Data Quality Improvement Initiative – Phase One: Pilot Work Findings

1. Background / Introduction

The implementation of a performance monitoring system is one of seven sub-themes of the *integration of mental health and addiction services* strategic priority, where the LHIN is expected to make progress in the 2016-19 fiscal years (as defined in their 2016-19 Integrated Health Service Plan[1]).

A first step to the establishment of a valid and reliable performance monitoring system for Champlain's MHA services, is to implement data quality improvement processes for the Ontario Health Reporting Standards (OHRS) data. OHRS data define service capacity: volumes and expenses; that is, the basic information of each service. This accountability data is submitted by each organization to the Ministry of Health and Long-Term Care (MOHLTC), for the programs and services that are funded by the LHIN.

The current state of MHA service capacity is currently reported by functional centers. The challenge remains that it is uncertain if all providers have a common understanding of how to report on those functions (in particular, the community mental health and addiction services / functional centers), what they mean and how the information can be used for system performance monitoring and planning. There are a number of initiatives at the provincial level[2] underway to support this. There remains a need to support these changes through a local process to ensure they become embedded in Champlain's system of reporting and performance monitoring.

Once the data quality improvement and reporting processes are implemented for the OHRS data, other data sources and systems will be addressed. Consideration will be given to other existing performance indicators and scorecards, such as the Champlain LHIN's quarterly performance reports[3] which includes repeat emergency department visits associated to mental health and addictions, Connex Ontario's wait time management scorecards, HQO's Common Quality Agenda[4], the Mental Health and Addictions Leadership Advisory Council client-centred, "balanced score card" performance measurement framework (currently in development with ICES) which also includes indicators from clients' perception of care (OPOC tool) and population suicide rates.

A common understanding of service performance is a key component of a common system language, enabling the creation of meaningful feedback mechanisms so that agencies and the system are regularly reporting, reviewing and recommending improvements based upon the best information collected.

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[1] URL: http://www.champlainlhin.on.ca/GoalsandAchievements/OurStratPlan.aspx
[2] URL: http://eenet.ca/drug-treatment-funding-program-2/ (scroll down to list of Ontario projects)
[3] URL: http://www.champlainlhin.on.ca/Accountability/Performance.aspx
[4] URL: http://www.hqontario.ca/System-Performance/Health-System-Performance/Common-Quality-Agenda

2. Project Objectives

Establish a valid, sustainable and reliable performance monitoring system for the Champlain MHA sector, beginning with Ontario Healthcare Reporting Standards data for the community mental health and addiction services functional centers, by:

a) Providing a bridge between provincial initiatives and local development
b) Building MHA health service providers' capacity in data collection, analysis and reporting.
c) Developing standardized tools and regular reporting mechanisms around system performance, impacts and client outcomes
d) Facilitating the use of the reports to drive system/program improvement opportunities
e) Contributing to improved provincial data systems

Allowing for:

- A common language for assessing system performance
- Access to timely, regular reports that reflect the activity and impacts of the system
- Planning for systems improvements, ensuring that emerging needs can be addressed

3. Pilot Work: Accomplishments

The DQI initiative identified a number of pilot sites covering geographic, organizational, and functional center diversity:

- The Royal
- CMHA-Champlain East
- Pinecrest-Queensway and Carlington CHCs

Additionally, initial discussions have been undertaken with:

- Salus and CMHA-Ottawa
- PLEO
- Dave Smith Youth Treatment Centre
- Sandy Hill and Centretown CHCs

The following highlights the key steps undertaken during the pilot work of this project:

#	Step	Project Objective
1	Develop Pathways internal capacity re. the OHRS, and MOHLTC data portals: OHFS (the OHRS data system), and HIT	a)-e)
2	Establish the project team Build relationships with the pilot site representatives	a)-b)
3	Develop a data quality validation check-list and coaching materials (presentations), based on parallel provincial initiative (DTFP Costing	a)-d)

	Project)	
4	Engagement with pilot sites: -OHRS data coaching -implementation of the data quality validation check-list -discussions on performance measurement and monitoring	a)-e)
5	Refinement of the data quality validation check-list and coaching materials (presentations) through lessons-learned with each pilot site and collaborations with the provincial representatives of the DTFP Costing Project.	a)-d)
6	Compile a baseline statistics/information for Champlain CMH&A activities: - list of agencies with functional centre activities - list of functional centres with indicator summary - sub-region indicator development (with/for LHIN's Sub-region Profiles Report): expense per affected individuals	c), d)
7	Develop a regional implementation plan	b)
8	Develop a data action item log: a tool to log agency data items that require follow-up actions.	b),d)
9	Compile a findings report based on the pilot work (meeting minutes and feedback)	

4. Pilot Work: Lessons-learned

The list below offers key lessons learned during the pilot work, and applied for regional implementation.

a) Clear message offered by each agency on their perspectives of the limitations of OHRS to offer a comprehensive evaluation of program/service performance.

- Coaching materials (presentation) modified to clarify that the OHRS won't be used in silo to make planning decisions, though planning necessitates quality OHRS data as part of the information.
- Giving added motivation for Pathways to advance the development of a more comprehensive performance measurement system, including the consideration of outcome/recovery indicators that matter to our Champlain stakeholders.

b) Using a more appropriate terminology: 'agency engagement' / 'knowledge exchange', instead of 'training' / 'coaching' sessions.

c) Simplification of Data Quality Validation Check-list, to items that 'matter the most'.

d) Increased understanding of the OHRS system complexities. In particular, the classification of community mental health and addictions (CMH&A) activities and implications.

Concerning funding types, as per OHRS v10.0 Chapter 2 page 6:

- Fund Type 1 is reserved for Hospital services
- Fund Type 2 is used for CCAC, CTC, CMH&A, CSS, CHC, LTCH services
- Fund Type 3 is used for services/programs funded by the Federal Government, municipal governments, or other ministries (MCSS, MCYS), non-government agencies (eg. United Way)

Related issues:

- The 'CMH&A' qualifier is associated to:
  - a fund type (i.e., Fund Type 2 for CMH&A services),
  - an agency grouping (i.e., 'Provincial Sector Code' 323 for CMH&A), and,
  - a functional centre grouping (i.e., CMH&A Functional Centres as defined by OHRS).

  Hence, different combinations are possible and must be considered; for examples:
  - a CMHA-specific functional centre can be funded via Type 1, not just Type 2. For example, The Royal has some ACT teams funded via Type 1 and others via Type 2.
  - An agency classified as a community ambulatory care (i.e., Provincial Sector Code 311) can deliver CMH&A functional centre programs. For example, Ottawa Inner City Health delivers Community Case Management for Mental Health (i.e., 7250976).

  This requires multiple searches and/or query specifications within the OHRS data system.

- Agencies can be funded for CMH&A functional centre activities, directly by the LHIN or funded directly by the MOHLTC (eg. Family Health Teams). Even though where do they appear in the OHRS system?

- Activities associated to Type 3 are not differentiated by functional centre, and hence, if Pathways were to delve further into these activities, it could not be via the central OHRS data portal (called OHFS), but via communication and data requests/gathering from each agency.

- DSYTC and CHCs have examples of programs running on funds that the agency has solicited themselves. Do they all fit within Type 3?

e) Necessity for increased clarity/transparency about what is in/out of scope:

- DQI Phase One addresses activities associated to LHIN-funded Type 2 only.
- South-East LHIN providing services to Champlain residents. Importance for consideration of total services offered/available for Champlain residents, and the calculation of indicators per capita.

f) Agencies provide the same data items to multiple data systems: opportunities to streamline and standardize across systems.

g) There is an interest from the LHIN for program (sub-functional centre) level information.

5. Pilot Work: Successes

The list below offers key successes during the pilot work, at the project infrastructure level, and particular data quality improvements that have been made, or for which information has been gathered for resolution.

a) Project Level
- Relationship building and opening the conversation on data, quality and usage with the agency representatives.
- Connections created with the Ministry OHRS experts, hence facilitating augmented knowledge exchange on the data standards and interpretation.
- Confirmation of interest for increased data quality and ongoing data quality community of practice.
- Opportunity for DQI to delve further on wait time data, in response to the Wait Time Initiative recommended next steps.

b) Overall OHRS Reporting
- Consolidation of MSAA and OHRS Reporting: some functional centres stipulated in MSAA were found to be not reported in OHRS Trial Balance (or vice versa).
- Missing data fields: often due to the fact that they are not 'technically' mandated for Trial Balance Submission, or not specifically stipulated on MSAA/SRI reports – opportunities for Pathways/LHIN.

c) Specific to the Data Quality Validation Check-list Items
- OHRS Definition:
  - variety of programs under same umbrella functional centre
  - gathering information on the necessity for creation of new functional centres

- Visits/Resident Days:
  - verifying that each agency counting the same way and logging issues such as:
    - For CHCs: All the <5min phone calls: can those be somehow captured to account for all the work accomplished? Question to be sent to the Ministry.
    - Mismatch between visit definition and service provider interaction definition: some agencies entering visit as per definition but dummy-entry of SPIs, and vice versa.

- Client Type Categories :
  - Outpatient Mental Health: attributed the same way? – correcting data entries
  - Non-registered clients: outstanding scenarios? – correcting data entries
  - Clients are registered at different time points between organizations.

- Service Provider Interactions (number and time intervals)
  - collecting feasibility of agencies to perform the data entry of these items in OHRS

- Wait times:
  - collecting feasibility of agencies to perform the data entry of these items in OHRS
  - collecting the applied definition by agencies

- Actual vs budgeted costs:
  - Financial statistics better monitored by the LHIN; higher data quality. Only the total costs/expenses is included in check-list, to initiate conversation about costing indicators.

- Costing indicators from the MOHLTC's HIT tool
  - collecting feedback on costing indicator usage and needed contextual variables from other data systems such as the CDS-MH and DATIS.

- Catchment area postal codes
  - collecting feasibility of agencies to provide the information
  - delaying data collection

6. Pilot Work: Performance

a) Performance against Objectives

See Section 3 (Pilot Work: Accomplishments) that lists the accomplishments against the project objectives.

b) Performance against Outcomes

Outcomes	Performance
Process outputs of the project:	
• Relationship building between Pathways Team and MHA service provider (decision support, accountability, finance) representatives.	• *Met with a portion of agencies during pilot phase.*
• Common tools; such as, educational materials, auditing templates, program to functional center mapping, report drafting.	• *Completed; only refinements to be made during regional implementation.*
• Evaluation reports.	• *Pilot Work Findings report; full evaluation to be completed at project closure (Dec 2017).*
• Implemented mechanisms for regular reporting. • Implemented mechanisms for ongoing data quality improvement and performance monitoring.	• *Discussions of scorecard development and logging of suggestions during pilot phase, to be continued with regional roll-out, and via the creation of a Community of Practice/Interest in late Fall 2017.*
System outcomes of the project:	
• Valid OHRS data, regularly audited to sustain quality over time: volumes and expenses by CMHA-FC.	• *Partially met during pilot phase.*
• Summary report by CMHA-FC of pre-validated data.	• *Baseline report draft to be posted on Champlain Pathways website.*
• Summary report by CMHA-FC of validated data.	• *To be completed with FYE 2017-18.*

c) Performance against Schedule

Milestone	Target Date	Completion Date
Scope Definition / Exploration of OHRS data system and available documentation, preliminary data extractions and reporting, consideration of options for the approach with agencies	2016-09-30	On target
Project Planning via the development of the project charter	2016-10-28	On target
Pilots Implementation & Evaluation through initial work with 5-7 pilot agencies to develop common tools (such as data auditing templates and benchmark reporting) and collaborative approach for continued data quality improvement.	2017-03-17	Extended to June 2017.
Regional Implementation & Evaluation regional roll-out to validate OHRS data items and build capacity for regular reporting (1-on-1 meeting with each agency and/or in small groups)	2017-10-01	On target
Project Closure & Evaluation determine what was most efficient, what could be changed, and document lessons-learned for continued data quality improvement with agencies and for the project's Phase Two (which will consider other OHRS functional centers (such as hospital MHA and primary care), and other data systems to expand on performance measurement and monitoring).	2017-12-01	On target.

d) Performance against Budget

#	Name	Estimated Cost		Estimated Effort (days)	
		Total Budget	Pilot Actuals	Total Project: August 2016-December 2017	Pilot: August 2016 – June 2017
	Data Quality Improvement Project	$2,050	$150	DS Specialist + Facilitator/Coach 92d + 40d = 132d Project Manager 48d Generalist 16d Communication Specialist 9d	70d 38d 0d 0d

7. Acceptance and Sign-off

	Name	Signature	Date
Prepared by:	Mitsi Cardinal	N/A	2017-05-31
Reviewed by:	Project Team	N/A	2017-06-02
Finalized by:	Mitsi Cardinal	N/A	2017-08-07
Approved by:	Project Team	Meeting Minutes	2017-08-28