EARLY PSYCHOSIS INTERVENTION ONTARIO NETWORK

Five years with the Ontario Early Psychosis Intervention (EPI) Program Standards:

Environmental Scan to Inform Quality Improvement

A project of the Standards Implementation Steering Committee

July 2016

The Early Psychosis Intervention Ontario Network (EPION) is a province-wide volunteer network of service providers, persons with lived experience, and families. EPION currently includes over 50 programs and satellite partners across Ontario. The network facilitates collaboration, training, resource sharing, and quality improvement efforts. EPION is funded by the Ministry of Health and Long-Term Care. For more information, visit http://epion.ca/ or http://eenet.ca/the-early-intervention-in-psychosis-for-youth-community-of-interest/.

camh PSSP
Provincial System Support Program

PROJECT TEAM

PROJECT TEAM:

Janet Durbin, PhD[1]
Avra Selick, MA[1]
Gordon Langill, MSW RSW[2]
[1]Performance Monitoring and Evaluation Research, Provincial System Support Program, Centre for Addiction and Mental Health
[2]Canadian Mental Health Association, Haliburton, Kawartha, Pine Ridge Branch

STANDARDS IMPLEMENTATION STEERING COMMITTEE (SISC):

Gordon Langill, Chair, Standards Subcommittee
Canadian Mental Health Association, Haliburton, Kawartha, Pine Ridge Branch

Chi Cheng, Co-Chair, EPION
Canadian Mental Health Association, Thunder Bay Branch

Christy Pentland
Ontario Ministry of Health and Long-Term Care

Dawn Maziak
Erie St. Clair Local Health Integration Network

Eleanor Baker
Family member, Toronto

Jai Mills
Central East Local Health Integration Network

Janet Durbin
Centre for Addiction and Mental Health; University of Toronto

Karen O'Connor
Canadian Mental Health Association, Peel Branch

Scott Secord
Brant Community Healthcare System

Suzanne Archie, Chair, Research Subcommittee
St. Joseph's Healthcare, Hamilton: McMaster University

Suzanne Robinson
Central West Local Health Integration Network

Heather Hobbs, Co-Chair EPION
St. Joseph's Healthcare, Hamilton (retired)

SUGGESTED CITATION
Standards Implementation Steering Committee. (2016). Five years with the Ontario Early Psychosis Intervention (EPI) Program Standards: Environmental Scan to Inform Quality Improvement. Centre for Addiction and Mental Health and the Early Psychosis Intervention Ontario Network: Toronto, Ontario.

TABLE OF CONTENTS

MAIN MESSAGES

- Early Psychosis Intervention (EPI) Program Standards were published in 2011 to improve quality and consistency of EPI delivery in Ontario. Many EPI programs are involved in quality improvement (QI) activities, although capacity to do this work varies. EPI stakeholders and the LHINs are working together to develop more systematic processes to support this work.
- This environmental scan summarizes current sector capacity, and outlines preferences and opportunities for improvement work. It is based on sector feedback (two provincial surveys and consultations with EPI programs and LHIN representatives) and on a scan of relevant provincial data sources and quality initiatives.
- Provincial context:
    - Health Quality Ontario is leading a variety of quality improvement initiatives across the health care system, providing examples of how sectors can participate in improvement work.
    - The Mental Health and Addiction (MHA) Leadership Advisory Council, created to advise the Ontario Ministry of Health and Long Term Care on implementation of the provincial MHA strategy, is committed to increasing the performance measurement capacity and demonstrating the work of community MHA programs.
    - Common data are being collected by MHA organizations in Ontario, including EPI programs, and are becoming available for sector wide monitoring. In general, these measure client outcomes, client care experience, service volumes and program capacity.
- Sector feedback:
    - EPI is a highly engaged sector, with many programs active in QI work.
    - Two surveys of EPI program experiences with the Standards since 2011 evidenced many examples of program efforts, successes and challenges in quality improvement work.
    - Capacity of most EPI programs to collect and use data for quality monitoring is limited and there is wide variability in current practices.
    - The quality of the data collected by EPI programs needs to be assessed, along with support needs to improve quality.
    - EPI program feedback and the Standards indicate potential quality areas to monitor - e.g., program capacity, client outcomes and quality of care.
    - There is high sector interest in fidelity monitoring, although developing a feasible strategy for collecting these data is important.
- Going forward, the sector is committed to building on the guidance of the EPI Program Standards, aligning improvement work with the priorities of the Leadership Advisory Council and other provincial projects, and continuing important collaboration with the LHINs and other stakeholders.

BACKGROUND

In 2011 the Ministry of Health and Long-Term Care (MOHLTC) released the Ontario Early Psychosis Intervention (EPI) Program Standards. Although EPI programs have been funded in Ontario since the early 2000s, the extent to which service delivery aligned with the EPI model was unknown. The Standards established quality aims and provided an opportunity to move the sector toward more consistent and higher quality service delivery, and systematic monitoring.

Following the release of the Standards, the MOHLTC established a *Standards Implementation Steering Committee (SISC*) to: (1) learn about EPI program practices and support needs related to the Standards; (2) foster dialogue between EPI programs and the LHINs; and (3) conduct work to support quality improvement monitoring. The SISC includes representation from:

- The Early Psychosis Intervention Ontario Network (EPION),[1] an established network of EPI programs, consumers, family members, decision makers, and researchers in Ontario;
- The Local Health Integration Networks (LHINs), which play an integral role in planning and funding EPI programs in their communities;
- The Ministry of Health and Long-Term Care;
- The Provincial System Support Program (PSSP), Centre for Addiction and Mental Health, which is supporting sector planning, monitoring, and evaluation activities.

Since it was formed, the SISC has completed the following:

- Two province-wide, key-informant surveys (2012, 2015) to learn about EPI program practices in relation to the Standards and areas where more support is needed. The survey response rates (90-100%) showed high sector engagement.[2]
- Follow-up consultations with the sector to share survey results and discuss service delivery challenges and opportunities, including data collection and use.
- A scan of provincial health data sources and quality improvement initiatives relevant to EPI sector improvement work.

This report summarizes findings from the surveys, consultations, and provincial scan. The next step for the sector is to develop systematic processes for monitoring and quality improvement work.

[1] EPION serves as the secretariat for the SISC and supports its work through its annual budget. The SISC chair sits on the EPION leadership group and members of the EPION executive attend SISC meetings. EPION decision-making lies within the EPION network as a whole. All major decisions are brought to network meetings for consensus support and approval.

[2] Survey results can be found at http://eenet.ca/wp-content/uploads/2012/12/EPI-Program-Survey-Final-Report-October-2012-pdf-pdf.pdf and http://eenet.ca/wp-content/uploads/2015/07/EPION-SISC-Survey-2-Report_July-31-2015-FINAL.pdf.

SECTOR FEEDBACK ON SERVICE DELIVERY CHALLENGES AND OPPORTUNITIES

During winter 2015-16, PSSP supported the SISC in a sector consultation. Meetings were held with LHIN representatives and EPI programs in their area, to review the survey findings and discuss strengths, challenges and improvement opportunities. The process included an orientation to the survey reports, review of results, and discussion. A portion of every meeting was reserved to review data collection, use, and opportunities for improvement. After each meeting, participants were invited to complete a brief evaluation.

Twelve meetings were held, including 11 with LHIN attendance. Overall, participants rated the meetings as relevant and valuable for sharing information and discussing service issues. Most found it helpful to have both LHIN and provider perspectives in the discussion, and indicated that further exchanges between the LHIN and the providers would be helpful.

Key issues emerging from the discussions were summarized in a report and are highlighted below. These show some common 'pressure points', along with some creative approaches to address them. Participants also identified potential areas for quality monitoring.

Theme 1: Capacity

Survey data showed that some programs had higher caseload sizes than the recommended 12-20 clients per full-time equivalent (FTE) for the EPI model (Bird et al., 2010; Nordentoft et al., 2014). Program representatives discussed challenges in maintaining caseloads within the recommended range. Some programs raised concerns about EPI resource drift, which can compromise program capacity and is a risk when EPI is only one of multiple programs competing for resources within an organization. Questions were also raised about the minimum number of FTEs needed to deliver the full model and how to effectively serve large geographic regions.

Emerging from this discussion was the idea of implementing a process for monitoring sector capacity. Total FTEs and caseloads may be relevant but work is needed to ensure that they are measured similarly across programs and are meaningful indicators of capacity. For example, should caseload estimates be based on all clinical staff or only those with an individual caseload (some staff serve as resources to all clients)? Some participants also raised the question of whether and how to count family work.

In relation to serving large geographic areas, program representatives described using different approaches, including traveling teams, locally-embedded staff, and video conference technology. Programs are still learning about how to balance feasibility and client needs.

Theme 2: Access

Related to the Standard on Barrier-Free Service, the survey asked about admission policies and where additional support is needed to promote inclusion. Overall, programs reported accepting clients across diverse health conditions and social groups. However, noted in the surveys and raised at some meetings

were difficulties in serving clients with developmental disabilities and reaching out to First Nations, Inuit and Métis communities.

Programs described some creative responses to these issues. One has hired a respected member of the local First Nations, Inuit and Métis community to build relationships between the community and the EPI program. Regarding clients with developmental disabilities, some programs are using consultation and shared care models to support care of these clients in other services. Others admit these clients to their program, offering supports that fit needs and abilities. A few programs have internal staff with expertise in working with clients with developmental disabilities that they have been able to leverage.

Theme 3: Graduation

EPI is intended to be a time-limited intervention, with clients transitioning to other community supports within three to five years. However, some clients stay longer than necessary in their program because of a lack of appropriate discharge options. Programs are exploring alternative support models including step down programs and alumni groups to ease challenges around graduation. Some are building capacity by educating local adult programs about care for younger clients.

Also raised was the importance of primary care support. Primary care can provide physical health and medication monitoring for clients while in EPI, and enhance continuity of care through continued support after discharge. Training and access to supports (including EPI psychiatrists) may improve primary care engagement with EPI programs, and the quality of care received by the client.

Theme 4: Training

Most programs offer staff training but they stressed the need for ongoing training to keep pace with the evolving evidence and staff turnover. In particular, there was a desire for standardized EPI specific training tools that could be used across programs.

Theme 5: Evaluation

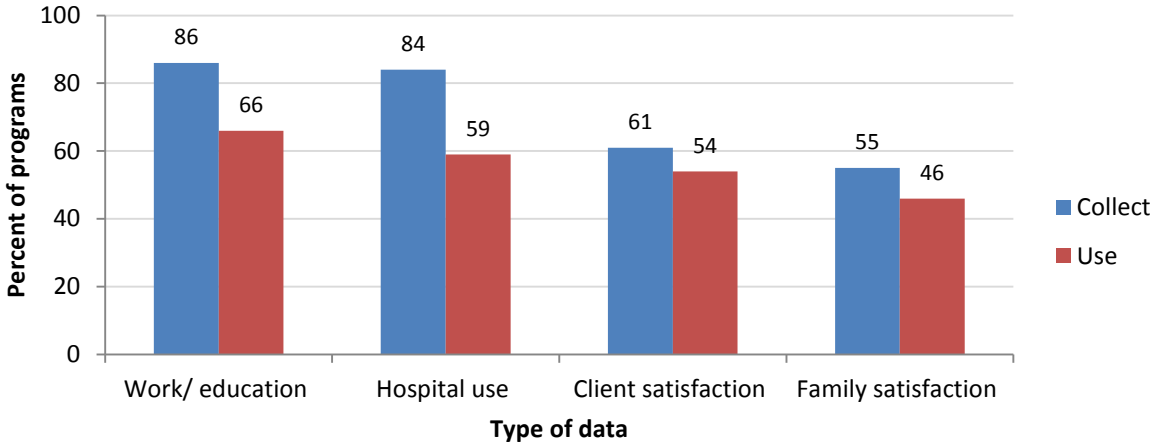
Survey responses on the challenges of data collection were shared and discussed at the meetings (see next section for more detail). Participants noted that some of the data they are being asked to collect is redundant and much of it is not being used. They noted the challenge of attending to clinical issues and also collecting data. Their main concerns were to minimize the burden of data collection and increase its relevance.

SECTOR FEEDBACK ON DATA COLLECTION AND USE

Current Practice

Feedback from both the provincial EPI survey (2015) and the provincial EPI/LHIN meetings indicated that programs are collecting data but are challenged to use these data for improvement work. This challenge is not unique to EPI programs; rather it is present across the entire community mental health and addictions (MHA) sector, as noted in *Taking Stock: A report on the quality of mental health and addictions services in Ontario* (Brien et al., 2015), and in the Ontario Mental Health and Addictions Leadership Advisory Committee annual report (2015). ***Figure 1*** shows the variation between data collection and use that EPI programs reported.

Figure 1: Collection and use of data by EPI programs (% of programs reporting 'agree'/ 'strongly agree')

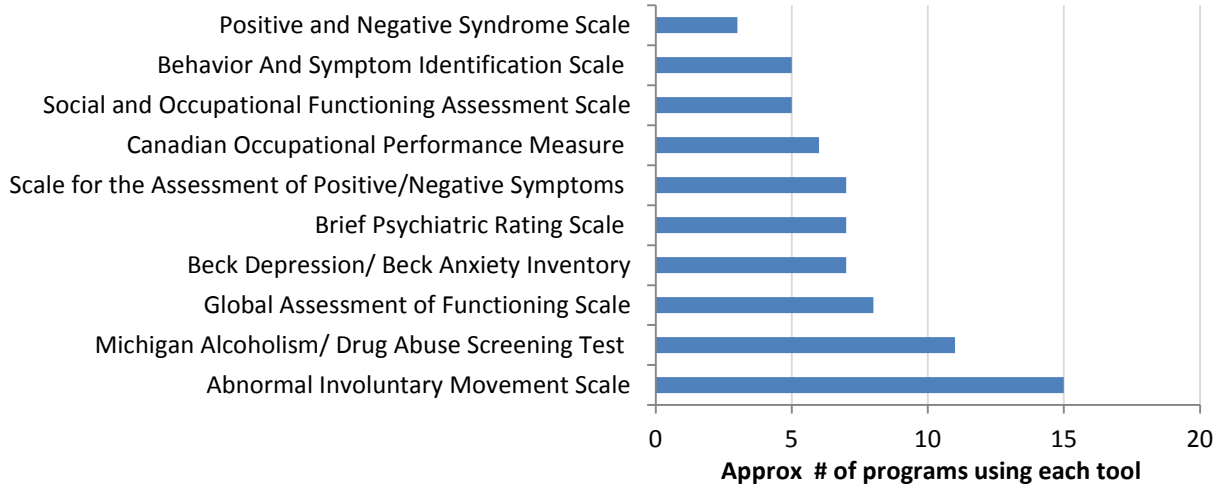


The Ontario Common Assessment of Need (OCAN) is a client assessment tool that provides a range of program and client data relevant to quality monitoring. The OCAN is widely implemented but not mandatory in the MH sector. While most EPI programs (84%) collect the OCAN, only 52% are using the data for client care planning and 18% for program planning.

Beyond the OCAN, EPI programs are using many other measures to collect data: on average, five per program, with up to 15 or 16 reported. ***Figure 2*** shows the 10 measures most frequently used; however, across the sector, over 60 different measures were reported. This finding signifies the sheer amount of data being collected. Overall, these results indicate that EPI programs spend substantial time collecting data but there is variation in what programs are collecting and often the data are not used for program planning or improvement.

Additionally, there are more than 14 different electronic record systems in use by programs across the province. This means that efforts to extract data directly from programs will involve negotiation with many vendors, and new data collection for sector monitoring will be complicated by differing and incompatible software. Nine programs reported having no electronic system at all and are still using paper-based data collection.

Figure 2: Clinical tools commonly used by EPI programs



Barriers and facilitators to data collection and use

Both in the provincial survey and the meetings, program representatives described challenges to data collection and use, including the large volume of data, redundancies in what was being collected, insufficient training, insufficient time and resources, electronic medical records challenges, poor data quality and staff resistance. Only 41% of programs reported having dedicated resources for evaluation or a dedicated support person.

Commonly noted was that interest in collecting data might be higher if staff could see how data were being used. Examples offered by the programs included advocating (successfully) for more funding, showing the need for streamlining the admission and referral processes, and providing feedback to staff on compliance with the Standards. Related to the OCAN, some LHINs have started projects with their MHA organizations to improve the quality of OCAN data being collected and its use for planning purposes.

Despite the challenges, programs recognized the potential benefit of sector wide monitoring and offered examples of areas to monitor with existing data. These included client outcomes (e.g., emergency department [ED] visits, hospital admissions, employment/education), client care (e.g., having a primary care provider), and program capacity. Other suggestions that would require new data or agreement across programs for common measure collection were quality of life, family support, and resilience.

PROVINCIAL DATA SOURCES FOR SECTOR MONITORING

System-wide data for monitoring inpatient, emergency and physician care have been available in Ontario for some time. However, data for monitoring community MHA care, including EPI programs, has not been available, as noted in two recent provincial reports: *Better Mental Health Means Better Health*, the annual report of Ontario's MHA Leadership Advisory Council (2015); and *Taking Stock* (Brien et al., 2015).

> "Ontarians can access mental health and addictions services through various types of providers in the community, in the primary care setting and in hospitals. A wide range of services are provided in the community, but data are not systematically collected on the effectiveness of these services and supports." (*Taking Stock*, page 40)
>
> "To focus improvement in mental health and addictions care in the areas where quality gaps are most apparent, we first need to measure how the system is performing." (*Taking Stock,* page 43)

This situation is starting to change. ***Table 1*** summarizes some provincial data sources specific to community MHA care that are available or in the process of being implemented. More detailed information is provided in **Appendix A**. While there are some quality challenges, these data are beginning to be used for system-level quality monitoring in Ontario. For example, pilot data collected using the Ontario Perception of Care (OPOC) measure were reported in *Taking Stock* (2015), to show its potential for reporting consumer perceptions of care quality. Additionally, both OCAN and OPOC-based indicators are included in the MHA draft scorecard currently in the field for consultation (Ontario Mental Health and Addictions Leadership Advisory Council, 2016).

To be available for system planning, these data need to be housed in central data repositories. Community Care Information Management (CCIM) is the provincial organization with responsibility for OCAN data collection. This occurs through the Integrated Assessment Record (IAR). Community mental health programs are expected to upload OCAN assessments to the IAR where, with client permission, they can be viewed by other providers involved in the client's care. If the client does not give permission, there is a process wherein the assessments can be reported in aggregate for evaluation and planning, similar to other health databases for the system. [3] The Drug and Alcohol Treatment Information System (DATIS) has responsibility for collection of the OPOC and other addictions treatment sector data.

The Institute for Clinical Evaluative Sciences (ICES) holds a variety of Ontario health and administrative databases. ICES is an independent, non-profit organization that produces system evidence to inform Ontario health policy development. Service use records can be linked across databases to develop a service use profile for each resident. OCAN data are being brought into ICES. While still at an early stage, this may create a future opportunity to describe use of physician and hospital services by EPI clients.

[3] The holder of the databases must meet all the regulations for holding Personal Health Information (PHI) and successfully pass ongoing audits. Retrieved October 26, 2016 from: https://www.ccim.on.ca/CMHA/OCAN/Private/Document/Education%20and%20Training%20v2.0/SupportDocs/OCANGlossaryofTerms_v4.0_20110102_CMHCAP.pdf.)

Appendix B lists hospital and physician data sources and system repository organizations that may have future relevance for the EPI sector.

Table 1: Provincial data sources available for EPI programs

1. Ontario Common Assessment of Need (OCAN)	
Description: Standardized comprehensive client assessment to support client care/program planning. **Collection**: Client assessments are completed at program entry and every six months until discharge. Data are uploaded to *IAR*, a provincial data repository managed by *CCIM*.	**Opportunity** - Provides comprehensive client level data - Available for EPI functional centre - Starting to be used in provincial monitoring initiatives **Challenge** - Not mandatory across system, although wide program participation - Data quality variable, including frequency of submission to IAR
2. Ontario Healthcare Reporting Standards (OHRS)/ Management Information System (MIS)	
Description: Program-level administrative data for accountability and planning **Collection:** Organizations submit OHRS data quarterly to the MOHLTC.	**Opportunity:** - Provides program data on capacity - Available for EPI functional centre - Program participation is mandatory **Challenges:** - Work may be needed on data quality
3. Common Data Set – Mental Health (CDS-MH)	
Description: Standardized minimum client outcome dataset **Collection:** Organizations submit CDS-MH data at functional centre level semi-annually to the MOHLTC.	**Opportunity:** - Provides client outcome data - Available for EPI functional centre - Program participation is mandatory **Challenges:** - Data quality needs to be investigated - Limited to aggregate program data - System may phase out CDS in favor of OCAN
4. Ontario Perception of Care (OPOC)	
Description: Standardized client/family survey on perception of care. **Collection:** Administration of the tool is determined by each program; data are uploaded to a central repository managed by *DATIS*.	**Advantages:** - Provides client/family feedback on experience of care - Starting to be used in provincial planning initiatives - Sectors can establish their own collection standards **Challenges:** - Use unique program codes that may not align with EPI functional centre - Not yet clear how data will be accessed - Not provincially mandated, although mandated in some LHINs
5. ConnexOntario MHA Service Inventory	
Description: Provincial inventory of mental health programs (includes wait time data). **Collection:** Organizations regularly submit updated information to Connex.	**Advantages:** - Provides program wait time data - Available for EPI functional centre - Program participation is mandatory - Starting to be used in provincial planning initiatives **Challenges:** - Work may be needed on quality of data

PROVINCIAL QUALITY IMPROVEMENT WORK

In recent years, there has been considerable activity in Ontario in health care performance monitoring and quality improvement**.** A key impetus was the release in 2010 of the Excellent Care for All Act (ECFAA) which sets provision of high-quality, integrated health care as a goal for Ontario, supported by a system that is accountable, transparent, and committed to ongoing improvement. This section reviews selected monitoring and quality improvement initiatives currently underway in Ontario (**Appendix C** provides more detailed descriptions). Overall, these illustrate current approaches to provincial health monitoring, current efforts in community MHA monitoring, and current information gaps. They provide examples of what the EPI sector could do and the value for the Ontario health system.

Health Quality Ontario

Under ECFAA, Health Quality Ontario (HQO) received a mandate to support system improvement work. HQO tracks service quality and evaluates improvement progress. It produces various public reports to support Ontario's health care transformation agenda. Among these is an annual report based on the Common Quality Agenda, which monitors the health of Ontarians and health system performance for a selected core set of indicators. Additionally, HQO produces specialized reports for specific populations, such as caregivers, or health sectors such as hospital care, primary care, long-term care, and home care.

HQO also manages the Quality Improvement Plan (QIP) program, where participating organizations annually report their performance on selected targets, changes from the previous year, and planned steps for the year ahead. Currently, more than 1,000 organizations in the hospital, home, primary and long-term care sectors submit QIPs and progress reports.

Recently, HQO started to report on MHA care. MHA care quality goals were added to its Common Quality Agenda, with five indicators reported. These pertained to hospital mental health care (4) and population health (1 -suicide rates). Additionally, in partnership with the ICES, HQO published *Taking Stock*, *A report on the quality of mental health and addictions services in Ontario* (Brien, 2015). This special report addresses prevalence of MHA disorders, and service access, use, and quality. Several indicators are reported using an equity lens (e.g., age, sex, immigration status and rurality). While two indicators address community care - client experience via the OPOC measure, and wait times for addiction services via ConnexOntario – the majority address hospital and physician care, and the report notes critical information gaps for monitoring community care.

Leadership Advisory Council

In 2011, Ontario released its Comprehensive Mental Health and Addictions Strategy – *Open Minds, Healthy Minds*, and in 2014 released Phase 2 of this strategy. In 2015, the province formed a Leadership Advisory Council to support the strategy implementation. The Council has emphasized the critical need for performance measurement in relation to community-based MHA agency care as, “without a more complete evidence-based understanding of what is happening across the entire continuum of publically funded services and supports, we cannot know where improvement is needed” (MHA Leadership Advisory Council, 2015, p18).

The Council is working with ICES to develop a balanced scorecard for monitoring access and quality of MHA care in Ontario and a draft framework is in the field for consultation (MHA Leadership Advisory Council, 2016). The proposed indicators address client access, experience of care, effectiveness, equity, and safety. Most indicators pertain to hospital and physician care. Three pertain to community MHA care, using the OCAN, OPOC, and DATIS minimum dataset as data sources, with additional, developmental indicators proposed. Where possible, reporting will include an equity lens.

The Leadership Advisory Council has also recognized the need to improve the MHA sector's capacity to collect and use data. Related to this, the *Excellence through Quality Improvement Project (E-QIP)* is a new initiative being led by Addictions and Mental Health Ontario (AMHO) and the Canadian Mental Health Association (CMHA), Ontario (2016). Aims include:

- building a common understanding of quality improvement in the sector;
- learning about current quality initiatives;
- sharing examples; and
- building sector capacity for meeting future quality measurement expectations

In the context of HQO and Leadership Council work, EPI sector efforts to build capacity for using data to monitor quality of care are highly relevant and address a key information gap. The quality areas highlighted in HQO reports and the MHA draft scorecard would be important for EPI to review and consider as they progress in their own work.

Provincial Accountability Agreements

Accountability agreements between the LHINs and health service providers (Multi-Sector Service Accountability Agreement- MSAAs), including EPI programs, are another tool to evaluate the system's performance. The MSAAs include program-specific fiscal and service activity targets and, for MHA service providers, also two cross-system targets: ED revisits for mental health and addiction problems.

Local Initiatives

Beyond centrally-initiated monitoring and improvement initiatives, there are examples in the province of stakeholder-driven projects focused on a specific area of health care/service. These initiatives can develop indicators tailored to their service area, and may be able to utilize data sources that are not available at the provincial level. Similarly, the EPI sector can create a monitoring process that is tailored to their needs and interests.

One example is the *Mental Health and Addictions Quality Initiative (MHAQI)*. This project started with four specialty mental health and addictions hospitals interested in developing a comparative scorecard of indicators appropriate to monitoring quality of care. The scorecard currently reports indicators across four domains: client complexity, quality of care, outcomes and experience. The participating hospitals use the scorecard to compare their performance and discuss approaches to quality improvement. Data quality and indicator improvement are ongoing. The initiative has grown from four to 15 hospitals, and the focus is expanding beyond inpatient care (Prince & Willett, 2014).

Another example involves the Toronto MHA Access Point initiative. The Access Point provides coordinated access to intensive case management, assertive community treatment (ACT), and

supportive housing services through one application and intake assessment process. Project stakeholder organizations have been meeting for over a year to define supportive housing access and wait time indicators based on the applicant/waitlist database. Agreeing on indicator definitions and reporting comparators, and checking data quality, have been important to the development process.

Summary

In summary, data-supported quality monitoring in health care is receiving considerable attention in Ontario. Recent projects have reported on the quality of MHA care in the province but there is a notable gap in information related to access and use of community MHA agency services. A few results are reported using OPOC, OCAN, DATIS minimum dataset, and ConnexOntario wait-time data. Stakeholder-driven local initiatives are emerging that are developing quality indicators tailored to their service area and available data although it is important to note that the development process typically requires time to define indicators and for data quality review and improvement.

NEXT STEPS

Many EPI programs are involved in improvement activities but capacity to do this work is variable and a process for systematic reporting, comparing, and sharing of quality work across the sector is lacking. EPI programs have many strengths to bring to a sector quality-monitoring process. Among these are:

- provincial Programs Standards that set out quality expectations;
- common data sources, although the quality is inconsistent; and
- support through EPION and the SISC.

The EPI sector is already involved in communities of practice and other improvement initiatives (e.g., related to metabolic monitoring, education). Systematic measurement could help demonstrate the results of these and other efforts. Programs have identified some domains of interest for quality monitoring. Among these are:

- capacity (e.g., staff size, caseload, length of stay);
- client outcomes (e.g., employment/education, hospital use, resilience, quality of life);
- service delivery (e.g., fidelity to the model).

Additionally, based on other provincial initiatives, consideration could be given to monitoring service access (e.g., client experience, wait times, equity) and service quality (e.g., client unmet needs, client experience, family support).

An evidence-based fidelity tool developed by Dr. Don Addington, an Alberta researcher, could inform efforts at quality improvement (Addington et al., 2016). Dr. Addington presented at an EPI sector evaluation Think Tank in May 2016. There is considerable interest in fidelity monitoring, although developing a feasible implementation strategy would be important.

Collecting and reporting data for quality monitoring have a number of benefits. Data can demonstrate EPI quality and impact. They can also stimulate conversations with the LHINs, across programs and within programs about improvement work, and be used to monitor results of improvement efforts. Such work would also align with broader provincial efforts to improve information and performance reporting related to the provision of MHA services.

The System Alignment and Capacity Work Group of the MHA Leadership Advisory Council proposed a framework (***see Appendix D***) to guide improvement work that is relevant to the EPI sector (MHA leadership advisory council 2016). Components of the improvement cycle include:

- defining quality aims;
- identifying relevant standardized resources;
- developing and reporting indicators relevant to quality aims;
- reviewing results; and
- conducting improvement work in line with evidence-based practice.

EPION is committed to delivering high quality care to young people and their families in Ontario dealing with psychosis. Work going forward will build on the guidance of the EPI Program Standards, align with the priorities of the Leadership Advisory Council and other provincial projects, and continue important collaboration with the LHINs and other stakeholders.

REFERENCES

1. Addington DE, Norman R, Bond G, Sale T, Melton R, McKenzie E, Wang JL. (2016) Development and testing of the First-Episode Psychosis Services Fidelity Scale. *Psychiatric Services* (online)
2. Bird V, Premkumar P, Kendal, T, Mitchell J, Kuipers E. (2010). Early intervention services, cognitive-behavioural therapy and family intervention in early psychosis: systematic review. *British Journal of Psychiatry*, *197*, 350-356.
3. Brien S, Grenier L, Kapral M.E., Kurdyak P, Vigod S. (2015) *Taking Stock: A Report on the Quality of Mental Health and Addictions Services in Ontario. An HQO/ICES Report.* Toronto, Health Quality Ontario and Institute for Clinical Evaluative Sciences.
4. Canadian Mental Health Association, Ontario & Addiction and Mental Health Ontario (2016). *E-QIP – Excellence through Quality Improvement Project*. http://ontario.cmha.ca/public-policy/e-qip/
5. Excellent Care for All Act, 2010, S.O. 2010, c. 14
6. Health Quality Ontario. (2015) Measuring Up: A yearly report on how Ontario's health system is performing. Toronto: Queen's Printer for Ontario.
7. Health Quality Ontario. (2015) Quality Improvement Plan (QIP): Guidance Document for Ontario's Health Care Organizations.
8. Mental Health and Addiction Leadership Advisory Council. (2015) Better Mental Health Means Better Health: Annual report of Ontario's Mental Health and Addiction Leadership Advisory Council.
9. Mental Health and Addiction Leadership Advisory Council. (March 4 2016) *Data and Performance Measurement in Ontario's Mental Health and Addictions Sector* (webinar)
10. Ministry of Health and Long-Term Care. (2011). *Ontario Early Psychosis Intervention Program Standards.* Toronto, ON.
11. Ministry of Health and Long-Term Care. (2011). Open Minds, Healthy Minds: Ontario's Comprehensive Mental Health and Addiction Strategy.
12. Nordentoft M, Rasmussen J O, Melau M, Hjorthoj C R, & Thorup AAE. (2014). How successful are first episode programs? A review of the evidence for specialized assertive early intervention. *Current Opinion in Psychiatry*, *27*, 167–172.
13. Prince P, Willett P. (2014) The mental health and addictions quality initiative: Collaboration in public reporting and quality improvement. *Healthcare Management Forum* 27: 25–29
14. Standards Implementation Steering Committee. (2012). *Implementation of Early Psychosis Intervention Program Standards in Ontario: Results from a Provincial Survey*. Centre for Addiction and Mental Health and the Early Psychosis Intervention Ontario Network: Toronto, Ontario.
15. Standards Implementation Steering Committee. (2015). After Release of the Ontario Early Psychosis Intervention (EPI) Program Standards: Results of the 2014 EPI program survey of current practices in relation to the Standards. Centre for Addiction and Mental Health and the Early Psychosis Intervention Ontario Network: Toronto, Ontario.

APPENDIX A: COMMUNITY CARE DATA SOURCES AVAILABLE FOR EPI PROGRAMS

Description	Collection and access	Potential for EPI sector improvement
1. Ontario Common Assessment of Need (OCAN)		
Description: Standardized client assessment to support client care/program planning. **Content**: The Core OCAN measures: program capacity; client demographics, clinical information (presenting issues, diagnoses), functioning (e.g., legal, housing, income, education). The Full OCAN also measures client needs (Camberwell domains); includes staff and client completed versions.	**Collection**: Client assessments are completed at program entry and every six months until discharge. Data are uploaded to *IAR*, a provincial data repository managed by *CCIM*. **Access**: CCIM produces standardized program and LHIN reports. CCIM recently initiated a process for other stakeholders (researchers, decision makers) to request dataset. Programs can produce their own reports if their data systems allow. **Implementation:** Variability is a concern - in assessments (e.g., frequency, timing, quality) and in rate of upload to IAR. Numerous collection challenges across MH sector.	**Advantages:** - Provincial data repository exists (CCIM) - Can be accessed through special request for EPI functional center - Collected by most EPI programs - Populates 2 indicators in the MHA Leadership Advisory Council draft scorecard (2016) - Some training available through CCIM; some LHINs working on data improvement - Potential source of client demographic, health, support need and outcome data **Challenges:** - Implementation varies across programs - Concerns over data quality - Data requests to CCIM are a new process
2. Ontario Healthcare Reporting Standards (OHRS)/ Management Information System (MIS)		
Description: Program-level financial and statistical data to support accountability and system planning **Content**: Expenses, staffing, service delivery activities, individuals served.	**Collection:** Organizations submit OHRS data quarterly to the Ministry of Health and Long-Term Care. **Access:** Data can be viewed at functional centre and organization level through the Health Data Branch Web Portal. Stakeholders can request permission to access. **Implementation:** Data submission is mandatory. Quality is variable (e.g., in how some items are understood).	**Advantages:** - Provincial data repository exists - Can be accessed through Health Data Portal for EPI functional center - Universal collection - Some work is underway to improve quality[1] - Potential source of information on program and system capacity **Challenges:** - Limited to program administrative data - Work may be needed on quality of data
3. Common Data Set – Mental Health (CDS-MH)		
Description: Standardized administrative and client data reported at program-level to Ministry of Health and Long term Care. **Content**: Program capacity; client demographics, clinical information, community functioning (Now also included in the OCAN).	**Collection:** Organizations submit CDS data per functional centre semi-annually to the Ministry of Health and Long-Term Care. **Access:** Data can be viewed at functional centre and organization level through the Health Data Branch Web Portal. Stakeholders can request permission to access. **Implementation:** Data submission is mandatory for all organizations.	**Advantages:** - Provincial data repository exists - Can be accessed centrally at aggregate level for EPI functional center - Universal collection - Potential source for program-level information on client demographics, clinical status and outcomes **Challenges:** - Data quality needs to be investigated - Limited to aggregate program data - System may phase out CDS in favor of OCAN

4. Ontario Perception of Care (OPOC)		
Description: Standardized client/family survey on perception of care.[2] **Content**: Demographics and perceptions of care (7 domains: access/entry to services, services provided, participation, therapists/staff, environment, discharge, overall).	**Collection:** When/how to administer the tool is determined by each program. Some sectors may establish their own collection standards. **Access**: Data are uploaded to a central repository managed by *DATIS*. Agencies and LHINs can access their own data. Process for central access by other stakeholders is not yet developed and tool uses unique program codes that may or may not align with EPI functional centre. **Implementation:** Currently being implemented with early adopters. Not mandated provincially but is mandated or strongly encouraged by most LHINs.	**Advantages:** - It may ultimately be collected across all programs - Populates one indicator in the Leadership Advisory Council draft scorecard (2016) - Potential standardized source of feedback of client and family perception of care **Challenges:** - Still in early stages of implementation - Currently not provincially mandated - Not yet clear how data will be accessed
5. ConnexOntario MHA Service Inventory		
Description: maintains health services database (mental health, alcohol, drugs, problem gambling); generates various service reports; also operates 24/7 service information helpline for the public. **Content**: Standardized program description including location, how to access, and wait times; also maintains forensic bed registry.	**Collection:** Organizations regularly submit updated service information to Connex. **Access**: Data requests can be submitted to Connex. Data is available by functional centre (e.g., EPI). **Implementation:** Data submission is mandatory for all organizations.	**Advantages:** - Provincial data repository exists - Can submit data requests to Connex, available for EPI functional center - Universal participation - Populates one indicator in the Leadership Advisory Council draft scorecard (2016) - Potential source of program information on wait times **Challenges:** - Aggregate program data - Work may be needed on quality of data - Limited variables

APPENDIX B: HOSPITAL AND PHYSICIAN DATA SOURCES AND DATA REPOSITORY ORGANIZATIONS

Source	Content and Collection
Hospital and Physician Data	
Discharge Abstract Database (DAD) Scope: National, hospital	**Content**: Demographic, administrative, and clinical data for hospital inpatient discharges and day surgery interventions. **Collection:** • Mandated for all hospitals (national); • Completed at discharge for all hospital inpatients; • Report to Canadian Institute for Health Information (CIHI); • In Ontario held by ICES, MOHLTC. **For more information:** https://www.cihi.ca/en/types-of-care/hospital-care/acute-care/dad-metadata
Ontario Mental Health Reporting System (OMHRS) Scope: Ontario, hospital, mental health	**Content:** • Collected though the Resident Assessment Instrument–Mental Health (RAI MH); • Includes mental and physical health, social supports and services used, care planning. **Collection:** • At admission, discharge and every 3 months for long-term patients; • Currently collected at 68 hospitals in Ontario with designated inpatient MH beds; • Reported to CIHI; • In Ontario held by ICES, MOHLTC. **For more information:** https://www.cihi.ca/en/types-of-care/specialized-services/mental-health-and-addictions/ontario-mental-health-reporting
National Ambulatory Care Reporting System (NACRS) Scope: National, hospital	**Content**: Demographic, administrative, clinical and service-specific data for ED, day surgery and other ambulatory care visits. **Collection:** • All ambulatory care including day surgery, outpatient and community based clinics and emergency department; • Reported to CIHI; • In Ontario held by ICES, MOHLTC. **For more information:** https://www.cihi.ca/en/types-of-care/hospital-care/emergency-and-ambulatory-care/nacrs-metadata
Ontario Health Insurance (OHIP) billing Scope: Ontario, physician services	**Content:** • Based on physician billing codes; • Includes information about service date, patient, provider, fee schedule code, number of services/units delivered, and diagnostic information. **Collection:** • Collected by all physicians using fee for service models; • Physicians in alternative payment models may submit shadow billing. **For more information:** http://www.health.gov.on.ca/en/pro/publications/ohip/

Source	Content and Collection
Data Repository Organizations	
Community Care Information Management (CCIM) Scope: Ontario health care	**Description:** Supports improved patient care in the community through standardized assessments and providing a platform where assessments can be shared within the circle of care. It is comprised of 3 streams: Business Systems (includes MIS, HRIS), Common Assessments (includes the interRAI tools) and the Integrated Assessment Platform (IAR- platform that allows providers to view all assessments for a client to support collaborative care). Assessments uploaded to the IAR can be made available for other clinicians. If the client doesn't give permission to share, they can be set as private so they cannot be seen by other clinicians but are still included in aggregate data for evaluation/planning purposes. **Access**: Can submit request to CCIM to get OCAN data (aggregate or case level data). **For more info:** https://www.ccim.on.ca/default.aspx
Drug and Alcohol Information System (DATIS) Scope: Ontario addiction programs	**Description::** DATIS is a repository for client level data from all addiction and problem gambling services in Ontario. In addition to current clinical data being captured, DATIS will also hold the OPOC and SSA data. **Access:** Standardized data reports available on-line, stakeholders can also submit requests for custom reports. **For more information:** http://www.datis.ca/
Institute for Clinical Evaluative Sciences (ICES) Scope: Ontario health care	**Description::** An independent, non-profit organization that uses population-based health information to produce information on a broad range of issues. It houses an array of linked datasets, including health administrative data, census data, vital statistics data, registered persons database, disease registries, and health survey data. Linked databases reflecting all 13 million Ontarians, allow ICES to examine patient populations longitudinally, through diagnosis and treatment, and to evaluate outcomes. **Access:** ICES data is not accessible to the public, but stakeholders can submit requests for data. **For more information**: http://www.ices.on.ca/
Canadian Institute for Health Information – CIHI Portal (CIHI) Scope: National health care	**Description::** A nonprofit that holds healthcare datasets, both Ontario-specific and national (e.g., DAD, NACRS). Allows registered users to create custom reports and also produces standard reports, available online. **Access:** Healthcare organizations (e.g., hospitals and regional health authorities) can apply for access for a cost. **For more information:** https://www.cihi.ca/en/types-of-care/hospital-care/cihi-portal-welcome
Data Portals	
MOHLTC Health Data Branch Web Portal (Health Indicators Tool)	**Description::** Housed in the Health Data Branch at the MOHLTC and provides access to healthcare data including the OHRS datasets. **Access:** Stakeholders can apply to receive access to the OHRS data and can submit requests to the Health Data Branch to receive other datasets, such as the CDS data.

Source	Content and Collection
Scope: Ontario health care	**For more information:** https://hsimi.on.ca/hdbportal/
Provincial Health Planning Database (IntelliHealth) Scope: Ontario health care	**Description:**: Platform at the MOHLTC Data Branch that allows access to health data sets (e.g., OMHRS, DAD, NACRS, OHIP, Home Care, long-term care, CCO) and other data (vital statistics, census, RPDB). **Access:** Stakeholders can apply to receive training and certification to access the data. Unlike at ICES, data linkage is not available at IntelliHealth. **For more information:** https://intellihealth.moh.gov.on.ca/

NOTE: For more information about the above data sources/repositories, and other data sources in the system see the *Health Analyst's Tookit* (2012)- http://www.health.gov.on.ca/english/providers/pub/healthanalytics/health_toolkit/health_toolkit.pdf

APPENDIX C: PROVINCIAL QUALITY IMPROVEMENT INITIATIVES

Initiative	Description	Domains
Mental Health Commission of Canada (MHCC)		
Informing the Future: Mental Health Indicators for Canada Scope: Mental health	The MHCC is a national non-profit organization, funded by Health Canada, to provide tools and information to improve mental health care quality and access. This set of indicators provides a snapshot of mental health problems & illnesses in Canada, drawing on existing data sources. Time trends are reported where possible and results are rated as: "good," "no change," "significant concern." Aim is to highlight gaps and weaknesses, and inform policy. Repeated publication of these indicators can help monitor progress over time. **Implementation:** First report released (2015) for 55 indicators. Eight additional indicators for FNIM communities to be released.	**Domains:** Main foci are population health and determinants of health. Domains (align with MHCC strategic directions): *access to services*; *promotion and prevention*; *disparities and diversity*; *caregiving*, *recovery and rights*. Within domains, results address general population, children & youth; seniors; diversity (lesbian, gay, or bisexual; immigrants; northern communities). **Data sources:** hospital data (DAD, NACRS, OMHRS); population data (Statistics Canada community surveys); Accreditation Canada, Canada Shelter Capacity Reports.
Ontario MHA Leadership Advisory Council		
Mental health & Addictions Performance Indicators for Ontario Scope: Mental health	The Leadership Council was formed in 2015 to provide advice on implementation of the Ontario Comprehensive MHA Strategy (2011). Work is proceeding on a number of fronts, including identifying opportunities for data collection for quality improvement. Multiple data challenges at the agency, LHIN, and Ministry level have been identified. A Task Group was formed to develop a scorecard of performance indicators, to support high quality hospital and community care and quality improvement. **Implementation:** A draft scorecard was released for consultation (winter 2016), with some items based on existing data and others flagged as developmental. Selection criteria (from HQO) included: measurable; important & relevant; actionable; interpretable.	**Domains:** A draft scorecard is under consultation. Domains, which align with Health Quality Ontario quality domains, are: • *Client-centred:* Client rating of care received. Recommended for development: measures of stigma, unmet need, family/caregiver support. • *Safe:* Physical restraints. Recommended for development: a measure of medication reconciliation. • *Effective:* Years of life lost, suicide rates. Recommended for development: a measure of functioning-GAF (hospital recommended). • *Timely:* Wait time from referral to service start; ED first contact. Recommended for development: common definition of wait times. • *Efficient:* 30 day repeat ED and physician visit within 7 days, 30-day repeat admission, ALC; Recommended for development: system transition. • *Equity:* Indicators will be reported by geography, age, sex, immigration status, neighbourhood income (where available).

Initiative	Description	Domains
		Reporting Level: Population, system, organization. **Data sources:** Hospital data (DAD, NACRS, OMHRS); physician billings (OHIP); community mental health (OCAN, OPOC); community addictions (DATIS, OPOC). Data sources to be developed to measure stigma, family/caregiver support, medication reconciliation.
Health Quality Ontario		
Common Quality Agenda Scope: Health	Health Quality Ontario is the provincial advisor on the quality of health care, and collects and reports data on the health of Ontarians and health care system performance. This yearly report provides information on how Ontario's health system is performing. Indicators pertain to different areas of the health system (i.e., population health, system integration, primary care, home care, long-term care, hospital care, mental health (recently added), health workforce, and health spending. These indicators will continue to evolve. **Implementation:** Annual, most recent is *Measuring Up*, 2015	**Mental health indicators:** Hospital admissions; readmission (30 day); doctor visit within 7 days of discharge; use of physical restraint in acute care; population suicide rates. Reporting level: LHIN where available; trends over time. **Data sources**: Various; includes Statistics Canada, hospital inpatient and emergency room data, OHIP physician billing data.
Taking Stock: A report on the quality of MHA services in Ontario, 2015 Scope: Mental health	This report examines the quality of mental health and addictions care in Ontario, and how it is changing over time. It was prepared in collaboration with ICES, and adds to the mental health indicators reported in the Common Quality Agenda report. *Taking Stock* was intended to inform the work of the MHA Leadership Advisory Council.	**Domains:** • *Population:* Illness prevalence, cost. • *Service access:* First ED contact; wait times for addiction services (ConnexOntario), client experience of access to primary care, post-hospital follow-up with physician. • *Service use:* Primary care use, ED use, admissions, readmissions, psychiatrist supply, client experience of MHA services (OPOC). • *Equity*: Related to first ED contact, physician follow-up (e.g., reported by age, rurality, new Canadians, income). Reporting level: Population and by subgroups (age, sex, rurality, immigration status, income). **Data sources**: Various; includes Statistics Canada community survey data, Ontario hospital inpatient and ED data, OHIP physician billing data, ConnexOntario, OPOC.
Quality Improvement	A documented plan with targets and actions that an organization makes to improve quality.	**Domains:** While specific indicators vary across sectors, HQO is focused on the following

Initiative	Description	Domains
Plan (QIP) Initiative Scope: Health	Organizations report their performance annually on the targets, changes, and achievements from the previous year, and planned steps for the year ahead. Targets are expected to meet the needs of the organization, but also align with sector and system priorities. HQO produces annual, sector-specific reports to summarize sector progress and spotlight success stories. Rate of sector participation in QIP is also reported. **Implementation:** More than 1,000 hospital, home, primary, and long-term care organizations submit QIPs and progress reports. Reports are publically available to support transparency and sharing. Organizational capacity to collect and use data is growing. (HQO, *Quality Improvement Plan Guidance Document*, 2015).	quality domains: safe, patient-centered, effective, efficient, equitable and timely. These domains have been adopted by the MHA Leadership Advisory Council for their system performance scorecard work. Reporting level: sector **Data sources:** various, e.g., EMR/chart review, patient survey
Local Health Integration Networks		
Multi-Sector Service Accountability Agreement (M-SAA) Scope: Health	The M-SAA is a service accountability agreement negotiated between each LHIN and the community agencies they fund, including community MHA services. The agreements support a collaborative working relationship to provide high quality care, coordinate health care in the local system, and manage the system effectively and efficiently. Agreements include information on the agency's services, funding, and performance targets. They are posted publically on the LHIN website.	**Domains:** • Capacity (e.g., staffing). • Clinical activity (e.g., volume of contacts). • Financial information. • Performance and explanatory indicators. Includes 4 explanatory indicators specific for community MHA: - 2 ED visit indicators (unplanned return visits within 30 days for MHA; - 2 wait-times indicators. Agreements include information at agency level and by functional centre. **Data source:** Organizations submit reports to their LHIN.
Examples of Sub-sector MH/A initiatives		
Mental Health and Addictions Quality initiative Score Card Scope: Inpatient mental health	This comparative scorecard reports indicators appropriate to specialized hospital MHA services. Participating organizations use the scorecard to compare their performance and discuss quality improvement.	**Domains:** • *Client complexity* (e.g., # reasons for admission, # psych dx; # med dx). • *Client outcomes* (e.g., change in functioning, change in care needs, readmission rate, satisfaction with care). • *Client safety* (medication reconciliation, restraint use). • *Client access* (ALC days). • *Staff safety* (lost time to injury) • *HR indicator* (staff engagement; absenteeism).

Initiative	Description	Domains
		• *Financial* (balanced budget). **Data source:** CIHI
The Access Point (Toronto Central LHIN- Centralized Access) Scope: Community mental health	The Access Point provides coordinated access to intensive case management, assertive case management, and supportive housing services through one application and intake process. Stakeholder organizations have been meeting for over a year to define access, wait times, and service outcome indicators based on the applicant/waitlist database. Agreeing on indicator definitions, reporting groups, indicators to provide context, and checking data quality have been important to the development process. **Implementation**: One report has been produced. Results will be updated semi-annually and posted on ACCESS website.	**Domains**: • *Client satisfaction* with referral process (not yet implemented) • *Access*: time to referral decisions; time to being housed/service initiation; agency decline rates and reasons; client decline rates and reasons; rates of clients being housed; provider vacancy days. Reporting level: Sector and various subgroups (by socio-demographics where possible). **Data source:** Centralized access applicant/waitlist database.

APPENDIX D: FRAMEWORK FOR SYSTEM IMPROVEMENT

From: Data and Performance Measurement in Ontario's Mental Health and Addictions Sector. Draft: February 5, 2016 (An initiative of Ontario's Mental Health & Addictions Leadership Advisory Council).
http://ontario.cmha.ca/files/2016/02/Data-Background-package-Feb-8-1.pdf