Development of a Client Perception of Care Tool for Mental Health and Addictions: Qualitative, Quantitative, and Psychometric Analysis

Final Report for the Ministry of Health and Long-Term Care

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Executive Summary

In 2008 Health Canada announced the Drug Treatment Funding Program (DTFP), a key element of the National Anti-Drug Strategy. The focus of the DTFP was on enhancing the systems of services for people with substance use problems in Canada, emphasizing three broad target areas for investment: implementation of evidence based practices; strengthening evaluation and performance measurement; and knowledge exchange.

Each province and territory was invited to submit proposals for system enhancement. The Ontario submission included the present project, the objectives being to assess the acceptability, utility, and psychometric properties of a new client and family perception of care tool for publicly funded addiction and mental health services in Ontario. The project also aimed to examine the feasibility of implementing this tool and the usefulness of the results, as well as to estimate the implementation requirements with respect to staff burden and time, training needs, and other resources.

A broad range of stakeholders were engaged in the project via a Program Advisory Committee and Working Group. Partners included the Ministry of Health and Long-Term Care, specialized mental health and substance use agencies (directors, managers, clinicians and researchers), Local Health Integration Networks (LHINs), and consumer representatives. This group and a special sub-group specific to this project, informed all stages of the decision-making regarding the development of the tool, selection of pilot sites, and procedures for implementation. Input was also received from a separate youth committee consisting of stakeholders working with young people and via a presentation to the Persons with Lived Experience and Family Member Advisory Panel.

Tool development included several steps, the first being a comprehensive literature review that evaluated all peer-reviewed papers focused on the development of a client satisfaction/client perception of care tool in mental health and/or addiction settings. The project team also conducted an environmental scan in Ontario to determine the scope of use of any kind of tool to assess client perceptions of care in mental health and addiction agencies, and what measurement tools and processes were in place. As a result of this literature review

and environmental scan, it was decided that a new tool should be developed that would be appropriate for both mental health and addiction settings as well as utilize a perception of care approach.

The tool underwent a rigorous development and validation process. Measures that had been identified in the literature review were examined to determine which tools would be most useful, had proven strong validity and reliability, and had been appropriate in both mental health and addiction settings. Seven tools met these criteria. The project team and the sub-group of key stakeholders reviewed each item/question from all of these tools and formed a comprehensive list of items, clustered into eight domains. This list became the foundation for the development of the Ontario Perception of Care Tool for Mental Health and Addictions (OPOC-MHA).

Twenty-three pilot sites (82 programs in total) participated in this study and piloted the OPOC-MHA. The sites represented a cross-section of addiction and mental health agencies in Ontario, and thus included a diversity of programs and clientele. Agency staff and clinicians were involved in data collection after obtaining appropriate training related to the administration of the OPOC-MHA and the data collection procedures.

Data collection occurred over a three-month period in the spring of 2012. The timing of tool administration varied by agency with some agencies administering the tool at program completion and others conducting a one-day or one-month blitz of all participants for that time period, thus engaging participants at different stages of program involvement. In total, 1,772 participants responded to the OPOC-MHA questionnaire – 1,476 (83.3%) were clients with mental health or/and addiction problems, 205 (11.6%) were registered supporters (family members, friends), and 91 (5.2%) were non-registered supporters; 1,476 (83.3%) participants were clients of outpatient services, and 296 (16.7%) were inpatients.

The main objective of the data analysis of the OPOC-MHA data was to test important psychometric properties in terms of validity and reliability in order to evaluate the appropriateness of the tool for assessing various aspects of client perceptions of care in mental

health and addiction treatment services and the utility for quality improvement. Qualitative analysis included regular feedback from pilot site contacts regarding the tool, phone interviews with site leads and other staff regarding their experience with the questionnaire, and an online survey distributed to all staff from all sites to provide feedback on the tool itself, its administration, and overall usage.

The work completed to date has resulted in the successful development of a valid and reliable perception of care tool for clients and their family members/supporters receiving services within mental health and addiction agencies. The quantitative results showed enough inter-item variation to detect four useful construct subscales with a significantly high level of internal consistency, good convergence with an established measure of client satisfaction, as well as identification of several important areas that may be targeted for quality improvement efforts.

Overall, the qualitative feedback indicated that the OPOC-MHA was generally well accepted and the majority of staff at each pilot site felt that the tool appropriately captured the importance of questions using a perception of care approach. Many staff, managers and directors commented that the information provided by the tool was useful and that it could spark initiatives to improve quality of care at the clinical, program, and system-planning levels. In addition to the qualitative feedback from the sites, the pilot testing process itself demonstrated that implementation of a common perception of care tool was very feasible across mental health and addictions services in Ontario. Most programs were able to integrate the tool easily into their daily practices in a way that best suited their needs.

Constructive feedback was obtained concerning the length, format, and language of the tool. Some revisions have been made (e.g., eliminating redundant items, splitting the client and family member/supporter sections into two separate tools) and other changes are underway (e.g., consulting with youth to make the language more youth-friendly). Once all revisions have been completed, the research team will partner with the Quality Initiatives Implementation Team (QIIT) from the Provincial System Support Program (PSSP) at CAMH to develop a provincial implementation plan. Together, these teams will evaluate this initial process, lessons

learned, and ultimately develop a comprehensive implementation plan for all of Ontario, including infrastructure requirements and costs. This would also include providing training sessions for participating agencies/LHINs and the provision of implementation support resources.

Future plans also include the development and implementation of an electronic version of the OPOC-MHA in partnership with the Drug and Alcohol Treatment Information System (DATIS). The research team has also initiated a consultation process with First Nations, Métis and Inuit stakeholders to explore the development of a First Nations, Metis and Inuit adaptation of the OPOC-MHA. Additional analyses and publication of the considerable client and family/supporter data collected in the pilot are also underway.

TABLE OF CONTENTS

1.0 BACKGROUND AND RATIONALE 1
1.1 The Drug Treatment Funding Program (DTFP) 1
1.2 Project Objectives 3
2.0 TOOL DEVELOPMENT AND PILOTING 4
2.1 Creating the Tool 4
2.1.1 Literature Review 4
2.1.2 Environmental Scan 12
2.1.3 Development Process 14
2.1.4 Description of the Tool 15
2.2 Pilot Testing 16
2.2.1 Pilot Sites 16
2.2.2 Site Staff Training 17
2.2.3 Data Collection 18
2.2.4 Analysis 20
3.0 RESULTS 23
3.1 Quantitative Results 23
3.1.1 OPOC-MHA Item Analysis 25
3.1.2 Construct Validity 28
3.1.3 Internal Consistency and Reliability 35
3.1.4 Concurrent Validity 37
3.2 Qualitative Results 40
3.2.1 Positive Feedback 40
3.2.2 Language 41
3.2.3 Completion Time and Length 42
3.2.4 Format 43
3.2.5 Challenges with Specific Items 43
3.2.6 Challenges with Participation 45
4.0 SUMMARY AND DISCUSSION 45
REFERENCES 51
Appendix A – Client Perception of Care Tools in Mental Health and Addiction Settings 57
Appendix B – Advisory Committee and Working Group Members 72
Appendix C – OPOC-MHA: Pilot Version Draft 74
Appendix D – Pilot Site Descriptions 82
Appendix E – Client Satisfaction Questionnaire (CSQ-8) 91
Appendix F – Descriptive Statistics Tables 93
Appendix G – Factor Analysis Output 95
Appendix H – Reliability Analysis Output 101
Appendix I – Qualitative Template 105
Appendix J – DTFP - OPOC-MHA Data Analysis Plan 106

1.0 BACKGROUND AND RATIONALE

1.1 The Drug Treatment Funding Program (DTFP)

In 2007, the Canadian federal government introduced the National Anti-Drug Strategy to focus efforts on reducing the demand for, and supply of, illicit drugs; as well as to address the crime associated with illegal drugs. The National Anti-Drug Strategy emphasized the need for effective treatment services to better manage the illicit drug problem when it occurs, and to help those in need. The need to make improvements at the level of the treatment system emerged as a priority for action based on countrywide consultations and national level studies on treatment needs and gaps carried out in support of the development of the National Anti-Drug Strategy. These studies demonstrated the need for systemic change to move treatment systems toward more evidence-informed practices, while also increasing systems' capacity to evaluate practices for their efficiency and effectiveness (Health Canada, 2008).

In response to these findings, the Drug Treatment Funding Program (DTFP)[1] was announced in 2008, providing new, 5-year, time-limited funding (2008-2013)[2] to assist provincial and territorial governments in addressing critical treatment needs in 3 investment areas (Health Canada, 2008):

1) Implementation of evidence-informed practice – Although evidence-informed practices to optimize treatment exist, and are continually being developed, many do not easily find their way into service delivery. Evidence-informed practice is based on interventions that effectively integrate the best research evidence with clinical expertise, cultural competence and the values of the persons receiving the services. These interventions have evidence showing improved outcomes for families, clients, and/or communities.
2) Strengthening evaluation and performance measurement – Performance measurement and evaluation activities across jurisdictions are limited. While all jurisdictions collect,

[1] Re-oriented funding from Health Canada's Alcohol and Drug Treatment and Rehabilitation Program, effective April 2008.
[2] Timelines varied across provinces and territories depending on the release of funds; Ontario's projects received funding for 19 months of work (April 2011 – March, 2013).

manage and analyze performance information pertaining to their treatment services and programs, the type and nature of data collected, as well as the approach to data collection and analysis varies considerably. This strategic investment area strengthens evaluation and performance measurement capacity and activities.

3) Knowledge exchange – This investment area is an essential element of work undertaken in investment areas #1 and #2. Knowledge exchange activities can include such things as mentoring and the provision of technical expertise; mechanisms that develop and/or enhance knowledge sharing and dissemination of lessons learned from communities of practice in the uptake of best practices and in performance measurement/evaluation; and activities that can effectively reach health professionals within organizations and service sectors to increase their awareness and participation in knowledge exchange activities across the continuum of treatment services.

Each province and territory was invited to submit proposals for system enhancement. The Ontario submission included the work that is the focus of this report – namely a review of client satisfaction/client perception of care tools within mental health and addiction settings, and the assessment of the feasibility of a provincial, standardized tool, including the development of a new tool if needed[3]. The present project was not aimed at the evaluation of the services offered by the participating pilot sites, but rather the evaluation of a new client perception of care tool and data collection procedures. The goal was to eventually recommend a common tool and provincial implementation process.

Client satisfaction in mental health and addiction services: Measures of client experience are widely used by customer-oriented businesses and healthcare services and settings – for example, cancer treatment centres (Brédart et al., 2010), primary care out-of-hours services (Garratt et al., 2007), and community pharmacy services (Panvelkar et al., 2009). Measuring client satisfaction in mental health and addiction treatment is recognized as an important indicator of the quality of care as it is a direct measure of whether a client received services

[3] Other related projects that are the subject of other reports are the review of Ontario's screening and assessment tools and processes, development and feasibility assessment of a provincial outcome monitoring system and the costing of Ontario's substance use treatment services.

that met their expectations and needs (McLellan & Hunkeler, 1998; McLellan et al., 2007). As an approach to evaluation and performance monitoring, measuring client satisfaction ensures that service providers have explored their clients' perception of the quality of care. Such information may be collected with other quality-related information, (e.g., indicators of engagement, retention and treatment participation, and outcome) and integrated into a larger performance measurement system (Rush et al., 2008).

It is noteworthy that the term "client satisfaction" is being supplanted in recent literature by the term "client perception of care". This represents an important conceptual shift. Essentially, satisfaction is a measure of the reaction to the services received (Graham et al., 1993) and high ratings are difficult to interpret as they may not necessarily indicate receipt of services that are aligned with current quality standards. Measures of perception of care ask more directly about the care experience in relation to what is expected as standard practice and may, therefore, be more directly used for quality improvement. For example, a satisfaction-oriented item may ask if the client was satisfied with a certain aspect of their treatment (high to low rating) whereas a perception of care-oriented item would ask if they had actually received a certain service or standard of care and then rate this in terms of how frequently they received it, if at all. The nuance is subtle but important since the range of responses based on a perception of care approach is likely to be wider since respondents may be more willing to report infrequent exposure or use of a practice (e.g., being informed about their rights or participating in their care plan) than express dissatisfaction with this aspect of their care *per se*. Further, respondents tend to report high levels of satisfaction (i.e., highly skewed responses) even though dissatisfaction might be voiced in open-ended questions or other feedback formats such as focus groups. Some tools combine the perception of care approach with summary ratings of satisfaction and services received in order to capture both perspectives on the treatment experience.

1.2 Project Objectives

This project piloted a client perception of care tool developed for testing in both mental health and addiction settings across Ontario, Canada.

The specific objectives of this project were:

1. To assess the acceptability, utility, and psychometric properties (e.g., validity, reliability) of a new client and family perception of care tool for publicly funded addiction and mental health services in Ontario.
2. To examine the feasibility of implementing a common client perception of care tool for both addiction and mental health settings and the potential usefulness of the results among decision-makers at the clinical, program, and system-planning levels.
3. To estimate requirements related to the implementation of a common tool in relation to:
    a. Staff burden and time
    b. Training requirements
    c. Resource requirements (e.g., for data collection, analysis and reporting).

An integral component of this project was the systematic collection of feedback about the new questionnaire and implementation processes in order to address our objectives, and ensure that recommendations regarding the feasibility of implementing this tool on a large scale across the province were in line with research in this area and client-centred care. This paper reports on the process and development of the Ontario Perception of Care Tool for Mental Health and Addictions (OPOC-MHA) as well as the quantitative and qualitative analyses used to validate the instrument.

2.0 TOOL DEVELOPMENT AND PILOTING

2.1 Creating the Tool

2.1.1 Literature Review

The literature review was conducted at the Centre for Addiction and Mental Health (CAMH) between November 2010 and February 2011. It was limited to papers published since 1995, although there are a few exceptions as some tools (in particular the Client Satisfaction Questionnaire (Larsen, 1979) and the Service Satisfaction Scale (Greenfield, 1989)) were used extensively in the study period but were developed prior to 1995.

Our search criteria included all peer-reviewed papers which articulated the development of a client satisfaction/client perception of care tool in mental health and/or addiction settings. Electronic indexes were used to identify articles: Pubmed, PsychINFO, Google scholar, Scholar's Portal, MEDLINE, Ovid, and Social Science. Keywords, usually used in combination, included consumer satisfaction; patient satisfaction; patient preference; perception of care; patient opinions; opinions of patients; client opinion; opinions of clients; data collection; psychiatric status rating scales; psychological tests; client satisfaction tools; client satisfaction questionnaires; client satisfaction surveys; patient satisfaction tools; patient satisfaction questionnaires; patient satisfaction surveys; mental disorders; psychiatric hospitals; mental health services; mentally ill persons; drug users; substance abuse treatment centers; community mental health centers; psychiatric nursing; psychiatry; psychiatric department, hospital; mental health programs; psychiatric patients; substance abuse disorders; substance abuse treatment; drug abuse; addiction; drug addiction; drug rehabilitation; measurement; test construction.

When searching the literature, keywords were used to scan entire documents for a match rather than just titles and abstracts. All references were recorded and stored electronically using RefWorks (2009). Forward and backward tracking was conducted and bibliographies of all papers were reviewed to identify additional documents of relevance. For the purposes of this paper, only articles found in peer reviewed journals were included. All papers were read by the second author (EH). An extraction form was developed and completed for all papers wherein the article and tool were described in detail. Once a list of tools had been developed, it was forwarded to five researchers with expertise in the field to assess coverage as one safeguard against missed tools. In addition, all authors of those articles in which the tool was not included, or where a tool did not have a specific name, were contacted in order to obtain a copy of the measure.

Tables A1-A3 (Appendix A) synthesize the information on various tools and contrasts the tools reported in the literature for application in mental health, addiction or concurrent disorders settings. The small literature on tools specific to family members is summarized later. Of 127 papers reviewed, 69 articulated the development of a client satisfaction/perception of

care tool used in addiction and/or mental health settings. Some of these papers made minor alterations to an existing tool to suit a particular population. Therefore, the total number of tools identified included 36 named tools and 9 unnamed tools, for a total of 45 measures. For each tool we indicated the setting (e.g. addiction or mental health), population (e.g. age group), country of origin, psychometrics (e.g. internal consistency, test-retest; criterion-related validity), number of items, domains covered, timing (i.e. when the tool was administered), and mode of administration. Country of origin was also noted as some authors may have translated tools without considering cultural or health system context. It has been argued that when not culturally validated, tools should only be used in their country of origin (Boyer et al., 2009). We also examined whether the study reported on the relationship between client satisfaction/perception of care and data on client characteristics, treatment process, outcome and/or subsequent quality improvement activities. These findings are not included in Tables A1-A3 as they apply to only a few studies.

- *Setting, Population and Country of Origin*

Of the 45 client satisfaction/client perception of care tools identified in the literature, nine had been used in addiction treatment settings (see Table A1, Appendix A); 29 tools were specific to mental health settings (both in- and out-patient) (see Table A2, Appendix A); and seven tools were used in both mental health and addiction settings (see Table A3, Appendix A). Although the majority of tools were developed and used for adult populations, three tools were designed for children and adolescents. Most tools (25) were developed in the United States but others were developed in the United Kingdom (5), Germany (3), Sweden (3), Australia (2), Italy (2), Canada (1), Switzerland (2), Israel (1), and Spain (1). Some of the identified tools have been adapted to meet the needs of a particular clientele or jurisdiction. For example, the Self-Rating Patient Satisfaction Scale (Hansson et al., 1995) was translated into Finnish and Norwegian to be used in those Scandinavian countries, respectively. In addition, the Perception of Care Survey was adapted from both the Client Satisfaction Questionnaire (CSQ) and the MHSIP tools (Way et al., 2007). Some “new” instruments were found to be culturally adapted from other versions, for example, Zahid et al. (2010) removed questions pertaining to sheltered accommodation from the VSSS-EU, as this service was not available in their jurisdiction (Kuwait).

- *Psychometric Characteristics*

Different aspects of validity and reliability were assessed in most papers reviewed. However, psychometric testing was not reported for 15 of the 45 tools (33%). With regard to reliability, calculation of Cronbach's alpha was the most commonly used approach. A score of greater than 0.70 is thought to be optimal, and in general, the higher the alpha coefficient, the more variance explained (Kolb, 2000, p. 78). Most of the reviewed instruments had an alpha of 0.70 or more; however, the range for all tools was 0.61 (Patient Satisfaction Survey) to 0.98 (Quality in Psychiatric Care). In addition, other estimates of reliability such as test-retest were performed on a small number of measures.

Validity testing that was reported was most commonly aimed at assessing scale structure using confirmatory or principal component factor analysis or structural equation modeling. One study (Perez de los Cabos et al., 2002) described a validation design to assess criterion-related validity (i.e., how the scale compared to another standard measure). Some studies examined predictive validity (e.g., relationship to future program participation or outcome) but this was usually a secondary study aim or sub-analysis.

- *Length and Item Format*

The mean, median and modal length of the 45 tools were 29 (SD=24), 22, and 14 items, respectively. The range was a low of 1 item (Zhiwei et al., 2008) to a high of 105 items (Hogan et al., 2007). Both tools at these extremes were "unnamed" and reported in one study only. Brief and better known measures included the CSQ Questionnaire (3, 5, and 8 item versions) (Hawkins et al., 2008; Hasler et al., 2004; Larsen et al., 1979); the 5-item Patient Evaluation of Care-5 (Blais et al., 2002); the 7-item Perception of Care Survey (Way et al., 2007); and the 3-item Experience of Care and Health Outcomes Survey (Deen et al., 2010).

Longer measures were the 31-item Cologne Patient Questionnaire (Braig et al., 2008; Ommen et al., 2009); the 45-item Self-Rating Patient Satisfaction Scale (e.g., Kuosmanen et al., 2006); the 54-item Verona Service Satisfaction Survey (Ruggeri, 2002); the 69-item Quality in Psychiatric Care Measure (Schroder et al., 2007); and the 73-item Patient Satisfaction Survey (Rosenheck et al., 1997).

Almost all questionnaire items were in Likert format, sometimes with supplementary open-ended questions whereby the respondent could add additional commentary on the treatment experience.

- *Domains*

Domains covered by each tool were explored and, for the purpose of this review, categorized under seven areas:

1. *Access/engagement* – questions pertaining to items such as hours of operation, location, ease of accessing services, etc. Engagement also includes questions regarding whether the client is or feels engaged in the treatment process (e.g. involved with treatment plans).
2. *Services provided* – questions related to services. Examples include "did you get the kind of services you wanted?" and "were there enough activities for you to do in the evenings and weekends?"
3. *Therapist/staff* – questions specific to the therapist/care provider. For example, whether the therapist listened well or was approachable, and whether the client was treated with respect by staff.
4. *Facilities* – questions related to the actual facilities. For example, "were the buildings clean?", "was the food of good quality?", and "did you have trouble finding your way around?"
5. *Disengagement* – questions pertaining to discharge, including the following: "was there a discharge plan in place?", "did you feel supported during discharge?" and "were you involved in discharge planning?"
6. *Outcome* – Questions regarding how well the client feels he or she is doing. Examples include: "do you feel better prepared to deal with problems?", "was the treatment effective for you?", and "do you feel helped by your hospital stay?"
7. *Other* – any question that did not fit into the above categories.

Figure A1 in Appendix A shows the outcome of our rating of the content of each tool.

- *Mode and Timing of Administration*

The majority of tools were administered at discharge. As such, few studies aimed to capture those clients who had dropped out and compare those results with those who successfully completed the program. Braig et al. (2008) found that the large majority of the tools across both mental health and addiction settings were self-administered, most often as discharge approached, at the point of discharge, or soon after discharge (e.g., home visit or telephone). In a small number of instances, the same tool was used across repeated administrations, for example at assessment, during treatment, and at discharge (Muller et al., 2002; Lange et al., 2003); periodically during treatment (Hawkins et al. 2008); or multiple time periods post-discharge (McLellan 1998; Carlson & Gabriel, 2001). Provision was sometimes reported for anonymous administration, for example, using anonymous drop boxes, sealed on-site envelopes or subsequent return mail. In nine of the 45 papers, the tool was administered by face-to-face or phone interview. Some studies employed multiple modes of administration (Eisen et al., 2001; Hansson & Hoglund, 1995; Langle et al., 2003) or participants could choose among options (Kolb et al., 2000).

- *Relationship to Quality Improvement*

We were interested to locate studies that showed whether and how the implementation of a satisfaction survey impacted the way services were delivered. However, few papers identified in this literature review addressed this question. Nonetheless, a few key papers discussed how the results of client satisfaction tools changed or altered their treatment setting. Brunero et al. (2009) noted that as a result of their study, two interventions had been developed. The findings indicated that clients in an acute care mental health setting wanted three things: service provided by a consumer support worker; having supports at discharge; and feeling safe and secure on the ward. As such, the authors developed an admission and discharge pathway and implemented a ward-based psychosocial intervention program involving nursing, allied health staff, and consumer support workers.

Meehan et al. (2002) indicated that adult clients in an Australian community mental health centre were very dissatisfied with the amount of information they were receiving in

terms of treatment and medication. As a result, consumer consultants based in hospital met with and arranged for community consumer consultants to visit units at regular intervals in order to support clients, as well as to provide information about peer support groups. In addition, a discharge package was developed and distributed to clients upon their departure.

Strobbe et al. (2004) asked clients in an outpatient detoxification program to complete a survey in which they were required to highlight aspects of the service that needed improvement. Recommendations included program expansion, requests for information, and other concerns, such as changing the name "detox" to "sedative assistance", placing a couch outside the group room, and allowing longer detoxification stays. Although there was no indication in the paper that recommendations were used to improve the quality of the program, the authors noted that clients' comments supported the existing program model.

- *Relationship to Other Process and Outcome Indicators*

There has been a growing interest in understanding whether a client's perception of care is associated with his/her treatment outcome, the hypothesis being that clients with a positive perception of their care would be more likely to experience better outcomes. Using the ECHO, Carlson et al. (2001) conducted a one-year follow-up of clients undergoing substance use treatment. The authors found that frequency of participation in self-help groups at baseline was significantly and positively associated with frequency of participation at 6 months, abstinence, and satisfaction with the effectiveness of services. Frequency of participation in self-help groups at 6 months was also significantly and positively associated with the number of hours of therapy, abstinence, satisfaction with effectiveness, and global satisfaction. Number of hours of therapy was significantly and positively associated with abstinence and all satisfaction items; abstinence was in turn positively associated with all satisfaction items and negatively associated with the presence of psychiatric symptoms at one year. In addition, neither employment nor the presence of psychiatric symptoms was associated with duration of therapy or satisfaction. Finally, individuals who reported high levels of satisfaction with access and effectiveness were more than twice as likely to be abstinent.

In another follow-up study conducted in the U.S., Tetzlaff et al. (2005) found that working alliance and treatment satisfaction were moderately and positively correlated. The latter was weakly and negatively correlated with baseline substance use, such that heavier substance users reported being somewhat less satisfied with treatment. Treatment satisfaction was also unrelated to baseline substance-related problems in the past month. Neither working alliance nor treatment satisfaction uniquely predicted outcomes while controlling for initial substance use (Tetzlaff et al., 2005).

Eisen et al. (2001) found that consumer satisfaction had little relation to consumer perceptions of outcome, while Blais et al. (2002) noted that a small group of adult inpatients in a mental health treatment setting reported low levels of satisfaction as well as less overall improvement. Furthermore, Zhang et al. (2008) conducted a study on outcomes for a substance abuse facility and found that patient satisfaction had a significant positive relationship to both primary and overall drug use improvement outcomes, independent of other measures and components of the treatment process. In a recent review examining several studies conducted within a wide range of hospital and primary care settings, positive associations were found between patient experience, clinical effectiveness, and patient safety that appear consistent across a range of disease areas, study designs, and settings (Doyle et al., 2013).

- *Family Members' Satisfaction with Services*

There was very little in the literature about client satisfaction tools used for parents and families. Shapiro et al. (1997) developed the Youth Client Satisfaction Questionnaire (YCSQ) to learn about young people's satisfaction or dissatisfaction with services. In addition, they used the Parent Satisfaction Questionnaire (PSQ) as a way of learning how parents felt about the services their child received. They also asked questions about improvement in the child's functioning as a result of treatment. Ayton et al. (2007) adapted the Verona Service Satisfaction Scale (VSSS) to include young people. Like the PSQ, the VSSS asks families to reflect on the services their child has received. There are currently no tools or questionnaires that ask about the services received directly by the families or other supporters of individuals seeking help for their substance use problem. The client perception of care tool developed for this project was

based on the findings and gaps identified in this literature, including a focus on youth and families.

- *Literature Review Summary*

Aside from reviewing aspects of different tools (e.g. length, administration details, psychometrics, etc.) we hoped to identify a tool that could be used in both mental health and addiction settings in the province of Ontario. We determined that most tools in use have been developed either for a specific agency or program or for a specific population (e.g. forensic psychiatry) and therefore would not be applicable for our population. Furthermore, most of the questionnaires found were based on grounding in the construct of client "satisfaction" rather than a perception of care perspective. Essentially, satisfaction is a measure of the reaction to the services received (Graham et al., 1993) and high ratings are difficult to interpret as they may not necessarily indicate receipt of services that are aligned with current quality standards. Measures of perception of care ask more directly about the care experience in relation to what is expected as standard practice and may, therefore, be more directly used for quality improvement. As a result of this literature review, it was decided that a new tool should be developed for this population that would be appropriate for both a mental health and addiction setting, as well as utilize a perception of care approach.

2.1.2 Environmental Scan

The project team conducted an environmental scan of all addiction and mental health agencies in Ontario to determine both whether or not agencies were using any kind of tool to assess client perceptions of care, and if so, what measurements were in place. Using the database from Connex Ontario, an email was sent to all publicly-funded agencies in Ontario which highlighted the project goals and objectives, and included a link to a questionnaire. This questionnaire asked several questions pertaining to the use of client perception of care tools including the population served at each agency, whether or not a tool was used, whether the tool was developed in-house or was a validated measure, administration questions, and what the agency does by way of quality improvement as a result of client perception of care measures. The survey was couched in the language of client satisfaction as that was a more

common term among agencies at the time. The survey also asked agencies to explain why they do not use any kind of similar measure (if applicable).

In total, 80 mental health agencies and 55 addictions agencies completed the online survey which was a response rate of 30%[4]. Within addiction settings, 85% administered a client satisfaction tool and the majority of tools (92%) were developed in-house. Most programs provided the tool at completion or right before discharge, while some distributed it while the client was still in the program. The majority of programs administered the tool face-to-face, however the use of an anonymous drop-box was also reported. None of the agencies surveyed had clients complete the survey online. Concerns expressed about tool administration included staff feeling that some clients who are mandated to treatment or in the pre-contemplation stage of change may have different perceptions and skew the data. Literacy levels and a preference for having a standard measurable questionnaire that can also be administered electronically were also reported. Quality improvement measures that had taken place as a result of using a client perception of care tool included improved wait times, changes to treatment group structure and content, and identifying service needs that were not currently met.

Within mental health settings, 86% administered a client satisfaction tool and the majority of tools (78%) were developed in-house. Most programs provided the tool at completion or right before discharge, while some distributed it while the client was still in the program. Other methods included administering the tool annually, every six months, and pre-treatment. The majority of programs administered the tool face-to-face. The use of an anonymous drop-box was also reported. Concerns expressed about tool administration included always receiving high satisfaction ratings, insufficient information for quality improvement, tool length, and literacy levels. Quality improvement measures that had taken place as a result of using a client perception of care tool included adjusted length or sequence of services provided, changed hours and locations, shortened appointment times, clarifying

[4] Although the response rate was somewhat low, the project advisory committee felt it adequately captured the use of such tools in the province.

what clients understood about their rights and information, and preparing a statement around rights and responsibilities.

2.1.3 Development Process

The tool underwent a rigorous development process. Measures that had been identified in the literature review were examined to determine which tools would be most useful, had proven strong validity and reliability, and had been appropriate in both mental health and addiction settings. Seven tools met these criteria: Client Satisfaction Questionnaire (CSQ) (Larsen, 1979), Service Satisfaction Scale (SSS) (Greenfield, 1989), Global Appraisal of Individual Needs (GAIN) (Tetzlaff et al., 2005), Experience of Care and Health Outcomes Survey (ECHO) (Deen et al., 2010), Inpatient Evaluation of Service Questionnaire (IESQ) (Meehan et al., 2002), Mental Health Statistics Improvement Program (MHSIP) (Eisen et al., 2001), and the Verona Service Satisfaction Scale (VSSS) (Ruggeri et al., 2002). A tool currently under development by the Centre for Addiction and Mental Health (CAMH) on behalf of Accreditation Canada was also reviewed.

The project team and sub-group of the larger Advisory Committee reviewed each item/question from all of these tools for its clarity and brevity, conceptual and statistical redundancy with other items, factor loadings on particular sub-scales, and relationship to key agency characteristics and operational processes that could be the target for concrete quality improvement initiatives. With respect to the latter criteria, the input from the agency stakeholders was critical. These items became the foundation for the development of the Ontario Perception of Care Tool for Mental Health and Addictions (OPOC-MHA). Through an iterative process conducted by email, teleconferences and face-to-face meetings, a comprehensive list of items was formed and clustered into eight domains. These are presented in Table 1 below.

Table 1. The OPOC-MHA domains and a sample question from each of them

Domain	Sample question
Access/Entry	“The location of services was convenient for me”.
Services Provided	“I had a good understanding of my treatment and support plan”.

Participation/Rights	"I felt comfortable asking questions about my treatment and support, including medication".
Therapists/Support Workers/Staff	"I found staff knowledgeable and competent".
Environment	"I felt safe in the facility at all times".
Discharge/Leaving the Program	"I have a plan that will meet my needs after I leave the program".
Recovery/Outcome	"The services I have received have helped me deal more effectively with my life's challenges".
Service Quality	"I think the services provided here are high quality".

A broad range of stakeholders were engaged throughout the planning and development stages via a Program Advisory Committee and Working Group (see Appendix B for a list of members). Partners included the Ministry of Health and Long-Term Care, specialized mental health and substance use agencies (directors, managers, clinicians and researchers), Local Health Integration Networks (LHINs), and consumer representatives. Stakeholders informed the decision-making regarding the development of the tool, selection of pilot sites, and procedures for implementation. The OPOC-MHA was reviewed by a separate youth committee consisting of stakeholders working with young people. They offered guidance to ensure the appropriateness of the tool for a younger population. We also received very helpful feedback from the Persons with Lived Experience and Family Member Advisory Panel. The OPOC-MHA was translated into French as well as back-translated for use with Francophone participants.

2.1.4 Description of the Tool

The Ontario Perception of Care Tool for Mental Health and Addictions (OPOC-MHA) incorporates two similar but separate sections. The first one is to be completed by registered clients of the program (both clients receiving services for their own treatment or support and clients who are family members/significant others/supporters who are receiving service in their own rights). The second briefer section is for family members/significant others/supporters who are not registered clients but who are also receiving services from the program (e.g., a parent who has a child in the program). Participants were asked to complete only the section relevant for them, but all were to answer the demographic information found at the end of the tool (see Appendix C for the pilot test version of the tool). The draft OPOC-MHA consisted of 33 questions for clients who are receiving community/outpatient services; 39 items for clients who are also receiving inpatient/residential services; and 18 items for family members/significant

others/supporters who are not registered clients but who are receiving services. One response scale was used throughout so as to avoid confusion and facilitate scoring and analysis. Response categories were 'Strongly agree', 'Agree', 'Disagree' 'Strongly disagree', and 'Not applicable'.

At the conclusion of the questionnaire, questions about the respondent's age, gender, sexual orientation, ethnic background, and stage in the treatment process are included. This information was to be used for subgroup analyses. These items were chosen to set the stage for analysis from an equity perspective. There were also two open-ended questions to allow for comments about what the respondent found most and least helpful in their experience with the program.

2.2 Pilot Testing

2.2.1 Pilot Sites

Twenty-three pilot sites participated in this study (see Appendix D for descriptions of the pilot sites). The sites, listed below in Table 2, represented a cross-section of addiction and mental health agencies in Ontario, and thus included a diversity of programs and clientele (i.e. youth, gender-specific, ethno-cultural, immigrant).

Table 2. Pilot agencies, their location and service focus

	Organization	Location	Agency focus
1.	Addiction Services of Thames Valley (ADSTV)	London	Addiction
2.	Dave Smith Youth Treatment Centre	Ottawa	Mental health and addiction
3.	Rideauwood Addiction and Family Services	Ottawa	Addiction and concurrent disorders
4.	Pinewood Centre	Oshawa	Addiction
5.	Canadian Mental Health Association, Kenora Branch	Kenora	Mental health
6.	Ray of Hope Youth Addictions Services	Kitchener	Addiction
7.	Jean Tweed Treatment Centre	Toronto	Addiction
8.	Four Counties Addiction Services	Peterborough	Addiction and concurrent disorders
9.	Youth Addiction Services CAMH	Toronto	Addiction and concurrent disorders
10.	Across Boundaries	Toronto	Mental health
11.	Portage Ontario	Guelph	Addiction
12.	Pine River Institute	Toronto	Addiction
13.	ADAPT Youth Program	Halton	Addiction and concurrent disorders

	Organization	Location	Agency focus
14.	Red Lake Community Counselling and Addiction Services	Red Lake	Mental health and addictions
15.	Sunnybrook Hospital	Toronto	Mental health
16.	Nipissing Detoxification and Substance Abuse Programs	North Bay	Addiction and concurrent disorders
17.	Hope Grey Bruce Mental Health and Addiction Services	Owen Sound	Mental health and addictions
18.	Maison Fraternité	Ottawa	Addiction and concurrent disorders
19.	G & B House	Owen Sound	Addiction
20.	Grey Bruce Health Services	Owen Sound	Mental health
21.	Canadian Mental Health Association, Halton Region Branch	Milton	Mental health
22.	Canadian Mental Health Association, Grey Bruce Branch	Owen Sound	Mental health
23.	Manitoulin Community Withdrawal Management Services	Manitoulin Island	Addiction

Agency staff and clinicians were involved in data collection after obtaining appropriate training related to the administration of the client perception of care tool and the data collection procedures.

2.2.2 Site Staff Training

Prior to the pilot process beginning, the project coordinator visited each site in person to conduct a training session with all staff. This half-day session informed all staff about the project's goals and explained both the questionnaire as well as information about what was expected during the pilot period. Each site had a site lead responsible for inviting staff they believed should be in attendance. Training manuals as well as the OPOC-MHA manual were provided to staff. The DTFP newsletter was also provided to all staff to provide further context. Each training visit consisted of a PowerPoint presentation facilitated by the project coordinator which detailed the DTFP initiative as well as the client satisfaction project. Additionally, most site visits involved the project coordinator taking a tour of the agency to learn more about the programs and services offered. At the conclusion of each visit, decisions were made regarding tool administration by the program. Each program would report the number of clients seen per month and decided how long they would like to pilot the tool (e.g. a month blitz, prior to discharge for three months, etc.). Within a week of each site visit, the project coordinator

developed a site summary for each site detailing the administration process including number of clients expected, when tool administration would occur, and how tool administration would occur. Summaries were sent to the lead at each site to confirm the details and they were provided a copy to keep for their own records.

2.2.3 Data Collection

Data collection occurred over a three-month period in the spring of 2012. The timing of tool administration varied by agency as some agencies administered the tool at program completion while others conducted a one-day or one-month blitz of all participants for that time period, thus engaging participants at different stages of program involvement.

Each client was given the tool to complete at a time agreed upon by the agency and project staff, and in a way that was least disruptive to the regular functioning of the program. The tool was self-administered via paper-and-pencil; it was anonymous and collected by agency staff, although the logistics of this varied (e.g., drop-box, sealed envelope). All questionnaires were accompanied by a blank white envelope in which participants put their completed questionnaire(s). There was a space on the front page of the questionnaire to indicate whether or not the participant was above or below the age of 16 years. If the client indicated that they were under the age of 16 years, they must have also included the signed consent/assent forms in the envelope. If these forms were missing, the data were discarded. All completed tools were sent by an agency contact to the project team by courier for data entry.

In order for the OPOC-MHA to be validated against a recognized standard, a sample of participants also completed the Client Satisfaction Questionnaire (CSQ) (see Appendix E). This eight-item tool has been widely used and psychometrically tested (Larsen et al., 1979). Most sites (22) distributed the OPOC-MHA tool as well as the CSQ. The CSQ was stapled to the OPOC-MHA and was also anonymous. 1,370[5] (77% of 1,772) participants completed both tools in the same sitting.

[5] This is the number of the participants who answered all CSQ questions. There were another 102 participants who responded to some of the CSQ questions; however, these cases were excluded from the analysis of concurrent validity due to the missing data.

The project coordinator provided regular support to each site throughout the duration of the pilot process. In addition to the in-person training visits, the coordinator contacted each site monthly to inquire how data collection was progressing and to answer any questions they may have had. The coordinator could also be reached by phone and email at any time to support sites should they have a question or concern. Following the pilot process, the project coordinator scheduled phone interviews with site managers and site leads to discuss their experience with the questionnaire and the pilot process.

- *Participants*

Participants from the pilot sites included clients and family members of clients aged 12 years or older receiving services in one or more of the programs being offered. Exclusion criteria included: immediate need for crisis services or declining to participate. Participants were defined in one of three ways: 1) Clients with mental health, substance use, and/or gambling-related problems; 2) Clients who were family members/significant others/supporters of a person with mental health, substance use, and/or gambling-related problems; and, 3) Family members/significant others/supporters of a person with mental health, substance use, and/or gambling-related problems but NOT registered as a client.

- *Recruitment and Consent Process*

The major steps of the recruitment process are outlined below:

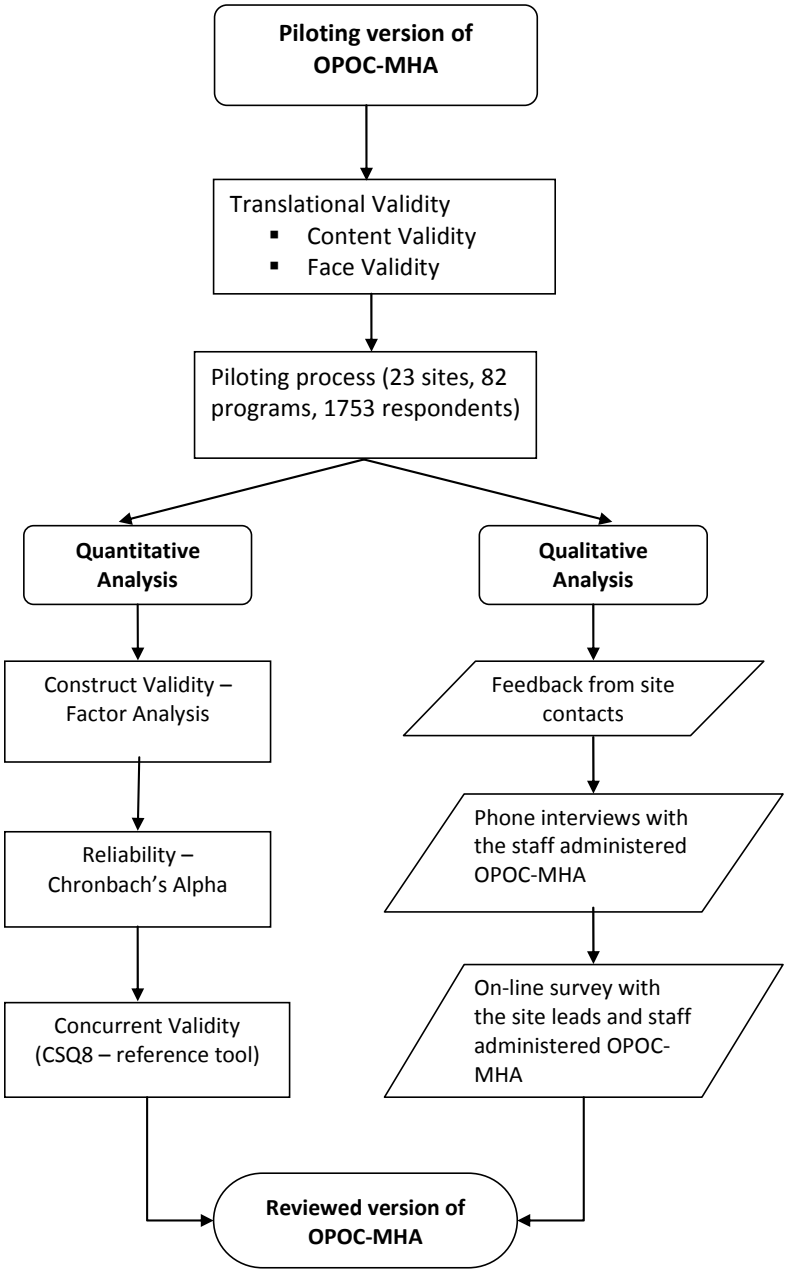
a. Potential participants were approached individually or in a group by trained agency staff and provided with the tool.
b. An implied consent procedure was adopted for all participants over the age of 16 years. Participants over the age of 16 were informed via a cover page in the tool package that by choosing to complete and return the questionnaire, they were implying their consent to participate.
c. Participants between the ages of 12-15 years were required to complete an assent form and have their parent/guardian complete a consent form.

This project received the required ethics approval from three hospitals: the Centre for Addiction and Mental Health, Sunnybrook Health Sciences Centre, and North Bay Regional Health Centre.

2.2.4 Analysis

Figure 1 below summarizes the overall validation and analysis plan.

Figure 1. Flow chart depicting the processes to validate the OPOC-MHA



- *Quantitative Analysis*

The main objective of the data analysis of the OPOC-MHA data was to test important psychometric properties in terms of validity and reliability in order to evaluate the appropriateness of the tool for assessing various aspects of client perceptions of care in mental health and addiction treatment services. The detailed psychometric evaluation process included the following steps:

- Sample profile
- Item analysis
    - Missing data
    - Descriptive statistics (frequency distribution, mode, median, range, inter-quartile range)
- Inter-item correlations – Spearman's rho, Kendall's tau, Pearson's r, Polychoric
- Assessing construct validity using Exploratory Factor Analysis (EFA)
    - Evaluation of the correlation matrix (examining inter-item correlation coefficients and significance values, Bartlett's test of sphericity, KMO and MSA values)
    - Extracting the initial factors (defining the number of factors)
    - Rotating the factors to improve interpretation
    - Evaluating and refining the factors (analysis of factor loading structure, interpretation of the factors)
- Assessing reliability of the instrument (evaluating the internal consistency)
- Evaluating concurrent validity using the CSQ-8 as a reference measure of client satisfaction.

- *Qualitative Analysis*

The qualitative analysis consisted of three parts:

1. Regular feedback from pilot site contacts regarding the tool
2. Phone interview with site leads (and other staff) regarding their experience with the questionnaire

3. An online survey distributed to all staff from all sites to provide feedback on the tool itself, its administration, and overall usage.

- *Regular feedback from pilot site contacts*

The manual that was provided following the staff training sessions in the pilot sites included a template with which staff could inform the project team of comments clients made about the tool or their own thoughts (for a copy of the template, please see Appendix I). The project coordinator was in regular contact with all sites during the pilot period and inquired monthly about feedback that either staff or clients had articulated. Feedback was provided either by way of the qualitative template or by email to the coordinator and was then inserted into a standard form. Feedback consisted of staff and client's reflection about the length of the questionnaire, language, format, and any issues or concerns identified.

- *Phone interviews with staff*

The project coordinator contacted each site lead for a phone interview to have a more in-depth discussion of the questionnaire as well as the pilot process. Of all 23 sites, 18 sites participated in this engagement. Reasons the five remaining sites did not participate include being out of town during interview period or having provided enough information over email. Each phone interview lasted between 30-45 minutes and staff were asked to comment on their (or their client's) thoughts about the questionnaire as well as the pilot process. Some site leads also involved other staff to participate in the calls to provide more information. All calls were documented for the purpose of analysis and information gathering. Sites were also asked about the number of clients that completed the questionnaire and their thoughts on factors related to participation rate. For example, sites with a lower response rate described what they believed to be the reasons for this, such as a smaller client population or declining to participate due to literacy issues. All sites were also asked if the materials and in-person training were useful in order to determine if the lower response rates were not the result of poor training or preparation from the project team.

- *Online survey for all staff*

An online survey was developed using software called Fluid Surveys[6]. This survey consisted of 23 questions for all staff and an additional five questions for managers/directors. It included general questions about the tool, tool language, format, time to complete, and length. Questions specific for managers and directors asked for their views regarding the ideas and logistics of future provincial implementation of the OPOC-MHA. The online survey was also available in French and was sent to site leads at all 23 pilot sites. They were each asked to distribute the survey link to all staff that were part of this project (e.g. counsellors, nurses, social workers, etc.). The survey was online for two months in order to provide enough time for completion. In total, 115 staff members completed the online survey.

3.0 RESULTS

3.1 Quantitative Results

A total of 23 mental health and addiction treatment facilities participated in the piloting study (82 programs in total). 1,772 participants responded to the OPOC-MHA questionnaire – 1,476 (83.3%) were clients with mental health or/and addiction problems, 205 (11.6%) were registered supporters (family members, friends), and 91 (5.2%) were non-registered[7] supporters; 1,476 (83.3%) participants were clients of outpatient services, and 296 (16.7%) were inpatients.

The breakdown of participants across mental health, addictions and concurrent disorders programs was as follows: 885(49.4%) were participants from 39 addictions treatment programs; 478 (27.0%) were participants from 28 mental health programs, and 409 (23.1%) were participants from 16 concurrent disorders programs. The distribution of the three groups of respondents (Clients, Registered Supporters, Non-registered Supporters) by program sectors (Addictions, Mental Health, Concurrent Disorders) and type of services (Inpatient, Outpatient) are presented in Table 3 below.

[6] www.fluidsurveys.com

[7] The non-registered clients (family members, friends, etc.) completed the short version of the OPOC-MHA that comprises 18 items of the questionnaire.

Table 3. Distribution of the respondents by program sectors and type of services.

	Addictions		Mental Health		Concurrent Disorders		
Respondents	*Inpatients*	*Outpatients*	*Inpatients*	*Outpatients*	*Inpatients*	*Outpatients*	**Total**
Client	224	494	39	388	28	303	**1,476**
Registered Supporter	3	117	2	32	0	51	**205**
Non-registered Supporter	0	47	0	17	0	27	**91**
Total	**227**	**658**	**41**	**437**	**28**	**381**	**1,772**

The distribution of respondents by demographic and key characteristics is presented in Table 4.

Table 4. Distribution of the participants on key characteristics.

Characteristics/category	n (%)
Gender (N=1,666)	
Male	834 (50.1%)
Female	832 (49.9%)
Age (N=1,672)	
18 and under	188 (11.2%)
19-25 years	204 (12.2%)
26-44 years	602 (36.0%)
45-54 years	396 (23.7%)
55 and older	282 (16.9%)
Ethnicity (N=1,660)	
White	1,333 (80.3%)
Aboriginal	87 (5.2%)
Asian	65 (3.9%)
Black	81(4.9%)
Other	94 (5.7%)
Sexual Orientation (1,542)	
Heterosexual/Straight	1,332 (86.4%)
Lesbian, Gay, Bisexual, Queer, Two-spirited	113 (7.3%)
Asexual/Nonsexual	56 (3.6%)
Not sure or Questioning	30 (2.0%)
Other	11 (0.7%)

3.1.1 OPOC-MHA Item Analysis

The OPOC-MHA consists of 39 Likert-type items (6 of them being specific for the residential services) with an identical 4-grade response scale (1 = “Strongly Disagree”, 2 = ”Disagree”, 3 = ”Agree”, 4 = “Strongly Agree”), and an additional option “Not Applicable”. Non-applicable responses were treated as missing data for multivariate data analysis.
The issue of whether Likert-type individual item responses should be considered as interval data or as ordered categorical data is the subject of some debate in the psychometric literature (Jamieson, S., 2004). We treated the individual item responses as ordinal, categorical data to account for the discrete four-grade response scale. Frequency distributions, modes, medians, and inter-quartile ranges were used to summarize individual item data.

- *Missing Data*

The goal of the missing data analysis is to determine if the data are missing randomly or if there is some pattern as to why particular data points are missing. We consider data as missing in the case where no response was available or the response was “Not applicable”.

The questionnaire items from 1 to 33 were designated for both outpatient and inpatient clients, while the items from 34 to 39 were designed particularly for inpatient/residential clients. The respondents who were supporters (family members, friends, etc.) and not registered in a program were given the short version of the questionnaire with 18 items. The percentages of the missing data presented below are based on the number of the respondents who were eligible to answer a certain question.

The rate of missing responses across the items of the OPOC-MHA (item 1 – 39) was generally low (less than 4.6%). The rate of non-applicable responses was sizeable for some of the items, due no doubt to the particular context, category of the participant (client or supporter), or the timing in the treatment process. In particular, items 10, 19, 26, and 39 had a high percentage of non-applicable responses as their context is pertinent to participants with specific needs: Item 26 (*The program accommodated my disability-related needs*) had the highest number of non-applicable responses – 48.7% (863 of 1,772); Item 39 (*My special dietary needs were met (e.g., diabetic, halal, vegetarian, kosher*) had 46.7% (136 of 291) non-applicable

responses; Item 10 (*I received clear information about my medication*) had 35.5% (524 of 1,456) non-applicable responses; Item 19 (*Staff were sensitive to my cultural needs, e.g., language, ethnic background, race*) had 24.1% (427 of 1,772) non-applicable responses**.**

The three items in the Discharge/Leaving the Program domain are related to a certain period of the treatment process: Item 27 *(Staff helped me develop a plan for when I leave the program)***,** Item 28 *(I have plan that will meet my needs after I leave the program)***,** and Item 29 *(Staff helped me identify where to get support after I leave the program)* had the highest rate of non-applicable responses in this domain, 32.3% (477 of 1,476[8]), 29.2% **(**431 of 1,476) and 29.1% (429 of 1,476) respectively.

To get a better insight into the patterns of non-applicable data, we examined the relationship between the number of inapplicable responses and participant type as well as the time in the program or treatment process. The results revealed that the registered supporters (family members, friends, etc.) responded 'Not applicable' at significantly higher rates ($p<0.001$) than the clients with addictions and mental health problems to certain items, such as Item 10 (*I received clear information about my medication*); Item11 *(I was referred or had access to other services when needed)*; Item 13 *(I understand how to make formal complaint to this organization),* and the three items from the Discharge/ Leaving the Program domain (Item27-Item29). For example, 62% (120 of 194) registered supporters vs. 36% (524 of 1,456) clients marked "Not Applicable" for Item 10.

Timing in the treatment/program was also related to the rate of non-applicable responses to the items in the Discharge/Leaving the Program domain. Participants who had not started the program or were in the middle of the program were more likely to respond with "Not applicable" than those who were close to program completion or had completed the program. The percentages of non-applicable responses on the three items (Item 27 – Item 29) by the four time-in-treatment categories are presented in Table 5.

[8] These three items are not included in the short version for the unregistered supporters.

Table 5. The percentages of the N/A responses on the items in Discharge/Leaving the Program domain by the time of treatment subgroups.

	Timing of questionnaire completion in relation to services received			
Item	Accepted treatment/ support but have not yet started	Treatment / Support in progress	Discharged/ Close to Discharge	After Discharge
	%N/A	%N/A	%N/A	%N/A
I27: Staff helped develop a after-discharge plan	34.4% (32 of 93)	44.4% (333 of 750)	10.4% (29 of 280)	21.5% (14 of 65)
I28: Have a plan that meet the needs after leaving	33.3% (31 of 93)	43.2% (324 of 750)	7.2% (20 of 278)	13.8% (9 of 65)
I28: Staff helped indentify where to get support after leaving	29.3% (27 of 92)	43.0% (323 of 752)	8.34% (23 of 277)	10.8% (7 of 65)

- *Frequency Distribution, Mode, Median*

Individual item response data were negatively skewed as the responses piled up on the positive end of the scale (3-"Agree" and 4-"Strongly agree"), which is typical for healthcare user's satisfaction surveys (see Table F1 and Table F2, Appendix F). For the 32 common items (Item 1 – Item 12, Item 14 – Item 33) of the questionnaire, the total percentage of positive responses ("Strongly Agree" and "Agree") ranged between 89% and 99%. These results showed a ceiling effect in the data: the number of "Strongly Agree" responses ranged between 44% and 69%; the percentage of "Agree" responses varied between 29.3% and 47.8%; the proportions of the responses at the negative end of the scale were low (0.8% - 9.1% "Disagree", and 0.3% - 2.3% "Strongly Disagree"). The response distribution of Item 13 (*I understand how to make formal complaint to this organization*) , 34.1% "Strongly Agree", 40.4% "Agree", 21.3% "Disagree", and 4.2% "Strongly Disagree", differed from the distribution of the other 32 items.

The response data of the last 6 items of the questionnaire (for residential/inpatient clients) were also skewed; however, the proportions of the positive answers were slightly lower: the percentage of "Strongly Agree" and "Agree" responses ranged within the intervals

(30%-58%) and (31%-45%) respectively, while the proportions of negative answers “Disagree” and “Strongly Disagree” varied within intervals (6.5% - 22.6%) and (3% - 7.1%) respectively.

The mode for 34 items was 4 = “Strongly Agree”. For the remaining 5 items (Item 11, Item 13, and 3 items for the inpatients - Item 34, Item 35, Item 36) 3 = “Agree” was the most frequent response. The median value was 4 (“Strongly Agree”) for 27 items and 3 (“Agree”) for 12 items, meaning that for 27 items more than 50% of the respondents answered “Strongly Agree” and for the remaining 12 items more than 50% (actually 70%) of the respondents answered with “Agree” or “Strongly Agree”.

3.1.2 Construct Validity

Exploratory Factor Analysis (EFA) was employed to test the construct validity of the OPOC-MHA. Data limitations**:** the six items that pertain to clients who used residential services were excluded from the factor analysis as we did not have a large enough sample of inpatient respondents who answered all 39 items (only 80 inpatient participants responded to all 39 items). Item 26 was also excluded from the factor analysis as it pertains only to clients with specific needs and about 50% of the participants did not answer or marked this item as inapplicable.

The main goals in evaluating instrument construct validity were to find a latent factor structure that best fit the relationships among the item data; to test whether the preliminary conceptual structure was consistent with the factor structure resulting from exploratory factor analysis; and to present suitable interpretation of each latent factor (construct) based on the context of the items associated with it. Psychometric researchers are not in absolute agreement upon treating the Likert-item response data as interval or ordinal; taking into account recent studies related to this issue (Jamieson, 2004; Uebersax, 2006; Choi et al., 2010; Holgado-Tello et al., 2010; Gadermann et al., 2012), we consider the latter approach.

The inter-item correlations were evaluated by using Pearson product-moment correlation coefficient ***r***. In addition, the Spearman’s ρ and Kendall’s τ correlation coefficients were obtained to account for the ordinal nature and the skewness of the item response data

(Choi et al., 2010; Holgado-Tello et al., 2010; Alteras et al., 2010). Although Spearman's ρ and Kendall's τ are both measures of association among ordinary scaled variables, they are also different in how they are computed and interpreted. Spearman's ρ can be interpreted as the proportion of variability accounted for with rank data, whereas Kendall's τ can be interpreted as the difference between probabilities of concordant pairs versus probabilities of discordant pairs (Choi et al., 2010).

Another popular measure of association with ordinal data is the polychoric correlation which possesses desirable properties similar to Pearson's r. Polychoric correlations are deemed very suitable for psychometric data because they evaluate the correlation between two sets of ordinal data that are considered to originate from normally distributed underlying variables. Unlike Kendall's τ and Spearman's ρ, polychoric correlations, similar to Pearson's r, assume an underlying bivariate normal distribution, and capture the linear dependency between the two underlying variables. This correlation, therefore, can be used in many statistical applications such as EFA with polychoric correlations and reliability analysis using ordinal Cronbach's alphas (Zumbo et al., 2007). Some studies suggest that polychoric correlations should be used when dealing with ordinal data, or in the presence of strong skewness or kurtosis (Muthen and Kaplan 1985; Gilley and Uhlig 1993), as is often the case of Likert items.

The Principal Axes Factoring (PAF) method is the most common EFA method used in psychometric research which is appropriate for non-normally distributed response data. We applied exploratory factoring techniques on the Pearson correlation matrix, Spearman's rank correlations, and Kendall's tau correlations and compared the results. The principal axes factoring was performed by SPSS using the three types of correlation matrices as input data. The resulting factor structures (factor loading patterns) were essentially the same. A sample of 503 participants who responded to all 32 items (Item 1 – Item 25, and Item 27 – Item 33) was used for factor analysis. Item 26 was excluded from the analysis as it pertains to a very small number of the respondents. The sample size is deemed sufficient for conducting reliable factor analysis, as the recommended number is 10-15 cases per item (Pett et al., 2003).

- *Evaluating the Correlation Matrix*

All the correlation coefficients among the 32 items (Pearson's r, Spearman's ρ, and Kendall's τ) were highly significant in the overall matrices ($p<0.001$). The summary statistics of these correlation coefficients are presented in Table 6.

Table 6. Summary statistics of inter-item correlation coefficients

	Pearson's *r*	Spearman's ρ	Kendall's
Min	0.30	0.34	0.32
Max	0.83	0.83	0.82
Mean	0.53	0.56	0.55
St.Dev.	0.09	0.08	0.09

The values of the Pearson's *r*, Spearman's ρ and Kendall's τ correlations were very close. The summary statistics of the differences between the correlations are presented in Table 7.

Table 7. Summary statistics of the differences between correlation coefficients

	Pearson's *r* – Spearman's ρ	Pearson's *r* – Kendall's τ	Spearman's ρ - Kendall's τ
Min	-0.092	-0.069	0.005
Max	0.033	0.044	0.037
Mean	-0.028	-0.011	0.017
Median	-0.028	-0.011	0.016
St.Dev.	0.021	0.020	0.005
Mean±2St.Dev.	(-0.070, 0.015)	(-0.052, 0.029)	(-0.006, 0.027)

The most strongly correlated items were those in the Recovery/Outcome domain (Item 30 & Item 31, r=ρ=0.82, τ=0.81), and in Service Quality domain (Item 32 & Item 33, r=ρ= 0.83, τ=0.82). The strong correlations between responses on these pairs of items are likely due to their similar focus. The majority of the strongly correlated items are subsequent items in the same conceptual domain. For example, the correlations among Item 27, Item 28, and Item 29

of the Discharge/Leaving the program domain varied from 0.76 to 0.79; the correlations between Item 15 and Item 16 in Participation/Rights domain were r=0.73, ρ=76, τ=0.75; the correlations between Item 17 and Item 18 in Therapist/Support Workers/Staff domain were r=0.78, ρ=79, τ=0.77.

- *Factor Analysis Findings*

As the results from factor analysis based on Pearson, Spearman and Kendall correlation matrices were very similar, only the findings based on Spearman's correlations are presented in this section. Other results are available in the Appendix G.

Three test statistics were examined to determine whether there are sufficient numbers of significant correlations among the items to justify undertaking the factor analysis – Bartlett's test of sphericity, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, and individual measures of sampling adequacy (MSA) (Pett et al, 2002). The KMO statistic was 0.97, which suggests that we had sufficient sample size relative to the number of items in our scale. Bartlett's test that the correlation matrix is not an identity matrix was highly significant (approx. Chi-Square=14470.557, df= 496, $p< 0.001$). All the individual item measures of sampling adequacy (MSA) were greater than .95. These results indicate that the correlations among the individual items are strong and suggest that the correlation matrices are factorable.

To decide how many factors to retain in the model, we examined the factor eigenvalues, the percentage of the explained variance and the residuals (Pett et al, 2002). The initial PAF solutions revealed that two of the factors had eigenvalues >1 and the third and fourth factors had eigenvalues respectively 0.96 and 0.61. The four factors accounted for 65.5% of the common variance. By experimenting with PAF models with three and four factors, we determined that a four-factor model better reproduces the inter-item correlations than the three-factor model, i.e. 94% of the values in the residual correlation matrix were close to zero (≤0.05) for the four-factor solution vs. 90% for three-factor model.

Examination of item communalities (percentage of the variance in a given item explained by all the extracted factors jointly) indicated that the four-factor model performed

well (i.e., six communalities had values between 0.50 - 0.60; 20 were between 0.61 - 0.69, and six were between 0.70 - 0.77). Promax oblique rotation (kappa=2) was applied to the factor-loading matrix to account for the correlations among the factors. The highest correlation (0.496) was between factors 1 and 2. The rotated Promax factor solution is shown in Table G4, Appendix G. The resulting grouping of the items for the four-factor model was consistent with the initially developed conceptual structure of item domains.

- *Factor Analysis Based on Polychoric Correlations*

We used the R software to generate a polychoric inter-item correlation matrix and then we used this matrix as input for the SPSS factor analysis procedure to examine the four - dimensional structure of the items. PAF based on polychoric correlations resulted in the same pattern in items loadings across the four factors.

Further, the communalities and factor loadings were higher than the respective ones based on Spearman's correlations and 76.5% of the item covariance was explained by the four factors (Table G3 and Table G4 in Appendix G). Table G4 and Table G5 in Appendix G show the factor pattern and structure matrices.

- *Interpretation of Factors*

Two factor matrices were generated as a result of the oblique Promax factor rotation: the factor pattern matrix and the factor structure matrix. Table G4 in the Appendix G presents the pattern matrix generated by SPSS and R as output from the factor analysis based on Spearman's and polychoric inter-item correlations respectively. The factor pattern matrix contains the loadings that represent the unique relationship of each item to a factor, controlling for the correlation among factors. They are like partial regression coefficients and their values are influenced by the strength of the correlations between the factors. The structure matrix consists of factor loadings that are not influenced by the strength of the correlation among the factors, i.e. they are simple correlations of the items with the factors (Pett. et al., 2003). There is some disagreement in the literature on factor analysis as to which of these two matrices to use for the factor evaluation. We focused on the pattern matrix first for factor interpretation and then used the structure matrix to check for consistency. In order

to simplify the presentation of the factor loadings of the pattern matrix we suppressed the loadings that are less than 0.4.

Examination of the rotated factor loading structure revealed that the obtained four-dimensional solution is consistent with the preliminary conceptual dimensions of the OPOC-MHA instrument, i.e., all items of each domain loaded highly on one of the four factors. There were only two items (Item 15 and Item 16) in the Participation/Rights domain which had their highest loadings on the first factor, while the remaining items in this domain loaded highly on the second factor. The description of the factors is presented in Table 8 below.

Factor 1 (Recovery) is a general scale combining 15 items from the following four OPOC-MHA conceptual domains: Therapist/Support Workers/Staff, Environment, Recovery Outcome, Service Quality, and 2 items from Participation/Rights. This suggests that the most important perceived aspects of recovery relate to: professionalism and competence of therapists, support workers and other staff; treating of clients with courtesy, dignity and respect; physical environment – personal comfort, privacy and security; quality and appropriateness of the care; outcome and helpfulness of treatment.

Factor 2 (Services) was loaded heavily by the items from the following two domains: Services Provided and three items from the Participation/Rights. The second grouping of important perceived aspects of care appears related to: obtaining necessary service in urgent or crisis situations; good understanding of the treatment plan and medications; awareness of consumer's rights (e.g., obtaining information about the treatment, involvement in making decisions about the treatment, declining certain treatment, making a formal complaint) and confidentiality of personal information.

Factor 3 is heavily loaded by the six items from Access/Entry to services concept. This factor could be interpreted as an overall evaluation of access to care including timeliness of appointments, availability of the services, convenience of facility location, warm reception, and sufficient information about available services and programs.

Factor 4 is heavily loaded by the items of Discharge/Leaving the Program domain (Item 27 - Item 29) with loadings between .739 - .951. This factor seems to be associated with a perception of discharge and anticipated continuity of care (evaluation of service providers' assistance in developing an after-treatment plan, suitability of this plan, getting directions and coordination of care after completing the program).

Table 8. Description of the factors.

Factors	Domains	Factor Loadings	Perception of Care Aspects
Factor 1 "Recovery" (15 items)	**Therapists/Support workers/Staff** (Item17-Item21)	(0.738 - 0.894)* (0.774 - 0.920)**	Professionalism and competence of the therapist, support workers and other staff; Treating clients with courtesy, dignity and respect;
	Environment (Item22-Item25)	(0.603 - 0.901)* (0.539 - 0.854)**	Physical environment – personal comfort, privacy and security;
	Recovery Outcome (Item30, Item31)	(0.633, 0.526)* (0.519, 0.530)**	Outcome and helpfulness of the treatment;
	Service Quality (Item32, Item33)	(0.795, 0.713)* (0.730-0.682)**	Quality and appropriateness of the care;
	Participation/Rights (Item15, Item16)	(0.666, 0.481)* (0.516, 0.493)**	Confidentiality of personal information; Information about treatment and support plan.
Factor 2 "Services" (8 items)	**Services Provided** (Item7 – Item11)	(0.401 - 0.676)* (0.432 - 0.786)**	Good understanding of treatment and support plan; Agreement with the staff on the treatment and support plan;; Obtaining necessary services in urgent or crisis situations; Information about medications;
	Participation/Rights (Item12 – Item14)	(0.647 - 0.761)* (0.584 - 0.758)**	Involvement in making decisions about the treatment; awareness of the rights to decline certain treatment and making a formal complaint.

Factors	Domains	Factor Loadings	Perception of Care Aspects
Factor 3 **"Access"** **(6 items)**	**Access/Entry to the Services** (Item1 – Item6)	(0.362 - 0.971)* (0.347 - 0.956)**	Timeliness of the appointments; Availability of the services; Convenience of the facility location; Warm reception, sufficient information about the available services and programs.
Factor 4 **"Discharge"** **(3 items)**	**Discharge/Leaving the Program** (Item27 – Item29)	(0.739 - 0.951)* (0.698 - 0.866)**	Continuity of care: sustainable after-treatment plan, getting directions and coordination of care after completing the treatment program.

*****Factor loadings from the pattern matrix based on polychoric correlation matrix
** Factor loadings based on Spearman's correlation matrix

3.1.3 Internal Consistency and Reliability

We used Cronbach's alpha as a measure of internal consistency and reliability. Alpha coefficients were generated for each factor independently. We looked especially closely at what happens with alphas when the items are removed. The results indicated that all 4 scales had an alpha that exceeds the usual cut-off point of 0.7, and the correlation among factors; all items were contributing to high reliability of the associated scale and none of them reduced the values of coefficient alpha by being removed from this scale.

The Cronbach's alphas obtained by SPSS based on Pearson correlations are presented in Appendix H. These results include the scale means, variance, corrected item-total correlation with the item deleted, the squared multiple correlation, and the coefficient alpha if the item had been deleted. To account for the ordinal nature of the measurement scale and highly skewed response data, the ordinal Cronbach's alphas based on polychoric correlations were used as well (Gaderman et al., 2012). The ordinal alphas are considered more accurate estimates of the theoretical reliability of measurements involving ordinal data such as Likert-type item response format. We followed the general steps described by Gaderman et al. (2012) to evaluate the internal consistency reliability of each of the four derived factors (scales) by

using the free software R. The results are presented in Appendix H. The values of the reliability statistics obtained by SPSS are presented below.

i. Assessing the reliability of the four constructs obtained via EFA:

- Assessing reliability of Factor 1 - Recovery
    - The total *alpha for factor 1 was very high* - 0.956;
    - The *corrected item-total correlations* for the 15 items were strong and vary from .72 to 0.84;
    - All of the alpha-if-item-deleted were lower than the total alpha 0.956.
- Assessing reliability for Factor 2 - Services
    - The total *alpha for factor 2 was very high* - 0.93;
    - The *corrected item-total correlations* for the 8 items were strong and vary from .64 to 0.79;
    - All of the alpha-if-item-deleted were lower than the total alpha 0.93.
- Assessing reliability for Factor 3 - Access
    - The total *alpha for factor 3 was very high* - 0.87;
    - The *corrected item-total correlations* for the six items were strong and vary from .60 to 0.75;
    - All of the alpha-if-item-deleted were lower than the total alpha 0.87.
- Assessing reliability for Factor 4 - Discharge
    - The total *alpha for factor 4 was very high* - 0.91;
    - The *corrected item-total correlations* for the three items were strong and vary from .81 to 0.83;
    - All of the alpha-if-item-deleted were lower than the total alpha 0.91.

ii. Assessing the reliability of the conceptual domains of the OPOC-MHA:

The items in the questionnaire were grouped in seven conceptual domains. Two of them (Assess/Entry to services and Discharge/Leaving the Program) are comprised of the same items as the two of the latent factors (Factor 3 and Factor 4), so their respective internal consistency

reliability coefficients are identical. The reliability coefficients for the domain subscales are presented in Table 9.

Table 9. Reliability coefficients for the OPOC-MHA domains.

Domain	OPOC-MHA Items	Cronbach's Alpha Reliability Coefficient
Access/Entry	Item1 – Item6	0.87
Services Provided	Item7 – Item 11	0.89
Participation/Rights	Item12 – Item16	0.87
Therapists/Support Workers/Staff	Item17 – Item21	0.92
Environment	Item22 – Item26	0.89
Discharge/Leaving the Program	Item27 – Item29	0.91
Overall Experience	Item30 – Item33	0.91

The values of alpha-if-item-deleted for all the items were lower than the value of the total alpha for the associated domain. This means that removing any item from the corresponding domain scale does not improve the reliability of this subscale. As the reliability estimates for the domain subscales were high, summated subscale scores can be used in future data analysis.

3.1.4 Concurrent Validity

Criterion validity is the correlation of the new scale with some other measure of the trait under study, ideally an existing validated "gold standard" which is well accepted in the field. If the two measures are administered at the same time, this is referred to as concurrent validity (John Sitzia, 1999). Criterion validity is strictly defined as the outcome of a comparison of results from an instrument under testing with those from a validated scale measuring the same construct (Streiner & Norman, 1995). For our purposes here, client satisfaction and client perception of care are assumed to be sufficiently close to warrant criterion validity testing.

The OPOC-MHA was assessed for criterion validity using the Client Satisfaction Questionnaire (CSQ-8) (Attkisson and Zwick, 1982) which has four-level Likert-type items as a

validated reference. The CSQ-8 consists of more general questions about the quality of service, appropriateness of services, and overall client satisfaction.

- *Correlations between items with similar meaning*

There is some commonality of item content in the two questionnaires being compared. Two pairs of items have the same meaning since they are taken from the CSQ-8: CSQ1 and Item 32 both ask the respondent to evaluate the quality of services received; CSQ4 and Item 33 ask whether the respondent would recommend the program to a friend with similar problems. The remaining questions in the CSQ-8 have more general aspects and they should be associated with at least some OPOC-MHA items. To study the relationship between OPOC-MHA and CSQ-8 items or scales, we used Pearson's correlation coefficient and Spearman's rank order correlation coefficient.

The correlations between CSQ1 and Item 32 responses was moderate (Spearman's $\rho = 0.55$). When we combined the four response options for CSQ1 and Item 32 into two categories – Satisfied (values 3 or 4) and Dissatisfied (values 1 or 2) – and cross tabulated these two categories, we found that: 95.6% (1,348) out of 1,412 respondents consistently expressed satisfaction/ dissatisfaction on both CSQ1 and Item 32 (93.8% were satisfied; 1.8% were dissatisfied); and 4.4% (63) responded inconsistently to these two questions (e.g., seven agreed/strongly agreed that the services had high quality for Item 32, but rated the quality of services as poor for CSQ1).

Item 33 and CSQ4 ask whether the respondent would recommend the program to a friend with similar problems. The correlations between scores of these items were moderate (Spearman's $\rho = 0.52$). When the Likert scale was collapsed to two categories, 97.4% of respondents were consistent in expressing their satisfaction (95.2%) or dissatisfaction (2.2%) in both CSQ4 and Item 33; 2.6% individuals gave inconsistent responses.

- *Correlations between scale scores*

Aside from items 1 and 4 in the CSQ-8, the other items cover more general aspects of satisfaction and they should be associated to one or more scales of OPOC-MHA items.

To assess the relationship between response scores on the two instruments completed simultaneously, total raw scores on the CSQ-8 were correlated with the raw scores of each subscale and the total score on the OPOC-MHA**.**

Table 10 presents the Pearson's correlations between the total CSQ-8 scale scores and the eight OPOC-MHA domain scores. The items 34 to 39 related to the inpatient clients were grouped together in one subscale. All the correlation coefficients were highly significant ($p<0.001$) with moderate values ranging between 0.49 and 0.63. The Pearson's correlation coefficient between the total OPOC-MHA scores and CSQ-8 scale scores was equal to 0.58 (n=416).

Table 10. Correlation coefficients between CSQ-8 score and the OPOC-MHA domain scores

OPOC-MHA domains	Pearson's *r*	n
Access/Entry	0.49	1,196
Services Provided	0.56	698
Participation/Rights	0.51	1,056
Therapist/Support Worker/ Staff	0.54	918
Environment	0.50	603
Recovery/ Outcome	0.54	1,176
Service quality	0.62	1,283
Discharge/ Leaving the program	0.49	739
Residential Items	0.56	90
OPOC-MHA (Item 1 - Item 33)	**0.58**	**416**

- *CSQ scale compared to four-factor subscales*

The results of EFA revealed four latent constructs underlying the response data. The correlations between these four scale scores and the CSQ-8 total scale score are presented in Table 11. Pearson's correlations were moderate and varied within the range 0.45 – 0.59, while Spearman's rank correlations were a little bit higher – between 0.46 and 0.6. All the correlation coefficients were highly significant ($p<0.001$).

We can summarize that there was good convergence between factor scores on items that were conceptually similar across the OPOC-MHA and CSQ-8, and moderate inter-scale correlations among the OPOC-MHA subscales and CSQ-8 scale. There was, however, some divergence and independence in domains as well. This "moderate to good" range of psychometric results indicates that the instrument captures information about access, quality, and outcome from a service user's perspective in a valid and reliable way; however, the OPOC-MHA instrument covers broader perception of care aspects than the CSQ-8 does.

Table 11. Correlation coefficients between OPOC-MHA latent factor scores and the CSQ-8 score.

Latent Factors	Pearson's *r*	Spearman's ρ
Factor 1 (Recovery)	0.59	0.60
Factor 2 (Services)	0.51	0.53
Factor 3(Entry)	0.45	0.46
Factor 4 (Discharge)	0.48	0.54

3.2 Qualitative Results

The analysis of the qualitative data included all three methods of data collection (regular pilot site feedback, staff interviews, and online staff survey) rather than broken down separately.

3.2.1 Positive Feedback

Although the OPOC-MHA received constructive feedback in the areas of language and format (see below), the majority of staff at each pilot site felt the tool appropriately captured the importance of asking questions using a perception of care approach. Many staff commented that the information provided by the tool was useful and initiatives to improve quality of care could be implemented. For example, more than one agency had lower scores on the question asking about clients knowing where to make a formal complaint. As a result, these sites began to develop a process in order to ensure clients are aware of how they may make a complaint should they need to. Senior staff also commented in the online survey that they saw

a great advantage to being able to compare their results with the rest of the province. Furthermore, many sites asked to continue to use the OPOC-MHA during this developmental phase, as they felt it to be the most inclusive and thorough tool used to date.

3.2.2 Language

The OPOC-MHA was designed to be appropriate for all reading levels, including youth from the age of 12 years and people with a severe mental health condition. Feedback from the sites indicated that most of the language in the tool is at a grade five reading level, but there were still concerns about some of the language. It was reported by staff at several sites that literacy was problematic with the tool and that clients with a lower literacy level were unable to complete the tool without assistance. Staff at one site noted that the tool should be at a grade one reading level rather than grade five. Some staff members were not sure what to do if clients were unable to read and/or write as they were instructed to only provide minimal guidance. It was reported that clients with a severe mental health problem such as schizophrenia or clients with a brain injury (including clients with MS or those who have had a stroke) were unable or had difficulty completing the questionnaire.

Literacy was also described as an issue for clients whose first language was not English. There were some clients who could not complete the tool due to their inability to read or write in English – this was especially true in Toronto. Several respondents found the questionnaire "too wordy". This was especially true for youth clients whereby it was noted by some that the tool was "too clinical". Staff at one site noted that although they understood and agreed with asking the demographic questions in Section C (particularly around equity), they questioned why these options were selected as people can be discriminated against for many reasons that are not listed in Section C.

Staff from some sites reported there were words that were challenging for various reasons. The word "disability" (Item 26) was confusing to some clients and some staff reported that this term made clients uncomfortable. The word "treatment" was difficult for some clients as they associated this word with medical treatment and therefore hadn't thought the questions were applicable. Some clients thought the word "non-sexual" meant that they were

currently not engaging in a sexual relationship. The word “queer” was offensive to many clients and staff. This was especially true of sites located outside of the Greater Toronto Area. One site had clients that were offended by the term “queer” and as a result, did not trust the definition of “two-spirited” as being the same as their own. One staff member reported that one client was in counselling because she was upset with the term “queer” so staff did not provide the questionnaire to her so as not to upset her further. “Queer” also does not translate to French and the closest translation to this word is derogatory.

Other than English and French, it was recommended that tool also be translated into Arabic, German, Italian, Oji-Cree/Cree/Ojibway, Spanish, Portuguese, Punjabi, Tamil, Somali, Farsi, Urdu, and Dari (the Ontario Common Assessment of Need (OCAN; Community Core Information Management, n.d.) is available in most of these languages). Some thought the questionnaire should also have pictures or graphics in it and be available in brail.

3.2.3 Completion Time and Length

20% of staff that completed the online survey reported it took clients between 15-20 minutes to complete the tool while 13% said it took between 10-15 minutes. 5% said it took longer than 30 minutes to complete.

Comments that the tool was too long were common among clients and staff – 43% of staff that completed the online survey thought the questionnaire was too long. All clients received the one tool formatted into three sections – but only had to complete two of the three. Most clients also received the CSQ as well; therefore, the package was several pages long. When speaking with staff, the research coordinator tried to gain insight into whether the tool itself was long or whether it appeared long because of all the pages included. Most staff thought that if the tool was limited to Section A, perhaps with Section C (demographics) being an optional piece, that it may not be too long, while others still thought there were too many questions. The length of the questionnaire was cited as one of the main reasons for refusal to complete the tool. There was also some concern that the length took time away from clinical time which frustrated staff and clients.

Regarding the length, one staff reported "*I think it might not have been long for other agencies, but we have so many tools in our assessment package that we already overwhelm the clients".* Many thought the survey should only be one – two pages or perhaps 20 questions at most. Staff from a program with clients that have a severe mental health problem felt the questionnaire should be 5-10 questions at most for this population. Most sites reported that the questionnaire should be divided by section – therefore, Sections A and C would be one tool and Sections B and C would be a separate tool.

3.2.4 Format

The biggest issue with the format was the confusion surrounding which sections to complete. This was reflected, for example, in the staff online survey which reported that 50% of respondents thought the OPOC-MHA could be more user-friendly. Some clients completed all three sections as they did not realize that they were only to complete two. Others were unsure which category they fell under so staff reported being often asked which sections to complete. Staff noted that if they explained to clients the three sections prior to completion, there were fewer questions about this. One staff member said *"I put lines through the sections that were not to be completed as clients found it confusing and were not likely to read the descriptive paragraphs above each category".* Although for the pilot it was necessary to have clients complete the OPOC-MHA using the paper-and-pencil method, there were comments that having the tool in electronic form would have been easier.

The print was too small according to some clients who require a larger font. Both staff and clients liked that the OPOC-MHA was on coloured paper as it made it stand out more and made it easier to decipher from other programs. The majority of staff and clients were content with the Likert rating scale.

3.2.5 Challenges with Specific Items

In Section C (the demographic section), there was concern about why the tool asked for people to voluntarily identify their sexual orientation. Although as noted above, the purpose for this question and others was to be able to review the results through an equity lens, some clients and staff did not feel comfortable answering this question or understanding why it was

included. Furthermore, agencies that work specifically with youth reported that this question would be difficult to assess as a young person's response may fluctuate throughout their adolescence as well as during their time in treatment. Some staff thought there should be more categories for the 'gender' question as "male, female, other" may not suffice. Alternatively, staff in northern, rural areas thought perhaps there were too many categories for this section as some communities are only in the beginning stages of LGBT acceptance. A similar response was observed with the question in Section C asking people to voluntarily identify which population group they belong to. The reasons for asking are the same as above, but many clients and staff were uncomfortable with the question. One site noted that clients of mixed race were confused that they were not asked to elaborate even though all other categories were.

Item 14 (Section A) pertains to being able to decline participation in activities and this question conflicts with a particular agency's requirements in that all clients are expected to participate in all programs, groups, and activities. Staff felt some of the questions about physical space were challenging as well, as it may not be in their budget to resolve such issues (e.g. questions 36 and 37). Youth at one site thought that items 22 and 23 (Section A) sounded the same. Item 13 ("I understand how to make a formal complaint about this organization") was misunderstood numerous times; this seemed to confuse some clients because they felt they were being asked if they had any complaints. People in some sites reported difficulty in understanding Q6 in Section C which asks respondents what the 'formal conditions of treatment' are. Many clients were unsure what this meant and what was meant by the word "formal". The question regarding the timing of tool completion in Section C (Q7) was confusing to many staff and clients and it was recommended that this item should be re-worded.

Staff at one site reported that they would have liked questions asking about being on a waitlist. Staff noted that many clients are unaware of system issues so they are unable to answer if they need more services as there may be no services available for them, or they don't know about or can't access certain services so they are unable to answer questions about whether or not they are satisfied with their services.

3.2.6 Challenges with Participation

There were various reasons why some sites had a lower response rate than others – one of the main reasons being that some agencies had fewer clients and therefore would have lower numbers overall. Some clients refused to participate for different reasons but the length of the questionnaire was frequently cited. A few sites reported that staff did not promote the project and did not ask clients to complete the questionnaire. Staff would receive emails from site leads asking them to encourage clients to participate but this was not always successful. Staff refusal may have been attributed to a lack of interest in the project or concern that the questionnaire would take too much 'clinical time' and they did not want to burden their clients. Some sites did not distribute the questionnaire to clients that had been there for a short amount of time as they thought that the client would not have been there long enough to comment on services. As this project required participants under the age of 16 years to have completed consent and assent forms, this resulted in a lower response rate from this age group. The Ontario Common Assessment of Need (OCAN) was being administered at the same time in many of the sites and some clients were confused as to why they were being asked to complete so many forms as well as answer questions that were quite similar to each other.

4.0 SUMMARY AND DISCUSSION

The objectives of this project were: to assess the acceptability, utility, and psychometric properties of a new client and family perception of care tool for publicly funded addiction and mental health services in Ontario; to examine the feasibility of implementing this tool and the usefulness of the results; and to estimate the requirements related to implementation in relation to staff burden and time, training needs, and other resources.

The work completed to date has resulted in the successful development of a valid and reliable perception of care tool for clients and their family members/supporters receiving services within mental health and addiction programs. The results confirm its utility in both inpatient and community programs and across a wide age range of clients/patients. As often found with other measures of client satisfaction and perception of care tools, data from the OPOC-MHA were skewed, indicating generally high satisfaction with mental health and substance abuse treatment services. High ratings of 'Agree' and 'Strongly Agree' (i.e., skewness)

and low level of variability may have attenuated the psychometric strength of the instrument when measured by widely accepted standards of reliability and validity. More experience in quality improvement applications will demonstrate the value of the information obtained with respect to its usefulness for benchmarking and sub-group comparisons. Despite these potential limitations, results showed enough inter-item variation to detect four useful construct subscales with a significantly high level of internal consistency, good convergence with an established measure of client satisfaction, as well identification of several important areas that may be targeted for quality improvement efforts.

Overall, the qualitative feedback indicated that the OPOC-MHA was generally well accepted and the majority of staff at each pilot site felt that the tool appropriately captured the importance of asking questions using a perception of care approach. Many staff, managers and directors commented that the information provided by the tool was useful and initiatives to improve quality of care could be implemented at the clinical, program, and system-planning levels. In addition to the qualitative feedback from the sites, the pilot testing process itself demonstrated that implementation of a common perception of care tool was very feasible across mental health and addictions services in Ontario. Most programs were able to integrate the tool easily into their daily practices in a way that best suited their needs.

Resources related to implementation of the OPOC-MHA were found to be minimal for most programs. The burden on staff time was minimal, except in cases where literacy was an issue for the client. Although staff voiced some concerns over the length and format of the tool, the majority of staff surveyed felt that this could be improved by separating the different versions into distinct tools, and completing some minor revisions. These recommendations were implemented. In terms of training requirements, a half-day training session was conducted in person for each pilot site. Most staff found this to be sufficient, and several found this to be more than enough. Future implementation will evaluate the benefits of a more structured approach based on implementation science (Fixsen et. al, 2005), and which emphasizes a staged approach to implementation that goes beyond didactic training to include, for example, goal setting, assessment of organizational readiness, and identification of key "levers" and barriers that facilitate or impede implementation. A team is currently under

development that will work with the research team to plan and initiate this structured, evidence-informed implementation process and the evaluation of its success.

For the purposes of this project, data entry and analyses were handled by the research team. Resource requirements may be considered to be significant for some agencies if they were to enter and analyze their own data. As part of a larger implementation plan, recommendations will include a central data analysis team to facilitate benchmarking as well as application of the information for provincial or regional level planning (i.e., applications beyond the agency level). Next steps (see below) include an electronic version of the tool that will greatly facilitate questionnaire administration and data entry. That said, we anticipate some sites will continue with paper and pencil and will require support for data entry from a central resource team. This requirement will no doubt evolve over time.

- *Revisions and Next Steps*

In October of 2012, the research team met with the project Working Group to discuss the pilot site results and feedback. The major change agreed upon by the group was to separate the OPOC-MHA into two distinct tools. The client version is now to be completed by registered clients of the program (both clients receiving services for their own treatment/support and clients who are family members/significant others/supporters who are receiving services in their own rights). The second, briefer version is for family members/significant others/supporters who are not registered clients but who are also receiving services from the program (e.g., a parent who has a child in the program). Having both versions together in one package was too confusing and this issue has now been resolved.

The quantitative analysis indicated that some pairs of items were very highly correlated and had similar meanings (see section 3.1.2 of the quantitative results). After consideration, the group decided to eliminate one item from each version of the questionnaire. Specifically, item 30 (The services I have received have helped me better understand my personal strengths and challenges) has been removed from the client version, bringing the total number of items from 39 to 38. In the briefer, supporter version, item 18 (If a friend were in need of similar help

I would recommend this service) has been removed, bringing the total number of items from 18 to 17.

Following the qualitative feedback described in the sections above, there were also a number of revisions made to the wording of specific items. For example, “treatment” has now been replaced with “treatment services” for several items. Item 13 (knowing how to make a formal complaint) has been reworded to make it more clear and it has also been moved to the end of the Participation/Rights section of the tool. The wording in the questions concerning the “formal conditions of treatment” and timing of the questionnaire has also been revised.

The wording of a few other items has also been revised slightly for clarity and/or cultural sensitivity based on our pilot site feedback and with the support of the Working Group. For example, a few subtle but important revisions have been made to the questions on gender and population group. The sexual orientation question has been reworded and now demonstrates more inclusivity. The option ‘transgender’ has been included and a definition of terms has been added to the end of the tool to further explain what is meant by each option for the gender and sexual orientation questions.

DTFP funding has been received to continue the project through 2013-2014. Work is currently underway to make the language of the OPOC-MHA more “youth-friendly”. To this end, we are engaging two focus groups with youth in addictions and mental health/concurrent disorders programs to review the tool item by item. Participants are being asked to give suggestions on the wording for each item to make them easier to understand while maintaining the same meanings. At the time of this writing, one focus group has been completed and several excellent suggestions have been received on the wording of a small number of items. We also plan to review the appropriateness of the language in the French version of the tool as well.

Once all revisions have been completed, the research team will partner with the Quality Initiatives Implementation Team (QIIT) from the Provincial System Support Program (PSSP) at CAMH to develop a provincial implementation plan. There are already several agencies and

programs that are eager to begin using the OPOC-MHA working with the research team. The QIIT will lead the roll-out for a phased implementation of the OPOC-MHA across selected agencies and/or LHINs using methods grounded in implementation science (Fixsen et. al, 2005). The implementation team and the project team will evaluate this initial process, lessons learned, and ultimately develop a comprehensive implementation plan for all of Ontario, including infrastructure requirements and costs. This would also include providing training sessions for participating agencies/LHINs and the provision of implementation support resources.

As noted above, future plans also include the development and implementation of an electronic version of the OPOC-MHA in partnership with the Drug and Alcohol Treatment Information System (DATIS). This will be greatly facilitated by anticipated enhancements to the Catalyst software that underpins DATIS. This electronic version will enable clients to input their feedback anonymously and eliminate the extra step of data entry. We will also explore different options for completion of the questionnaires (e.g. PC, tablets, and smart phones). The research team has also initiated a consultation process with First Nations, Métis and Inuit stakeholders to explore the development of a First Nations, Metis and Inuit adaptation of the OPOC-MHA.

Additional analyses of the considerable client and family/supporter data collected in the pilot are also anticipated (see Appendix J) as these data are the first of their kind on such a large scale in Ontario and speak to the positive perceptions of the large majority of clients and family members/supporters accessing Ontario mental health and addiction treatment services and the reported benefits of their treatment and support experience. The research team also is planning to publish the tool and the results of the development process in peer-reviewed journals so as to make it widely available. In the same vein, presentations at selected conferences are either scheduled or planned (e.g., the Issues of Substance conference in November of 2013 sponsored by the Canadian Centre on Substance Abuse). The research team will continue to coordinate and communicate ongoing research and development efforts with other groups in Canada and internationally that continue to develop and validate similar tools and processes for assessing client satisfaction/perception of care.

An important aspect of the feedback received from the Persons with Lived Experience and Family Member Advisory Panel is the relationship that is implied between items in a perception of care tool and the expectations or standards of care within mental and addiction agencies. For example, a question that asks whether the respondent understands how to make a formal complaint to the provider organization clearly implies that there should in fact be a transparent process to do so and that this should be clearly communicated to clients and family members/supporters. Similarly, with items such as "I was given private space when discussing personal issues with staff" again implies an expectation or indeed a "standard" of care. In other words there is an implicit relationship between a questionnaire item in a perception of care format and the standards of care that can be reasonably expected in mental health and addiction services. This poses a challenge here in Ontario, and the majority of other treatment systems, since these standards of care are neither documented nor well-communicated to clients and family members/supporters. This suggests, therefore, that a next step would be a review of the items in the OPOC-MHA from a "standards of care perspective" and, with the appropriate provincial bodies, explore the need to develop such standards and related communication materials for clients and family members/supporters. There may also be a direct link between some of the items in the questionnaire and core competencies at the practitioner level, for example, sensitivity to cultural and diversity-related needs.

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Appendix A – Client Perception of Care Tools in Mental Health and Addiction Settings

Table A1. Tools Used in Addiction Treatment Settings

Tool	Setting	Population	Country of Origin	Scale Characteristics			Administration	
				Psychometrics	Length/ Item Format	Domains	Mode	Timing
Cologne Patient Questionnaire (KPF)	Addiction setting (Braig et al., 2008)	Adults	Germany	Alpha ranges from 0.76 – 0.91 Structural equation modeling (SEM), confirmatory factor analysis – reliabilities ≥ 0.60 (recommended cut off)	31 items with 6-point Likert scale. One additional question using a 5-point Likert scale.	Access/engagement Disengagement Facilities Outcome Services provided Therapist characteristics	Self-administered	Completed at discharge – clients who dropped out early also completed questionnaire
	Addiction setting (Ommen, O. et al., 2009)	Adults	Germany	Alpha ranges from 0.76 – 0.91 Structural equation modeling (SEM), confirmatory factor analysis – reliabilities ≥ 0.60 (recommended cut off)	31 items with 6-point Likert scale. One additional question using a 5-point Likert scale.	Access/engagement Services provided Therapist characteristics	Self-administered	Completed at discharge
Global Appraisal of Individual Needs (GAIN) - Treatment Satisfaction Index (TSI) - a subscale (Tetzlaff et al., 2005)	Addiction setting	Adolescents	United States	Internal consistency = 0.92 (Cronbach's alpha)	14 items, 5-point Likert scale	Outcome Therapist characteristics	Structured interview	Collected at 3 months post-intake
Chelsea Arbor Treatment Centre Patient Satisfaction Survey (Strobbe et al., 2004)	Detoxification unit	Adults – outpatient	United States		5 items using a 5-point Likert scale with an additional 2 open-ended questions	Access/engagement Outcome Therapist characteristics	Self-administered	Only completed if finished detoxification program
Satisfaction with Treatment Questionnaire (Cernovsky et al., 1997)	Addiction setting	Adults	Canada	Internal consistency = 0.75 (Cronbach's alpha)	11 items with a 4-point Likert scale	Facilities Outcome Services provided	Self-administered	Completed at discharge
Tool not named (Hogan et al., 2007)	Addiction setting	Adults - methadone treatment	United States		105 items 85 using a Likert scale and 14 close-ended questions 6 open-ended questions	Access/engagement Facilities Services provided Therapist characteristics	Self-completed with anonymous drop-box	
Tool not named	Addiction	Adults -	United States	Internal consistency:	18 items - 5 point Likert	Access/engage	Self-	

Tool	Setting	Population	Country of Origin	Scale Characteristics			Administration	
				Psychometrics	Length/ Item Format	Domains	Mode	Timing
(Rohrer et al., 1999)	setting	outpatients		Perceptions of organization (Cronbach's alpha = 0.91) Satisfaction questions (Cronbach's alpha = 0.82)	scale	ment Facilities Other Services provided Therapist characteristics	administer ed	
Tool not named (McLellan et al., 1998)	Addiction setting	Adults	United States		6 items - 5-point Likert scale	Outcome Services provided Therapist characteristics	Phone interview	Completed at one, three, and six month intervals
Tool not named (Zhiwei et al., 2008)	Addiction setting	Adults	United States		1 item - 3-point Likert scale	Outcome	Self-administer ed	Completed at assessment, discharge, and after discharge (mean = 11 months later)
Verona Service Satisfaction Scale for Methadone Treatment (VSSS-MT) Perez de los Cabos et al., 2002)	Addiction setting	Adults – opioid-dependant	Spain		27 items with a 5-point Likert scale	Disengagement Other Outcome Services provided Therapist characteristics	Self-administer ed	Completed at 3 months post-treatment

Table A2. Tools Used in Mental Health Settings

Tool	Setting	Population	Country of Origin	Scale Characteristics	Administration			
				Psychometrics	Items	Domains	Mode	Timing
Carers' and Users' Expectations of Services - User version (CUES-U)	Community Mental Health settings (Lelliott et al., 2001)	Adults	United Kingdom	Spearman's ρ =0.42; *P* < 0.01 Principle components analysis, ICC – moderately good or better	16 items - 3 point Likert scale	Access/engagement Services provided Therapist characteristics	Self-administered - approximately 15-30 minutes to complete.	
	Community Mental Health settings (Blenkiron and Hammill, 2003)	Adults	United Kingdom		16 items - 3 point Likert scale	Access/engagement Services provided Therapist characteristics	Self-administered	
Charleston Psychiatric Outpatient Satisfaction Scale (Pellegrin et al., 2001)	Mental health setting	Adults - outpatient	United States	Internal consistency = 0.87 (Cronbach's alpha) Pearson's correlation (r) significantly correlated (different score based on item assessed)	15 items - 5 point Likert scale	Access/engagement Facilities Services provided Therapist characteristics	Self-administered – 2 to 5 minutes to complete	Completed following treatment
Consumer Satisfaction Questionnaire (Brunero et al., 2009)	Mental health setting	Adults - acute inpatients	Australia		23 items - 5-point Likert scale. One overall question with 10-point Likert scale.	Access/engagement Disengagement Facilities Other Services provided	Self-administered	Completed on day of discharge
Experience of Care and Health Outcomes Survey (ECHO)	Mental health setting (Deen et al., 2010)	Adults – outpatient	United States		12 items were selected from the the 51-item ECHO - 5-point Likert scale	Services provided Therapist characteristics	Telephone interview	Measured at 6 month follow-up
Forensic Satisfaction Scale (FSS) (MacInnes et al., 2010)	Mental health setting	Adults - in-patient forensic	United Kingdom	Internal consistency = 0.91 (Cronbach's alpha) Principles component analysis – r (FSS vs VSSS) = 0.80	60 items	Access/engagement Disengagement Facilities Other Outcome Services provided Therapist characteristics	Self-administered	

Tool	Setting	Population	Country of Origin	Scale Characteristics	Administration			
				Psychometrics	Items	Domains	Mode	Timing
Inpatient Consumer Satisfaction Scale (ICSS) (Holcomb et al., 1989)	Mental health setting	Adults - inpatients	United States	Internal consistency = 0.70-0.92 (Cronbach's alpha) Factor analysis: 3 factors Correlations inter-subscales ranged from 0.22-0.60	33 items - 5-point Likert scale	Access/engagement Outcome Services provided Therapist characteristics	Self-administered	Form provided at time of discharge
Inpatient Evaluation of Service Questionnaire (IESQ)	Mental health setting (Cleary et al., 2009)	Inpatients and staff (modified for staff)	Australia	Internal consistency (Cronbach's alpha) = 0.93 to 0.96	20 items - 5 point Likert scale	Access/engagement Facilities Outcome Services provided Therapist characteristics	Self-administered	
	Mental health setting (Cleary et al., 2003)	Adults - inpatient	Australia		22 items; 5 point Likert. 3 dimensions – including 2 open-ended questions	Access/engagement Facilities Outcome Services provided Therapist characteristics	Self-administered	Prior to discharge
	Mental health setting (Meehan et al., 2002)	Adults - in-patients in acute and rehabilitation settings	Australia	Internal consistency = 0.95 (Cronbach's alpha) PCA (3 factors)	22 items; 5 point Likert. 3 dimensions – including 2 open-ended questions	Access/engagement Facilities Outcome Services provided Therapist characteristics	Self-administered	Close to discharge date
Inpatient Psychiatric Questionnaire (Kolb et al., 2000)	Mental health setting	Adults - Inpatient	United States	Internal consistency ranged from 0.74 to 0.88 (Cronbach's alpha) Factor analysis: 6 factors	43 items	Access/engagement Disengagement Facilities Outcome Services provided Therapist characteristics	Self-completion. Patient could either complete and put in anonymous box or mail-in	Given to patient on discharge date.

Tool	Setting	Population	Country of Origin	Scale Characteristics	Administration			
				Psychometrics	Items	Domains	Mode	Timing
							with pre-stamped envelope.	
Mental Health Statistics Improvement Program's Consumer Survey (MHSIP)	Mental Health setting (Ganju, V., 1998)	Adults	United States		40 items. There is also a short version with 21 items.	Access/engagement Outcome	Self-administered	
	Mental Health setting (Eisen et al., 2001)	Adults	United States	Cronbach's alpha ranges from 0.81 to 0.91 Corrected item-total correlations for items within the MHSIP subscales ranged from 0.39 to 0.73.	40 items on a 5-point Likert scale	Access/engagement Outcome	Self-administered	
	Mental Health setting (Jerrell 2006)	Adults	United States	Cronbach's alpha ranges from 0.71- 0.78 Test-retest ranges from 0.45 – 0.61 Convergent validity (vs CCET), r= 0.42 – 0.79	21 items on a 5-point Likert scale	Access/engagement Outcome	Structured interview	Following the first interview, some clients were interviewed again 2-4 weeks later
Patient Evaluation of Care-5 (PEC-5) (Blais et al., 2002)	Mental health setting	Adults - inpatient	United States	Internal consistency = 0.88 (Cronbach's alpha) The coefficient alpha for the PEC-5 was 0.89 Factor analysis: 1 factor Item to scale correlations ranged from 0.61 to 0.79	5 items - 7-point Likert scale	Access/engagement Outcome Therapist characteristics	Self-administered	Completed at discharge
Patient Opinion Survey (MacDonald et al., 1988)	Mental health setting	Adults - Long-stay inpatients	United Kingdom	Factor analysis: 8 factors	42 items plus 2 open-ended yes/no format	Facilities Other Services provided Therapist characteristics	Administered by an interviewer	
Penn State Inpatient Psychiatry Satisfaction Survey (PSIPSS) (Woodring et al., 2004)	Mental health setting	Adults - inpatient	United States	Internal consistency for total sample = 0.94 (Cronbach's alpha) Consistency for professional care and mileu subscale = 0.92 Consistency for treatment subscale = 0.86 PCA (2 factors)	15 items - 5 point Likert scale	Access/engagement Disengagement Facilities Outcome Services provided Therapist characteristics	Self administered - left in locked box on the unit	Completed on day of discharge
Perception of Care Survey -	State prison	Adults	United		7 perception questions -	Access/engage	Self-	

Tool	Setting	Population	Country of Origin	Scale Characteristics	Administration			
				Psychometrics	Items	Domains	Mode	Timing
Adaptation of the CSQ and the MHSIP (Way et al., 2007)	mental health services		States		6-point Likert scale	ment Outcome Therapist characteristics	administered with postage paid envelope to first author.	
Psychiatric Care Satisfaction Questionnaire (PCSQ) (Barker.et al., 1996)	Mental health setting	Adults - acute psychiatric inpatients	United Kingdom	Internal consistency = 0.89 (Cronbach's alpha) PCSQ had correlations of 0.72 with the CSQ	26 items - 5-point Likert scale. Comments section at the end of the questionnaire.	Access/engagement Services provided Therapist characteristics	Self-administered -	
Quality in Psychiatric Care (Schroder et al., 2007)	Mental health setting	Adults - inpatient setting	Sweden	Internal consistency = 0.98 (Cronbach's alpha)	69 items on a 4-point Likert scale	Access/engagement Disengagement Facilities Therapist characteristics	Self-administered	Completed at discharge
Rome Opinion Questionnaire for Psychiatric Wards (ROQ-PW) (Gigantesco et al., 2003)	Mental health setting	Adults - inpatients	Italy	Internal consistency = 0.35-0.71 (Cronbach's alpha) Internal consistency for entire questionnaire was 0.82 Test-re-test was performed with 27 patients completed after several days of completing first time. Overall agreement was good. For 3 items, the weighted kappa was higher than 0.9 and for 7 items it ranged from 0.6 to 0.9. The intraclass correlation coefficient was 0.80. Factor analysis: 3 factors	12 items with 5 point-Likert scale Space was provided for additional comments	Disengagement Facilities Other Therapist characteristics	Self-administered Participants anonymously put completed questionnaires in a box	Questionnaires distributed 6-7 days after admission
Satisfaction Questionnaire (SATQ-98) (Muller et al., 2002)	Mental health setting	Adults - Inpatients in open and closed wards	Germany		12 items with 5 point-Likert scale	Facilities Other Services provided Therapist characteristics	Self-administered - dropped questionnaire anonymously into box	Provided within 14 days after admission and immediately prior to discharge
Satisfaction Questionnaire	Mental health	Adults -	Israel		28 items, 1 open-ended	Access/engage	Self-	

Tool	Setting	Population	Country of Origin	Scale Characteristics	Administration			
				Psychometrics	Items	Domains	Mode	Timing
(Barak et al., 2001; Remnik et al., 2004)	setting	inpatient and outpatient clinics			question 5-point Likert scale	ment Facilities Services provided Therapist characteristics	administered	
Self-Rating Patient Satisfaction Scale (SPRI)	Mental health setting (Kuosmanen et al., 2006)	Adults (Finnish) Inpatients in acute settings	Finland (questionnaire originally developed in Sweden)	Internal consistency = 0.87 (Cronbach's alpha), split-half reliability = 0.79 for the original version - has not been tested on the Finnish version. Correlation inter-subscales ranged from -0.04 to 0.22	45 items - 5 point Likert	Access/engagement Disengagement Facilities Outcome Services provided Therapist characteristics	Self-administered - completed anonymously in a private place and left in a sealed envelope	Filled out prior to discharge
	Mental health setting (Soergaard et al., 2008)	Adults (Norwegian) - In-patient	Norway (questionnaire originally developed in Sweden)	Internal consistency = 0.87 (Cronbach's alpha), split-half reliability = 0.79 for the original version	50 items - 5 point Likert scale	Access/engagement Disengagement Facilities Outcome Services provided Therapist characteristics	Self-administered	Completed at discharge
	Mental health setting (Hansson 1995)	Adults (Swedish) - Inpatient and outpatient	Sweden	Cronbach's alpha: Inpatient consistency = 0.87 and a split-half reliability of 0.79. Outpatient consistency = 0.84 and a split-half reliability of 0.78.	Inpatient questionnaire - 48 items - 5-point Likert scale Outpatient questionnaire - 35 items - 5-point Likert scale	Access/engagement Disengagement Facilities Outcome Services provided Therapist characteristics	50% self-administered - completed before discharge 50% completed at home within 2 weeks of discharge.	Completed at discharge
Tool not named (Rost, et al., 2001)	Mental health setting	Adults - outpatient	United States		1 item – 5-point Likert scale	Services provided	Telephone interview	Completed at 6 month follow-up
Tool not named (Carlson et al., 2001)	Substance use treatment (Carlson et al., 2001)	Adults	United States		3 items on a 5-point Likert scale.	Access/engagement Outcome Services provided	Self-administered	Baseline, 6 months, and 12 months (must have completed all three)

Tool	Setting	Population	Country of Origin	Scale Characteristics	Administration			
				Psychometrics	Items	Domains	Mode	Timing
Tool not named (Langle et al., 2003)	Mental health setting	Adults - In-patients admitted for acute reasons	Germany		91 items plus 1 summarizing item	Access/engagement Disengagement Facilities Services provided Therapist characteristics	Completed anonymously by patients	One group completed questionnaire 2 weeks after admission One group asked to complete during the last 5 days of hospital stay
Tool not named (Eytan et al., 2004)	Mental health setting	Adults - inpatients	Switzerland		14 items - 4-point Likert scale	Access/engagement Facilities Services provided Therapist characteristics	Self-administered	Form provided 2 days before discharge
Tool not named (Kilbourne et al., 2006)	Mental health setting	Adults - Inpatient or outpatient	United States		Unknown but has a 6-point Likert scale	Access/engagement Therapist characteristics		
UKU-Consumer Satisfaction Rating Scale (UKU-ConSat) (Ivarsson et al., 2007)	Mental Health settings	Adult	Sweden	Internal consistency = 0.80 (Cronbach's alpha) Correlations for items were between r=0.67 and r=0.83	13 items - 7 point Likert scale	Access/engagement Outcome Services provided Therapist characteristics	Self-administered	
Verona Service Satisfaction Scale - Child and Adolescent Version (CAMHSSS) (Ayton et al., 2007)	Mental Health settings	Children (aged 11+), adolescents, and their parents. Outpatient and inpatients.	United Kingdom	Internal consistency (Cronbach's alpha) 39-item version = 0.96 (adolescents) and 0.84 (adults) 20-item version = 0.95 (adolescents) and 0.95 (adults) Test-retest reliability of the final versions was high. Using the 39-item version, Spearman correlation was 0.88 for both adolescents and their parents and it was 0.82 for young people and 0.90 for parents using the 20-item version.	20 items (short version) 39 items (long version). Both on a 5-point Likert scale	Access/engagement Facilities Other Outcome Services provided Therapist characteristics	Self-administered	
Verona Service Satsifaction Scale (VSSS-EU)	Mental Health settings (Ruggeri, M. et	Adults - in-patient and out-patient	Italy	Internal consistency = 0.97 (Cronbach's alpha)	54 items. 5-point Likert scale	Access/engagement Facilities	Self-administered. 20-30	Subjects asked to provide overall rating of mental

Tool	Setting	Population	Country of Origin	Scale Characteristics	Administration			
				Psychometrics	Items	Domains	Mode	Timing
	al., 2002)					Other Outcome Services provided Therapist characteristics	minutes to complete.	health services they have received in the past year
	Mental Health settings (Ruggeri, M. et al., 2003a)	Adults - Inpatients with schizophrenia	Italy	Internal consistency = 0.97 (Cronbach's alpha)	54 items. 5-point Likert scale	Access/engagement Facilities Other Outcome Services provided Therapist characteristics	Self-administered. 20-30 minutes to complete.	Subjects asked to provide overall rating of mental health services they have received in the past year
	Mental Health settings (Ruggeri, M. et al., 2003b)	Adults - Inpatients with a focus on those with neuroticism	Italy	Internal consistency = 0.97 (Cronbach's alpha)	54 items. 5-point Likert scale	Access/engagement Facilities Other Outcome Services provided Therapist characteristics	Self-administered. 20-30 minutes to complete.	Subjects asked to provide overall rating of mental health services they have received in the past year
	Mental Health settings (Ruggeri, M. et al., 2006)	Adults - Patients in emergency psychiatric services	Italy	Internal consistency = 0.97 (Cronbach's alpha)	54 items. 5-point Likert scale	Access/engagement Facilities Other Outcome Services provided Therapist characteristics	Self-administered. 20-30 minutes to complete.	
	Mental Health settings (Ruggeri, M. et al., 2004)	Adults - Patients using a community-based mental health service	Italy	Internal consistency = 0.97 (Cronbach's alpha)	54 items. 5-point Likert scale	Access/engagement Facilities Other Outcome Services provided Therapist characteristics	Self-administered. 20-30 minutes to complete.	Provided at baseline and at two years
WHO Health System Responsiveness Scale (Bramesfeld et al., 2007) The Health systems Responsiveness Analytical	Mental health setting	Adults - Inpatient and outpatient	Switzerland	Single latent construct: Cronbach's Alpha 0.8 on average Test-retest reliability: Kappa	Inpatient: 27 items, 8 domains; Outpatient: 24 items, 7 domains; questions include 5-point Likert scale summary	Access/engagement Facilities Other Services	Face-to-face by trained external interviewe	Subjects asked to answer questions based on their experiences with mental health

Tool	Setting	Population	Country of Origin	Scale Characteristics	Administration			
				Psychometrics	Items	Domains	Mode	Timing
Guidelines for Survesy in the MCSS (WHO, 2005)				coefficient 0.7 on average.	rating questions and 4 and 5 point Likert scale report questions on experiences with the health system.	provided Therapist characteristics	rs	services during the past six months
Youth Client Satisfaction Questionnaire (YCSQ) (Shapiro et al., 1997)	Mental health setting	Youth	United States	Internal consistency for individual factors = 0.85 (Cronbach's alpha) Parent's scale (5 questions that mirrored 5 questions from YCSQ) = 0.87 Test-retest 3-4 weeks after initial completion - reliability coefficient of 0.92 Test-retest for parent scale = 0.71 for total score with an average correlation of 0.54.	14 items - 4-point Likert scale	Outcome Therapist characteristics	Telephone interview method - approximately 8 minutes to complete	Measurements were administered before and after therapy

Table A3. Tools Used in Both Mental Health and Addiction Settings

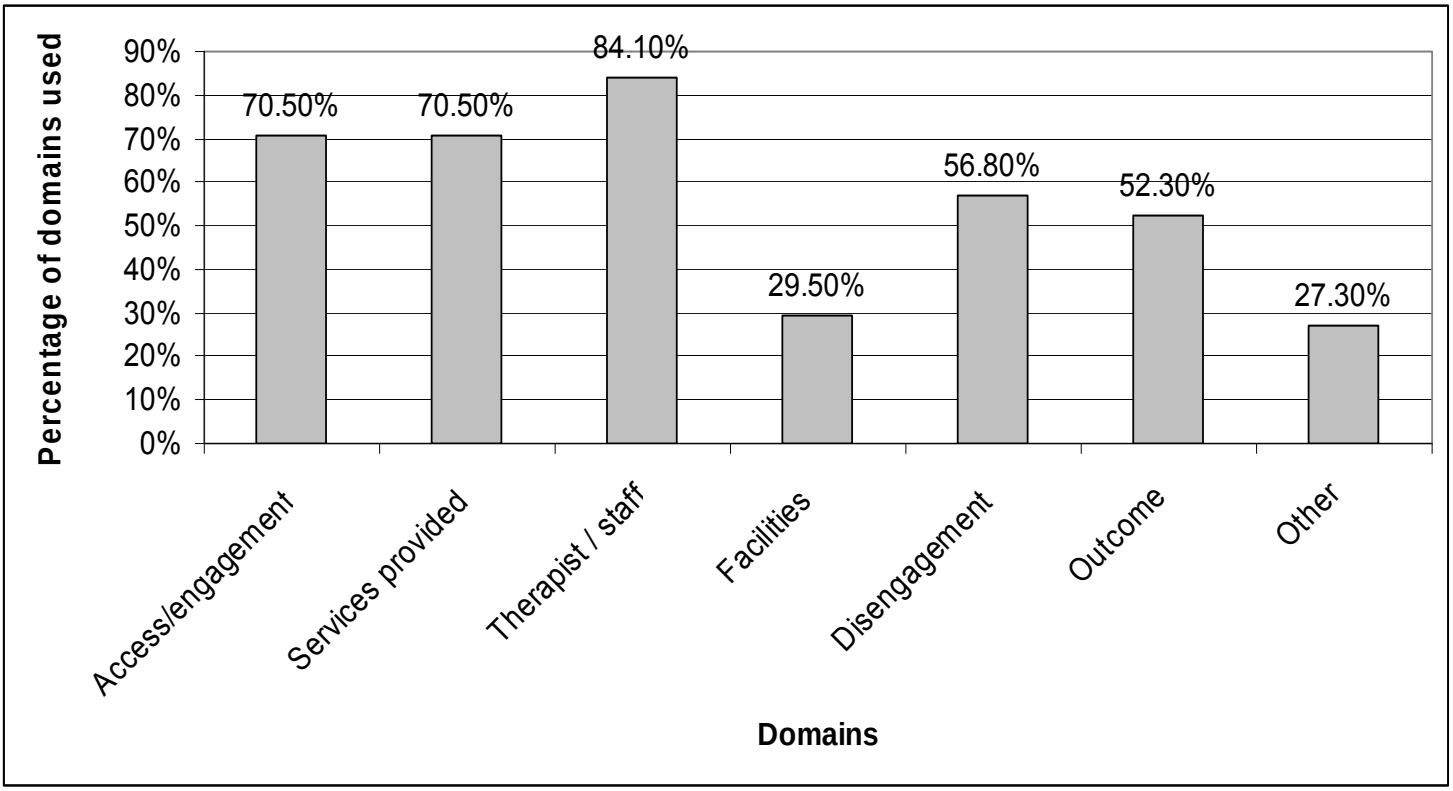
Tool	Setting	Population	Country of Origin	Scale Characteristics			Administration	
				Psychometrics	Length/Item Format	Domains	Mode	Timing
Consumer Assessment of Behavioral Health Services instrument (CABHS) (Eisen et al., 1999; Eisen et al., 2001)	Mental Health setting and addiction services	Adults	United States	Subscales had acceptable (≥0.70) levels of internal consistency. Cronbach's alpha ranged from 0.55 to 0.87. Item correlations (0.23-0.61) ANOVA (discriminant validity) 6 domains significant	54 items	Access/engagement Other Services provided Therapist characteristics	Participants were randomly assigned to one of two modes: mail or telephone.	
Client Satisfaction Questionnaire (CSQ)	Mental health and addiction settings (Hawkins et al., 2008)	Adults – male veterans seeking outpatient general addiction services from large VA medical centre. All participants in abstinence-based outpatient treatment	United States	Cronbach's alpha coefficient = 0.72 Pearson's correlation (r)	Study modified 5 items from CSQ	Outcome Services provided	Self-administered	Participants completed weekly for 8 weeks
	Addiction setting (Leonhard et al., 1997)	Adults	United States		Modified 3 items - 6-point Likert scale	Services provided	Self-administered	Clients completed upon finishing their evaluation and referral
	Mental Health settings (Larsen et al., 1979)	Adults	United States	Coefficient alpha = 0.93 Principle components factor analysis – high factor loading Convergent validity – correlations (r) (significant for a few variables)	8 items with a 4-point Likert scale	Outcome Services provided	Self-administered	Outpatient clients sent questionnaire 4 weeks after admission
	Mental Health settings – outpatient (Hasler et al., 2004)	Adults	United States	Cronbach's alpha = 0.89	3 item short form		Self-administered	Completed between 9-21 months post-treatment
	Mental health and addiction treatment setting (Hawthorne et	Adults	United States		8 items with a 4-point Likert scale	Outcome Services provided	Self-administered	Completed at discharge

Tool	Setting	Population	Country of Origin	Scale Characteristics			Administration	
				Psychometrics	Length/Item Format	Domains	Mode	Timing
	al., 1999)							
	Mental health settings (Greenwood et al., 1999)	Adults	United States		8 items with a 4-point Likert scale	Outcome Services provided	Self-administered	Interviewed either at discharge or one month after admission
Service Satisfaction Scale (SSS)	Mental health and addiction treatment settings (Greenfield, T., 1989, 2004)	Adults	United States	Internal consistency ranged from 0.66 to 0.87 (Cronbach's alpha) Factor analysis (2 primary factors and two secondary subscales) Subscales have high face validity Good Content validity: open-ended questions modestly correlates with close-ended questions: 0.15 – 0.30 Good inter-rater reliability Good criterion validity: correlation with CSQ-8 is 0.7 Test-retest reliability: 75% agreement with inclusion of adjacent-response options Average Internal reliability: 0.88 for the 9-item Manner and Skill subscale and 0.87 for the 8-item Perceived Outcome subscale. 0.74 for Office Procedures and 0.67 for Access. Cronbach's alpha value for SSS-30 total score: 0.93 to 0.96	15, 30 (for mental health participants), 38 items with a 5-point-Likert scale	Access/engagement Facilities Outcome Services provided Therapist characteristics	Self-administered (ballot box), interviews - administered for those with severe mental health problems or their family members	Completed after termination or discharge
	Mental health (Greenfield, T., 1996)	Adults, adolescents	United States	6-month Test-retest reliability for subscales: 0.45 to 0.57	SSS-Case Manager Unknown items	Access/engagement Facilities Outcome Services provided	Self-administered	

Tool	Setting	Population	Country of Origin	Scale Characteristics			Administration	
				Psychometrics	Length/Item Format	Domains	Mode	Timing
						Therapist characteristics		
	Mental health (Greenfield, T., 2008)	Adults	United States		SSS-RES 33 items	Access/engagement Facilities Outcome Services provided Therapist characteristics	Interviewed	30 days, 3 months, 6 months and 12 months following admission
Inpatient Treatment Survey – Patient Version (ITS-P) (Hackman et al., 2007)	Mental health and substance use treatment setting	Adults	United States		4-point Likert scale		Self-administered	
Kentucky Consumer Satisfaction Instrument (KY-CSI) (Howard et al. 2001)	Mental health and addiction treatment setting	Adults	United States	Cronbach's alpha ranges from 0.69 to 0.82. All items exhibited loadings of at least 0.35.	19 items	Access/engagement Disengagement Facilities Outcome Services provided Therapist characteristics	Face-to-face interviews	Completed 24-72 hours after discharge
Patient Satisfaction Survey	Mental health and addiction services (Rosenheck et al., 1997)	Adults – inpatient	United States	Internal consistency = 0.61 - 0.92 (Cronbach's alpha) Correlation between subscales *r* ranged from 0.34 - 0.80	73 items	Access/engagement Disengagement Facilities Services provided Therapist characteristics	Self-administered.	Mailed out after discharge
	Mental health setting (Druss et al., 1999)	Veterans with mental health issues	United States	All subscales had Cronbach's alpha values of 0.60 and above PCA: 2 factors (components)	73 items addressing 14 domains	Access/engagement Disengagement Facilities Services provided Therapist characteristics	Self-administered Mail-out/mail-back method	Completed 6 months after discharge
Treatment Outcome Profile	Mental health setting (Holcomb, et al., 1998)	Adults	United States		9 items on a 5-point Likert scale	Outcome Services provided Therapist characteristics	Self-administered	Completed at discharge
	Mental health	Adults	United States	Internal consistency:	9 items on a 5-point	Outcome	Self-	Completed at

Tool	Setting	Population	Country of Origin	Scale Characteristics			Administration	
				Psychometrics	Length/Item Format	Domains	Mode	Timing
	and substance use treatment setting (Holcomb et al., 1997)			Complete scale = 0.91 (Cronbach's alpha) Patient satisfaction = 0.91 Satisfaction with treatment = 0.87 Satisfaction with staff = 0.83 Satisfaction with environment = 0.85	Likert scale	Services provided Therapist characteristics	administered	discharge

Figure A1: Client Satisfaction / Perception of Care Measurement Tools by Domains and Setting



Appendix B – Advisory Committee and Working Group Members

Name	Organization
Anita Webb*	Canadian Mental Health Association, Kenora Branch
Anne Bowlby*	Ministry of Health and Long-Term Care
Aseefa Sarang (WG)	Across Boundaries
Beata Wezyk	Health Data Branch, Ministry of Health and Long-Term Care
Beth Powell*	Centre for Addiction and Mental Health
Brad Davey	Connex Ontario
Cate Sutherland*	Addictions Centre (Hastings/Prince Edward Counties) Inc.
Claudio Rocca*	Drug and Alcohol Treatment Information System, CAMH
Cynthia Damba*	Toronto Central LHIN
Dan Purdon	G&B House, Owen Sound
Danielle Layman-Pleet*	Ministry of Health and Long-Term Care
David Ross	Veteran Affairs Canada, Operational Stress Injury National Network of Clinics
Dennis James	Centre for Addiction and Mental Health
Donna Rogers*	Four Counties Addictions Services Team (FourCAST)
Donna Strawson	Community Mental Health, Community Care Information Management
Garth Martin*	Consultant; Addiction Consulting Services
Glenn Barnes*	Dave Smith Youth Treatment Centre
Gloria Chaim	Centre for Addiction and Mental Health
Glynis Burkhalter*	Ray of Hope Addiction Services
Harry Whyte	Ray of Hope Addiction Services
Heather Bullock	Centre for Addiction and Mental Health
Jackie McKenzie (WG)	Drug and Alcohol Treatment Information System, CAMH
Jai Mills	Central East LHIN
Jan Hansen	Health Data Branch, Ministry of Health and Long-Term Care
Jan Wighton	Connex Ontario
Janet Durbin*	Centre for Addiction and Mental Health
Janine Luce	Centre for Addiction and Mental Health
Jennifer Blunt (WG)	Portage Ontario
Jennifer Speers*	ADAPT, Halton
Joanna Henderson*	Centre for Addiction and Mental Health
Kathy Martin (WG)	Manitoulin Health Centre
Laura Mills (WG)	Pine River Institute
Linda Sibley*	Addiction Services of Thames Valley
Loïs Alexanian*	Maison Fraternité, Ottawa
Lucy Hume*	Jean Tweed Centre
Mahwesh Siddiqi	Toronto Central LHIN
Marianne Pope	Addiction Services of Thames Valley
Mike O'Shea*	North East LHIN
Nancy Bradley	Jean Tweed Centre
Nandini Saxena	Centre for Addiction and Mental Health
Nila Sinnatamby	Ministry of Health and Long-Term Care
Olga Likhodi (WG)	Drug and Alcohol Treatment Information System, CAMH
Patricia Syms Sutherland	Waterloo Wellington LHIN

Name	Organization
Patty Chapman	South West LHIN
Paul McGary*	Lakeridge Health Corporation
Paul Welsh*	Rideauwood Addiction and Family Services
Peter Selby	Centre for Addiction and Mental Health
Rob Moore	Centre for Addiction and Mental Health
Ruth Stoddart*	Ministry of Health and Long-Term Care
Sarah Beland	Consumer Representative
Susan Marshall*	Community Mental Health Common Assessment Project
Susy Cannon	Jean Tweed Centre
Suzanne Robinson	Central West LHIN
Sylvie Guenther	Centre for Addiction and Mental Health
Wendy Prieur	North Bay Recovery Home
Ying Jiang	Ministry of Health and Long-Term Care

*Indicates members are in both the Advisory Committee and the project Working Group
WG = member of smaller Working Group only

Unique Agency and Program Code

Ontario Perception of Care Tool for Mental Health and Addictions (OPOC-MHA)

In terms of services received, which category best describes you?

☐ Client with mental health, substance use, and/or gambling-related problems (please complete Sections **A and C**)

☐ Client who is a family member/significant other/supporter of a person with mental health, substance use, and/or gambling-related problems (please complete Sections **A and C**)

☐ Family member/significant other/supporter of a person with mental health, substance use, and/or gambling-related problems but **you are NOT** a registered client (please complete Sections **B and C**)

Please note: If you are family member/significant other/supporter of a person with mental health, substance use, and/or gambling-related problems, please respond to these questions based on the services **you** have received rather than on the services your family member/friend has received.

Section A

Please complete if you are either a client with mental health, substance use, and/or gambling-related problems **OR** if you are a client who is a family member/significant other/supporter of a person with mental health, substance use, and/or gambling-related problems.

Please indicate the extent to which you agree or disagree with each of the following statements about your treatment/support experience.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not applicable
Access/Entry to Services					
1. The wait time for services was reasonable for me.					
2. Services were available at times that were good for me.					
3. The location of services was convenient for me.					
4. When I had appointments I was seen on time.					
5. From the start I felt welcome.					
6. I received enough information about the programs and services available to me.					
Services Provided					
7. I had a good understanding of my treatment and support plan.					
8. Staff and I agreed on my treatment and support plan.					
9. Responses to my crises or urgent needs were provided when needed.					
10. I received clear information about my medication (i.e., side effects, purpose, etc.)					
11. I was referred or had access to other services when needed (including alternative approaches).					
Participation/Rights					
12. I was involved as much as I wanted to be in decisions about my treatment and support.					
13. I understand how to make a formal complaint to this organization.					
14. I understood that I could decline treatment activities if I wanted to.					
15. I was assured my personal information was kept confidential.					
16. I felt comfortable asking questions about my treatment and support, including medication.					

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not applicable
Therapists/Support Workers/Staff					
17. I found staff knowledgeable and competent.					
18. I was treated with respect by program staff.					
19. Staff were sensitive to my cultural needs (e.g., language, ethnic background, race).					
20. Staff believed I could change and grow.					
21. Staff understood and responded to my needs and concerns.					
Environment					
22. Overall, I found the facility welcoming, inclusive, and comfortable (e.g., entrance, waiting room, décor, posters, your room if applicable).					
23. Overall, I found the program space clean and well maintained (e.g., meeting space, bathroom, and your room if applicable).					
24. I was given private space when discussing personal issues with staff.					
25. I felt safe in the facility at all times.					
26. The program accommodated my disability-related needs.					
Discharge/Leaving the Program					
27. Staff helped me develop a plan for when I leave the program.					
28. I have a plan that will meet my needs after I leave the program.					
29. Staff helped me identify where to get support after I leave the program.					
Recovery/Outcome					
30. The services I have received have helped me better **understand** my personal strengths and challenges.					
31. The services I have received have helped me **deal more effectively** with my life's challenges.					
Service Quality					
32. I think the services provided here are high quality.					
33. If a friend were in need of similar help I would recommend this service.					

****Please complete only if you are receiving services in a residential or inpatient program**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not applicable
34. There were enough activities of interest to me during free time.					
35. Rules or guidelines concerning contact by my family and friends were appropriate to my needs.					
36. The layout of the facility was suitable for visits by my family and friends (e.g., privacy, comfort level).					
37. The area in and around my room was quiet at night.					
38. The quality of the food met my needs.					
39. My special dietary needs were met (e.g., diabetic, halal, vegetarian, kosher).					

Please go to Section C and complete

Section B

Please complete if you are a family member/significant other/supporter of a person with mental health, substance use, and/or gambling-related problems but **you are NOT** a registered client

Please note: If you are family member/significant other/supporter, please respond to these questions based on the services **you** have received rather than on the services your family member or friend has received.

Please indicate the extent to which you agree or disagree with each of the following statements.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not applicable
Access/Entry to Services					
1. Services were available at times that were good for me.					
2. The location of services was convenient for me.					
3. From the start I felt welcome.					
4. I received enough information about the programs and services available to me.					
Services Provided					
5. Responses to my crises or urgent needs were provided when needed.					
6. I was referred or had access to other services when needed (including alternative approaches).					
Participation/Rights					
7. I understand how to make a formal complaint to this organization.					
Therapists/Support Workers/Staff					
8. I found staff knowledgeable and competent.					
9. I was treated with respect by program staff.					
10. Staff were sensitive to my cultural needs (e.g., language, ethnic background, race).					
11. Staff understood and responded to my needs and concerns.					
Environment					
12. Overall, I found the facility welcoming, inclusive, and comfortable (e.g., entrance, waiting room, décor, posters, your room if applicable).					
13. Overall, I found the program space clean and well maintained (e.g., meeting space, bathroom, your room if applicable).					
14. I was given private space when discussing personal issues with staff.					
15. I felt safe in the facility at all times.					
16. The program accommodated my disability-related needs.					
Service Quality					
17. I think the services provided here are high quality.					
18. If a friend were in need of similar help I would recommend this service.					

Section C

Please complete the following questions; these questions ask for some details about you in order to help organize the information by sub-group for quality improvement purposes. **You may answer only the questions that you feel comfortable answering, and you may stop at any time.**

1. What is your gender? (please check one box)
   - ☐ Male
   - ☐ Female
   - ☐ Other, please describe: _____

2. Age (please check one box):
   - ☐ 12 and under
   - ☐ 13 – 18 years
   - ☐ 19 – 25 years
   - ☐ 26 – 34 years
   - ☐ 35 – 44 years
   - ☐ 45 – 54 years
   - ☐ 55 – 64 years
   - ☐ 65+ years

3. Which population group best describes you? (please check one box and then proceed to the more detailed question below that corresponds to your answer)

   - ☐ White → please go to question 3a below
   - ☐ First Nations/Aboriginal Ancestry → please go to question 3b below
   - ☐ Asian → please go to question 3c below
   - ☐ Black → please go to question 3d below
   - ☐ Middle Eastern → please go to question 3e below
   - ☐ Latin American → please go to question 3f below
   - ☐ Multiple or mixed
   - ☐ Other, please describe. _____

   a. If your population group is **White**, which of the following best describes your background?
      - ☐ North European (e.g., Danish, Norwegian, Swedish)
      - ☐ Central-Western European (e.g., English, Welsh, Scottish, Irish, German, Dutch, Czech, Slovak)
      - ☐ South European (e.g., Italian, Spanish, Portuguese, Greek, French, Turkish)
      - ☐ East European (e.g., Bulgarian, Ukrainian, Polish, Romanian, Russian, Slovenian, Serbian, Croat)
      - ☐ North American (e.g., Canadian, American)
      - ☐ Other, please describe. _____

   b. If your population group is **First Nations/Aboriginal Ancestry**, which of the following best describes your background?
      - ☐ Aboriginal Status
      - ☐ Aboriginal Non-Status
      - ☐ Métis
      - ☐ Inuit
      - ☐ Other. Please describe. _____

c. If your population group is **Asian**, which of the following best describes your background?
   - ☐ East Asian (e.g., Chinese, Japanese, Korean)
   - ☐ South Asian (e.g., Indian, Pakistani, Afghani, Sri-Lankan)
   - ☐ South-East Asian (e.g., Filipino, Malaysian)
   - ☐ Other. Please describe. _____

d. If your population group is **Black**, which of the following best describes your background?
   - ☐ Black African (e.g., Ghanaian, Somali, Kenyan, Ethiopian)
   - ☐ Black Caribbean (e.g., Trinidadian, Jamaican)
   - ☐ Black American
   - ☐ Other. Please describe. _____

e. If your population group is **Middle Eastern**,, which of the following best describes your background?
   - ☐ Arabic (e.g., Saudi Arabia, Jordan)
   - ☐ Northern African (e.g., Egyptian, Libyan)
   - ☐ West Asian (e.g., Syrian, Lebanese, Iraqi, Iranian, Israeil)
   - ☐ Other. Please describe. _____

f. If your population group is **Latin American**, which of the following best describes your background?
   - ☐ South American (e.g., Argentinean, Chilean, Peruvian, Columbian)
   - ☐ Central American (e.g., Mexican)
   - ☐ Caribbean
   - ☐ Other. please describe. _____

4. Which of the following best describes your sexual orientation? (please check one box):
   - ☐ Asexual or non sexual
   - ☐ Bisexual
   - ☐ Gay
   - ☐ Heterosexual or straight
   - ☐ Lesbian
   - ☐ Not sure or Questioning
   - ☐ Queer
   - ☐ Two-spirited
   - ☐ Other, please describe. _____

5. If you identified yourself as being a family member/significant other/supporter, please note your relationship to the client: (please check one box). If you are not a family member/significant other/supporter, please go to question 6.

   - ☐ Parent
   - ☐ Brother/sister
   - ☐ Extended family
   - ☐ Friend
   - ☐ Spouse/Partner/Significant other
   - ☐ Service Provider/Peer Helper
   - ☐ Other, please describe: _____

6. If you are a client receiving services, what are the formal conditions of treatment (if any)? If more than one, choose the most appropriate. If you are a family member/significant other/friend, please go to question 7.

   ☐ None
   ☐ Mandated by a medical certificate or court
   ☐ Choice between treatment or jail
   ☐ Condition of probation/parole
   ☐ Child welfare authority (e.g., Children's Aid Society)
   ☐ Condition of employment
   ☐ Condition of school
   ☐ Condition of family
   ☐ Other. Please explain: _____
   ☐ Don't know

7. Timing of questionnaire completion in relation to services received? (please check one box)
   ☐ Accepted treatment/support but have not yet started
   ☐ Treatment/support is in progress
   ☐ Discharged/or close to discharge
   ☐ Services received after discharge
   ☐ Other. Please describe: _____

8. Please comment on aspects of your experience with this treatment/support service that were particularly helpful to you.

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

9. Please comment on aspects of your experience with this treatment/support service that you feel could be improved.

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

Thank You for Supporting this Feedback Process!!!

Appendix D – Pilot Site Descriptions

Across Boundaries

Across Boundaries provides a range of supports and services to people from marginalized communities including immigrants and refugees who are experiencing mental health problems. The centre provides a holistic approach to dealing with mental health problems recognizing the interdependence of the spiritual, emotional, mental, physical, social, cultural, linguistic, economic and broader environmental aspects of health that affect the well being of people of color. Along with mental health problems, clients are challenged with a unique set of issues that are culturally, politically and socially specific to the country of their origin. Repeatedly, in the traditional Western medical field, these issues are not factored in with diagnosis and treatment of clients. It is Across Boundaries' (AB) commitment to serve a myriad of cultures and people. AB piloted the OPOC-MHA in three of their programs including: Adult Mental Health, Mental Health and Justice and, Youth program. These outpatient services work will approximately 210 clients per month.

ADAPT Youth Program

ADAPT helps their clients and/or family members make changes with respect to alcohol, drug or gambling issues is based on the best available knowledge and research. Their approach to treatment involves the use of a range of evidence based treatment modalities that conform to best practices. Although best practices are never static and evolve over time to reflect ongoing research, key components of the approach to treatment include the Stages of Change model, Motivational Interviewing and Harm Reduction. ADAPT's client centered treatment model focuses on individual strengths and needs and results in treatment plans tailored to individual circumstances. It is important to note that clients and families are actively involved in determining their own recovery and care. At ADAPT they have developed a number of specialized programs to meet the needs of underserved populations and to fill gaps in service. This process involves working in an integrated way with a variety of service partners in the community. Inter-organizational collaboration of this type allows for program development that is accessible and relevant to the unique circumstances of their various service users.

ADAPT piloted the OPOC-MHA in three of their programs including: Days Ahead program, a school-based program and, a transitional age group. These outpatient services work with approximately 65 clients per month.

Addiction Services of Thames Valley (ADSTV)

Addiction Services of Thames Valley is a community based service. They operate in co-operation with local addiction and health care agencies, through the Southwest Local Health Integration Network. There are eight programs that are operated by ADSTV. Through these programs, ADSTV offer assessment, counselling, support, education, employment and housing services for a wide diversity of individuals involved with substance abuse or gambling problems. They offer services in London, Strathroy (Middlesex), St. Thomas (Elgin), and Woodstock, Ingersoll and Tillsonburg (Oxford). ADSTV piloted the OPOC-MHA in six of their programs including: Substance Use, Problem Gambling, Heartspace, Supportive Housing, Fresh Start and, Drug Treatment Court. These outpatient services work with approximately 637 clients per month.

Canadian Mental Health Association – Kenora Branch (CMHA)

CMHA-Kenora is dedicated to providing comprehensive and responsive adult mental health services that promote individual recovery, access to effective and relevant services and equal opportunity to housing employment and community activities. They believe in the values of individual choice, dignity of the person, and the right to participate fully in treatment. CMHA-Kenora works to promote understanding of mental illness through public education and community partnerships. CMHA-Kenora piloted the OPOC-MHA in four of their programs including: Counselling and Treatment program, Case Management, ACTT and, Housing Services. These outpatient services work with approximately 120 clients per month.

Canadian Mental Health Association – Halton Branch (CMHA)

In cooperation with Ontario Division and the National Office of the purpose of the Canadian Mental Health Association, Halton Region Branch is to develop and implement a coordinated citizen movement to ensure:

- The promotion of mental health through advocacy and on-going public education programs
- The improvement of attitudes towards mental illness and the encouragement of community acceptance, understanding and responsibility for people experiencing mental health problems
- The identification of needs which remain unmet by the existing community network of services and, in collaboration with other agencies and associations, both professional and lay, to promote the development of practical programs designed to prevent mental health problems and to offer support to those with mental health problems
- The encouragement of the consumer group to voice their opinions about mental health concerns, issues, and existing or desirable services
- The active involvement of the general public and community mental health resources in order to attain these objectives

CMHA-Halton piloted OPOC-MHA in five of their programs including: Community Support Program, Dual Diagnosis, Concurrent Disorders, 6-bed inpatient, and the Justice program. These services work with approximately 175 clients per month.

Canadian Mental Health Association – Grey Bruce Branch (CMHA)

CMAH-Grey Bruce provides programs and services that support the resilience and recovery of people experiencing mental disorders, and to enhance, maintain, and promote the mental and emotional health of all individuals in Grey and Bruce Counties. CMHA-Grey Bruce piloted the OPOC-MHA in four of their programs including: Intensive case management, Court support – case management, Leisure links, and Brief counselling. These services work with approximately 410 clients per month.

Dave Smith Youth Treatment Centre

Dave Smith Youth Treatment Centre is Eastern Ontario's only non-profit, residential and community-based agency dedicated to helping youth (13-21) overcome substance abuse issues and other related challenges to achieve a healthier lifestyle. Located in the Ottawa region, programs are available free of charge to help youth and their families progress through the

treatment continuum, all in a supportive, safe and caring environment. Dave Smith Youth Treatment Centre piloted the OPOC-MHA in two of their programs including: Adolescent and Non-adolescent Community Reinforcement Approach and the Family Program. These services work with approximately 51 clients per month.

Four Counties Addiction Services Team (Fourcast)

Fourcast is a community addiction treatment agency offering professional counselling services for anyone concerned about substance use or problem gambling, whether it is for them or someone they care about. They provide community addiction treatment programs in the counties of Peterborough, Northumberland, Haliburton and the City of Kawartha Lakes. Their goal is to support our clients by empowering them to make their own choices in an open, non-judgmental atmosphere. Their focus is on encouraging positive change. Fourcast piloted the OPOC-MHA in all of their outpatient programs which includes: Community Withdrawal Management, Problem Gambling, Family Program, etc. These outpatient services work with approximately 420 clients per month.

G&B House

G&B House is a Residential Support and Recovery Home that provides residential support to men who have substance abuse problems. Their role is to offer individual and team skills to support and encourage residents to empower themselves in becoming responsible for their own personal recovery. G&B House piloted the OPOC-MHA in their Residential Services for Men program. This program works with approximately 20 clients per month.

Grey Bruce Health Services

Grey Bruce Health Services in Owen Sound provides regional specialty services across Grey and Bruce Counties. Their rural hospitals located in Lion's Head, Markdale, Meaford, Southampton and Wiarton offer a wide range of primary and ambulatory care services to their communities and to our many seasonal visitors. Grey Bruce Health Services piloted the OPOC-MHA in six of their programs which including: Withdrawal Management, Day treatment, Brief Counselling, Case Management, ACTT, and Community Outreach Treatment team. These programs work with approximately 365 clients per month.

Hope Grey Bruce Mental Health and Addiction Services

The Corporation's mental health counselling programs serve as the base of operations for two multi-agency community mental health teams: the South Grey Community Mental Health Team (based in Markdale) and the Central Grey-Bruce Community Mental Health Team, based in Hanover.

Jean Tweed Treatment Centre

Jean Tweed is a leading community-based substance abuse and problem gambling agency for women in Ontario. The Centre offers a wide range of services including residential and day programming; two day programs now exist – one 3 weeks and one 7 weeks for mothers with young children. They also offer out-patient programs including family and trauma counselling, and outreach services in various locations across the city for pregnant and parenting women. There is also a second outreach service to women who have mental health and substance use problems as well as involvement in the criminal justice system. Jean Tweed piloted the OPOC-MHA in two of their programs including: Day Program and Mom and Kids. These outpatient services work with approximately 40 clients per month.

Maison Fraternité

Maison Fraternité is a not for profit community agency subsidized mainly by the Ministry of Health and Long-Term Care of Ontario. This organization is a multifunctional centre with adult intensive drug rehab programs inpatient recovery and outpatient services for male and female substance abusers. Services are offered in French only. A separate long-term residence for women is provided. Youth services for young people and families are offered on an outpatient basis. Maison Fraternité piloted the OPOC-MHA in three of their programs including: Adolescent program, Outpatient adult programs (includes individual services and the family member program), and their Residential program. These services work with approximately 415 clients per month.

Manitoulin Health Centre - Manitoulin Withdrawal Management Services

The MCWMS provides support to clients voluntarily withdrawing from alcohol and/or other drugs. Clients may be residing at their home, the home of a significant other, or in

another safe setting. MCWMS staff members also provide information and assistance to guide the support provider(s) supervising the "in-home" care. MCWMS offers three main components in managing withdrawal: intake and assessment, withdrawal management, and continuing care. Assessment/treatment planning services and case management are available.

Nipissing Detoxification and Substance Abuse Programs (NDSAP)

Provides short term residential non-medical care for males and females, age 16 and over, who are intoxicated, in withdrawal, or at risk or relapse from alcohol and/or other drugs, a 21-day resident program, community treatment services, and a 15-day program. The clients and/or family members are provided with motivational counselling, needs assessment, education, and referral to appropriate treatment, rehabilitation, and/or mutual aid resources, in order that the individual may lead a chemical-free life. It also serves as a community resource for alcohol/drug information. NDSAP piloted the OPOC-MHA in three of their programs including: Residential Treatment, Withdrawal Management and, Concurrent Outreach Program. These services work with approximately 31 clients per month.

Pine River Institute

Pine River Institute is a residential treatment centre and outdoor leadership experience for youth 13 to 19 struggling with mental health issues, and specifically substance abuse. Their family lives are in uproar. Their personal and academic lives are in jeopardy. These are kids who have exhausted other interventions, and need a new, creative approach. That new approach is available in a peaceful area outside of Toronto, where family-centered wilderness, therapeutic, and academic programs come together in a unique, holistic treatment and educational model. At Pine River, self-destructive behaviours are addressed. Furthermore, math and life skills are taught. Pine River piloted the OPOC-MHA in one of their programs including: Youth Residential Program. This service works with approximately 30 clients per month.

Pinewood Centre

Pinewood Centre has specialized in addiction counselling since 1967. They provide a range of treatment services to people who are affected by substance use and gambling. Their

services are continually evolving in response to community needs and provincial directions. They are committed to assisting clients through the process of change and believe that each person has a right to make choices regarding his/her treatment plan. Pinewood views the treatment process as collaborative, meaning that they work in partnership with each person's strengths and personal goals. This process includes establishing both short term and long term goals that are realistic and obtainable. Pinewood piloted the OPOC-MHA in four of their programs including: Residential Treatment, Community Outpatient, Withdrawal Management and, Problem Gambling. These services work with approximately 185 clients per month.

Portage Ontario

Portage offers comprehensive services within a continuum of care model aimed at helping users to overcome addiction problems. Its programs, which are based on the therapeutic community approach, encourage personal growth and enable residents to transform their lives. The Portage Elora treatment centre has a 52-bed capacity in Guelph, Ontario and provides substance abuse treatment for males and females in two gender-separate programs. The residential rehabilitation centre serves youth referred by parents, schools, family physicians, hospitals, other addiction-treatment and youth-serving agencies, as well as through Youth Justice and the Children's Aid Society. Portage piloted the OPOC-MHA in one of their programs including: Residential Youth Program. This service works with approximately 30 clients per month.

Ray of Hope Youth Addictions Services

Ray of Hope offers addiction treatment programs which assist youth in the Waterloo and Wellington regions on their journey to overcoming addiction and substance abuse. We provide three levels of treatment to youth, as well as support to parents/guardians, with the ultimate goal of helping youth return to a life free of addiction. Ray of Hope provides parents and guardians with an opportunity to learn and grow with others through weekly parent support groups. These groups offer knowledge about addictions, self-care and parenting approaches for dealing with at-risk youth. Parents are encouraged to participate in a support group until their youth has successfully completed their treatment program. Ray of Hope piloted the OPOC-MHA in four of their programs including: Residential Treatment, Day

Treatment, Community Treatment, and Parent Support Group. These services work with approximately 100 clients per month.

Red Lake: Community Counselling and Addiction Services

This program runs out of the Red Lake Margaret Cochenour Memorial Hospital. Programs include Adult Mental Health Counseling (for people 18+; crisis intervention and counselling for adults experiencing mental health problems), Case Management Services (for people 18+; to increase independence and quality of life for those living with a serious mental illness). Substance Abuse and Problem Gambling Services (for people 12+; assessment, community-based treatment, referral to residential treatment programs, and aftercare support for those with problems related to alcohol or drug use or gambling), and Community Education (a variety of educational workshops are available to the residents of Red Lake and Ear Falls). Red Lake piloted the OPOC-MHA in four of their programs including: Mental Health Counselling, Mental Health Case Management, Substance Use and, Problem Gambling. These outpatient services work with approximately 50 clients per month.

Rideauwood Addiction and Family Service

Founded in 1976, Rideauwood Addiction and Family Service is a Registered Charity serving adults, adolescents and family members. They provide non-residential, group and individual treatment, public education, training and consultation. Rideauwood also has an extensive volunteer program that provides essential services to the agency. Rideauwood piloted the OPOC-MHA in two of their programs including the Parent program and the Family Member program. These outpatient services work with over 100 families per month.

Sunnybrook Hospital – Inpatient Mental Health program

Sunnybrook is a fully affiliated teaching hospital of the University of Toronto, evolving to meet the needs of Toronto's growing community. Sunnybrook has established itself as the largest single-site hospital in Canada, with four strategic areas of focus: heart and stroke, cancer, trauma, emergency and critical care, and the women and babies program. Sunnybrook piloted the OPOC-MHA in both their inpatient and outpatient programs.

The Child, Family, and Youth Program (CAMH)

The Child, Youth and Family Program at the Centre for Addiction and Mental Health is committed to client-centred care, providing intensive and specialized services for young people with mental health and/or addiction problems. The professional, experienced health care team from the program includes psychiatrists, nurses, psychologists, social workers, child and youth workers, therapists and others. They work with and welcome clients from all backgrounds and cultures. In addition to their clinical services, they are involved in research, education, prevention and health promotion for child and youth mental health and addictions. The Child, Youth and Family Program at CAMH piloted the OPOC-MHA in one of their programs including: Outpatient Addiction/Concurrent Disorders Program. This outpatient service works with approximately 40 clients per month.

Appendix E – Client Satisfaction Questionnaire (CSQ-8)

Please help us improve our program by answering some questions about the services you have received. We are interested in your honest opinion, whether it is positive or negative. Please answer all of the questions. We also welcome your comments and suggestions. Thank you very much; we really appreciate your help.

CIRCLE YOUR ANSWER

1. **How would you rate the quality of services you received?**

4	3	2	1
Excellent	***Good***	***Fair***	***Poor***

2. **Did you get the kind of services you wanted?**

4	3	2	1
No, definitely not	***No, not really***	***Yes, generally***	***Yes, definitely***

3. **To what extent has our program met your needs?**

4	3	2	1
Almost all of my needs have been met	***Most of my needs have been met***	***Only a few of my needs have been met***	***None of my needs have been met***

4. **If a friend were in need of similar help, would you recommend our program to him or her?**

4	3	2	1
No, definitely not	***No, not really***	***Yes, generally***	***Yes, definitely***

5. **How satisfied are you with the amount of help you have received?**

4	3	2	1
Quite dissatisfied	***Indifferent or mildly dissatisfied***	***Mostly satisfied***	***Very Satisfied***

6. **Have the services you received helped you deal more effectively with your problems?**

4	3	2	1
Yes, they helped a great deal	***Yes, they helped somewhat***	***No, they really did not help***	***No, they seemed to make things worse***

7. **In an overall, general sense, how satisfied are you with the service you have received?**

4	3	2	1
Very satisfied	***Mostly satisfied***	***Indifferent or mildly dissatisfied***	***Quite dissatisfied***

8. **If you were to seek help again, would you come back to our program?**

4	3	2	1
No, definitely not	***No, I don't think so***	***Yes, I think so***	***Yes, definitely***

Note: Reprinted with permission from C.C. Attkisson (1991). The CSQ was developed by C.C. Attkisson et al. at the University of California, San Francisco, Department of Psychiatry. Use for non-profit research and evaluation purposes is permitted. All other uses by prior permission and user fee, without exception.

Appendix F – Descriptive Statistics Tables

Table F1. Item Frequency Distribution

ITEM	Strongly disagree		Disagree		Agree		Strongly agree		Total	
	n	%	n	%	n	%	n	%	n	%
Item1 AE: Wait time reasonable	32	1.9%	101	6.1%	656	**39.5%**	873	**52.5%**	1662	100.0%
Item2 AE: Services available	18	1.0%	67	3.8%	743	**42.4%**	924	**52.7%**	1752	100.0%
Item3 AE: Location convenient	21	1.2%	122	7.0%	727	**41.7%**	874	**50.1%**	1744	100.0%
Item4 AE: Seen on time on appointment	9	.6%	36	2.2%	595	**36.7%**	980	**60.5%**	1620	100.0%
Item5 AE: Felt welcome	8	.5%	26	1.5%	548	**31.6%**	1150	**66.4%**	1732	100.0%
Item6 AE: Information about programs	22	1.3%	61	3.5%	725	**41.9%**	922	**53.3%**	1730	100.0%
Item7 SP: Understand treatment	15	.9%	54	3.4%	744	**46.6%**	783	**49.1%**	1596	100.0%
Item8 SP: Agreement on treatment	11	.7%	53	3.4%	687	**44.5%**	792	**51.3%**	1543	100.0%
Item9 SP: Timely response to crises	19	1.2%	56	3.7%	650	**42.4%**	807	**52.7%**	1532	100.0%
Item10 SP: Info about medication	16	1.6%	79	7.8%	457	**45.2%**	460	**45.5%**	1012	100.0%
Item11 SP: Referral to other services	24	1.7%	91	6.3%	685	**47.7%**	636	**44.3%**	1436	100.0%
Item12 PR: Involved in decisions re treatment	20	1.3%	52	3.3%	640	**41.0%**	850	**54.4%**	1562	100.0%
Item13 PR: How to make formal complaint	65	4.2%	329	21.3%	625	**40.4%**	528	**34.1%**	1547	100.0%
Item14 PR: Right to decline treatment activity	35	2.2%	84	5.4%	670	**43.0%**	770	**49.4%**	1559	100.0%
Item15 PR: Personal Info Confidentiality	14	.9%	19	1.2%	499	**30.5%**	1104	**67.5%**	1636	100.0%
Item16 PR: Felt comfortable asking Q	15	1.0%	37	2.4%	561	**36.0%**	946	**60.7%**	1559	100.0%
Item17 ST: Staff knowledgeable	7	.4%	16	.9%	586	**33.9%**	1122	**64.8%**	1731	100.0%
Item18 ST: Treated with respect	7	.4%	23	1.3%	506	**29.2%**	1196	**69.1%**	1732	100.0%
Item19 ST: Staff sensitive to cultural needs	7	.5%	26	2.0%	465	**35.4%**	817	**62.1%**	1315	100.0%
Item20 ST: Staff believed in Change	5	.3%	12	.8%	548	**34.9%**	1004	**64.0%**	1569	100.0%
Item21 ST: Staff understandable and responsive	6	.4%	37	2.2%	597	**35.1%**	1060	**62.4%**	1700	100.0%

ITEM	Strongly disagree		Disagree		Agree		Strongly agree		Total	
	n	%	n	%	n	%	n	%	n	%
Item22 FE: Facility welcoming	15	.9%	44	2.6%	680	**40.6%**	936	**55.9%**	1675	100.0%
Item23 FE: Facility clean & well maintained	13	.8%	41	2.5%	644	**38.5%**	974	**58.3%**	1672	100.0%
Item24 FE: Private space for discussions	5	.3%	31	1.9%	535	**32.8%**	1062	**65.0%**	1633	100.0%
Item25 FE: Felt safe	18	1.1%	52	3.1%	536	**32.4%**	1046	**63.3%**	1652	100.0%
Item26 FE: Disability needs accommodated	8	.9%	30	3.5%	360	**42.0%**	459	**53.6%**	857	100.0%
Item27 DP: Staff helped develop plan	20	1.9%	81	7.7%	457	**43.6%**	491	**46.8%**	1049	100.0%
Item28 DP: Have proper plan	18	1.7%	99	9.1%	483	**44.4%**	488	**44.9%**	1088	100.0%
Item29 DP: Staff informed me where to get support	19	1.7%	85	7.8%	445	**40.6%**	547	**49.9%**	1096	100.0%
Item30 RO: Aware of personal strengths	9	.6%	42	2.7%	636	**41.2%**	858	**55.5%**	1545	100.0%
Item31 RO: Deal effectively with challenges	13	.8%	59	3.8%	605	**39.5%**	856	**55.8%**	1533	100.0%
Item32 SQ: Services high quality	10	.6%	53	3.1%	625	**36.5%**	1026	**59.9%**	1714	100.0%
Item33 SQ: Would recommend services	16	.9%	28	1.6%	512	**30.0%**	1151	**67.4%**	1707	100.0%

Table F2. Item Frequency Distribution (Inpatient/Residential services)

	Strongly disagree		Disagree		Agree		Strongly agree		Total	
	n	%	n	%	n	%	n	%	n	%
Item34 RS: Enough activities of interest	21	7.1%	67	22.6%	119	**40.2%**	89	**30.1%**	296	100.0%
Item35 RS: Proper rules re outside contacts	11	3.8%	30	10.3%	126	**43.3%**	124	**42.6%**	291	100.0%
Item36 RS: Facility suitable for visits	8	3.0%	28	10.6%	118	**44.7%**	110	**41.7%**	264	100.0%
Item37 RS: Area quiet at night	12	4.1%	29	9.9%	120	**41.1%**	131	**44.9%**	292	100.0%
Item38 RS: Good food	14	4.8%	19	6.5%	91	**31.0%**	170	**57.8%**	294	100.0%
Item39 RS: Dietary needs met	6	3.7%	12	7.4%	57	**35.0%**	88	**54.0%**	163	100.0%

Appendix G – Factor Analysis Output

Table G1. Variance Explained by Four Factors Principal Axes Factoring and Promax Rotation on Spearman Correlation Matrix

Factor	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total
1	18.236	56.986	56.986	16.959
2	1.151	3.598	60.584	15.704
3	.964	3.013	63.597	12.396
4	.609	1.903	65.500	11.355

Extraction Method: Principal Axis Factoring.
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table G2. Variance Explained by Four Factors Principal Axes Factoring and Promax Rotation on Polychoric Correlation Matrix

Factor	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total
1	21.928	68.525	68.525	20.771
2	1.153	3.605	72.129	15.176
3	.820	2.563	74.692	18.878
4	.593	1.854	76.547	14.537

Extraction Method: Principal Axis Factoring.
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table G3. Communalities of the Items – Four Factor Solution obtained by PAF based on Polychoric, Spearman, Pearson and Kendall Correlations

	Polychoric	Spearman	Pearson	Kendall
Item1	0.622	.550	.477	.527
Item2	0.866	.757	.623	.735
Item3	0.532	.498	.418	.471
Item4	0.679	.624	.586	.604
Item5	0.762	.625	.656	.617
Item6	0.773	.618	.650	.605
Item7	0.763	.653	.669	.639
Item8	0.804	.694	.692	.681
Item9	0.786	.680	.680	.664
Item10	0.636	.556	.544	.535
Item11	0.711	.615	.602	.591
Item12	0.813	.688	.669	.673
Item13	0.636	.495	.508	.453
Item14	0.692	.613	.590	.580
Item15	0.782	.633	.672	.626
Item16	0.826	.705	.727	.691
Item17	0.829	.678	.747	.668
Item18	0.784	.693	.721	.683
Item19	0.764	.658	.685	.648
Item20	0.723	.634	.634	.625
Item21	0.871	.746	.755	.738
Item22	0.689	.589	.598	.574
Item23	0.707	.599	.648	.584
Item24	0.826	.684	.703	.674
Item25	0.771	.661	.669	.638
Item27	0.843	.769	.728	.747
Item28	0.895	.774	.733	.753
Item29	0.854	.767	.723	.744
Item30	0.807	.678	.758	.664
Item31	0.803	.689	.748	.672
Item32	0.830	.682	.789	.665
Item33	0.816	.657	.765	.647

Table G4. Pattern Matrix after Promax Rotation (loadings <0.35 not presented**) using Polychoric and Spearman Correlations**

	PAF Factor Loadings based on Polychoric Correlations				PAF Factor Loadings based on Spearman correlations			
OPOC- MHA Items	1	2	3	4	1	2	3	4
AE Item1: The wait time for services was reasonable for me.		.837					.805	
AE Item2: Services were available at times that were good for me.		.971					.956	
AE Item3: The location of services was convenient for me.		.522					.566	
AE Item4: When I had appointments, I was seen on time.		.570					.586	
AE Item5: From the start I felt welcome.	.479	.418					.415	
AE Item6: I received enough information about the programs and services available to me.	.381	.362					.347	
SP Item7: I had a good understanding of my treatment and support plan.			.676			.786		
SP Item8: Staff and I agreed on my treatment and support plan.			.626			.774		
SP Item9: Responses to my crises or urgent needs were provided when needed.			.401			.432		
SP Item10: I received clear information about my medication (i.e., side effects, purpose, etc.)			.688			.717		
SP Item11: I was referred or had access to other services when needed (including alternative approaches).			.528			.595		
PR Item12: I was involved as much as I wanted to be in decisions about my treatment and support.			.647			.584		
PR Item13: I understand how to make a formal complaint to this organization.			.761			.758		
PR Item14: I understood that I could decline treatment activities if I wanted to.			.715			.647		
PR Item15: I was assured my personal information was kept confidential.	.666		0.44		.516	.303		
PR Item16: I felt comfortable asking questions about my treatment and support, including medication.	.481		0.49		.493	.368		
ST Item17: I found staff knowledgeable and competent.	.779				.774			
ST Item18: I was treated with respect by program staff.	.886				.915			

	PAF Factor Loadings based on Polychoric Correlations				PAF Factor Loadings based on Spearman correlations			
OPOC- MHA Items	1	2	3	4	1	2	3	4
ST Item19: Staff were sensitive to my cultural needs (e.g., language, ethnic background, race).	.738				.751			
ST Item20: Staff believed I could change and grow.	.822				.816			
ST Item21: Staff understood and responded to my needs and concerns.	.894				.920			
FE Item22: Overall, I found the facility welcoming, inclusive, and comfortable (e.g., entrance, waiting room, décor, posters, your room if applicable).	.603				.539			
FE Item23: Overall, I found the program space clean and well maintained (e.g., meeting space, bathroom, and your room if applicable).	.874				.725			
FE Item24: I was given private space when discussing personal issues with staff.	.889				.762			
FE Item25: I felt safe in the facility at all times.	.901				.854			
DP Item27: Staff helped me develop a plan for when I leave the program.				.819				.797
DP Item28: I have a plan that will meet my needs after I leave the program.				.951				.866
DP Item29: Staff helped me identify where to get support after I leave the program.				.739				.698
RO Item30: The services I have received have helped me better understand my personal strengths and challenges.	.633				.519			
RO Item31: The services I have received have helped me deal more effectively with my life's challenges.	.526				.530			
SQ Item32: I think the services provided here are high quality.	.795				.730			
SQ Item33: If a friend were in need of similar help I would recommend this service.	.713				.682			

Table G5. Structure Matrices

	Structure Matrix (Polychoric Correlations)				Structure Matrix (Spearman's Correlations)			
	Factor				Factor			
	1	2	3	4	1	2	3	4
item1	.556	.784	.570	.448	.494	.517	.735	.407
item2	.669	.927	.633	.498	.593	.584	.865	.427
item3	.633	.713	.613	.464	.561	.589	.696	.408
item4	.725	.801	.692	.525	.666	.654	.773	.450
item5	.817	.808	.757	.559	.723	.678	.736	.458
item6	.829	.802	.798	.623	.713	.724	.721	.520
item7	.788	.689	.866	.653	.671	.808	.603	.560
item8	.836	.675	.880	.673	.718	.829	.594	.586
item9	.843	.761	.840	.673	.760	.794	.701	.587
item10	.703	.606	.795	.600	.615	.745	.551	.538
item11	.767	.672	.826	.687	.674	.776	.615	.605
item12	.801	.755	.888	.677	.737	.818	.668	.610
item13	.609	.507	.786	.587	.536	.690	.448	.540
item14	.735	.639	.829	.617	.686	.778	.588	.573
item15	**.867**	.742	.791	.599	**.766**	.728	.654	.494
item16	**.878**	.716	.866	.700	**.811**	.790	.657	.592
item17	.907	.697	.804	.689	.822	.680	.625	.573
item18	.885	.674	.749	.628	.828	.651	.609	.511
item19	.867	.709	.742	.668	.808	.662	.622	.578
item20	.845	.618	.704	.674	.793	.643	.539	.574
item21	.931	.674	.808	.699	.862	.699	.588	.578
item22	.822	.673	.742	.643	.756	.691	.590	.578
item23	.838	.651	.694	.579	.772	.657	.578	.512
item24	.908	.684	.778	.655	.825	.709	.606	.560
item25	.872	.659	.692	.587	.810	.657	.596	.506
item27	.712	.577	.728	.912	.634	.665	.519	.871
item28	.685	.534	.694	.945	.594	.631	.476	.878
item29	.772	.595	.743	.910	.704	.691	.543	.860
item30	.862	.591	.790	.784	.779	.711	.541	.720
item31	.847	.611	.784	.812	.775	.689	.538	.743
item32	.905	.669	.788	.728	.819	.695	.582	.632
item33	.890	.656	.791	.751	.797	.674	.568	.652

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

Table G6. Factor Correlation Matrix (Based on Spearman Correlations)

Factor	1	2	3	4
1	1.000	.496	.448	.438
2	.496	1.000	.427	.426
3	.448	.427	1.000	.309
4	.438	.426	.309	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

Table G7. Factor Correlation Matrix (Based on Polychoric Correlations)

Factor	1	2	3	4
1	1.000	.458	.506	.469
2	.458	1.000	.411	.320
3	.506	.411	1.000	.440
4	.469	.320	.440	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

Appendix H – Reliability Analysis Output

Table H1. Factor 1 – Recovery Subscale

Reliability Statistics based on Pearson Correlations (SPSS)
Cronbach's Alpha = 0.956, Number of items =13, Number of cases = 503,
Scale Mean = 46.69, Variance = 36.93, Std. Dev. = 6.07

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Item17	43.07	31.617	.803	.725	.952
Item18	43.04	31.779	.774	.703	.952
Item19	43.08	31.835	.751	.645	.953
Item20	43.06	32.315	.730	.614	.954
Item21	43.07	31.599	.837	.743	.951
Item22	43.15	31.778	.717	.563	.954
Item23	43.16	31.567	.731	.622	.954
Item24	43.07	31.644	.802	.669	.952
Item25	43.16	31.073	.763	.648	.953
Item30	43.14	31.448	.781	.732	.952
Item31	43.13	31.462	.764	.719	.953
Item32	43.13	30.950	.818	.776	.951
Item33	43.07	31.423	.785	.745	.952

Ordinal Reliability Statistics based on Polychoric Correlations (R)
Ordinal Alpha = 0.98, Number of items =13, Number of cases = 503

Item-Total Statistics

	Corrected Item-Total Correlation	Alpha if Item Deleted
Item17	.91	.98
Item18	.89	.98
Item19	.87	.98
Item20	.85	.98
Item21	.94	.97
Item22	.82	.98
Item23	.83	.98
Item24	.90	.98
Item25	.86	.98
Item30	.89	.98
Item31	.87	.98

Item32	.92	.98
Item33	.91	.98

Table H2. Factor 2 – Services scale

Reliability Statistics based on Pearson Correlations (SPSS)
Cronbach's Alpha = 0.931, Number of items =10, Number of cases = 503,
Scale Mean = 34.85, Variance = 24.35, Std. Dev. = 4.93

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Item7	31.34	19.907	.756	.625	.923
Item8	31.34	19.862	.785	.667	.922
Item9	31.33	19.936	.760	.608	.923
Item10	31.41	19.968	.691	.508	.926
Item11	31.42	19.702	.743	.566	.924
Item12	31.30	19.816	.787	.632	.922
Item13	31.61	19.405	.636	.476	.931
Item14	31.40	19.648	.719	.557	.925
Item15	31.20	20.600	.709	.594	.926
Item16	31.26	19.921	.778	.671	.922

Ordinal Reliability Statistics based on Polychoric Correlations (R)
Ordinal Alpha = 0.96, Number of items =13, Number of cases = 503

Item-Total Statistics

	Corrected Item-Total Correlation	Alpha if Item Deleted
Item7	.87	.96
Item8	.90	.96
Item9	.87	.96
Item10	.80	.96
Item11	.85	.96
Item12	.89	.96
Item13	.75	.96
Item14	.82	.96
Item15	.85	.96
Item16	.91	.96

Table H3. Factor 3 - Access scale

Reliability Statistics based on Pearson Correlations (SPSS)
Cronbach's Alpha = 0.87, Number of items =6, Number of cases = 503,
Scale Mean = 21.06, Variance = 7.69, Std. Dev. = 2.77

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Item1	17.61	5.978	.598	.450	.861
Item2	17.58	5.774	.747	.587	.833
Item3	17.63	6.099	.580	.354	.864
Item4	17.51	6.035	.703	.538	.842
Item5	17.43	6.154	.714	.610	.842
Item6	17.53	5.891	.697	.548	.843

Ordinal Reliability Statistics based on Polychoric Correlations (R)
Ordinal Alpha = 0.92, Number of items =6, Number of cases = 503,

Item-Total Statistics

	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item1	.76	0.92
Item2	.87	0.90
Item3	.73	0.92
Item4	.84	0.91
Item5	.87	0.90
Item6	.85	0.91

Table H4. Factor 4 - Scale Discharge

Reliability statistics based on Pearson Correlations (SPSS)
Cronbach's Alpha = 0.91, Number of items =3, Number of cases = 503,
Scale Mean = 10.19, Variance = 3.62, Std. Dev. = 1.91

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Item27	6.79	1.701	.824	.681	.870
Item28	6.84	1.665	.830	.691	.864
Item29	6.75	1.688	.809	.655	.882

Ordinal Reliability statistics based on Polychoric Correlations (R)
Ordinal Alpha = 0.95, Number of items =3, Number of cases = 503,

Item-Total Statistics

	Corrected Item-Total Correlation	Alpha if Item Deleted
Item27	.92	.93
Item28	.93	.92
Item29	.91	.93

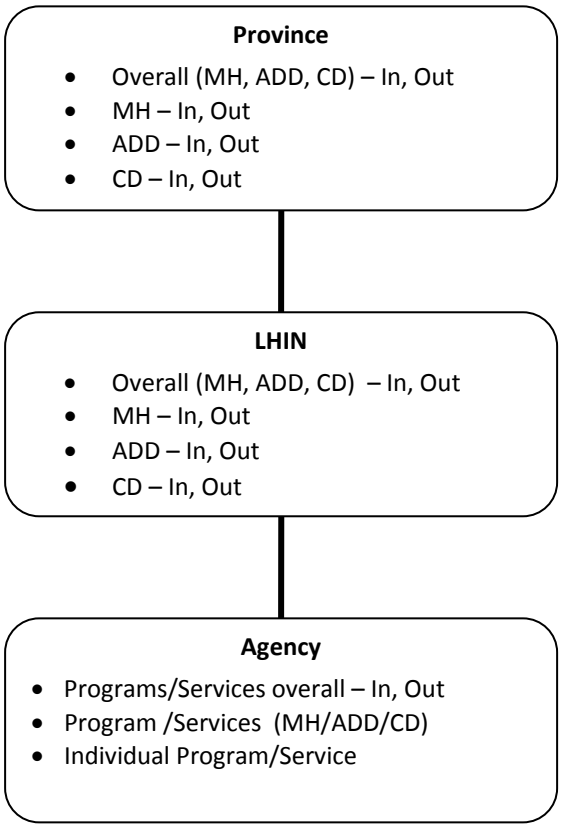
Appendix I – Qualitative Template

Name of Agency:
Program Name:
Name of person completing this form:
Position (e.g., Case Worker):
Contact details:
Observational Information (this may include (but not limited to) estimated time it takes to complete the questionnaire; comments about the questionnaire participants have reported; staff observations; staff comments about the questionnaire, etc.):
Please return this form to: Emily Hansson Research Coordinator Emily_Hansson@camh.net (416) 535-8501 Ext. 4323

Appendix J – DTFP - OPOC-MHA Data Analysis Plan

The hierarchical structure of the data analysis of the client perception of care survey with levels **Province, LHIN** and **Agency**/Program is presented in Figure J1.

Figure J1. Hierarchical Structure of the Data Analysis



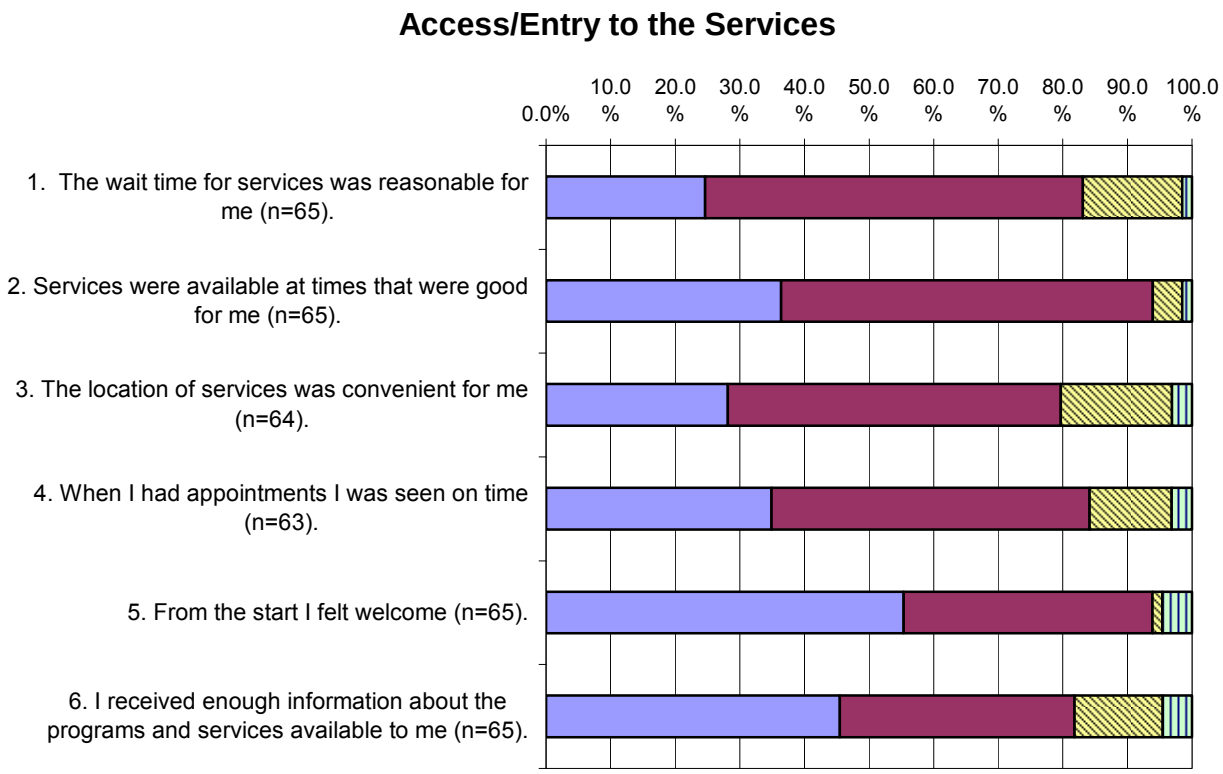
Abbreviations: MH – Mental Health, ADD – Addictions, CD – Concurrent Disorders
In – Inpatient services, Out – Outpatient services

Notes:
1. Inpatient and Outpatient data to be analyzed and reported separately (there are 6 additional items in the OPOC-MHA that are specific for the inpatient clients)
2. Data from the two versions of the questionnaire (the 38-item version for registered service users and the 18-item version for non-registered service users) to be analyzed separately.

1. **Data analysis for individual Unit at each level of the hierarchy** (Program or Service/ Agency/ LHIN/ PROVINCE).

   1.1. **Item Analysis:** Distribution of the responses on each item. Items are grouped by domains – stacked bar charts (see Figure J2 for a sample)

Figure J2. Distribution of the responses on the items in the **Access/Entry to services** domain**.**



	6. I received enough	5. From the start I felt	4. When I had appointm	3. The location of	2. Servic es were available	1. The wait time for
Strongly Disagree	4.5%	4.6%	3.2%	3.1%	1.5%	1.5%
Disagree	13.6%	1.5%	12.7%	17.2%	4.5%	15.4%
Agree	36.4%	38.5%	49.2%	51.6%	57.6%	58.5%
Strongly Agree	45.5%	55.4%	34.9%	28.1%	36.4%	24.6%

1.2. **Top 5 areas –** list of the five items with the highest percentage of the positive response rate (%Agree + %Strongly Agree).

1.3. **Bottom 5 areas –** list of the five items with the lowest positive response rate.

1.4. **Analysis of responses on open-ended questions (comments)** – summary report by concepts

1.5. **Areas of improvement –** gap analysis, based on the comparison of the participating agency results to the LHIN/Province results.

2. Comparing results for the Participating agency to the average results for the LHIN/Province

2.1. Comparing the results item-by-item. Items are grouped by domains – each participating agency vs. LHIN/Province (see Figure J3 and Figure J4 for a sample)

Figure J3. Comparison of the proportions of "Strongly agree" responses on the items in the **Access/Entry to the services** domain for the outpatient services.

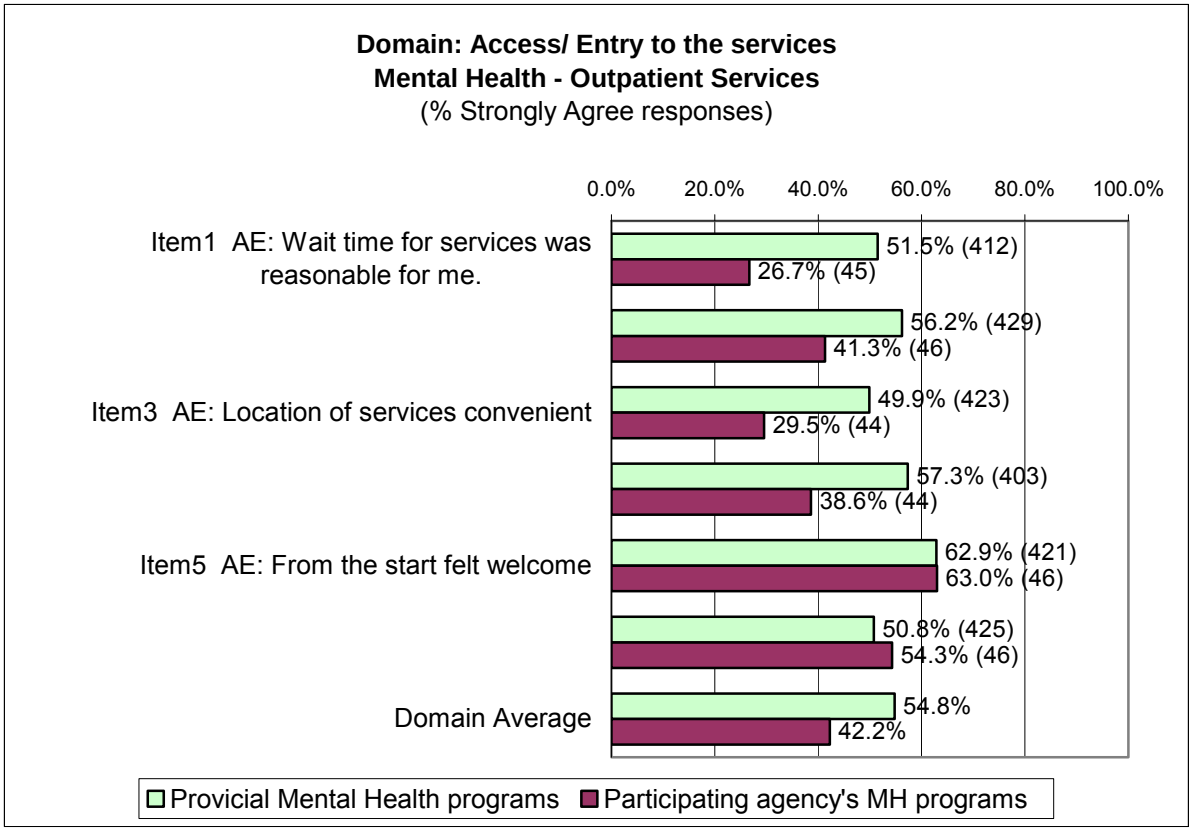
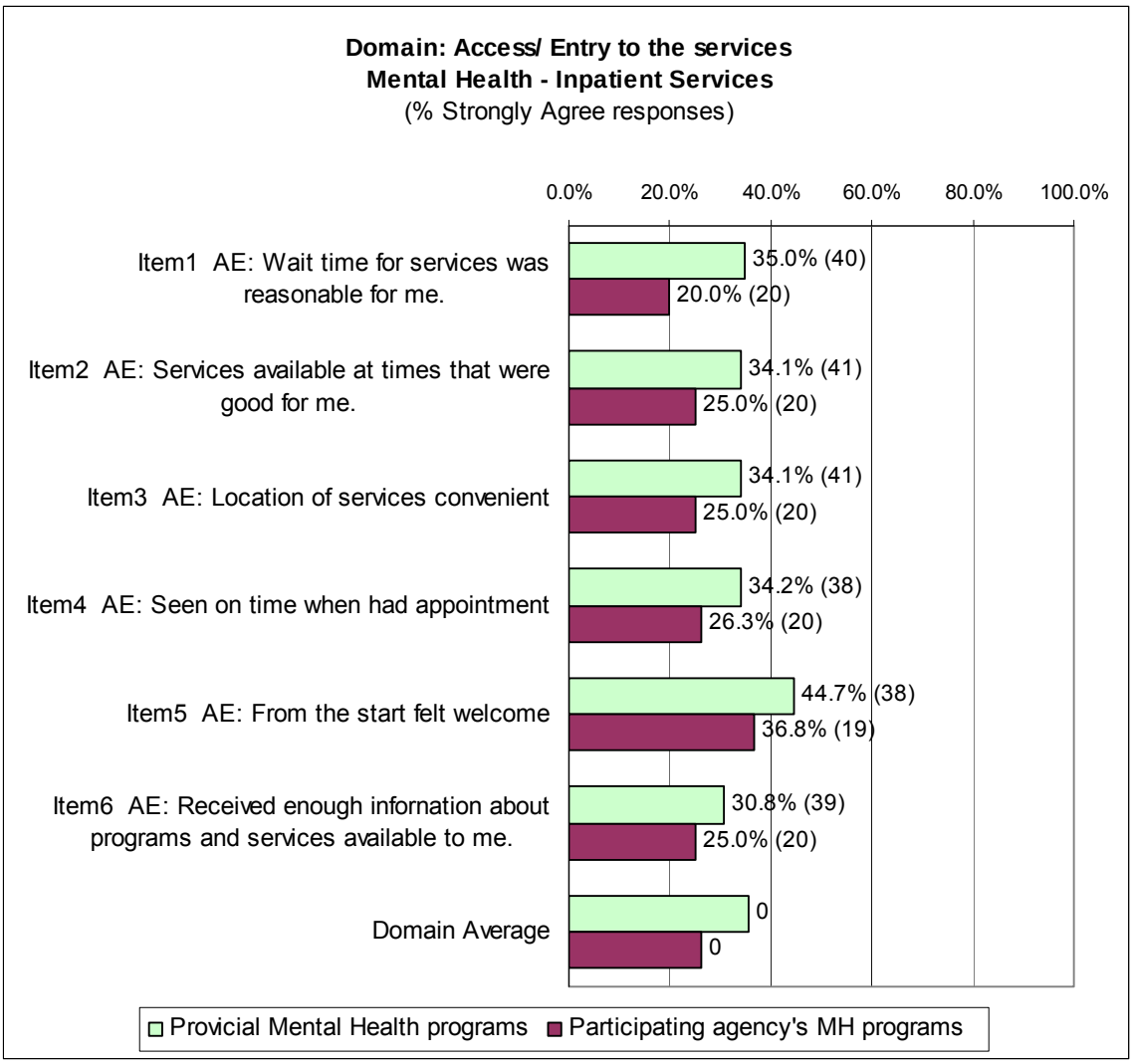
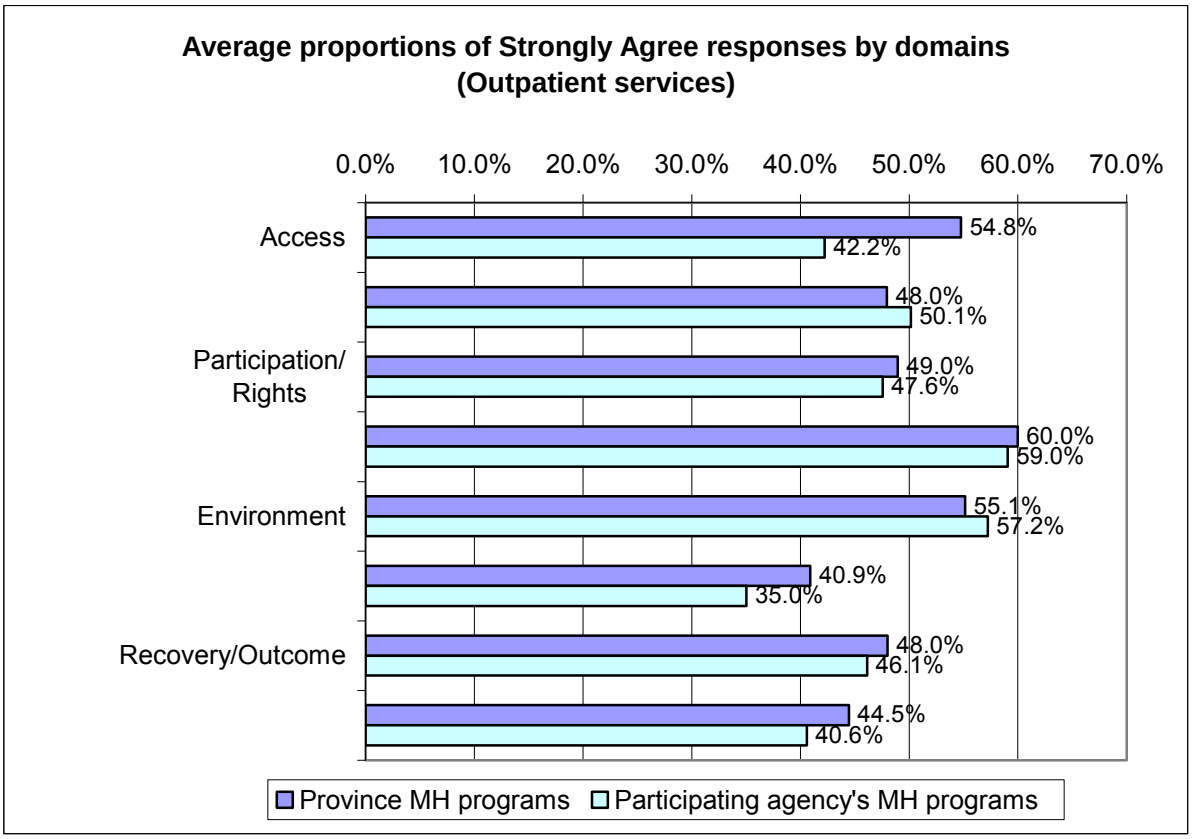


Figure J4. Comparison of the proportions of "Strongly agree" responses on the items in the **Access/Entry to the services** domain for the inpatient programs.



Comparing the average proportions of “Strongly Agree” responses by domains for each Participating agency vs. LHIN/Province (see Figure J5 for a sample).

Figure J5. Comparison between the results from the participating agency and the Provincial outpatient programs



3. Comparing agency/LHIN/Province results from the present survey to the results from the previous surveys

This analysis is intended to identify changes/trends in the client experience (item-by-item, items grouped by domains) using bar charts based on the percentage of the "Strongly agree" responses (see Figure J6 for a sample)

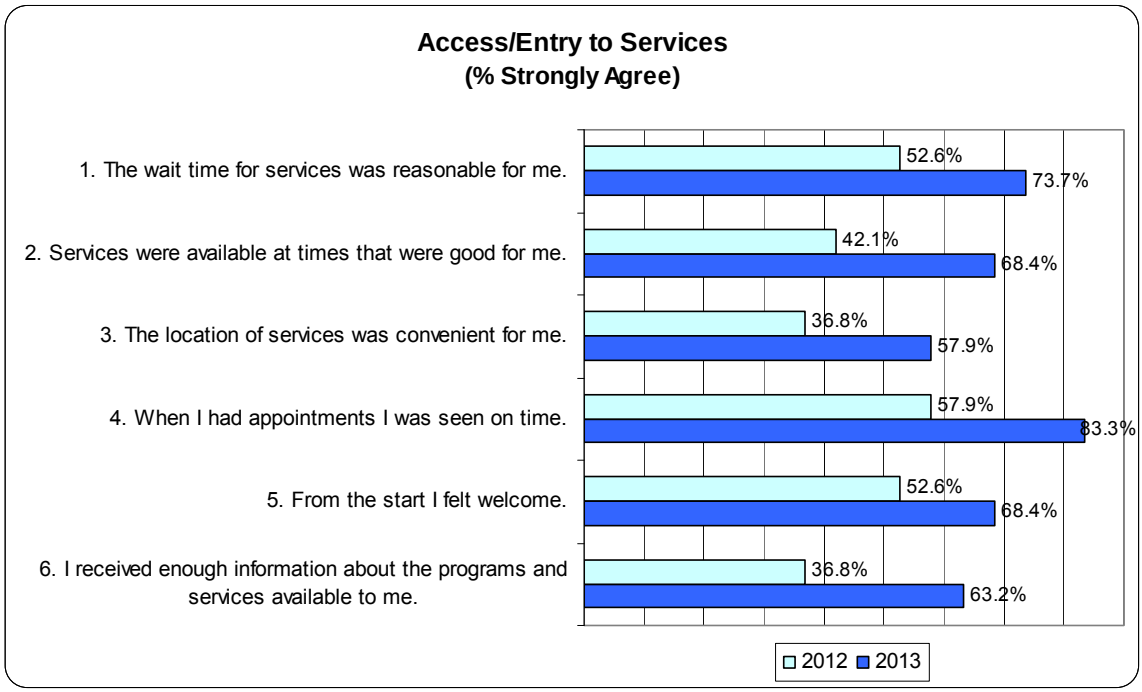



Figure J6. Comparison of the results on Access/Entry to services domain from the 2012 and 2013 surveys for the Participating agency