EARLY PSYCHOSIS INTERVENTION ONTARIO NETWORK

Quality of care in Ontario Early Psychosis Intervention programs

An update after the second round of EPI fidelity assessments

A project of the Standards Implementation Steering Committee

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camh

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://help4psychosis.ca/ or https://www.eenet.ca/initiatives/EPION.

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Main Messages

- To date, 17 Early Psychosis Intervention (EPI) programs have volunteered to receive assessments through two rounds of assessments (about 40% of provincial EPI programs). Feedback from programs and other stakeholders suggest continued sector interest in conducting fidelity reviews.
- Results show that overall Ontario programs are providing high quality care in adherence with the EPI model.
- Results can also be used to identify common areas of challenge across programs that could be targeted at a system level (e.g., training to offer specialized therapies, access to psychiatry, improved documentation).
- Combined with outcome data, fidelity reviews have potential to build evidence of quality and benefit of Ontario EPI care. Combined with repeat assessments, change efforts can be monitored.
- However, programs may need more support to use review feedback for program-level quality improvement. A sector survey is in process to learn about program capacity to implement quality improvement projects and supports needed to use fidelity review feedback.
- To manage costs, the reviews relied on volunteer staff from EPI programs who were trained to conduct assessments. While programs valued having direct contact with experienced EPI clinicians during the assessments, reliance on volunteers makes the sustainability of this process uncertain and increases risk of variability in quality.
- To sustain this work, other assessment strategies are being explored including self-assessments, greater reliance on administrative data and tele-fidelity (remote) assessments. These may be able to complement on-site reviews. Still a stable funding source is needed for sustainability and spread, especially if results are to be aggregated to learn about sector level practice and if improvement of the fidelity scale for Ontario use is to continue. Advocacy with funders for more support is needed.

Background

In 2016, the Early Psychosis Intervention Ontario Network (EPION) and the Centre for Addiction and Mental Health (CAMH) partnered to pilot a volunteer peer fidelity assessment model in Ontario Early Psychosis Intervention (EPI) programs. Fidelity assessments measure the extent to which delivery of an intervention adheres to the standards, guidelines, or protocol that characterize it. Fidelity assessments can guide program improvement and provide a common standard for assessing quality of services delivered across a sector. In 2016, an EPI fidelity scale was published (Addington 2016). The pilot provided an opportunity to develop and implement a fidelity review protocol using the new scale, assess feasibility and value for Ontario EPI programs, and begin to assess the current state of practice in EPI programs.

The pilot, conducted during 2017, included 9 programs and 20 volunteer assessors. While some feasibility concerns emerged, programs and assessors were both very positive about the value of the assessments. Many program delivery strengths were identified as well as some improvement opportunities. Additionally, suggestions were made for improving the review process. See the Fidelity Pilot Study Report for full details on the pilot results.[1]

Based on the success of the pilot, a decision was made to conduct a second round of fidelity assessments. A number of refinements were made to the protocol based on pilot feedback. During this second round, seven programs were assessed.

This brief report includes the combined results from both rounds of fidelity reviews.

[1] Standards Implementation Steering Committee. (2018). Implementing a volunteer peer fidelity assessment in Ontario Early Psychosis Intervention programs: What did we learn? Centre for Addiction and Mental Health and the Early Psychosis Intervention Ontario Network: Toronto, Ontario. https://help4psychosis.ca/wp-content/uploads/2018/09/EPION-SISC-2018_FidelityPilotReport_FINAL-Sept-24-2018.pdf

Fidelity Assessment Approach

Fidelity assessment protocol:

The core components of the assessment protocol are as follows (see the pilot report for more details on the fidelity assessment process).

1. Peer assessor team → The assessment team included two EPI program staff (volunteer) and one evaluator from CAMH (in kind contribution). Each team included at least one experienced assessor. All assessors were trained in structured fidelity assessment protocol (new assessors receive a full day of training and returning assessors receive a shorter 'refresher' training).
2. First Episode Psychosis Services Fidelity Scale (FEPS-FS) → The FEPS-FS was used to evaluate program fidelity to the EPI model (Addington 2016).
3. Site visit→ Data about program delivery were collected during a site visit to each participating program where assessors reviewed 10 client health records, interviewed staff, clients and family members, and reviewed program materials.
4. Consensus rating meeting → Ratings were finalized using a post-visit consensus rating meeting including the assessors and members of the central team to increase consistency across teams.
5. Final report → A structured final report was provided to each program.

Protocol differences between pilot and second round of assessments

Based on feedback from the pilot and from continued work by D. Addington to improve the FEPS-FS, some modifications were made to the scale for the second round of assessments (***see Appendix A***). These included adding items to measure relevant practices not assessed in the original scale; removing items which were not good measures of intended practices; and modifying rating criteria for some items. Additionally, we added seven exploratory items for practice expectations specific to the EPI Ontario standards and context (supplementary Ontario module). These items are listed in the appendix but results are not reported as they are at an early developmental stage.

The fidelity assessment manual and data collection tools were also updated to reflect the above changes and streamline the review process. These changes combined with the increased experience of the assessor teams led to a reduction in the average time spent by each assessor per assessment from 53 hours to 45 hours.

These refinements supported the overall aim of the scale and review process to assess program adherence to the EPI model of care, with a rating of 4 intended to indicate satisfactory adherence. Thus, we report the combined results from the pilot and second round of assessments to show what we have learned about the current state of practice in Ontario EPI programs.

See ***Appendix A*** for more details on the changes to the FEPS-FS.

Participants

Program participation

For both waves, programs were invited to voluntarily participate in a review. The pilot included 10 programs, 9 of which were included in the first report. An additional 7 programs received fidelity assessments between November 2018 and January 2019. ***Table 1*** below provides an overview of all 17 Ontario programs that have received fidelity assessments to date. This sample represents about 40% of provincial EPI programs, including a wide range of program sizes (1-22 clinical FTEs), delivery models and locations across the province. However, since programs volunteered and were not selected randomly, results may be not fully representative of EPI practice in Ontario.

Table 1: Participating programs (pilot and round 2)

Program	Clinical FTEs	Client caseload	Host organization	Region
Pilot: Fidelity assessments conducted between February 2017- June 2017				
Program 1	<3	<50	Community	North
Program 2	>8	50-100	Community	West
Program 3	3-8	100-150	Hospital	West
Program 4	>8	50-100	Community	Central
Program 5	3-8	100-150	Hospital	Central
Program 6	>8	>150	Hospital	East
Program 7	3-8	100-150	Hospital	East
Program 8	<3	<50	Hospital	East
Program 9	>8	>150	Hospital	East
Program 10	>8	>150	Hospital	Central
Round 2: Fidelity assessments conducted between November 2018- January 2019				
Program 11	>8	>150	Hospital	West
Program 12	>8	>150	Community	Central
Program 13	<3	<50	Hospital	North
Program 14	<3	<50	Community	West
Program 15	>8	50-100	Community	North
Program 16	>8	50-100	Community	West
Program 17	3-8	<50	Community	Central

Assessor participation

Ten new assessors were trained in fall 2018; 7 EPI staff and 3 CAMH evaluators. This brings the total number of staff who have received training to 30. However, of the original pool of 20 assessors trained for the pilot, only 6 were still available to participate in round 2. Additionally, 3 of the 10 newly trained assessors ultimately were unable to participate. Thus the second round of assessments was conducted by a team of 13 active assessors.

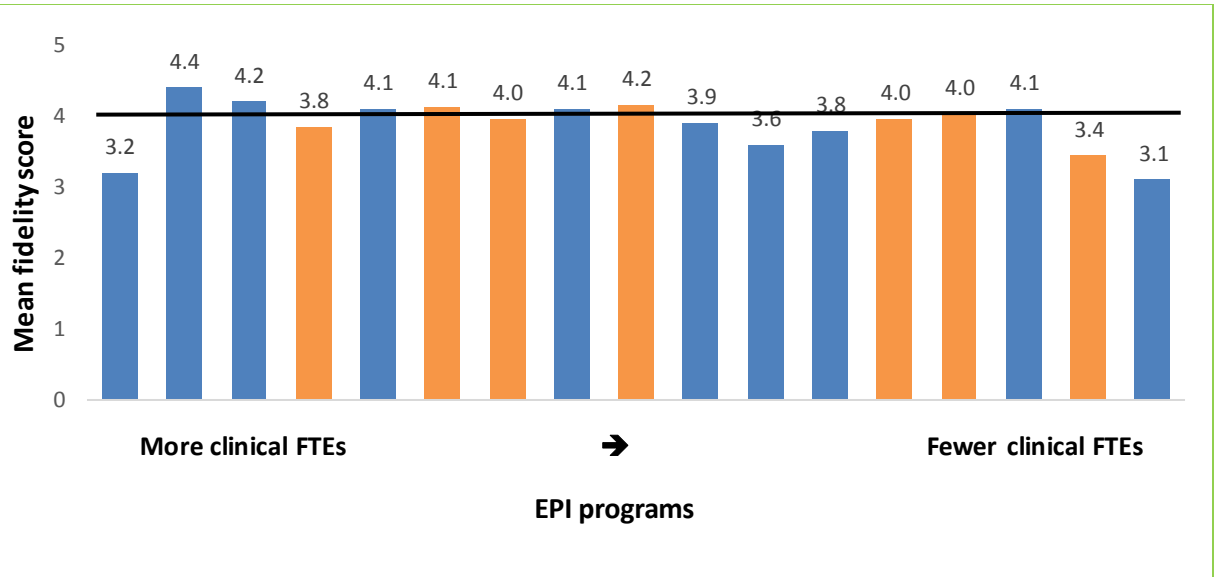
Fidelity Item Results

This section reports the results for all 17 programs that have received fidelity assessments.

Figure 1 reports the mean overall fidelity score for each program (blue bars are pilot programs, orange bars are round 2 programs). Although the scale used for the round 2 programs was slightly different, the results were similar to the pilot programs. Overall fidelity scores ranged from 3.1 to 4.4, with an average score of 3.9. When considering how closely a program follows the EPI model, a rating of 4 indicates that program performance is satisfactory. Overall, these findings suggest that Ontario EPI programs are performing with a satisfactory level of adherence to the EPI model.

In the pilot sample the total scores showed a slight trend where smaller programs had more difficultly achieving fidelity to the model. This trend is not apparent in the full cohort of fidelity assessments. Programs can vary in their challenge areas and size appears to be only one determining factor. As the sample of assessed programs grows we can learn more about the impact of program size and other programs factors (e.g., caseload, staff training, IT infrastructure etc.) on fidelity.

Figure 1: Mean fidelity scores across programs



***blue bars are pilot programs; orange bars are round 2 programs*

We grouped the fidelity items into five domains that align with different areas of program practice and calculated mean program scores per domain. The domains include:

- *Pharmacotherapy*, for example, medication prescribing.
- *Access and continuity*, such as timely access, proactive outreach, crisis support, and communication with inpatient services.
- *Team practice*, such as multidisciplinary team, weekly meeting, and psychiatrist role on the team.
- *Assessment and care planning*, such as comprehensive initial assessment, family involvement, and annual reassessment.
- *Psychosocial treatments*, for example, psychoeducation, supported employment, and psychotherapies, such as cognitive behaviour therapy.

Results (***see figure 2***) show that, overall, program practices were closer to the EPI model in domains related to pharmacotherapy, access and continuity, team practice, and assessment and care planning, and less so for the psychosocial treatments domain.

Figure 2: Mean domain scores across all programs (n=17)

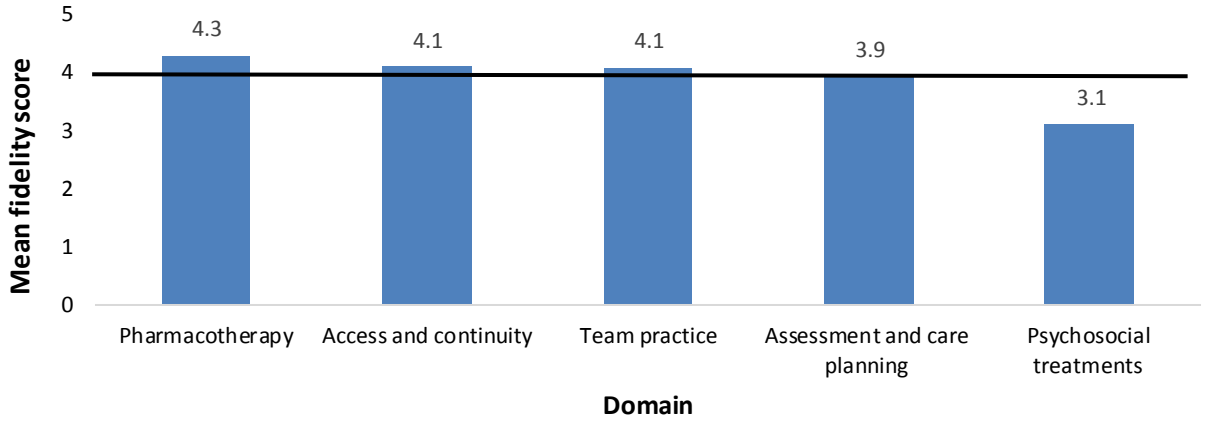


Figure 3 reports item level results across the 17 programs. Since the scale underwent some changes between the pilot and round 2 assessments, only common items are included (n=26). At the item level we can see that although overall most programs have good fidelity to the model, there are specific areas of practice where programs are more challenged to meet fidelity criteria. These are areas that could be prioritized for system or sector level improvement efforts. A trend across the lower scoring items is the need for additional training to enable staff to deliver that component of care (e.g., CBT, supported employment, metabolic monitoring). Another common challenge is access to psychiatry.

Figure 3: Mean item scores across all programs (n=17)

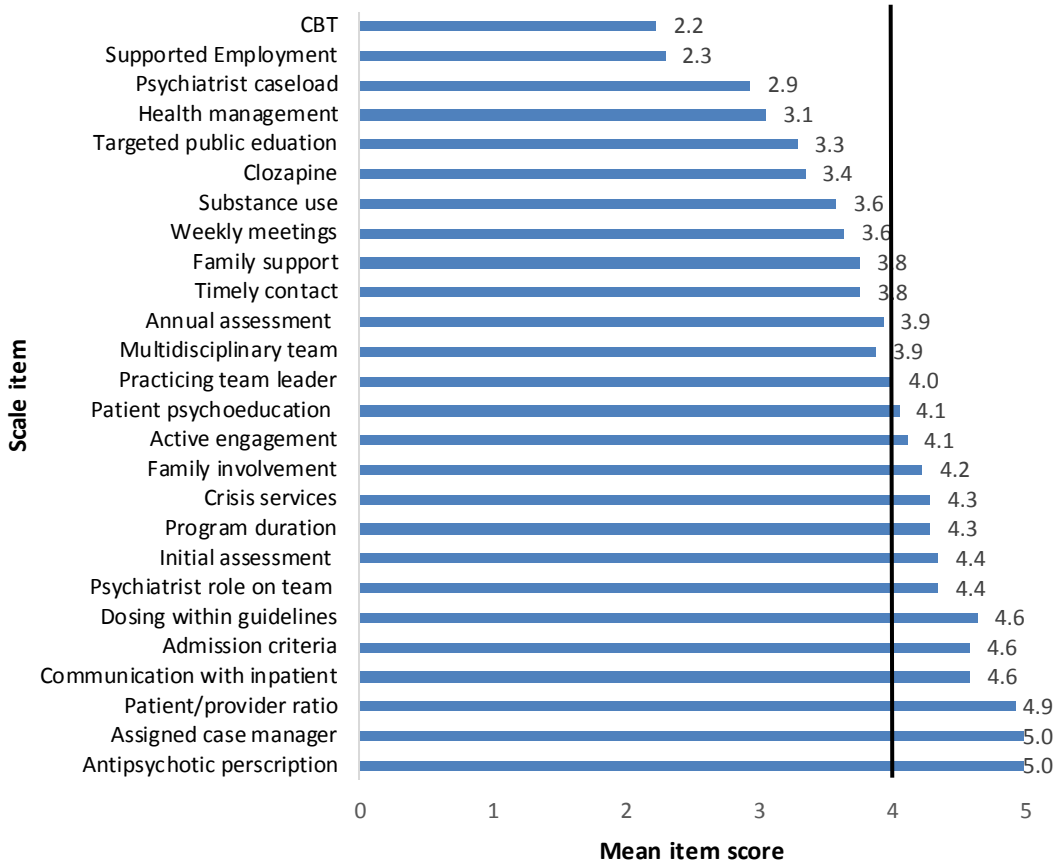
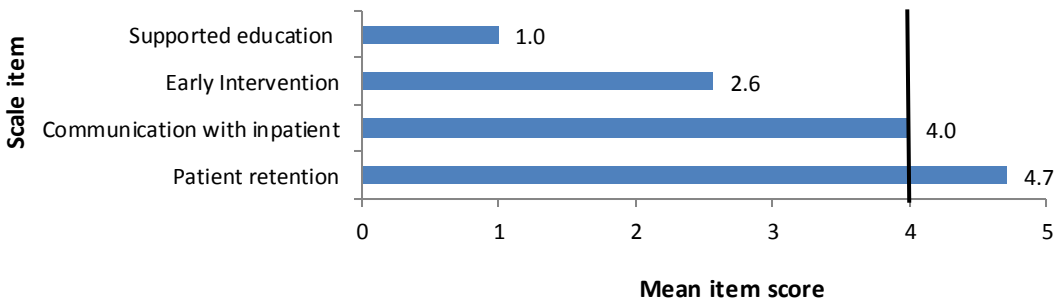


Figure 4 reports the four new items added to the scale for the second round of assessments. *Supported education* relies on programs having a supported education specialist which is not a role currently implemented in Ontario so programs all received a score of 1. *Early intervention*, which looks at the proportion of clients with a psychiatric hospitalization prior to admission, was also an area of challenge with a mean score of 2.6. *Communication with inpatient*, which includes practices to ensure continuity of care for clients who have been hospitalized, and *patient retention*, which looks at drop out rates, are both areas of strength for Ontario EPI programs with mean scores at or over 4.

Figure 4: Mean scores for 4 new items (n=7)



Strengths and Improvement Opportunities

These two rounds of fidelity assessments, covering 17 programs, evidenced high levels of adherence for most core EPI program components and service delivery activities. Clients are typically assigned an intensive case management worker, with an acceptable patient/provider ratio. Psychiatrists perform several key roles on EPI teams, consulting with staff and ensuring medications are prescribed within established dosing guidelines for First Episode Psychosis. Families are involved in their loved one's care with client consent whenever possible. Programs generally deliver care for the first three years after the onset of a first episode of psychosis, covering the critical period for promoting recovery. Young persons with psychosis receive a thorough assessment at intake, and psycho-education to learn about psychosis and recovery. These program components, for which the mean fidelity score across programs was above 4.0, are evidence-based practices that research has shown are related to better outcomes in EPI.

At the same time, some core components of EPI received lower mean scores, indicating an important opportunity to increase adherence and quality of care. Timely contact, with a mean item score of 3.8, indicates some programs have difficulty in meeting face to face with new clients with in two weeks of referral. The early intervention mean item score of 2.8, although more difficult to interpret, suggests some clients may be experiencing more acute psychosis requiring hospitalization, before accessing care in an early intervention program. Additionally, as indicated in ***figure 2*** above, some other key activities such as CBT, psychosocial programs, and physical health care are also areas where improvement work may be required.

In addition to the item scores, the fidelity reports included rich narrative detailing how programs de liver services, providing context and a deeper understanding for both program strengths and improvement opportunities. The fidelity reports completed to date were overwhelmingly positive about the passion and dedication of EPI clinicians to their clients. The fidelity reports praised creative and innovative practices developed by programs to support high quality care, particularly when faced with limited resources. Many programs have formed strong partnerships with other community organizations to ensure their clients receive the full basket of EPI services when beyond the scope of their program to deliver.

The narrative reports also highlight some common themes in relation to service delivery challenges. For example, a frequent recommendation in the fidelity reports is to improve documentation. Programs may be delivering high quality services that are not properly documented. Low quality documentation can make it difficult to monitor delivery and identify where improvement is needed.

Another common theme is that programs and resources are often offered to clients 'as needed', raising the concern that not all clients within a program have consistent access to the same services. A recommendation was to establish manual-based protocols for delivering services (e.g., psychoeducation, assessments) and formal criteria for offering or making referrals for specialized services (e.g., CBT, employment supports etc.).

The fidelity assessment item scores, in combination with detailed narrative descriptions and quality improvement suggestions, provide a rich and informative picture of how 17 Ontario programs are delivering the EPI model. These data can help us to better understand program strengths and identify opportunities for improvement.

Where Do We Go From Here?

In total, 17 programs have received fidelity assessments as part of this project to date. Overall, the results show that Ontario EPI programs are providing high quality services, reflecting the hard work and dedication of EPI program staff. The results also identify areas where there is room for improvement. Common challenges include access to training for staff, access to psychiatry, ensuring services are offered consistently to all clients, and documentation.

Fidelity results have been used by individual programs to identify and celebrate strengths, identify improvement opportunities and communicate with internal and external stakeholders, including their teams, organizational leadership, community and funders. At the sector level, EPION has used fidelity results to identify and prioritize sector improvement work. Fidelity results have also supported applications for research funding. A large initiative funded by the Canadian Institute of Health Research is currently underway to implement the NAVIGATE model of EPI delivery in Ontario. A primary purpose of this model is to enhance consistency in service delivery, a common challenge identified in fidelity assessments.

If more programs are assessed, the opportunity for individual and sector practice improvement efforts will increase. If assessments can be repeated, programs (and the sector) can monitor the effects of any improvement efforts. If a common set of outcome measures can be reported, fidelity results can be compared to outcomes, providing an opportunity to learn more about critical program components.

An important question moving forward is how fidelity assessments can be provided in a sustainable, ongoing way for all EPI programs. Although we were able to gain some efficiencies based on learnings from the pilot, saving an average of 8 hours per assessor, this process still relies heavily on a high level of volunteerism from staff and programs. The high turnover in the assessor team since the pilot study highlights the risk of this approach. Of the 30 assessors trained since fall 2016, only 13 actively participated in the second round of assessments. Additionally, ongoing assessments would require continued financial support from EPION's limited budget to support project coordination, assessor training, aggregating and reporting results, and travel costs for assessors.

Possible options going forward include the use of a fee-for-service model that would require individual programs to pay to receive an assessment. This option, however, may exclude programs that cannot manage the cost. Tele-fidelity assessments (where fidelity assessments are conducted remotely by telephone) reduce travel costs but still rely on trained assessor pool. Another option is to shift to self-assessments. There may be a role for self-assessments as part of a larger improvement strategy but feedback from the pilot emphasized the value of having external assessors provide the review.

Fidelity measurement is complicated and researchers are still learning the best way to balance consistent, standardized measurement with locally meaningful results. In order to show change over

time it is important to have a standardized instrument. However, it is also important that we continue to improve the process as we learn more about what works well and what does not work well. Additionally, it is important that the scale is adapted to reflect the most up to date evidence about effective EPI practice.

Routine fidelity assessment is a challenge across the Ontario health care system. A recent symposium on fidelity measurement brought together providers, administrators, researchers, people with lived experience and funders from across the mental health and addiction sector, including EPI, to consider how to implement routine sustainable fidelity assessments in Ontario. A conclusion of the group was the need for a funded team or centre with dedicated trained assessors to develop robust scales and assessment processes, and conduct fidelity reviews. While other options may be helpful in the short term, solutions relying on volunteers and one time funds cannot support a sustainable process. A community of interest initiated at the symposium will continue to consider how to move this work forward.

Within EPION a next step currently underway is to conduct a follow up survey of EPI programs to further investigate how fidelity assessments have been used, and whether additional supports are needed to enable programs to use fidelity results for quality improvement. The survey will also investigate the appetite of new programs to receive fidelity assessments and the capacity of programs to pay up front for assessments as an alterative funding structure. The survey is anticipated to be disseminated in early 2020.

Appendix A: Changes to the FEPS-FS

FEPS-FS core scale changes

Based on the feedback from the Ontario pilot, as well as another project in the United States using the same fidelity scale, a number of refinements were made to the protocol and the fidelity scale. Two items on the fidelity scale that were difficult to measure reliably were removed: **Item 20 (*Community living skills*)** and **item 8 (*Guided antipsychotic dose reduction*)** in the original scale. A number of new items were also added to capture important components of the EPI model that were missing from the original scale:

1. ***Item 12: Early Intervention*** → The proportion of first episode psychosis patients who have been hospitalized prior to admission to the FEP services reflects success in early intervention.
2. ***Item 27b: Supported Education*** → Supported Education is provided to patients interested in participating in education.
3. ***Item 29: Patient retention*** → The proportion of patients that leave the program during their first year.
4. ***Item 31: Communication between the program and inpatient services*** → If a EPI patient is hospitalized, program staff: (1) Contact inpatient unit to establish communication plan; (2) Visit with patient on inpatient unit; (3) Communicate with family about admission; (4) Are involved in discharge planning process; (5) Receive / obtain a hospital discharge summary; (6) Schedule an outpatient appointment prior to discharge.

Additionally a number of minor changes were made to how the remaining items were operationalized. The version of the FEPS-FS used in this round of assessments has a total of 32 items.

Ontario supplement

Based on feedback from the pilot that some elements of the Ontario Standards were not sufficiently covered in the FEPS-FS, we developed a supplementary module specific to Ontario. Seven items were included in the module:

1. ***Peer Support***: Formal opportunities are available for clients to connect and receive support from peers with lived experience of psychosis.
2. ***Client Length of Stay***: Length of stay for clients currently enrolled in the EPI program.
3. ***Appropriate Care after Discharge***: Clients have access to appropriate ongoing treatment and support after discharge.
4. ***Transition Support***: Clients receive a 'warm hand off' and transition support after discharge.
5. ***Consistent Admission Criteria***: Ontario programs should strive towards consistent admission criteria.

6. ***Employment support****:* Clients are routinely offered supports to gain employment or stay employed, if interested. Supports may be offered through the EPI program or through referral.
7. ***Education support*****:** Clients are routinely offered supports to enter or stay in school, if interested. Supports may be offered through the EPI program or through referral.