for schizophrenia) to the OMHRS Discharge Assessment, Short Discharge Assessment, and Short Stay Record.
- **This change is effective April 4, 2022.** New validation rules to support this change will only apply to submissions received after this date, and submissions that reference assessments received after this date. More information on these changes will follow.

The new data elements will inform evidence-based provincial benchmarks for these interventions and support the strategies needed to ensure value-based care from hospital to community for patients with conditions related to mental health and addictions.

Please share with the relevant staff within your organization.

- For questions related to the Service Announcement, please contact AskHealthData@ontario.ca
- For questions on the Mental Health Funding initiative, please contact HSF@ontario.ca
- For Guidance on completing assessments, please contact specializedcare@cihi.ca

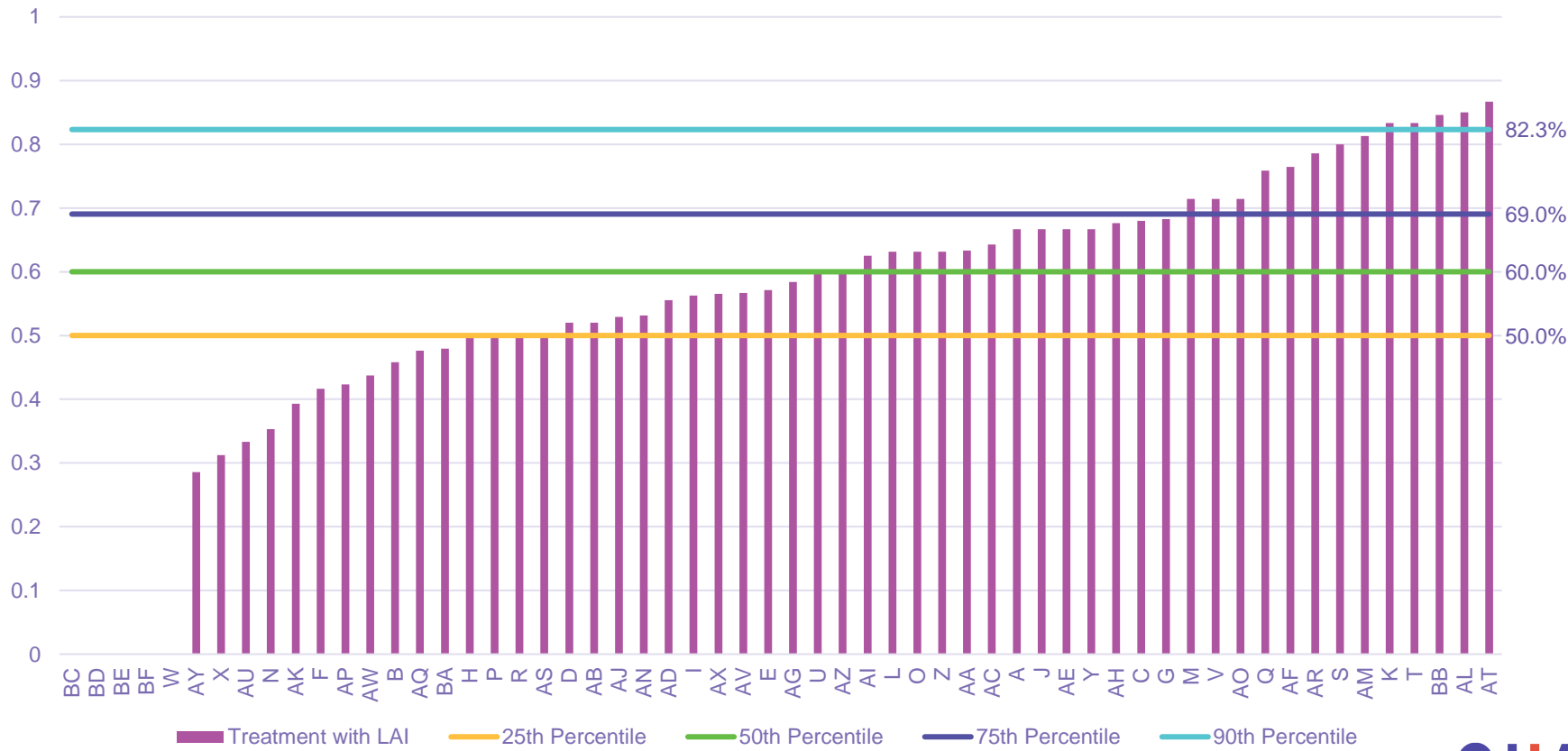
Health Data Support Team

Health Data Branch
Capacity Planning & Analytics Division
Ministry of Health | Ministry of Long-Term Care

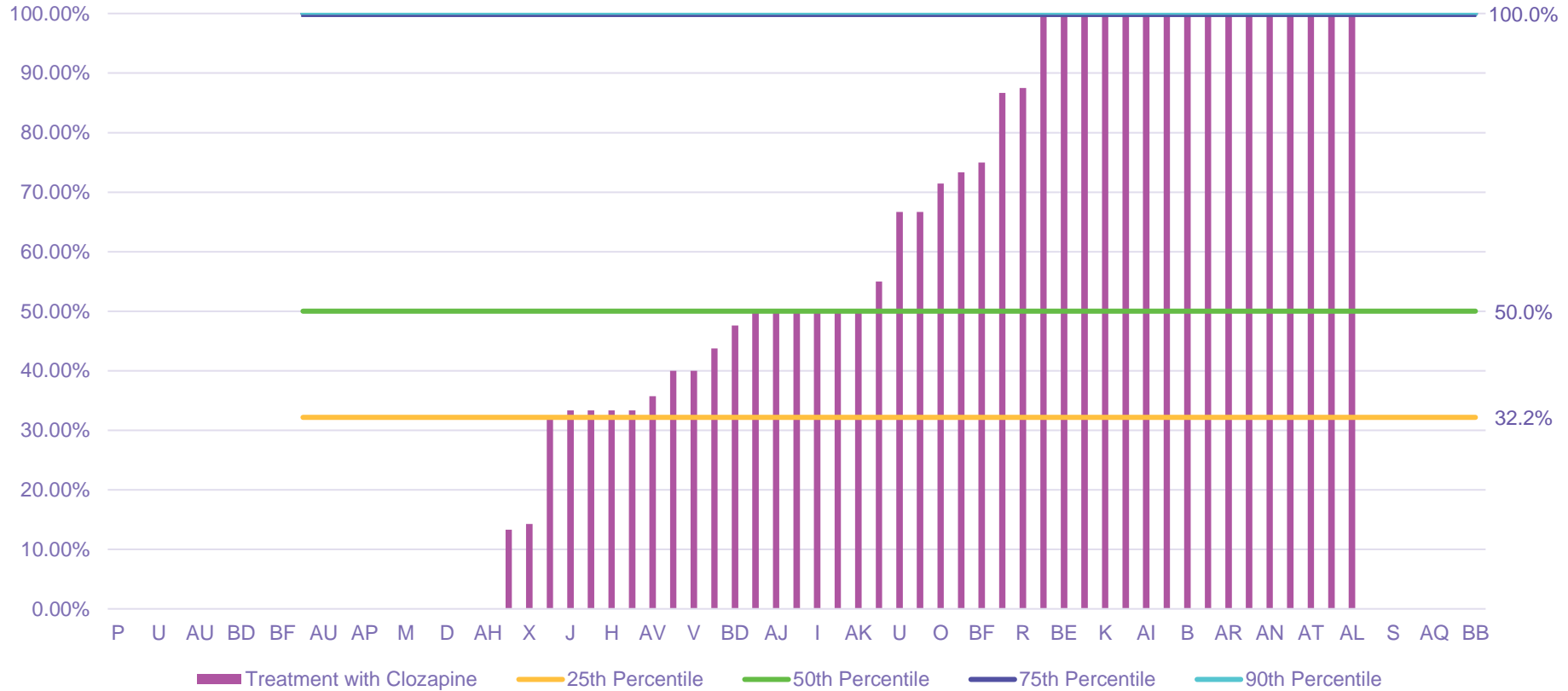
Need more information?

Contact us at: AskHealthData@ontario.ca

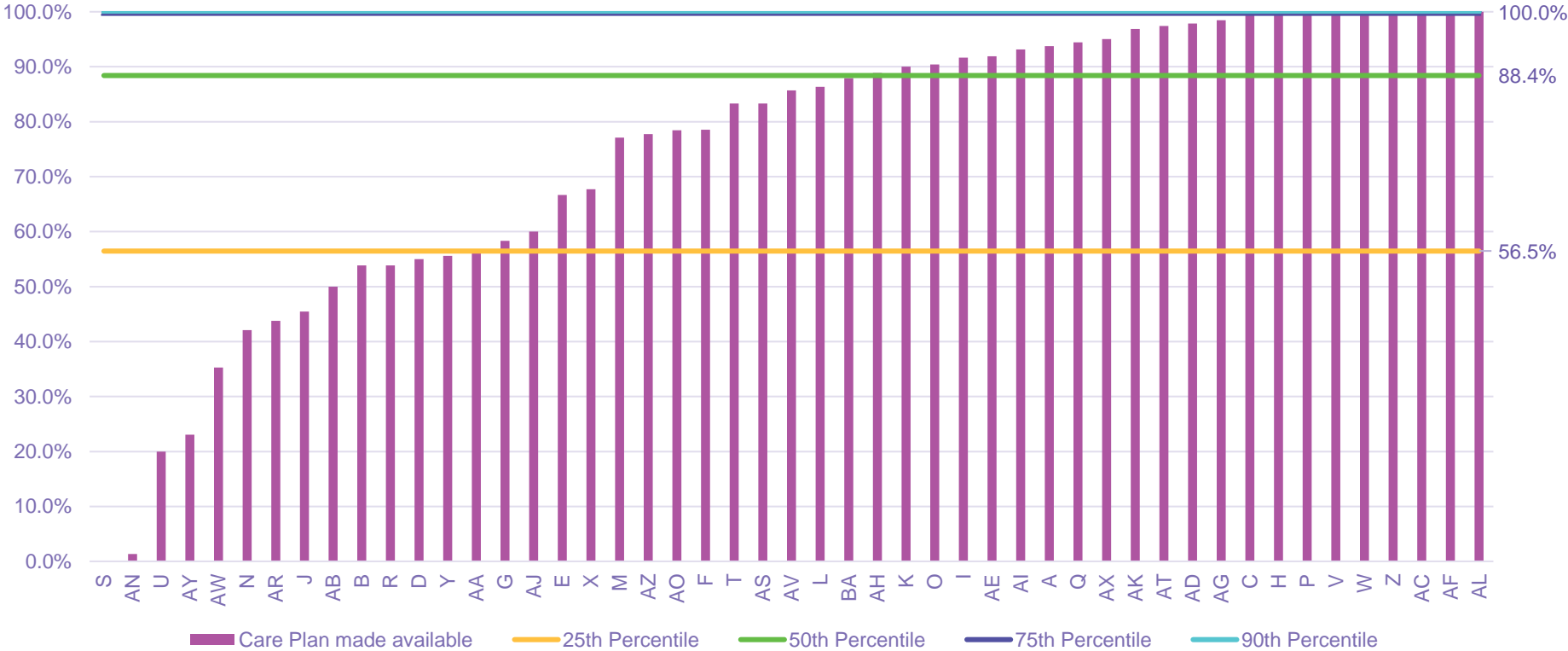
FY2023/24 Q1 – Treatment received with LAI antipsychotic medication



FY2023/24 Q1 – Treatment received with Clozapine



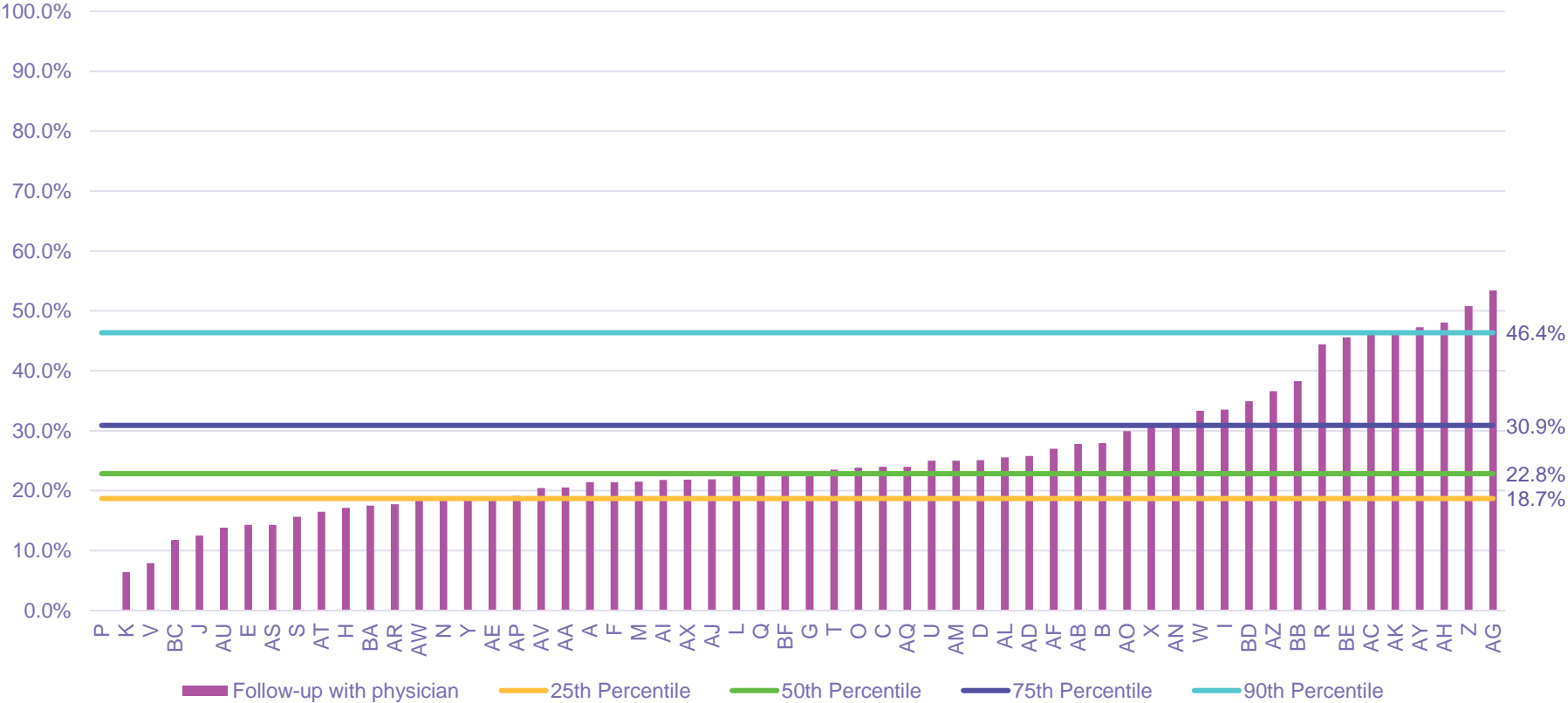
FY2023/24 Q1 – Care plan made available within 7 days of discharge from hospitalization



Care Plan made available 25th Percentile 50th Percentile 75th Percentile 90th Percentile



FY2021/22 – Follow-up with physician within 7 days of discharge



Reporting back: OHA Quality Standard Schizophrenia Care in Hospital Dashboard

A dashboard was developed to provide hospitals the ability to review the results of their quality measures and allow comparisons to others. This allows hospitals to connect with peers to learn about their successes on adoption of the quality statements.

Finance Tools

Tools: Financial Health, Care Gap Explorer, DARS Meter, Care Meter Explorer, Patient Based Funding, Financial Year-End, Schizophrenia Care

Finance Tools

- Financial Health Dashboard
- Ontario Healthcare Reporting Standards (OHRS) Data Explorer
- Ontario Healthcare Reporting Standards (OHRS) Meter
- Ontario Healthcare Reporting Standards (OHRS) Meter Explorer
- Ontario Healthcare Reporting Standards (OHRS) PPT Dashboard
- Financial Year-End Dashboard
- Mental Health and Addictions Quality Standard Schizophrenia Care Dashboard
- Human Resources Tools
- Patient Experience Tools
- Partner Tools
- All Tools
- Integrated Business Support

Mental Health and Addictions Quality Standard: Schizophrenia Care Dashboard

Log In to Access

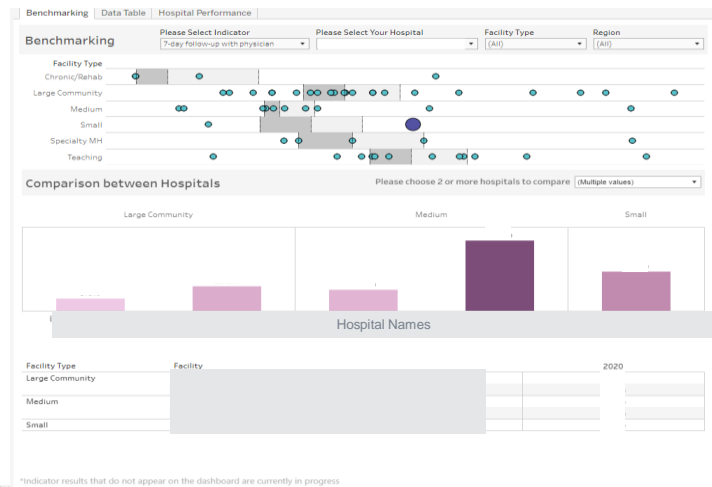
The Mental Health and Addictions Quality Standard - Schizophrenia Care (Schizophrenia Care Dashboard) allows visitors to compare their performance with regional mental health activity and allow them to compare their performance with peers using their quality metrics for FY 2020-2021.

On behalf of the Hospitals Advisory Committee, the OHA has been working closely with the Ministry of Health to collect and validate data measuring clinical interventions and services based on the Ontario Health Quality Standard of Schizophrenia Care for Adults Inpatients. This data collection is intended to support the adoption of clinical best practices and identification of improvement activities and appropriate benchmarks. As part of the [Quality Standard and Addictions Care Dashboard](#), it will also be used to explore a pay-for-quality approach to mental health care in Ontario.

Staff in the following roles at hospitals with inpatient mental health activity have access to this tool: CEOs, CFOs, VP of medical affairs, Staff in Mental Health Units, Inpatient Support and Finance units. Indicators used in the tool are defined below.

Indicator Descriptions

Treatment with Clozapine Percentage of adults discharged from an episode of care with a primary diagnosis of



Facility: Hospital Name

Indicator	Hospital	Province			
		25th Percentile	50th Percentile	75th Percentile	100th Percentile
Care Plan made available	36.6%	80.8%	92.6%	99.6%	100.0%
Treatment received with LAI	93.5%	46.2%	68.5%	83.6%	96.0%
Treatment with Clozapine	35.7%	43.6%	65.0%	89.4%	100.0%
7-day follow-up with physician	16.4%	15.2%	23.0%	32.6%	46.1%

Indicator: 7-day follow-up with physician

Facility Type: (All)

Region: (All)

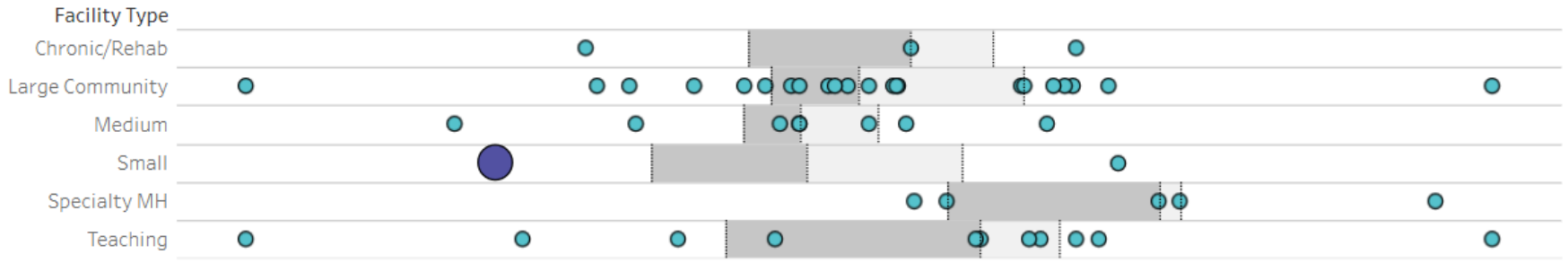
Facility Type	Facility	Result
		0.0%
		13.3%
		1.0%
		0.0%
		0.0%
		22.2%
		18.2%
		22.2%
		22.2%
		11.8%
		21.0%
		22.3%
		21.4%
		21.8%
		22.8%
		21.6%

Indicator results that do not appear on the dashboard are currently in progress.

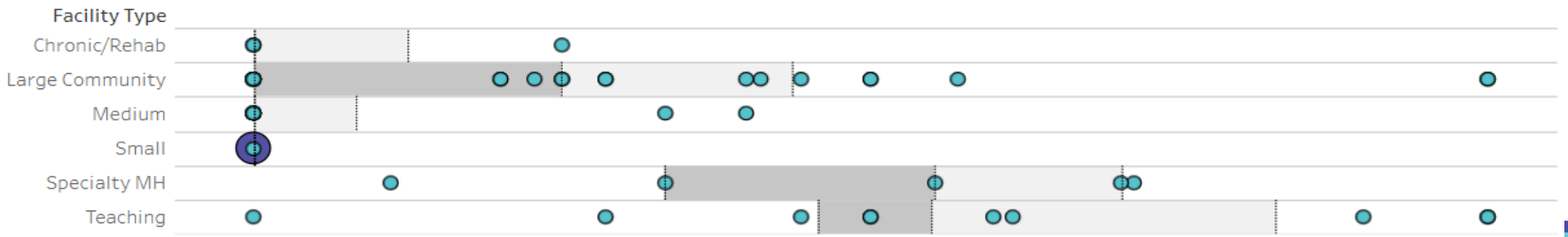
<https://www.oha.com/data-and-analytics/finance-tools/mental-health-and-addictions-quality-standard-schizophrenia-care-dashboard>

Quality indicator results for treatment received with LAI and Clozapine

Benchmarking Please Select Indicator: Treatment received with ... Please Select Your Hospital: Facility Type: (All) Region: (All) Accounting Period: FY2223 Q1



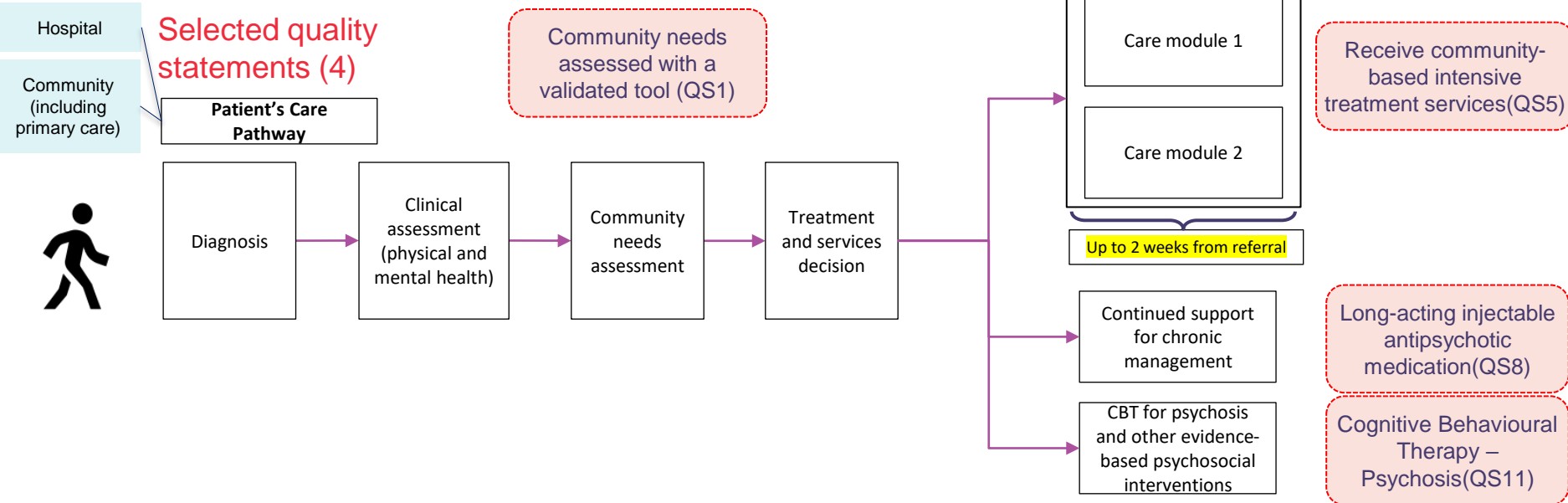
Benchmarking Please Select Indicator: Treatment with Clozapine Please Select Your Hospital: Facility Type: (All) Region: (All) Accounting Period: FY2223 Q1



Integrated Care Initiative



Care pathway development



- Patient is diagnosed by a physician (psychiatrist or in collaboration with psychiatrists)
- Hospital settings may include inpatient, outpatient, mobile units
- Community settings may include mental health organizations, primary care settings, supportive housing, congregate settings
- Care modules and continued support for chronic management (i.e. LAIs) are dependent on intensive services needed, such as intensive case management, assertive community treatment, early intervention program, etc. They are offered in select care settings

Key Takeaways

- The initiative has created a significant focus on integrated schizophrenia care in Ontario's hospitals and community provider.
- Measuring performance using standardized approaches allowed providers to create a baseline for improvement and benchmark their performance.
- Based on the first six months of reporting, hospitals have demonstrated improvement and concordance to the quality standard for persons living with schizophrenia.
- P4Q approach needs strong support and collaboration at all levels but in the absence of patient classification systems, this approach should be explored.



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