Perceptions of the Use of an Outcome Monitoring Tool in a Clinical Psychology Training Centre: Lessons Learned for Performance Measurement

Lindsay Rosval
Barrhaven Psychological Services

Stephanie Yamin
Saint Paul University

Parastoo Jamshidi and Tim Aubry
University of Ottawa

Abstract: *The purpose of this study was to examine the perceptions of the Outcome Questionnaire (OQ) following its implementation in a university-based psychological services training centre. Participants were doctoral-level student clinicians (n = 49), clinical supervisors (n = 17), and clients (n = 24). Data was collected through surveys, semi-structured interviews, and focus groups. Findings indicated that the majority of clinicians used the OQ to monitor outcomes and the majority of stakeholders perceived it as useful. However, the extent to which the information provided by the OQ was being used was variable. Lessons learned for implementation of performance measurement systems within mental health services are discussed.*

Keywords: *outcome monitoring, performance measurement, training*

Résumé : *Cette étude vise à examiner les perceptions relatives à l'utilité d'un questionnaire portant sur les résultats (Outcome Questionnaire) après sa mise en œuvre dans un centre de formation universitaire axé sur les services psychologiques. Les participants sont des doctorants en psychologie clinique (n = 49), des superviseurs cliniques (n = 17) et des clients (n = 24). Les données ont été recueillies par sondages, entretiens semi-dirigés et groupes de discussion. Les résultats indiquent que la majorité des cliniciens utilisent le questionnaire pour suivre le progrès de leurs clients et le considèrent comme utile. Cependant, l'utilisation de l'information fournie par le questionnaire pour les décisions cliniques n'est pas constante. Nous discutons des leçons à tirer de la mise en œuvre des systèmes de mesure du rendement dans les services de santé mentale.*

Mots clés : *suivi des résultats, mesure du rendement, formation*

Corresponding author: Stephanie Yamin, 223 Main Street (321G), Ottawa, ON, K1S 1C4; syamin@ustpaul.ca

 Canadian Journal of Program Evaluation / La Revue canadienne d'évaluation de programme
34.1 (Spring / printemps), 84–101 doi: 10.3138/cjpe.52823

The integration of performance measurement into the delivery of mental health services has grown in popularity over the past decade (Boswell, Kraus, Miller, & Lambert, 2015). However, it is increasingly recognized that the implementation of performance measurement systems in mental health services is no easy task, and that there are many challenges that make obtaining complete and useful data difficult (Boswell et al., 2015). The current paper outlines lessons learned from implementing and using an outcome monitoring tool in a clinical psychology training centre. It describes the perceptions and experiences of student clinicians, supervisors, and clients involved with using this tool. Our goal is to highlight some factors that may be important to consider for practitioners wishing to implement such measures within mental health service settings for performance measurement and program evaluation purposes.

"Performance measurement" involves the collection of information on the delivery and outcomes of services with the intention of using this information to inform decision making about these services, ensure their quality, and improve their results (Poister, 2003). Within the context of mental health services, one approach to performance measurement that can allow for the collection of useful data in a way that is practically feasible involves using "routine outcome monitoring" (ROM) measures. ROM entails measuring client mental health outcome indicators on a contact by contact basis (Boswell et al., 2015; Howard, Moras, Brill, Martinovich, & Lutz, 1996; Lambert, 2001, 2005; Lambert et al., 2003; Mellor-Clark, Cross, Macdonald, & Skjulsvik, 2016; Youn, Kraus, & Castonguay, 2012).

The Outcome Questionnaire (OQ; Lambert et al., 2004) developed by Lambert and colleagues is an example of an instrument that can be used for routine outcome monitoring. It is designed to be administered repeatedly in order to assess changes in clients' mental health functioning and their progress in counselling over time (Lambert et al., 2004). Versions of the questionnaire have been developed for children and youth (Y-OQ; Burlingame et al., 2001) and adults (OQ; Lambert, Okiishi, Finch, & Johnson, 1998) and are available in paper format or online. The online version provides clinicians and clients with individualized feedback regarding progress compared to expected outcomes. Those clients at risk of failing to make progress are flagged, which can be used to inform and potentially adjust the therapeutic process (Lambert et al., 2004; Slade, Lambert, Harmon, Smart, & Bailey, 2008).

There are several reasons that the Outcome Questionnaire instruments are well suited for performance measurement in mental health service contexts. First, using these instruments for collecting performance data is practical because of the brief format of the questionnaires and the automatic, computer-assisted scoring of the electronic forms. Second, administering the OQ measures on a routine, contact-by-contact basis helps reduce missing or incomplete data. Lambert and colleagues (2004) suggest that administering OQ questionnaires at every therapy contact ensures that the clients' level of distress is evaluated at the end of treatment even if they terminate treatment unexpectedly. Third, the OQ instruments measure clients' mental health outcomes, which is a variable that is highly relevant

and meaningful within mental health services (Hodges & Wotring, 2012). Fourth, the OQ instruments provide timely information that is actionable at multiple levels within a mental health organization. If the online/electronic versions of the instruments are used, an interpretive report is available to clinicians immediately after the client completes and submits the questionnaire. The information can be used by the clinician to adjust clinical interventions as necessary, particularly to identify and prevent deterioration (Lambert et al., 2004). In addition to the utility of this information for clinicians working with individual clients, the collected data can be summarized and analyzed for the purpose of quality assurance, program evaluation, and research on different client groups and in a wide range of treatment contexts (Howard et al., 1996).

A number of studies provide evidence supporting the utility of the OQ instruments for improving the outcomes of mental health services for clients (e.g., Shimokawa, Lambert, & Smart, 2010). Shimokawa and colleagues (2010) found that having access to feedback on client functioning and suggestions for altering or continuing the same treatment approach enhanced outcomes, particularly in those clients who were not making progress in treatment.

It has also been proposed that assessing outcomes can serve to improve therapeutic skills by examining clinicians' own aggregate client data (Clement, 1994; Sapyta, Riemer, & Bickman, 2005). Researchers have only begun to consider the utility of implementing outcome monitoring of client functioning within a training context (Sapyta et al., 2005). Sapyta and colleagues (2005) argued that feedback on the effects of mental health interventions is essential for clinical trainees to learn, as it provides objective information about treatment response from the client's perspective. The availability of immediate client feedback further permits the identification of client difficulties and a subsequent evaluation of whether the treatment has been effective (Sapyta et al., 2005). However, researchers have not yet examined the experience of implementing an outcome monitoring system within a training context.

Despite the demonstrated benefits associated with using this performance measurement approach within mental health services, outcome monitoring tools can be difficult to implement. Surveys suggest that the majority of practicing clinicians have not integrated outcome monitoring tools into their practices and that they continue to rely primarily on their own clinical observations and intuition to evaluate client outcomes (Garland, Kruse, & Aarons, 2003; Hatfield & Ogles, 2004; Zimmerman & McGlinchey, 2008). Furthermore, based on their experience leading national outcome monitoring efforts, Mellor-Clark and colleagues (2016) found that when clinicians do integrate outcome monitoring within their work, the quality and quantity of outcome data they collect is highly variable, with only 40–50% of clients having complete outcome data.

Garland et al. (2003) reported that many clinicians felt that it was impossible to use quantitative measures to assess change in treatment due to the complex nature of human behaviour and psychotherapy outcomes. In their study, the reported barriers to the use of standardized measures included feasibility concerns,

perceived invalidity of the measures for evaluating outcomes, and difficulties with interpretation. In a similar study, Hatfield and Ogles (2004) found that clinicians cited practical reasons, such as too much paperwork, too little time, or placing too great of a burden on clients, for why they chose not to use outcome measures in their clinical work. Another common reason cited by clinicians for not using outcome monitoring measures was the belief that outcome measures were not helpful or useful (Hatfield & Ogles, 2004).

Building on these studies, in a recent article, members of several research teams leading outcome monitoring efforts discussed other "practical" and "philosophical" barriers that they had collectively observed when attempting to implement outcome monitoring tools in routine practice (Boswell et al., 2015, p. 10). For example, Boswell and colleagues (2015) noted that one challenge to implementation is balancing the needs and wants of different stakeholder groups, such as the clients' wish for brief measures with high face validity and the clinicians' and administrators' need for reliable and actionable data. Another practical barrier they describe is frequent staff turnover and the need for "ongoing training, education, and seemingly never-ending 'buy-in' discussions" (p. 11). Furthermore, they reported that clinicians often assume that outcome measures will interfere with rapport or that they worry that the data will be used to cut funding or to judge their clinical skills.

The goal of the current study was to evaluate the implementation of the Outcome Questionnaire instruments at a university training centre for doctoral students in clinical psychology. Conducting a study of the implementation of ROM in a training centre is particularly unique in that it provides a perspective on the process from trainees who represent the next generation of mental health professionals and their supervisors, who should be committed to providing "state of the art" training using evidence-based practices.

The current study was undertaken to answer the following questions: (1) How are clinicians and supervisors integrating outcome monitoring into the delivery of psychological services at a training centre? (2) What are the perceived benefits of using outcome monitoring in the delivery of psychological services? (3) What are the perceived drawbacks of using outcome monitoring in the delivery of psychological services? It was hypothesized that student clinicians and their supervisors would perceive several benefits, and few drawbacks, to using the OQ instruments and that they would report regular use of the tools as a result. We discuss the lessons that this study offers for effectively implementing performance measurement systems within mental health services.

METHOD

Description of setting

The training centre is located on a university campus in a medium-sized Canadian city and provides psychological services to members of the community from the

surrounding region. At the training centre, all services are provided by student clinicians who are registered in a Ph.D. program in clinical psychology and are supervised by registered clinical psychologists (from the College of Psychologists of Ontario). The student clinicians provide a variety of theoretically guided psychological treatments, including cognitive behavioural therapy, emotion-focused therapy, and interpersonal therapy.

When the outcome monitoring system using the OQ and Y-OQ was implemented at the university training centre, clinicians and supervisors were provided with a 90-minute training session to introduce them to the tool and to review the administration, scoring, and interpretation of the OQ and Y-OQ as well as the use of the OQ Analyst software. In addition, the manuals and relevant literature for the OQ and Y-OQ measures were made available at the training centre. Clinicians were expected to integrate the use of these tools in their delivery of psychological services to children, adolescents, and adults.

Participants

Three different groups were sampled for the evaluation: student clinicians (n = 49), clinical supervisors (n = 17), and clients (n = 24). A total of 71 student clinicians were invited to provide their perceptions by participating in focus groups and completing an online survey. A total of 11 student clinicians (15.5%) participated in focus groups, and a total of 49 student clinicians (69%) completed the online survey. Among survey respondents, 92% identified themselves as being female. On average, they had worked with six clients each, with the majority of the cases being adult individual therapy cases, followed by career counselling, child and family assessment and treatment, and couples therapy.

Seventeen of the 20 (85%) clinical supervisors at the training centre agreed to participate in an interview. A total of 24 clients at the centre responded to a brief self-report questionnaire in the waiting room about their perception of the use of the Y-OQ and OQ to monitor their outcomes while they were receiving services. Twenty-three of the 24 participants were receiving individual therapy for adults and had experience completing the OQ. Only one client reported receiving child/family services and had experience completing the Y-OQ. A requirement for completing the survey was that clients had to have had at least two sessions at the training centre and completed the OQ at least once. The number of times that clients had completed the OQ ranged from once to 52 times, with an average of about 13 times. Nine (38%) had completed the OQ electronically, nine (38%) using paper and pencil, and six (25%) using both methods.

Materials

Outcome Questionnaire-45 (OQ-45)

The 45-item version of the OQ was used by student clinicians working with adult clients. The OQ-45 is the most commonly used version in clinical settings for monitoring client progress and is also the most heavily researched version

(Lambert et al., 2004). The items on the OQ ask about mental health functioning in three domains: (1) symptom distress (e.g., symptoms of anxiety and depression), (2) interpersonal relations (i.e., satisfaction with and problems in relationships with friends, family, and romantic partner), and (3) social role (i.e., how the client is functioning with regards to work, family, and leisure tasks). Research utilizing this measure has demonstrated that it has high internal reliability, is highly correlated to other symptom-based and global functioning measures, and is a useful, accurate measure of therapeutic change (Lambert & Finch, 1999).

Youth Outcome Questionnaire (Y-OQ)

The 64-item version of the Y-OQ was used by student clinicians working with child clients. In determining the mental health functioning of children and adolescents, the items comprising the Y-OQ focus on issues in six different areas: (1) intrapersonal distress, (2) somatic symptoms, (3) interpersonal relations, (4) social problems, (5) behavioural dysfunction, and (6) critical items (i.e., severe symptoms) (Burlingame et al., 2001). Research on the Y-OQ has shown it to have strong internal consistency and very good test-retest reliability, as well as excellent content, criterion, and construct validity (Burlingame et al., 2001).

Focus groups and online survey for student clinicians

Three 90-minute focus groups were conducted. Focus groups were led by a team of four graduate-level students using a standardized question format. In the focus groups, student clinicians were asked about how and how often they used the OQ in sessions and in supervision; how useful they found the OQ; and what problems they encountered with its use, including any gaps in training and any issues related to client receptiveness.

The online survey inquired in greater detail about student clinicians' practices concerning their use of the OQ with clients. Specifically, multiple-choice questions touched on frequency, time (start or end of session), and method (paper or electronic) of OQ administration; how and when student clinicians score the OQ; what information from the OQ they use to inform sessions; what information they discuss with clients; how often they review OQ results to plan for sessions; how often and what OQ content they discuss in supervision; adequacy of OQ training received; and overall satisfaction with the OQ.

Interview with clinical supervisors

The interview with clinical supervisors included questions about how they direct students to use the OQ with clients; what information from the OQ they use in supervision and how often they discuss OQ results; the usefulness of the OQ in supervision; any concerns or barriers related to using the OQ tools; and any gaps in training regarding using the OQ as supervisors.

Client survey

The brief paper survey that was administered to clients included questions about the extent to which OQ measures were used in sessions and how they were used.

The survey also included three open-ended questions asking what they liked about the OQ, what they disliked about the OQ, and suggestions for improvement.

Procedures

All student clinicians providing services at the university training centre at the time of data collection were invited to participate in a series of focus groups and in an online survey. Information about focus groups and the online anonymous survey were distributed by email with a series of follow-up reminders. The online survey was generated with "Survey Monkey" software and was sent by email to all student clinicians. Students were sent a series of three follow-up reminders over a period of one month to complete the survey. Several aspects of these methods likely facilitated student clinicians openly reporting their experiences and views without fear of repercussions, including the anonymity of surveys, focus groups being led by other students as opposed to supervisors or administrators, and a clear statement about the purpose for which their input was being sought.

All clinical supervisors working at the centre at the time of data collection were invited by email to participate in a brief interview. Depending on supervisor preference, interviews were conducted either in person or by telephone, or the questions were sent by email.

Over a period of four weeks, clients who were presenting for services at the centre were asked if they were interested in completing a brief self-report questionnaire. If they were interested, they were provided with a questionnaire to fill out in the waiting room and return to the reception desk.

Prior to the start of the research, the Research Ethics Office at the university in which the training centre was located was consulted about the required procedures for conducting a program evaluation and the Tri-Council Guidelines for conducting research were closely followed.

Data analysis

The qualitative data from the interviews and focus groups were transcribed for coding. Two coders, who were graduate-student members of the research team, generated themes from the qualitative data. This was accomplished by reading the data and assigning line-by-line themes. The research team and the supervisor then met to discuss the themes and to reach conciliation where discrepancies existed between the two coders. The frequency of themes was then calculated. Quantitative data were collected through the online survey. Descriptive statistical analyses were then conducted on the online survey data.

RESULTS

This section presents the results organized according to the answers given to evaluation questions.

What are the perceived benefits of integrating outcome monitoring in the delivery of psychological services?

Student clinicians

Data from the online survey indicated that almost all of the surveyed student clinicians (96%) perceived the use of the outcome measures as being "very useful" or "somewhat useful." When asked in the focus groups, "How useful is regular administration of the OQ as a clinician doing therapy?," student clinicians described that the OQ-45 and Y-OQ provided an additional piece of information for understanding the client's presenting difficulties. The OQ instruments were also viewed as providing a useful indicator of increasing client distress, particularly when clients were hesitant to discuss those issues in session.

Many student clinicians also perceived that the OQ-45 and Y-OQ provided new information about changes being experienced by clients. In particular, they were described as being useful for assessing improvement as well as deterioration, as one clinician noted: "when things go wrong, a flag goes up." Moreover, according to student clinicians, the usefulness of the outcome measures extended to clients, as it was described as allowing them to visually track their own progress in treatment.

When asked about client response to completing the OQ or Y-OQ, many of the student clinicians noted that clients are generally accepting, and that at times clients looked forward to seeing their results. One student clinician noted that "clients seem to enjoy getting the feedback and seeing how they are doing."

Supervisors

The majority of supervisors felt that the OQ-45 and Y-OQ were useful tools when the information they produced was combined with clinical judgement and other information. Supervisors perceived the OQ-45 and Y-OQ as being useful as tools to monitor change over time and stated that this can help inform decisions regarding the direction of treatment. One supervisor noted that the OQ is "important for gaining a sense of therapeutic progress, or lack thereof ... [and student clinicians] may use scores as a means of deciding whether to shift focus of therapy or remain on track."

At the same time, supervisors generally indicated that the usefulness of an outcome-monitoring tool such as the OQ-45 or Y-OQ was dependent on client characteristics such as level of insight, ability to communicate experiences, and symptom severity. They also felt that the tool was particularly useful for beginner therapists to "learn to match mood states with numbers to get a sense of where to go" clinically, and that administration of outcome measures helped to "ground what to be on the lookout for."

Clients

Seventeen clients (71%) made a positive comment about the OQ-45 in response to an open-ended question asking what they liked about the OQ. Four clients (17%) wrote that they felt positively about the level of clarity of the items in the OQ-45 and/or its ease of completion. They also reported viewing many benefits

of using the measure as a therapeutic tool. Nine clients (38%) indicated that they felt that the completion of such a measure allowed them to reflect on the past week and/or served as a useful way to determine which topic to address in session. Five clients (21%) also saw the benefit of using the tool to monitor their own progress in therapy. One client reported that the OQ is "a rubric for judging personal emotional progress," while another client added that "it gives a global idea of our development."

What are the perceived drawbacks of using the OQ?

Student clinicians

Some student clinicians expressed concerns that administration of an outcome measure at the onset of a session might interfere with rapport. For instance, one student clinician suggested that perhaps clients might be thinking, "I'm here to talk to you, not fill in a form." Other student clinicians felt that if a client arrived distressed, it might not be appropriate to hand them a questionnaire.

Student clinicians also expressed concerns about the practical components of administering the measures. Some shared concerns that the outcome monitoring was taking time away from sessions. Student clinicians also reported that they found that the Y-OQ was particularly laborious for parents and youth to complete. As well, a few student clinicians expressed concerns about having to administer the OQ-45 on a weekly basis, stating that they did not see the purpose of having clients complete the OQ-45 so frequently, since "the OQ does not pick up anything that does not come out in session."

Student clinicians questioned the usefulness of using outcome measures with every client, highlighting examples of clients for whom the OQ-45 and Y-OQ might not be helpful. For instance, clinicians questioned whether administration of the Y-OQ was helpful or even relevant for family therapy cases, where the wording of the Y-OQ might send the message that the child is the problem, thus "pathologizing the child." Other types of clients mentioned by student clinicians for whom the use of the OQ-45 might not be helpful included clients with extremely high or extremely low levels of distress, clients with anxiety about how their responses might be used, or clients with problems reading and/or writing.

Another set of perceived barriers to using the OQ pertained less to the questionnaires themselves and more to the way in which they were introduced to student clinicians and supervisors and implemented within the training centre. Student clinicians expressed some concerns about their own lack of knowledge regarding how to use the OQ-45 or Y-OQ, as well as their supervisors' familiarity with the measure. Student clinicians also reported that they were unsure of how to discuss the results with clients and how often they should do so. Finally, student clinicians mentioned variability between supervisors in terms of perceived knowledge of and interest in outcome monitoring. Some students commented that the OQ-45 or Y-OQ was rarely discussed in supervision, explaining, "If we bring it up, we can discuss it, but it is usually not queried by supervisors."

Supervisors

In their interviews, supervisors raised many of the same concerns about the OQ and Y-OQ as clinicians did. For instance, some supervisors suggested that administration of outcome measures could possibly affect rapport. Supervisors also reported that the usefulness of outcome measures was dependent on the type of case as well as the theoretical approach. For example, one supervisor said that because of their theoretical orientation, "I don't like starting the session and ending it with a form." Some supervisors also suggested that using a measure such as the OQ might not be useful for clients with chronic trauma, clients with personality issues, or clients with lower levels of insight.

Supervisors expressed concerns about a perceived lack of consensus on the part of the training centre administration regarding outcome-monitoring procedures. For instance, some supervisors were unclear about whether they were required to administer the OQ-45 or Y-OQ at the beginning of the initial session or whether they could choose to direct students to have clients complete the outcome measure at the end of a session. There were questions about how to utilize the OQ with families (e.g., if youth complete the self-report version of the Y-OQ, should their parents also complete the parent Y-OQ or the OQ?). Supervisors felt they lacked training with using the tools and also raised concerns about students' lack of training and knowledge about them.

Clients

Clients had few complaints about the OQ other than general comments about the repetitiveness of the questions and the non-applicability of certain items to themselves. One client complained that "the majority of questions do not apply to me." Some suggested providing clients with a questionnaire tailored to their individual problems, while others suggested that they would prefer to complete the OQ either at home or in the waiting room prior to commencing sessions: "would prefer to do online once a week and forward to counsellor."

How are student clinicians and supervisors integrating outcome monitoring into the delivery of psychological services?

As we predicted, given that student clinicians and supervisors perceived several benefits to using the OQ tools and relatively fewer drawbacks, there was a high reported rate of uptake for the tools. Almost all of the student clinicians (46 out of 49 [94%]) at the training centre reported in the online survey that they administered the OQ-45 or Y-OQ during most or every session. In focus groups, student clinicians noted that there was some variability in administration depending on the type of services provided. Student clinicians agreed that the OQ-45 or Y-OQ was regularly administered in individual therapy but was less frequently administered in other types of services such as family therapy and couples' therapy.

Student clinicians also reported that there were some instances where the measures were used less frequently or not at all because of the characteristics of clients. For example, a student clinician reported abandoning the use of the

OQ-45 with a client because of the client's cognitive difficulties. Thus, the OQ instruments were not used in situations in which the perceived drawbacks to using them outweighed the perceived benefits, such as when the measures were perceived to be a poor fit for services or when there were practical barriers that interfered with their completion.

In response to the online survey, virtually all of the student clinicians (47 out of 49 [96%]) reported administering the OQ-45 or Y-OQ at the beginning of therapy sessions. However, a much smaller percentage of students reported engaging in practices that would allow them to make the most effective use of the measures. For example, only a minority (17 [35%]) scored or reviewed the measures at the beginning of the session. In terms of providing feedback to clients in therapy regarding their scores, most student clinicians reported in focus groups that they provided feedback only when a significant change occurred from previous therapy sessions.

When student clinicians were asked what types of information they discussed with clients in session, almost one-quarter (12 [24%]) stated that they did not discuss results with clients in session. About one-half of student clinicians (27 [55%]) indicated that they talked to clients about critical items (i.e., items referring to self-harm, substance use, aggressive behaviour), (22 [45%]) discussed total score, and approximately two-thirds (32 [65%]) reported to clients changes in their scores. Only a small number of student clinicians (8 [16%]) stated that they discussed the alert status (i.e., prediction of client outcome by software based on algorithms developed from previous client data) with clients in session.

A majority of student clinicians (33 [67%]) indicated that they discussed OQ-45 and Y-OQ scores in some supervisions. About a quarter of student clinicians (12 [24%]) stated that they never or almost never discussed the OQ or Y-OQ scores in supervision. At the other extreme, the online survey results suggested that only a small number of student clinicians (4 [8%]) discussed client progress as reflected in OQ results in either every supervision or most supervisions. Finally, when student clinicians were asked in an online survey what types of information they discuss in supervision, they stated that they reviewed the responses on critical items (24 [49%]), discussed the overall score (21 [43%]), reviewed change over time (32 [65%]), and reported the alert status (10 [20%]).

There is evidence that student clinicians did refer to clients' OQ scores on their own and that they made use of the information when planning for sessions. Most (28 [57%]) reported looking at the computer-generated clinician report outlining the OQ results, or documenting the OQ score in their session note (33 [67%]). Furthermore, most student clinicians indicated that they reviewed the change in a client's OQ scores over time (30 [61%]), and/or the critical items endorsed by a client (25 [51%]) when planning for sessions on their own.

DISCUSSION

The presented research is the first study to examine the perceptions of student clinicians, supervisors, and clients about outcome monitoring in the context of a

clinical psychology training centre that has integrated it into its practices. Overall, the findings are mixed in terms of achieving successful integration and use of outcome monitoring in the centre. On the one hand, the findings suggest that there is receptivity among student clinicians, supervisors, and clients to administering brief self-report measures during sessions in order to monitor client progress. These positive perceptions are in line with previous research showing the clinical utility of outcome monitoring (Shimokawa et al., 2010). Moreover, a majority of student clinicians were administering outcome measures in most of the individual therapy sessions for adults.

On the other hand, despite this receptivity, student clinicians and supervisors reported administration and scoring practices that were at odds with those recommended for informing clinical decision making in a way that contributes to better outcomes (Lambert, 2010). Moreover, clinicians and supervisors reported variable use of the information on client progress produced by the monitoring. In some cases, student clinicians indicated tracking client change closely and frequently as well as using the information to inform their service planning. In other cases, student clinicians reported examining changes in scores infrequently and not necessarily in a timely fashion. Interestingly, although most adult clients stated that they completed the OQ-45 in most sessions, they indicated not receiving regular feedback on their progress based on the results of the measure. As well, there appeared to be limited use in supervision by student clinicians and supervisors of the information produced by the outcome measures.

The variable clinical use of the OQ measures is inconsistent with our finding that the measures were generally perceived to be useful. Student clinicians, supervisors, and clients reported that the use of outcome measures provided them with important information regarding changes in functioning in a positive or negative direction, which allows them to modify their treatment plan accordingly if necessary. These findings are in line with previous research, as psychologists in clinical practice cited tracking client progress and determining if there is a need to alter treatment as the most important reasons for using outcome measures (Boswell et al., 2015). Many clinicians and supervisors perceived the OQ-45 and Y-OQ as useful tools in working with clients because they serve as good indicators of distress, particularly in those clients who are less open with their clinicians.

In terms of training student clinicians, supervisors felt that the OQ measures were particularly useful for beginning therapists, as they allowed them to become more in tune with the mood states of their clients. Supervisors, however, cautioned that the usefulness of the measures depends on their use in conjunction with clinical judgement. Clinicians and supervisors appeared well aware of the potential added value of using outcome monitoring in psychological services. However, this awareness has not translated into regular and optimal use of outcome monitoring in the delivery of services.

Despite the perceived benefits, several drawbacks of using outcome measures in therapy were raised by student clinicians and supervisors. Student clinicians and supervisors expressed concerns that administration of the measures might

interfere with rapport or take valuable time away from sessions. Student clinicians and supervisors also raised concerns about the utility of administering outcome measures to specific clients, and some questioned the utility of administering them every week. With respect to the Y-OQ, clinicians and supervisors reported that it took a long time for parents and youth to complete the questionnaire, and it was not always clear who the "client" was in family therapy cases. Both clinicians and supervisors expressed concerns about their own lack of knowledge regarding how to use the OQ-45 and Y-OQ, including questions about software usage and how to provide clients with useful feedback.

Despite suggestions in the literature that a significant barrier to implementation is clinician "fear and mistrust" about use of outcome data at a program or agency level (Boswell et al., 2015; de Jong, 2016; Mellor-Clark et al., 2016), the student clinicians and supervisors in this study did not report such concerns or insecurities about what the outcome data would reveal about their ability as clinicians. This is surprising, given that one expects student clinicians to be more concerned than non-student clinicians about their competence as clinicians.

Interestingly, clients expressed few complaints about the OQ other than general comments about the repetitiveness of the questions and the non-applicability of certain items to themselves. There was no feedback from clients that using outcome monitoring affected therapeutic rapport or alliance. However, some clients did suggest that therapy time could be better utilized if they were able to complete the OQ either at home or in the waiting room prior to commencing sessions. The finding that clinicians were more concerned than clients about a potential negative impact on rapport is similar to findings from Unsworth, Cowie, and Green's (2012) study, which assessed perceptions of clinicians and clients related to the use of outcome-monitoring instruments in a mental health service agency context.

The drawbacks of outcome monitoring raised in the current study, notably concerns about the feasibility of integrating it into the clinical process, difficulties in the clinical interpretation of results, and questions regarding the overall usefulness of such a tool, are in line with the primary reasons cited by clinicians in previous research for not using outcome measures in the delivery of mental health services (Boswell et al., 2015; Garland et al., 2003; Hatfield & Ogles, 2004).

Limitations

One limitation of our methods is that voluntary participation of students, supervisors, and clients may have led to the selection of participants who had more favourable views toward the OQ. However, given that the majority of student clinicians and supervisors participated (69% of students and 85% of supervisors), individuals with a range of views toward the OQ were likely represented in the sample, at least for these groups. Additionally, students and supervisors who had concerns about using the OQ within the training centre may have participated in order to make sure that their concerns were heard and considered when making future decisions about using OQ measures within the training centre. However, clients who were dissatisfied or disinterested in the OQ may have had few

incentives to participate, and the resulting selection bias may have contributed to our finding that clients reported relatively fewer drawbacks to using the OQ than student clinicians or supervisors.

Other limitations included relying on self-report data to assess rates of OQ administration and viewing of OQ interpretive reports, and not interviewing or surveying individuals who used the data at a program or clinic level to assess usefulness of the data for this stakeholder group. Additionally, it is possible that the methods used (surveys and focus groups) to gather student clinician input may not have been sufficient for accessing deeper concerns about the OQ, such as performance evaluation fears.

Implications

A number of important implications regarding the implementation of performance measures within a mental health service clinic can be drawn from the current study. Firstly, our results suggest that performance measures are likely to be accepted and administered within mental health service settings if clinicians perceive clinical benefits to administering them and relatively few drawbacks. Perhaps one of the biggest incentives for staff to participate in performance measurement is the sense that they can meaningfully use information from the measures in their work. When measures are not perceived to be useful for a specific service that clinicians are providing, as was the case with clients receiving family therapy in this study, there are likely to be problems with consistent administration of the measures. Thus, measures selected for performance measurement in mental health service settings not only need to be useful at a program or agency level but must also serve some clinical benefits to the clinicians administering them.

However, finding a measure that is perceived to be useful by all clinicians and for all services within any given agency is likely to be challenging, given the range of theoretical orientations, treatment modalities, and client characteristics that are typically represented in any agency. This may be particularly difficult within the context of an academic training centre, since in comparison with other mental health services with defined goals and dictated processes, there may be less consensus and more divergence among both supervisors and students in terms of the specific intended clinical outcomes and the processes through which these outcomes can be achieved. One solution could be to select a measure that would be useful for the majority of clinicians and clients, and to work with minority clinician groups to problem-solve and identify possible ways to make the measure more useful to their work.

In addition to the selection of a clinically useful performance measure, our results highlight the importance of reducing both practical and perceived barriers to using the selected performance measure. For example, in our study, feedback from all individuals in all three groups referred to the desirability of completing the measure outside of the therapy session to conserve therapy time. Addressing this practical barrier is likely to increase adherence to completing the measures. Alternative methods of gathering client data may need to be investigated, such as

having clients complete the measures on tablets or in private computer stations in the waiting room, or asking clients to complete and submit the measures online at home prior to their session. Exercising flexibility in how measures are administered in order to minimize the disruption that measure completion causes to clients and clinicians is consistent with implementation recommendations made by several leading researchers in the field (Boswell et al., 2015; Douglas, Button, & Casey, 2016).

Second, we found that although perceived usefulness of measures is important for clinician acceptance and administration of measures, it does not appear to be sufficient for effective clinical use of the measures. In our study, student clinicians' and supervisors' reports that they found the OQ measures useful were inconsistent with their variable clinical use of the measures. One explanation for this finding may be that student clinicians and their supervisors were not sufficiently informed about how to use the measures clinically. This hypothesized explanation is supported by the finding that student clinicians and supervisors both reported a lack of clarity in terms of the "best practice" procedures for using outcome measures with clients. Hence, it is important that these procedures be clarified and communicated to clinicians and supervisors. Clarifying best practice procedures may be particularly important for situations in which standard procedures do not appear to apply, such as using OQ measures within the context of family therapy.

Another explanation for our inconsistent finding about the clinical use of the OQ may be that some clinicians and supervisors had only a surface-level understanding of the benefits of the OQ measures but had not fully integrated how using the measures was consistent with their clinical values (Douglas et al., 2016) and their higher-level goals (de Jong, 2016) related to providing optimal care to clients. In fact, results suggest that some believed that use of the measures might go against their clinical goals and values (e.g., through interfering with alliance, "pathologizing the child"). Thus, it may be important to link use of the measures with clinicians' clinical values and higher-level goals in order to increase adherence to best-practice procedures for using OQ measures. It does not appear to be sufficient for a measure to have demonstrated value in improving client outcomes, since our study indicated that even a measure that has several studies supporting its clinical utility had variable uptake. Rather, the value of the data being collected needs to be internalized and fully understood by the staff participating in its collection.

Training of the clinicians and supervisors may play an important role both in clarifying best practice procedures, ensuring that clinicians are utilizing the measures in the most effective way (i.e., using the clinical support tools and the ALERT system, reviewing the feedback from the measure with the client at the start of the session), and in helping to address any perceived barriers to using the measures (e.g., clinician perceptions that use of the measures goes against something that they value in therapy). As such, appropriate training sessions focusing on the practical aspects of the administration and on the clinical use of the OQ

data with the client and supervisor should be developed and provided to clinicians and their supervisors. Training can also focus on increasing clinician and supervisor commitment to using the measures and addressing clinician concerns about the tools (de Jong, 2016).

Another implication of our study is that supervisors and managers must be on board with using a performance measure and must encourage its use at the frontline level. Otherwise, there may be difficulties with staff adherence and meaningful clinical use of the information collected. Clinical supervision may be a critically important venue within mental health service agencies for frontline staff to learn how to use data from measures like the OQ-45 in their clinical work. Unlike training workshops, clinical supervision has the advantage of being an *ongoing venue* for discussion about how to apply information from these measures to staff members' specific cases. When supervisors do not incorporate discussions of these measures in supervision, as was the case for the majority of supervisions in our study, a significant opportunity for integrating performance measurement is missed.

The current research provides important information in understanding the process of implementing outcome monitoring within a mental health clinic. Our findings join those of other studies in the area that suggest that the integration of outcome monitoring in the delivery of psychological services remains a work in progress, even in the face of mounting empirical evidence of its contributing to more positive outcomes.

ORCID iD

Stephanie Yamin http://orcid.org/0000-0002-9702-314X

REFERENCES

Bickman, L. (2005). A common factors approach to improving mental health services. *Mental Health Services Research*, *7*(1), 1–4. https://doi.org/10.1007/s11020-005-1961-7. Medline:15832689. Retrieved from http://psycnet.apa.org/record/2005-02909-001

Boswell, J. F., Kraus, D. R., Miller, S. D., & Lambert, M. J. (2015). Implementing routine outcome monitoring in clinical practice: Benefits, challenges, and solutions. *Psychotherapy Research*, *25*(1), 6–19. https://doi.org/10.1080/10503307.2013.817696. Medline:23885809.

Burlingame, G. M., Mosier, J. I., Wells, M. G., Atkin, Q. G., Lambert, M. J., Whoolery, M., & Latkowski, M. (2001). Tracking the influence of mental health treatment: The development of the Youth Outcome Questionnaire. *Clinical Psychology and Psychotherapy*, *8*(5), 361–379. https://doi.org/10.1002/cpp.315

Clement, P. W. (1994). Quantitative evaluation of 26 years of private practice. *Professional Psychology: Research and Practice*, *25*(2), 173–176. https://doi.org/10.1037/0735-7028.25.2.173

de Jong, K. (2016). Deriving implementation strategies for outcome monitoring feedback from theory, research and practice. *Administration and Policy in Mental Health and*

Mental Health Services Research, *43*(3), 292–296. https://doi.org/10.1007/s10488-014-0589-6. Medline:25208490.

Douglas, S., Button, S., & Casey, S. E. (2016). Implementing for sustainability: Promoting use of a measurement feedback system for innovation and quality improvement. *Administration and Policy in Mental Health and Mental Health Services Research*, *43*(3), 286–291. https://doi.org/10.1007/s10488-014-0607-8. Medline:25344848.

Garland, A. F., Kruse, M., & Aarons, G. A. (2003). Clinicians and outcome measurement: What's the use? *Journal of Behavioral Health Services & Research*, *30*(4), 393–405. https://doi.org/10.1007/BF02287427

Hatfield, D. R., & Ogles, B. M. (2004). The use of outcome measures by psychologists in clinical practice. *Professional Psychology: Research and Practice*, *35*(5), 485–491. https://doi.org/10.1037/0735-7028.35.5.485

Hodges, K., & Wotring, J. R. (2012). Outcomes management: Incorporating and sustaining processes critical to using outcome data to guide practice improvement. *Journal of Behavioral Health Services and Research*, *39*(2), 130–143. https://doi.org/10.1007/s11414-011-9262-y. Medline:22037962.

Howard, K. I., Moras, K., Brill, P. L., Martinovich, Z. & Lutz, W. (1996). Evaluation of psychotherapy: Efficacy, effectiveness, and patient progress. *American Psychologist*, *51*(10), 1059–1064. https://doi.org/10.1037/0003-066X.51.10.1059. Medline:8870542.

Lambert, M. J. (2001). Psychotherapy outcome and quality improvement: Introduction to the special section on patient-focused research. *Journal of Consulting and Clinical Psychology*, *69*(2), 147–149. https://doi.org/10.1037/0022-006X.69.2.147. Medline:11393592.

Lambert, M. J. (2005). Presidential address: What we have learned from a decade of research aimed at improving psychotherapy outcome in routine care. *Psychotherapy Research*, *17*(1), 1–14. https://doi.org/10.1080/10503300601032506

Lambert, M. J. (2010). *Prevention of treatment failure: The use of measuring, monitoring, and feedback in clinical practice*. Washington, DC: American Psychological Association. https://doi.org/10.1037/12141-000

Lambert, M. J., & Finch, A. (1999). *The outcome questionnaire*. Mahwah, NJ: Lawrence Erlbaum Associates.

Lambert, M. J., Morton, J., Hatfield, D., Harmon, C., Hamilton, S., Reid, R., Shimokawa, K., Christopherson, C., & Burlingame, G.M. (2004). *Administration and scoring manual for the OQ-45*. Provo, UT: Brigham Young University; American Professional Credentialing Services.

Lambert, M. J., Okiishi, J. C., Finch, A. E., & Johnson, L. D. (1998). Outcome assessment: From conceptualization to implementation. *Professional Psychology: Research and Practice, 29*(1), 63–70. https://doi.org/10.1037/0735-7028.29.1.63

Lambert, M. J., Whipple, J. L., Hawkins, E. J., Vermeersch, D. A., Nielsen, S. L., & Smart, D. W. (2003). Is it time for clinicians to routinely track patient outcome? A meta-analysis. *Clinical Psychology: Science & Practice*, *10*(3), 288–301. https://doi.org/10.1093/clipsy.bpg025

Mellor-Clark, J., Cross, S., Macdonald, J., & Skjulsvik, T. (2016). Leading horses to water: Lessons from a decade of helping psychological therapy services use routine outcome

measurement to improve practice. *Administration and Policy in Mental Health and Mental Health Services Research*, *43*(3), 279–285. https://doi.org/10.1007/s10488-014-0587-8. Medline:25179755

Poister, T. H. (2003). *Measuring performance in public and nonprofit organizations.* San Fransisco, CA: John Wiley & Sons.

Sapyta, J., Riemer, M., & Bickman, L. (2005). Feedback to clinicians: Theory, research and practice. *Journal of Clinical Psychology*, *61*(2), 145–153. https://doi.org/10.1002/jclp.20107. Medline:15609360

Shimokawa, K., Lambert, M. J., & Smart, D. W. (2010). Enhancing treatment outcome of patients at risk of treatment failure: Meta-analytic and mega-analytic review of a psychotherapy quality assurance system. *Journal of Consulting & Clinical Psychology*, *78*(3), 298–311. https://doi.org/10.1037/a0019247. Medline:20515206

Slade, K., Lambert, M. J., Harmon, S. C., Smart, D. W., & Bailey, R. (2008). Improving psychotherapy outcome: The use of immediate electronic feedback and revised clinical support tools. *Clinical Psychology & Psychotherapy*, *15*(5), 287–303. https://doi.org/10.1002/cpp.594. Medline:19115449

Unsworth, G., Cowie, H., & Green, A. (2012). Therapists' and clients' perceptions of routine outcome measurement in the NHS: A qualitative study. *Counselling and Psychotherapy Research*, *12*(1), 71–80. https://doi.org/10.1080/14733145.2011.565125

Youn, S. J., Kraus, D. R., & Castonguay, L. G. (2012). The treatment outcome package: Facilitating practice and clinically relevant research. *Psychotherapy*, *49*(2), 115–122. https://doi.org/10.1037/a0027932. Medline:22642519

Zimmerman, M., & McGlinchey, J. B. (2008). Why don't psychiatrists use scales to measure outcomes when treating depressed patients? *Journal of Clinical Psychiatry*, *69*, 1916–1919.

AUTHOR INFORMATION

Lindsay Rosval earned her PhD in clinical psychology from the University of Ottawa. She currently works with children, adolescents, and adults in private practice and through the Ottawa Catholic School Board in Ottawa.

Stephanie Yamin is an assistant professor in the School of Counselling, Psychotherapy and Spirituality at Saint-Paul University in Ottawa and an affiliated researcher with Bruyère Research Institute. Her main research interest includes evaluating clinical interventions for vulnerable populations.

Parastoo Jamshidi is a clinical psychologist at the Ottawa Institute of Cognitive Behavioural Therapy (OICBT) and an affiliate researcher at the University of Ottawa's Centre for Research on Educational and Community Services (CRECS). One of her areas of research interest is helping community agencies make meaningful use of data.

Tim Aubry is a full professor in the School of Psychology and senior researcher at the Centre for Research on Educational and Community Services at the University of Ottawa. He is currently holder of the Faculty of Social Sciences Research Chair in Community Mental Health and Homelessness at the University of Ottawa.