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Measurement Implementation in Youth Psychotherapy:

An Examination of Barriers and Facilitators of

Y-OQ and TSM Implementation

Tess Janeen Collett

A dissertation submitted to the faculty of
Brigham Young University
in fulfillment of the requirements for the degree of

Doctor of Philosophy

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ABSTRACT

Measurement Implementation in Youth Psychotherapy: An Examination of Barriers and Facilitators of Y-OQ and TSM Implementation

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Doctor of Philosophy

Studies have shown a concerning and disproportionate amount of treatment failure and premature termination in youth populations. Routine measurement feedback has been proposed as a means to prevent treatment failure and premature termination for adults and may also improve youth mental health services. However, studies examining helpfulness of measurement feedback systems in youth populations have demonstrated a lack of effects more likely due to poor measurement implementation than to the measurement feedback system itself. Because contexts within the service settings are such crucial factors in whether an innovation is successfully implemented, examining barriers and facilitators in said contexts is a necessary step towards improving implementation for the ultimate purpose of improving youth mental health services. The present study explored barriers and facilitators to the implementation of the Youth Outcome Questionnaire (Y-OQ) and Treatment Support Measure (TSM) in youth routine clinical care. Thirteen staff of varying job titles, experiences, education and opinions towards measures were interviewed using consensual qualitative research (CQR) methods. Results were similar to previous studies, indicating multilevel barriers and facilitators to measurement implementation such as at the organization, staff, client and measure level. Using CQR data analysis, domains, categories and subcategories along with level of frequency are displayed and discussed in further detail. In addition to barriers and facilitators, interviewees provided recommendations for how to improve implementation of measures within their organization. Researchers provide recommendations of continued communication, re-assessment of barriers and facilitators over time and shared responsibility between stakeholders and professionals invested in improving youth mental health services.

Keywords: implementation, youth mental health services outcomes, Youth Outcome Questionnaire, Treatment Support Measure, qualitative methods

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Measurement Implementation in Youth Psychotherapy:

An Examination of Barriers and Facilitators of Y-OQ and TSM Implementation

For decades, youth mental health professionals have been concerned with youth treatment outcomes. The combination of this developmental stage being a crucial predictor for later life functioning and the fact that we are seeing high rates of treatment failure in mental health settings is indicative of the attention this population warrants. More recently, in adult outcome literature, researchers have found promising benefits in mitigating treatment failure through the use of feedback from routine outcome monitoring (ROM) measures and clinical support tools (CST) (Hatfield & Ogles, 2006; Lambert, Harmon, Slade, Whipple, & Hawkins, 2005). However, the benefit of said measures with youth are unclear. One primary reason measures are successful in their purpose is the level to which they are implemented. Barriers and facilitators to the implementation of a measure may enhance or limit its utility, and by consequence enhance or limit client outcome. The purpose of this study is to explore potential barriers and facilitators of ROM and CST implementation in youth routine clinical care settings in an effort to increase our understanding and ability to promote youth treatment outcome.

Youth Treatment Outcome

The significance of intervention at an early age is difficult to overemphasize. Studies repeatedly show the connection between youth functioning and later life functioning. For example, youth in need of mental health treatment who do not improve throughout treatment show signs of symptoms worsening later in life (de Haan, Boon, de Jong, Hoeve, & Vermeiren, 2013). Studies have shown treatment failure (the statistically significant worsening of functioning while in therapy) rates of 20% and premature termination (client ending treatment not having achieved treatment goals) rates of 45% in children and adolescents receiving

psychotherapy (de Haan et al., 2013; Jacobson & Truax, 1991). The contrast of these with adult treatment failure rates of 5-10% and premature termination rates of 18-20% reinforces the urgency to address treatment outcomes in routine clinical care for youth populations (Swift & Greenberg, 2012).

Measurement Feedback Systems

Treatment outcomes in adult populations have shown significant benefit from the use of measures that monitor and provide feedback to therapists about client progression throughout the course of psychotherapy intervention (Harmon et al., 2007). These measures are referred to as outcome measures and assess client change in constructs believed to be relevant in psychotherapy outcomes and provide the therapist with feedback (considered a measurement feedback system; Siefert & DeFife, 2012). Multiple studies have demonstrated the utility of measurement feedback in adult populations with deterioration rates dropping from 20% to 8% (Hatfield & Ogles, 2006; Lambert et al., 2005). The Outcome Questionnaire is a well-established and internationally acclaimed outcome measure. Its effectiveness in improving mental health functioning has been demonstrated in many studies. The youth version of the Outcome Questionnaire has been shown to be an exceptionally reliable and valid outcome measure for youth (Wells, Burlingame, Lambert, Hoag, & Hope, 1996; Shimokawa, Lambert, & Smart, 2010). However, the utility of the feedback generated from this Youth-Outcome Questionnaire (Y-OQ) along with other outcome measures have rarely been assessed with youth populations.

Another type of measure designed to aid therapists throughout the therapy process is called a clinical support tool (CST) and assesses a client's functioning in areas shown to be highly correlated with treatment outcome. A key feature of a CST is that the feedback is actuarial and therefore provides treatment profiles for the therapist's use. These treatment profiles consist

of evidenced-based interventions shown to be helpful with youth presenting with similar concerns in functioning. The Treatment Support Measure (TSM) is a CST that is most commonly used as a supplement to the Y-OQ. Often a client will be administered the Y-OQ and TSM at the beginning of treatment and then frequent administration of the Y-OQ is given while the TSM is administered by the therapist when their client is signaled by the Y-OQ as *off-track* (client functioning is stagnant or worsening) in therapy. The use of CSTs has demonstrated preventive benefits for off-track clients who are at high risk for treatment failure (Whipple et al., 2003). Both the Y-OQ and TSM are administered electronically and results are immediately available in the secure software system known as the Outcome Questionnaire Analyst (OQ-Analyst). The OQ-Analyst provides feedback to therapists in the form of progress charts, written interpretation of scores, and more. Understanding the utility of feedback from measures such as ROMs and CSTs in youth populations is the next step towards potentially mitigating such rates of poor treatment outcomes discussed above.

As far as we know, only one such study exists that has examined the usefulness of measurement feedback in youth routine clinical care settings. Bickman et al. (2016) conducted a randomized control trial examining the usefulness of a measurement feedback system (not the Y-OQ) at youth routine clinical care settings. Utilizing a sample of 257 youth (11-17) and 21 therapists, researchers randomly created feedback and non-feedback groups and implemented a feedback system at two different sites. Researchers also created an implementation covariate to indicate possible level at which measure feedback was applied to each case. The implementation covariate was a combination of whether the measure was completed by the client and whether the therapist viewed the feedback. During analysis, researchers found that feedback youth at the site with a higher implementation rate (34%, mode = 50%) showed significant improvements in

functioning throughout the course of treatment compared to those without feedback.

Additionally, results at the site with low implementation (27%, mode = 0%) indicated no significant feedback effects. When implementation was at 0%, client functioning showed significant decreases throughout the course of treatment ($p = .007$) while with every unit of implementation added, functioning significantly increased ($p < .001$). Bickman et al. (2016), concluded that a lack of effects found during the feedback study were more likely due to poor measurement implementation than to the measurement feedback system itself.

Innovation Implementation

The implementation of innovations is as important as the innovation itself and though the usefulness of measurement feedback systems is well documented (with adult populations) there is still a lack of successful implementation into routine practice (Aarons, Hurlburt, & Horwitz, 2011; Bickman et al., 2016). Implementation is defined as “the process of gaining targeted employees’ appropriate and committed use of an innovation” (Klein & Sorra, 1996, p. 1055). Often when an innovation is adopted by an organization and the intended benefits are not seen, the complication is not due to a fault in the innovation but rather the lack of its appropriate and committed implementation in that organization (Klein & Sorra, 1996). If an innovation is created for a specific purpose and the means by which that innovation evolved was through many iterations identifying its appropriate use, then it is not surprising that inappropriate use of that innovation would undermine any alleged benefits.

This failure of implementation is a concern not only in the social sciences but among most, if not all, fields of study where the transfer from research settings to “real-world” applications reside (Schoenwald & Hoagwood, 2001). Many researchers and clinicians today as well as 50 years ago attest to the phenomenon of a large disconnect preventing the smooth and

rapid transition of innovations from the laboratory to the clinical setting. The rates are substantial, with failure to implement innovations in organizations then and now ranging from 28%-93% (Bridgeforth, 2009; Greiner, 1967). Through the years, the topic of implementation has expanded from fields of study such as agriculture and manufacturing to organizational development, social sciences and more (Mendel, Meredith, Schoenbaum, Sherbourne, & Wells, 2008; Schoenwald & Hoagwood, 2001). The National Institutes of Health along with other organizations recognize implementation failure as a significant challenge in the promotion of mental health (National Institute of Mental Health [NIMH], 2001; National Institute of Health [NIH], 2006). Its growing awareness in the social sciences for the past ten years has led to the development of theoretical explanations for why this “research-to-practice” gap might exist.

Theory of implementation. One of the aforementioned explanations is well articulated by Aarons et al. (2011) in their theoretical model of implementation in public service sectors. Similar to other implementation models that identify multiple contextual influential factors, Aarons et al.’s (2011) model highlights the presence of multiphasic and multilevel components to implementation. The four different phases of implementation are exploration, adoption decision/preparation, active implementation, and sustainment. The theory then outlines contextual variables that may have more impact in that phase, stemming from findings that certain variables play more crucial roles at different points in time (Fixsen, Blase, Naoom, & Wallace, 2009; Mendel et al., 2008). There are two types of contextual variables that have emerged in meta-analyses of implementation over the years. *Inner context* variables are those that lie within implementing organizations themselves, such as structure, expectations, and individual values. *Outer context* variables are usually those that stem from the surrounding community such as stakeholder, government and policy. Because both organizations in our study

have already adopted the Y-OQ and TSM, and because this study is interested in barriers and facilitators that may exist within the community mental health organizations, we only outlined the inner context variables included in the active implementation phase.

Inner context factors are important in improving implementation specifically between the innovation and service context. The first factor to consider is what takes place in the organization as-a-whole to influence innovation implementation. These tend to include the way an organization is structured, the priorities and goals that formally exist, its physical and cultural readiness to changes, and climate or norms associated with change that lie within an organization's social layers. The next inner factor to consider is how well the innovation fits the purpose and needs of that organization. These tend to address whether the innovation aids in accomplishing the goals of the organization (e.g., helps targeted population), and is sensitive to the capacity of the organization (e.g., can be easily used with available resources). Lastly, the model outlines inner context factors at an individual level where the innovation can be impacted by a service provider's characteristics (e.g., demographics, level of education, years of experience, values and attitudes towards innovations). Many of these factors have been recognized as significant components in youth community mental health settings (Glisson, Hemmelgarn, Green, & Williams, 2013; Glisson & Williams, 2015). Because contexts within the service settings are such crucial factors in whether an innovation is successfully implemented, examining barriers and facilitators in contexts where the Y-OQ and TSM are frequently utilized is a necessary step towards improving implementation of these measures (Aarons et al., 2011).

Purpose of Study

The purpose of this study was to explore perceived barriers and facilitators to utilizing the Y-OQ and TSM feedback systems in youth routine clinical care. In doing so, we aimed to

explore varied levels of staff experience with the OQ-Analyst feedback system. Due to the exploratory nature of this study, we used data inductively to develop a theory of implementation for the Y-OQ and TSM feedback systems. We acknowledged an underlying comprehensive assumption of current implementation theory as proposed by Aaron et al., and generally hypothesized that both barriers and facilitators of implementation would be present within individual experiences and that they would exist in multiple levels of involvement (therapist, directors, secretaries, etc.). Qualitative methods were used to comprehensively explore this question in an effort to ultimately improve measure feedback implementation and consequently, client outcome.

Method

In this study, I assessed the perceived barriers to implementation of the Y-OQ and TSM through the context of a broader youth mental health feedback study. I used an adapted consensual qualitative research (CQR) methodology, containing constructivist and postpositivist philosophical underpinnings, to explore barriers and facilitators of OQ-Analyst implementation (Hill et al., 2005). This study was part of a larger randomized control trial (RCT) conducted within one outpatient mental health organization in the intermountain west. Three different sites operating under this organization participated and spanned both rural and urban locations. These organizations provide psychotherapy services to youth and their guardians from varying demographic backgrounds and presenting problems. Within the larger RCT, this particular study consisted of a qualitative methodology that examined barriers of the OQ-Analyst feedback system from a staff (consumers/users) perspective.

Participants

Staff that were involved with the implementation of the OQ-Analyst feedback system were invited to participate. In order to examine possible barriers and facilitators, I pursued participants with diversity in experience, qualifications, positions and opinions (Aarons et al., 2011; Gleacher et al., 2015). Participants therefore consisted of executives, division directors, managers, supervisors, therapists, interns and office secretaries. Participant education ranged from doctorate to high school levels in fields including and not limited to psychology, social work and marriage and family therapy. Participants varied in familiarity with measures, ranging from nine months of use to many years. There was also a variety of general positivity, negativity and neutral attitudes towards the measures amongst interviewees. Varying ethnic and theoretical backgrounds provided an appropriate level of diversity that reflects consumers of the OQ-Analyst system (Aarons et al., 2011; Burlingame et al., 2003; Warren & Lambert, 2013; Wells, Burlingame, & Rose, 2003).

Researchers

The composition of researchers included myself (the primary investigator), three research assistants, two auditors and a CQR lab. I am a female-identified, clinical psychology PhD candidate who attended a two-day intensive CQR training and regular CQR lab meetings throughout the data analysis process. My research team consisted of three students of the university, two male-identified psychology undergraduates and one female-identified clinical psychology PhD student, all of which received CQR training and attended weekly CQR lab meetings. The team and I worked consensually through the transcription and coding process, meeting twice weekly and collaborated between lab meetings. I, along with the team of researchers, recorded biases initially and revisited these frequently. Data analysis documents

were sent to auditors (two professors of psychology with extensive CQR or Y-OQ and TSM background) at different benchmarks of the analysis process as well as collaborating weekly with a larger CQR lab.

Procedure

Prior to the commencement of the broader RCT, researchers met on-site during staff meetings with each site to discuss basic characteristics of the study (purpose, length, etc.). Preliminary data were gathered to examine the history and current implementation of the OQ-Analyst feedback system within that organization. Areas of inquiry included how long the organization had been using the OQ-Analyst, details of any training that was utilized for OQ-Analyst consumers, and any other contextual information relating to the overall organization's relationship with the OQ-Analyst (Aarons et al., 2011).

Due to the broader RCT, all staff participants were required to attend an initial training session conducted at each site before data collection (Klein & Sorra, 1996). This training session included one hour of education on how to use the OQ-Analyst system, the purposes of the study, expected study procedures and voluntary signing of consent forms. Additionally, at each site I designated one staff member as the OQ-Analyst liaison. This liaison was someone that expressed enthusiasm towards the OQ-Analyst system and was an additional person that staff members could go to with system related questions. As an on-site internal support, the liaison received extra OQ-Analyst training, engaged in regular communication (at least once a month) with a primary researcher in order to address questions or concerns that were raised at their given site, and were interviewed. In addition, all participants in the study were able to contact a primary researcher directly with any questions or concerns (Gleacher et al., 2015; Wolpert, Curtis-Tyler, & Edbrooke-Childs, 2014).

Following the initial training, quantitative data collection, as part of the broader RCT, began. Consistent with routine clinic procedures, clients completed the Y-OQ and TSM at specified times (Y-OQ every session, initial TSM, Y-OQ red flag TSM, six-month mark or termination TSM). Clients were randomly assigned to feedback or no-feedback conditions. Therapists were given access to OQ-Analyst feedback for half their caseload. In order to allow adequate time for experience with client initial and termination stages as well as habits of implementation to surface, I conducted in-depth semi-structured interviews with staff participants at the nine-month mark of data collection. According to Hill et al.'s (2005) recommendation for CQR sample size, I interviewed 13 multi-level staff members. These face-to-face interviews were approximately 50 minutes. This amount of time was for the purpose of pursuing adequate data saturation and was conducted by myself following extensive qualitative interview training. I met with the staff members at an on-site location where audio recording was utilized. I used an exploratory approach with the flexibility to ask clarifying questions and reference to a semi-structured interview outline. Data collected from interviews includes audio recordings as well as my personal notes from the interaction with interview participants (e.g. body language, observation and personal impressions). These interviews concluded the collection of data for this study.

Measures

OQ-Analyst feedback system. The implementation components studied were the Youth Outcome Questionnaire (Y-OQ) and Treatment Support Measure (TSM). These measures were accessed through a system which contains a number of empirically supported measures used to assess client functioning, called the OQ-Analyst. The OQ-Analyst is accessed online and is used in mental health services both nationally and internationally. The system's efficacy has been

sanctioned through multiple studies and institutions as a way to increase treatment effectiveness (SAMHSA's National Registry of Evidence-Based Programs and Practice; NREPP, 2014). The Y-OQ and TSM are often used in conjunction due to their compatibility and mutually beneficial purposes. Completed questionnaires are uploaded into the OQ-Analyst's algorithm from which results (i.e. feedback) are immediately generated for therapist use.

The Y-OQ (parent/guardian) and Y-OQ Self-Report (youth) are outcome measures that track client functioning in areas that have been empirically shown to be sensitive to child and adolescent change throughout therapy (Burlingame et al., 2003; Wells et al., 2003). These areas make up the subscales of the Y-OQ and include intrapersonal distress, somatic, interpersonal relations, critical items, social problems and behavioral dysfunction. The questionnaire is made up of 64 items and takes clients approximately 10 minutes to complete. The youth and adult (for caregiver's use) Y-OQs are administered prior to the therapy session so that therapists may view and be informed about the client's progress thus far. The Y-OQ's psychometrics are strong with an internal consistency of .97, specificity of .79, sensitivity of .81 and strong convergent and divergent validities (Burlingame et al., 2003; Wells et al., 2003).

The TSM-P (parent/guardian) and TSM-Y (youth) are treatment planning and clinical support tools that assess client functionality in several areas and provide actionable feedback for therapist use. These areas make up the subscales of the TSM and for the TSM-P version include parent self-efficacy, parent social support, parenting skills, parent distress and the parent's perception of the therapeutic alliance. The TSM-Y subscales include self-efficacy, social support, motivation for treatment and perception of the therapeutic alliance. These subscales have been empirically identified as areas of functioning significant to youth development and positive treatment outcomes. The TSM is to be administered at the beginning of treatment and

when a client has been flagged as “off track” by the Y-OQ. Once completed, therapists are able to immediately view the client’s feedback reports through the OQ-Analyst software and have the option of incorporating the feedback into their practice to improve their client’s outcomes.

Preliminary results examining TSM psychometric properties have shown strong 4-week test-retest reliability estimates of .91 to .92, moderate to strong subscale alpha estimates ranging from .77 to .89 and sensitivity to change (Warren et al., 2008).

The Y-OQ and TSM have been introduced at different times within the organization. The Y-OQ was originally adopted by administration of the organization many years ago and has become part a primary commitment of the organization and staff members’ daily routine. The TSM has been introduced more recently and has played less of a daily role for staff. It serves a different function than the Y-OQ and is thus less familiar to most staff. For these reasons, the two measures are at different phases of implementation within the organization.

OQ-Analyst barrier and facilitator interview. In evaluating barriers and facilitators of the OQ-Analyst feedback system I used a semi-structured interview. Because exploration is key and this line of inquiry is relatively new with these measures and settings I used a maximum variation sampling. This qualitative sampling technique endeavors to capture the greatest range of experience in reference to the phenomenon of interest that can be found within settings (Creswell, 1998). Therefore, our sample consisted of several directors, liaisons, supervisors, therapists and secretaries. In order to obtain details about the complex process involved in psychotherapy decision making, a qualitative approach can yield valuable information that may serve to clarify, reconsider or illustrate quantitative findings (Stephen, Elliott, & Macleod, 2011).

Consistent with a postpositive qualitative interviewing style, I used a semi-structured interview protocol guided by my research question of “what barriers and facilitators to the Y-OQ

and TSM implementation exist?”. I was able to refer to a flexible outline for additional guidance when I felt that more structure was needed (Wampold, Heppner, & Kivlighan, 2008; for interview outline see Appendix). This outline reflected the overarching domains of a well-supported implementation theoretical framework found within the literature (Aarons et al., 2011; Gleacher et al., 2015). These domains included influences on implementation at the organization, innovation and individual level. Within the outline, general and open-ended questions were initially given and more specific questions were referenced when I felt that the interviewee did not understand the broader question. Audio recordings of the interview and my notes of impressions, observations and personal reminders made up the qualitative data.

Within this qualitative research, validity was obtained through acknowledging my assumptions and approaching the research question with a methodology that reflected the purpose of the study (phenomenon of OQ-Analyst feedback implementation) and took into account the phenomenon’s theoretical maturity (Kvale, 1996). As this is the first study to examine the OQ-Analyst feedback implementation at outpatient youth psychotherapy facilities, the exploratory nature of this study’s design was deemed most likely to result in a deeper personalized understanding of this phenomenon. Validity was dependent on the quality of qualitative data collection and analysis and its adherence to the qualitative standard of our approach (consensual qualitative research). This quality was examined on a weekly basis and appropriately altered by all members of the research team (e.g. checking of textual interpretation, quality of interviews aimed at the purpose of exploration and clarification of themes, etc.).

Data Analysis

In order to analyze the qualitative data, all 13 audio recorded interviews were transcribed by research assistants onto a secure document template. To ensure consistency and rigor, these

researchers were trained in how to obtain the ultimate goal of preserving the dialogue meaning when transcribing. They were also trained on how to accurately report text as well as non-word sounds (voice inflections and pauses). Research assistants were divided into pairs and aided each other in the transcription of interviews by individually transcribing one interview and then going over the audio-recordings together to discuss any disagreements in the transcription. I carefully supervised research assistants throughout the data analysis process, providing feedback and additional training when necessary. I then went through each transcription and integrated my personal observation notes. The aim was to obtain a holistic representation of the interview experience with that staff member (Hill, 2012; Kvale, 1996).

The integration of observational data also provided a more comprehensive picture of possible barriers and facilitators to implementation of the OQ-Analyst feedback system (Weiss, 1995). I collected and narrated (i.e. described) exchanges and impressions (observational data) whenever I interacted or observed with study participants - from initial contact to the end of qualitative interviews. Interactions included, and were not limited to, introductory team meetings, study training sessions, random system/study assistance and interviews. Narrations encompassed any observation of mine that related to study participants and implementation of the OQ-Analyst. The combination of these sources of data provided rich and deep perspectives into the complexity of innovation implementation under the study's community mental health organization.

Analysis of data from a CQR approach is done in a more circular and relational manner, as opposed to the more common linear approach. Several coding techniques were used and compared one to another, optimizing our analysis and understanding of the research question. In other words, this was demonstrated by examining smaller segments of a participant's words in

and of themselves as well as re-evaluating their meaning in relation to the larger whole of their experiences (Fisher-Smith, 1999).

The initial phase of analyzing transcripts was open coding with open noting, a technique utilized by several qualitative researchers analyzing from a postpositivist and constructivist theory. It combines the common postpositivist segmentation of data (Strauss & Corbin, 1990) as well as the constructionist modification of accounting for the researcher's notations and the collaborative team's interpretation about segment meanings (Marchant, 2014; McLeod, 2011). Thus, the data was segmented into broad categories called *domains* and summaries of those domains, called *core ideas*, allowing for comparison with other data (Hill, 2012; Strauss & Corbin, 1990). Coding the descriptive (audio recordings) and interpretive data (narrations) was used to compare for greater accuracy in assigning domains and core ideas.

The next step in analyzing the data was linking and creating themes from the previously segmented core ideas. This is called *cross-analysis* and involves identifying primary meanings or events that appear in patterns across our data (i.e., across interviews). This level of analysis included constructing themes made up of similar conditions, interactions, contexts and consequences (Hill, 2012; Strauss & Corbin, 1998). Because this step requires repetitive and collaborative re-visitation of raw data, this step ensures that raw data is not lost while at the same time making sense of seemingly disconnected segments/comments. Cross-analysis served as a means to deepen our understanding and formulation of data beyond identifying individual categories and subcategories. It also concluded the qualitative data analysis and provided an overall understanding of facilitation to implementation and an overall understanding of barriers to implementation within our sites. The purpose of this last step was to uncover the central themes of discovery in answer to this study's research question.

Results

For both the Y-OQ and the TSM interview data, domains were separated into three groups that corresponded to the research question: barriers and facilitators to measure implementation and recommendations. Within the barriers theme there were five domains: staff level barriers (Y-OQ), organization level barriers (Y-OQ), client level barriers, TSM lack of awareness/integration, other priorities/lack of time. Within the facilitators theme there were five domains: staff level facilitators (Y-OQ), organization level facilitators (Y-OQ), measure level facilitators (Y-OQ), new information (TSM), because of the study/other staff (TSM). Within the recommendation theme there were two domains: Y-OQ recommendations and TSM recommendations. Consistent with CQR analysis, the additional domains of “junk” and “other” were also used.

In Table 1, we provide a summary of the Y-OQ domains, categories, subcategories and their frequency. In Table 2, we similarly provide TSM domains, categories, subcategories and their frequency. Frequencies are labeled according to requirements prescribed by Hill (2012). *Typical* represents responses that are demonstrated in more than half but less than almost all responses (i.e. with an N=13, typical=7-11). *Variant* represents responses that are demonstrated in half or less but are not so rare as only occurring once (i.e. with an N=13, variant=2-6). *General* would mean that responses are almost always present (i.e. with an N=13, general=12-13) and *rare* would represent only one-time occurrences. Categories that appeared at a higher rate (typical in frequency) and/or that were surprising -given previous knowledge about the research question- will be discussed in greater depth than findings with less frequency (see Table 3 and Table 4 in Appendix for data that were rare).

Y-OQ Domains and Categories

Staff level facilitators. This level of facilitation was identified by statements made about staff characteristics that increased Y-OQ use. Two frequent categories of staff level facilitators emerged throughout the data analysis process: values and motivators that increased implementation of measures.

Values and attributes that facilitate the use of the Y-OQ. Several values were cited as facilitating measure implementation. Most prevalent was that of the staff's using attributes of proactivity and problem solving when met with barriers to using the Y-OQ. Staff cited varied and creative ways they have responded when faced with situations that might otherwise hinder use of the Y-OQ. Examples included completing the measure with their late client during session, orients a reluctant client to measure benefits at the beginning of treatment, searches up-to-date literature to inform use or increase personal motivation to use the measure, adapts measure feedback to decrease workload and simplify efficient documentation, creates shortcuts to access desired measure feedback, increase communication between people important to the implementation process and not taking client reluctance or deteriorating scores personally (e.g. "We don't know everything...we don't predict well. As much as we'd like to think we do, we don't. So let's humble ourselves and get data about it."). One staff member explained:

"I pulled up the research on some of the Y-OQ to kind of get a better feel for where [administrator/director] is coming from and why they are pushing it. So, I like using it, the more I've researched it a little bit more. After I've done my research, I can see why they are using it. I think it's important."

Next in order of frequency were staff reporting that they generally value the Y-OQ and value regular daily Y-OQ use. One staff member referencing daily use of the Y-OQ,

succinctly stated, “It becomes like breathing.” Another staff member reported, “We use it every day. We use it before we have the client come back, we can look at it easily....So I’ve come to depend on it.” Another personal value that was emphasized by staff was that of using research and evidence-based methods. Staff reported feeling more qualified and confident in services when an objective tool, such as the Y-OQ, was integrated (e.g. “I really like when its evidence-based...I feel like it gives [my work] a strong foundation.”). Of note were several staff who went further described using multiple assessment tools in addition to the Y-OQ. These staff appeared to have created a place for assessment within their daily treatment practices, making Y-OQ implementation a more familiar and seamless task.

Staff reported that they value research and evidence-based approaches with clients, and thus, they more fully implemented the Y-OQ. Comments often noted the desire to provide evidence-based care for clients and finding this possible through Y-OQ use. For example, one staff member explained “I really like when its evidence-based and so both the Y-OQ and TSM are evidence-based. So, I really like that. I feel like it gives me a strong foundation.” Another staff member reported, “I do like the movement that’s been going on for a good while now for practice-based evidence. Get feedback and make tweaks based on that evidence.”

Motivation to use the Y-OQ because it provides treatment promoting information. Staff referenced multiple reasons they have felt motivated to implement the Y-OQ. Of greatest motivation to staff was that the Y-OQ provides external indication of client progress or decline. Many staff referred to the usefulness of having an external measurement, as opposed to their own or parent’s interpretation, of the youth’s experience throughout treatment, saying “Being human individuals, we all have our good days and our bad days...in trying to read another person. I like to make sure there is some way for me to evaluate if I’m on track or not.” Staff frequently

commented on the “hope” and benefit clients receive when seeing the feedback from their scores. For example, one staff member in referring to a client who was not feeling they have made any progress, stated “[I could] pull that client report up and print that off for them and they could see the pattern of their Y-OQ. They could see the ups and the downs and they could talk about what was going on at that point. So, for them it made a big deal.”

Of similar but less frequency, staff referenced motivation to use the Y-OQ because it helps staff keep the focus of treatment on salient concerns. Staff described Y-OQ feedback as helping them keep their “finger on the pulse.” In addition to staying updated on issues that are of most importance, the clinicians used the feedback as a way to introduce and start discussions within the session that focus on those issues. For example, one staff member reported, “I can bring up a difficult topic maybe without being too confrontational about it...I’m not a really big confrontational person, so having that neutral factor that I can be like, ‘Hey, you answered this question and according to your answer, it says this is a problem for you.’”

Staff-level facilitators that were less frequent (variant) regarded their values of feeling responsibility to themselves, clients and to organization to implement the Y-OQ. A personal background in research was also a facilitator for some staff. Lastly, staff felt motivated to implement the Y-OQ to help alleviate the suffering of their clients.

Organization level facilitators. This level of facilitation is characterized by comments made about administration and organizational qualities that facilitate Y-OQ use. Three primary categories of organization level facilitators emerged throughout the data analysis process. These included organization systematically integrating the measure throughout the organization, the measure aligning with organization and administrative values, and the measure’s research and evidence-base qualities.

Y-OQ has been systematically integrated into the organization, promoting regular and frequent use. The organization was described as taking steps to make the Y-OQ helpful, efficient, and easy to access for staff and clients. Most prominent was that the organization has successfully incorporated the measure into its software system, which staff interface with heavily throughout their work day. One staff member explained, “We use it every day. We use it before we have the client come back, we can look at it if we want. It comes to us pretty quickly, it’s just automatically. We enter it into our note, it’s part of our notes.” Staff cited multiple factors increasing ease of use, such as the organization transitioning from paper to entirely electronic administration of measure, immediate feedback populated to therapist computer, providing links to Y-OQ feedback in note section, automated alerts if critical items are endorsed, allowing clients to complete the Y-OQ online off-site prior to sessions, software prompting clinician to look at feedback and secretaries making Y-OQ a priority while interacting with clients. Promoting ease and quickness of Y-OQ feedback seemed to be of particular importance to staff.

The next factor frequently cited was that the organization has integrated the Y-OQ into trainings and meetings (e.g. consultation groups, staff meetings) facilitating people’s understanding and implementation of the Y-OQ. Staff reported being constantly reminded that the Y-OQ is a fundamental aspect of their interaction with clients, and thus it was “hard to forget to use it.” The organization seems to have found a way to benefit from the Y-OQ by creating application of its use in multiple settings. For example, one staff member reported “It seems helpful that consultation groups are using Y-OQ scores to decide how to staff clients. This is helpful in getting away from talking about clients in a gossipy way or because they are just interesting clients. Rather, it objectively identifies clients that aren’t making progress.” There

were multiple examples, in addition to the previous example, of how the Y-OQ has been utilized in “alternative” ways to the benefit of staff and clientele.

Staff reported that use has increased due to clinicians being required and held accountable for implementation of the Y-OQ. In other words, failure to use the measure reflects poorly in staff performance reviews. One staff member noted, “Once a year evaluation with our supervisor...there are questions that ask if we are doing it. And I can give myself a high score because I know I [use the Y-OQ daily]...it’s just in our job description.” Another staff member pointed out other forms of requirement, such as daily obligations, stating “[Using the Y-OQ feedback] is required. Like when you write your note, you have to import the score and write a sentence or two about it. It’s just one of the requirements of writing [the note].” Interviewees gave several other examples of the requirement to use the Y-OQ within the organization.

Implementation was reported as high because the Y-OQ is a regular, accepted, and routine part of the culture and everyday work at organization. Staff drew attention to the daily and repetitive use of the measure, to the point where it is seen as an integral part of the culture within the organization. Staff who spoke about this facilitator often stated that it would be “weird” to not use the measure and “impossible” to forget it due to the extent of Y-OQ integration within the organization. They expressed a high level of comfort and familiarity with the measure because of its routine use. One staff member explained the following, “The Y-OQ is part of my hard-wiring now, and I’ve only been doing it for like four or five months.” Reports indicated that there was a sense of acceptance that the measure was now a part of the organization, instead of an additional or foreign feature.

Organization promotes use because the Y-OQ aligns with organization and administrative values. Another major category that arose was that the Y-OQ is facilitated due to

its high alignment with the organization and administrative values. In other words, administrative personnel and organization values are in harmony with the measure. More specifically, the organization's values of providing excellent healthcare services, promoting wellness and using evidence-based methods facilitates the use of the Y-OQ. Staff commonly identified key organization values with phrases such as "promoting wellness," "excellence," "measurable progress," and "evidence informed treatment." One staff member eloquently put:

I think the organization likes to use methods to produce and show change. I think the objective piece is really nice and important. The organization is careful not to push a specific therapy type, so the outcomes allow for the agency to use different types of therapies while tracking change across these different therapies. The organization wants to provide excellent service, so these measures are seen as helping provide that service or alerting people to improve poor services

In essence, values of the organization were described as being achieved more successfully with proper and regular use of the Y-OQ.

Staff stated that organization supervisors and administration actively promote Y-OQ use. Many staff reported that because administrative personnel had high "buy-in" to the measure, staff in positions that hold more power would often advocate for measure use. One frequent example given was supervisors often inquiring after and integrating the Y-OQ feedback into the supervision session. One staff member reported noticing a significant increase in positivity towards the Y-OQ when proponents of the measure were hired into administrative positions. One staff member explained that the measure has been "embraced starting from the top-down." Another staff member described this process as higher-level staff adopting the Y-OQ into their

values and then that process “trickles out” to everyone else through supervision, trainings, newsletters, presentations and staff meetings.

Organization promotes Y-OQ because it is a standardized, objective and evidence-based measure. Staff often referred to the Y-OQ’s standardized and evidence-based nature allowing for measurable quality services and increased ability for inter-staff communication. Staff cited services being measurable reliably measured because of the Y-OQ, making comments such as “[the Y-OQ] gives you a quantifiable resource that shows some evidence and progress or lack of progress. And then when you have the [clients] that are 75 for eternity [lacking progress] you ask. . . “Okay, what else can we do, then? Let’s change it up so we’re being efficient with our time and resources.” Inter-staff communication was reportedly improved because the measure assesses general distress, irrespective of therapist theoretical orientation or client diagnosis, it provides a “common language” that all therapists mutually understand as they consult with one another about a variety of client presentations. Other specific comments made by staff referred to the usefulness of the measure’s objectivity, research informed nature and clarity of results.

There was one organization-level facilitator that appeared with less frequency. This included the organization’s motivation to implement the Y-OQ due its positive appraisal by government agencies, benefactors and insurance companies. These larger level factors value the use of evidence-based treatments and provide greater support when it is present.

Measure level facilitators. This level of facilitation was determined through comments made directly about the measure and its qualities that facilitate its use.

Y-OQ promotes itself by effectively helping with the therapy process. This category was characterized by one primary subcategory, which included the Y-OQ providing new or otherwise hidden information about the client’s condition. Staff noted how important it is to have a

measure that “catches” easy to miss information, adds to the information gained through the initial client meeting, and provides another venue for clients to disclose details about their well-being that they may be reluctant to discuss in session. One staff member noted “I’ve understood that some clients who are not doing well, they are not fully disclosing what’s happening, and so that can be helpful in figuring out what’s not coming across.” Other comments described the importance of suicidality being a particular area of functioning measured by the Y-OQ, because that tends to be a topic that clients fail to call attention to or disclose in session. Staff also described the measure’s ability to gather a substantial amount of information in a small amount of time as being helpful for them to obtain a more comprehensive picture of client functioning.

Measure-level facilitators that appeared with less frequency were comments made by staff regarding the measure’s ability to provide information that facilitates with conversation in session. Interviewees also spoke to the objectivity of the measure and how this benefits the assessment of clients. In particular, staff saw the measure’s ability to validly and reliably assess client severity and progress an inherent facilitator.

Staff level barriers. This level of barrier was characterized by comments made about staff aspects that were thought in some way to hinder the Y-OQ’s implementation. There were no categories within this domain that appeared with high frequency in the data. However, there was one finding that is worth highlighting due to researchers feeling that it was expressed more frequently than the data analysis suggested. This included staff describing the measure as unhelpful when it came to treating certain client populations.

More specifically, staff did not see the Y-OQ as a useful measure under certain conditions, such as when working with certain populations and when little change is occurring for a client. For example, staff identified clients who struggle with disordered eating, have been

diagnosed on the autism spectrum or through significant trauma as clients who do not progress or present in treatment the same way as others. They explained that because Y-OQ's items do not seem to measure the specific distress or symptoms related to these presentations, they do not see the use in implementing the Y-OQ. In addition, because the measure does not attend to those symptoms, it does not indicate change throughout therapy, therefore diminishing even further staff desire to utilize the Y-OQ. Several staff explained feeling frustration and that the work they had accomplished with the clients was being negatively misrepresented when viewing these particular Y-OQ scores. For these reasons, staff indicated they were less likely to implement the Y-OQ.

Other staff-level barriers that appeared with low frequency included clinician's reluctance to use the measure because they did not agree with the required and evaluative pressure it placed on them as clinicians as well as their clients. Staff reported a lack of communication about expectations and understanding around the Y-OQ to both therapists and clients as hindering its use. Lastly, some staff felt that utilizing the measure takes away from more important components of treatment and is administered too frequently.

Organization level barriers. This level of barrier was made up of statements that identified characteristics of the organization or its administrative directives as hindering the use of the Y-OQ. There was one category within this domain that was frequently noted by staff. This included a busy and on-the-go schedule that prohibited full implementation of the Y-OQ.

It was reported that the busy schedule at organization makes full implementation and benefit from the Y-OQ difficult. Staff commonly felt that their "back-to-back" schedule of clients and meetings hindered their ability to fully utilize the Y-OQ. It was reported that, despite the desire to contemplate on the Y-OQ feedback and integrate it more thoroughly into their work

with the client, they did not have the time or space in their schedule to do so. Staff often cited that both clinicians as well as a CTAs have to manage many tasks throughout the day and administering the Y-OQ becomes burdensome or difficult if any extra steps are added to that process. One staff member said “...every extra click here is difficult because you have back-to-back clients every hour.” Another staff member, when talking about a time that a secretary accidentally missed a step in the Y-OQ administration process reported “[I am] in the middle of [the session] and am like, ‘Dang it. I really wish that I had the [Y-OQ] that this [client] did today—but I don’t have the time to talk to the CTAs to switch it.’”

Organization-level barriers that appeared with less frequency were comments made by staff regarding computer software issues that complicated the administration process as well as a lack of effective training around Y-OQ use. In particular as it relates to the training piece, staff felt that despite the expectation that they use the measure frequently they were provided with limited trainings around its use. In addition, staff reported that when trainings were provided on the Y-OQ, some staff felt demeaned and devalued as a result of the way in which measure proponents promoted the measure (e.g. by pointing out clinician blind-spots and need for the measure to provide quality services).

Client level barriers. This level of barrier was defined by statements from staff referring to client characteristics that seemed to hinder Y-OQ implementation. There were two categories within this domain that appeared frequently in staff interviews. These included client apathy or reluctance to complete Y-OQs and the measure lacking usefulness with certain client populations.

Some clients are not “bought-in” to the measure and express general apathy, reluctance, or refusal to complete the Y-OQ. Staff often spoke to the client’s frequent

disinclination to complete the Y-OQ. They noted experiencing clients who do not take the measure seriously and “mark random boxes”, express relief when they find out they don’t have to take it, become agitated when asked to complete it or refuse completion altogether. One secretary stated, “Overall, I know a lot of clients don’t really like taking it. I mean... every time I hand one out it’s like, ‘Do I have to? Oh, can I do it next week? Next time?’” Another staff member reported, “Well, one thing that gets in the way is usually the clients themselves that get tired of taking it time and time again. And so, some of them won’t do it.” Staff statements seemed to suggest that this barrier is a common and regular occurrence with clients.

The Y-OQ lacks sensitivity and specificity with certain mental health populations. This often consisted of presentations where client problem was largely due environmental factors outside the client’s control (e.g. home environment), population prone to under-reporting (e.g. those who have committed sexual offense, those with disordered eating) and clients whose treatment often require long-term care to see changes (e.g. trauma victims). One staff member stated, “I feel that in general, the information from these measures is not very relevant [referring to their work with those who have committed sexual offense]. If it was, I would be more very motivated to use it with them.” Another clinician explained, “I have some clients with significant trauma, it’s gonna be a long time in therapy for them, so I don’t see much success there [referring to change on their Y-OQ score].”

There was one client-level barrier that appeared with lower frequency. This included client misunderstanding of certain items on the Y-OQ. This would lead to inoperative feedback and ultimately created a barrier to full implementation.

Recommendations. This domain was characterized by recommendations made by staff on how to possibly improve Y-OQ implementation. There were no categories within this domain

that appeared with high frequency in the data. For this reason, they are briefly noted below. For further information on recommendations, please see Table 1 in the Appendix.

Staff made recommendations including: increased frequency of trainings on Y-OQ use, further integration of the Y-OQ into clinic software, changes to certain items on the Y-OQ that would promote clarity as to what the item is assessing and positive and non-abrasive methods of gaining clinician “buy-in” to use the measure with clients. These recommendations were listed in order of frequency, with the first recommendation appearing most frequently by staff.

TSM Domains and Categories

New information facilitators. This facilitator included statements about the TSM’s benefit of providing additional information to staff. There were two categories within this domain including additional information being useful to clinicians and clients. Only two subcategories within the first category (information being useful to clinicians) were frequently observed within the data. These two subcategories were 1) information gained through TSM aided clinicians when they felt “stuck” with clients and 2) guided treatment decisions.

TSM provides added information that is useful in helping clinicians understand clients further. More specifically, the TSM helps the clinician clarify and increase understanding of the client, especially when they feel “stuck” with clients. Staff noted that this was due to the TSM providing additional information to what the Y-OQ provides. One supervisor reported, “I encourage them [referring to a supervisee working with a client who is stagnant or deteriorating in treatment] to record a session and also administer the TSM...it’s useful in helping me to figure out why this client is not making better progress.” Overall, use of the TSM was promoted by situations involving the clinician wanting more clarification about clients who were not showing progress in treatment.

Staff also reported that feedback from the TSM helped them effectively guide sessions, direct conversation, and make treatment decisions. One staff member described the TSM as a “cheat sheet” stating, “It gives more in-depth areas...then I realized I can use it as a cheat sheet to kind of direct the conversation.” More specifically, interviewees noted that the TSM can indicate internal and external areas of difficulty for clients (e.g. client self-efficacy, social support, therapeutic alliance) consequently providing a more accurate and comprehensive picture of significant factors in the client’s life (in and outside of the therapy room). One staff member explained, “TSM provides more....it could really help me to get an overview of all the other systems of the client...it gives me a much bigger picture than just the Y-OQ or what I hear during the session.”

New information facilitators that appeared with less frequency were comments regarding the usefulness of the TSM for session participants including therapist, clients and their families. More specifically, staff noted having positive regard towards the TSM because it aligns with their values, it provides clinicians with a baseline understanding of client functioning, provides clinicians with the ability to bridge the information gap when clients are reluctant to share certain information and it aids in therapist interventions with parents.

External motivation facilitators. This facilitator was characterized by external factors that influence the staff’s TSM use. There were two categories within this domain including implementation of the TSM increasing due to influences outside and within the organization. One frequently observed subcategory in the first category (influences outside the organization) was TSM implementation increasing due to the large RCT being conducted by BYU at the organization. Three frequently observed subcategories in the second category (influences within the organization) were 1) individual staff promoting TSM use, 2) activities within the

organization using the TSM and 3) organization-wide initiatives making TSM use more of a priority in clinical work.

TSM implementation was increased due to influences outside the organization. The majority of staff reported increased use of the TSM due to the co-occurring BYU RCT being conducted at the organization. This study required both Y-OQ and TSM use and a majority of staff within the organization were part of the study. Some staff reported hearing about the TSM prior to the study but having very little understanding of the measure and infrequent use. One staff member reported “I hadn’t used [the TSM] as much because until [BYU] came last year, quite honestly, I didn’t even know about it. So, thanks for educating us.” Overall, staff consistently commented on the increase in TSM use throughout the organization as a response to the outside influence of the BYU study and inherent trainings that were associated. Of less frequency, however within the category, staff reported that having researchers from the university at the organization location was helpful in ultimately implementing the TSM.

TSM implementation was increased due to influences inside the organization. Interviewees frequently stated that individual staff members promote TSM use to other staff. Essentially, they referred to certain staff members within the agency that had taken particular interest in the TSM and promoted its use to other staff. Examples often consisted of staff members who had previous extensive training in TSM use or past research experience and would communicate their enthusiasm for the measure to staff. One staff member explained “So I think people that are at [a high] level of familiarity with the TSM are trying to encourage more use of it so that it becomes part of the ‘family’ like the Y-OQ already is.” Interviewees also reported that staff know which clinicians tend towards use of research and measures and will seek said staff out with questions regarding TSM use.

Another frequently referred to influence was activities within the organization, such as “consultation groups” and supervision promoting discussion and use of the TSM. One staff member described an anecdotal experience of the recent uptick in TSM promotion, stating, “...so in the staff meeting we talked about [the TSM] maybe a couple months ago and I think that was helpful too because then the supervisor kind of talked about where we could go and find the TSM” It seemed that the general sentiment pointed to more frequent discussion around the TSM from “the top” highly influencing increased TSM use because this made the TSM more at the forefront of staff’s minds. Staff explained consultation groups as being newly introduced within the past year and include regular meetings where a small group of clinicians meet to consult about stagnant or deteriorating clients. One clinician reported that “The organization has consultations groups...where staff are encouraged to use the TSM from other staff members.” Again, these regular meetings where the TSM is integrated into the function of the group has created a greater awareness, discussion around and frequency of its use.

Staff frequently referred to increased TSM use due to recent organization-wide initiatives, such as directives from administration and integration of the TSM into the software. For example, staff mentioned the TSM recently becoming more accessible, integrated into the software, directed by supervisors, CPA administration and organization-wide initiatives for all staff to administer the TSM. One CPA noted that clinicians can now ask them to administer the TSM and they know where and how to do this within the system. Another staff member explained one initiative and how it increased their desire to use the TSM, stating, “I think once last year [administrators] had everybody do the TSM so [staff] could actually get more used to it. And I think I want to have the people in the front just give out the TSM to everybody for a month, like just to see where they’re at and where I’m at.”

Lack of awareness and integration barriers. This domain was characterized by staff referring to the TSM as being infrequently recognized or incorporated, especially when comparing to the high acceptance and utilization of the Y-OQ. Two categories were presented within the data that included low integration and awareness being due factors at the staff and organization level. Within the staff level barriers, the primary finding was that staff reported lack of familiarity and making the TSM a part of their daily tasks. Within the organization level barrier, two frequent findings were that the TSM is not accessible or integrated enough into the software to make daily use more efficient and there are not enough trainings provided to promote staff understanding of the measure.

Staff-level factors that inhibit use of the TSM include lack of awareness and integration of the measure. Staff reported that use of the TSM is low because they are either unfamiliar with or they have not yet made the TSM a part of their daily practice. These comments often were reflections on their personal lack of awareness and integration of the TSM, as opposed to a lack of integration from the organization. Comments often resembled statements such as, “sometimes I forget about it since I’ve been doing the Y-OQ for so long” or “I need to get more familiar with the specific numbers and what the cutoff scores are and things like that.”

Barriers to using the TSM included organization-level factors of lack of structure and support around TSM use. Staff reported that the process of using the TSM is not easy due to a lack of routine integration of the TSM into the software or day-to-day practice. For example, staff reported that the TSM requires them to complete multiple steps in the software which makes it difficult to remember, much less have time to administer the measure. Other staff noted that even after the measure is administered, feedback/results are difficult to find and sometimes received late one hard copy instead of through the software system. One staff member explained:

I don't use [the TSM] on a regular basis, and the reason for that is again, just all that work, like it takes intentional- like you have to send a email and be like, 'I need you to administer this and you have to catch [the client] before they get there and then, there's all of that so, I don't use that one very frequently.

Another staff member reported, “It is not as well integrated, you have to go looking for [the TSM].” From these comments, it appeared that the general lack of systematic integration of the TSM, especially into the software system, deters staff from more fully implementing the measure.

Staff reported that the organization has not provided enough training or knowledge base to incorporate and use the TSM correctly. Staff also reported that because of this lack of knowledge they feel less comfortable or competent using the measure. For example, one staff member reported “I've never been trained on [the TSM]. I've just read through the report and the descriptions...but I've never had somebody do a training on it” and another “There is a lack of education around the TSM.” Another staff member explained, “the TSM is not even on my radar. I don't use it. I haven't been taught enough about it and don't know enough.” In general, staff indicated that the reason they might not use the TSM is due to not being sure of how to use it appropriately or when to use the measure.

Lack of awareness and integration barriers that occurred with less frequency included both a staff-level and organization-level barrier. The staff-level barrier was that staff opposed TSM use based on their belief that certain subscales in the measure might reveal their clinical deficits. The organization-level barrier was the lack of requirement placed on staff to use the TSM. In other words, TSM use is left to therapist discretion, without prompt or direction on frequency of use, as opposed to the Y-OQ which is required and prompted on a frequent basis.

Other priorities barriers. This barrier included staff reports of finding the TSM lower of a priority when compared to their many other tasks and responsibilities. There were no categories within this domain that appeared with high frequency in the data. For this reason, categories will be discussed briefly and can be viewed in Table 2 in the Appendix.

Staff indicated that their busy schedules, which are composed of many important tasks, become a barrier to implementing the TSM. Staff also reported having several other measures that they are more familiar with and prefer to use with client time. Lastly, some staff found the actuarial feedback that is provided by the TSM to be difficult to acquire and provide information that may be outdated or limited.

Recommendations. This domain was characterized by recommendations made by staff on how to possibly improve TSM implementation. There were no categories within this domain that appeared with high frequency in the data. For this reason, they are briefly noted below. For further information on recommendations, please see Table 2 in the Appendix.

Staff recommendations noted that the TSM would be more easily implemented if it was more fully integrated into their software and daily tasks. The other recommendation was that increased and frequent trainings on how to efficiently and accurately use the TSM would increase implementation.

Discussion

The purpose of this study was to explore potential barriers and facilitators to implementing the Y-OQ and TSM feedback systems within a youth outpatient community mental health organization. Thirteen staff with varying roles and from various geographical locations within the organization were interviewed. Using CQR methodology, interviews were carefully transcribed and analyzed by a trained team of CQR researchers. Findings provide

insight into the many factors within varied staff experiences that impact implementation of these measures.

Major facilitators of Y-OQ use were found at the staff, organization and measure level. Barriers to Y-OQ use were found at the staff, organization and client level. The primary facilitators of TSM use was the addition of new information it provides as well as external motivating factors. Barriers to TSM use were a lack of awareness and integration of the TSM within the organization and other priorities taking precedence over the TSM. In addition, staff provided recommendations around how to increase implementation of the Y-OQ and TSM. In this section we provide a general look at barriers, facilitators and recommendations that were found within the data and suggest how these might be used to enhance measure implementation moving forward.

Y-OQ Facilitators, Barriers, and Recommendations

Staff described a range of factors that they had experienced as facilitators to Y-OQ use. In general, they cited having values that promoted use of the Y-OQ, namely using skills of problem solving and proactivity to circumvent barriers to Y-OQ use. In addition, staff noted the importance of generally having a positive outlook towards the Y-OQ as a helpful tool and placing a high personal value on evidence-based treatment approaches. Staff also noted their motivation for using the Y-OQ was due to their desire to keep the focus of treatment on salient issues and be informed about the progress or decline of their clients, information which the Y-OQ provides.

Interviewees pointed to organizational facilitators such as the high level of Y-OQ integration and promotion within their software, policies, trainings, administrative personnel and daily tasks. It was reported that the organization's values around "excellence" and "wellness

promotion” (depicted in their mission statements) as well as the importance of using objective and standardized measurements of outcome aligned closely with the Y-OQ’s purpose and evidence-base. Lastly, staff noted that the measure’s ability to provide new or hidden information, that may have otherwise been missed, helps them administer more effective treatment to clients.

Barriers that were reported during interviews included staff disapproving of the evaluative nature of Y-OQ use in the workplace, feeling that its administration is unnecessarily frequent, and not seeing it as useful when working with certain client populations. When considering barriers at the organizational level, staff most frequently expressed feeling that their excessively busy schedules greatly diminished their ability to use the Y-OQ to its full potential. Staff also noted that the Y-OQ is difficult to implement when many clients communicate reluctance and general apathy towards the measure.

Interviewees recommended that in order to increase Y-OQ implementation, more frequent and regular didactics should be offered for new and continuing staff. They cited the importance of knowing how to effectively and efficiently use the measure in a way that benefitted them and the clients. It was also recommended that the those who promote the Y-OQ within the organization use a less inimical approach with staff (e.g. positive evaluation based on Y-OQ use, presenting the measure as a way to make up for the “pitfalls” of the clinician, etc.) and rather gain staff buy-in by providing research, a narrative around the measure being a tool to complement their work and respectfully discussing any concerns or barriers that staff may experience around its use.

TSM Facilitators, Barriers, and Recommendations

Staff described several factors that they had encountered as facilitators to TSM implementation. These included experiencing the TSM as a means to gain new information about clients which in turn supplements the therapist's conceptualization of a client and ability to intervene effectively with said clients. In particular, staff felt that the information gained from the TSM helped them guide sessions, make treatment decisions and guide session discussions when they were otherwise unaware of how to proceed (felt "stuck") with certain clients.

Interviewees indicated factors inside and outside the organization as facilitating TSM use. Within the organization, they referred to "champions" of the TSM (individual staff members who highly value the TSM) who promote its use and help other staff members understand how and when to use the measure. Other factors included activities and initiatives required by the organization, such as regularly meeting consultation groups, supervisors requiring all clinicians to administer the TSM, trainings, etc. Staff indicated a primary factor outside the organization influencing TSM use, namely the large RCT being conducted by BYU. The frequent presence of and reminder from researchers to utilize the TSM not only kept it at the forefront of their minds but also provided clarity on its implementation for staff members.

One primary factor that inhibited use included lack of awareness and integration of the TSM at both the staff and organizational level. At the staff level, interviewees reported feeling a lack of familiarity with the measure as well as placing a lower priority on its use in their daily routine. They described having other priorities that they deemed more important for their client's treatment as well as time limitations due to their full schedules. At the organizational level, interviewees reported that the TSM is difficult to use due to a lack of its integration it into

their software system, providing infrequent trainings and direction about the measure and a lack of policy regarding its required use.

Lastly, staff recommended that the organization make efforts to integrate the TSM into their software system more seamlessly. This in an effort to allow staff easier and uncomplicated use of the TSM. Staff also recommended that the organization promote and provide more frequent access to knowledge and trainings about TSM use.

Limitations

Due to our sampling method and therefore small sample size, results are less generalizable. By choosing to use maximum variation sampling (i.e. inclusion of varied staff roles and different backgrounds/experience), we gained transferability within the organization as a whole at the loss of generalizability across other youth outpatient organizations (Creswell, 1998). In addition, while this sampling method captured a wide range of experiences providing a comprehensive picture of the many different factors that influence measure implementation, it inevitably limited common experiences between staff members. While there were many similar points made between staff, some points may have been even more prevalent if the sample would have contained staff with similar roles. It is for this reason that we discuss many findings within the results section, despite their “variant” (e.g. low to moderate) frequency.

Another limitation related to the sensitivity of information that was gathered. Interviewees were assured of the de-identification and confidentiality of their information by the interviewer and consent forms. However, staff were asked to share their opinions and experiences within a system that is also their employer. Some staff may have felt the need to speak more highly of experiences. Although administration within the organization were in full

support of learning about measure implementation barriers and no concerns were reported by interviewees, we want to be aware that it could have played a role in staff responses.

Lastly, as with any study, this current study is not exempt from the unintentional influence of biases that were held by the team of researchers who collected and analyzed data. The team of researchers made intentional efforts to record biases prior to and throughout the data collection and analysis process. Due to the important “consensual” aspect of CQR, conversations were held frequently around bias and power amongst team members. For example, the primary researcher and interviewer was intentional about equalizing power within the research team by giving equal time and legitimacy to the thoughts of research team members’ interpretation of data.

Implications for Measure Implementation in Community Mental Health Youth Settings

Despite the limitations considered above, these findings provide implications for increasing Y-OQ and TSM implementation in outpatient community mental health. This study identified multiple levels at which implementation might be affected. Similar to implementation research findings, barriers and facilitators were observed at multiple levels including organizational, staff, client and measure level. Given that there were frequent and valuable data in every level, we recommend that strategies to increase implementation of measures be made at all levels. In other words, organizations and researchers will likely effect most change in implementation if they work together to make informed changes at the organization, staff, client and measure level. This is congruent with the general consensus by many implementation researchers that multi-component efforts are most beneficial in addressing the multi-level challenges often seen in innovation implementation (Fixsen et al., 2009; Glisson & Schoenwald, 2005).

In utilizing the data from this study, implications point towards augmenting facilitators, working to problem-solve barriers and consider making adjustments based on recommendations described above. In the sentences following, we provide a brief (non-comprehensive) look at how findings might be applied by staff and researchers. At the organizational level, this may resemble retaining policies, initiatives, trainings and values that promote frequent and easy integration of the Y-OQ and TSM. In addition, efforts to mitigate the intensive schedule of staff, provide easy access to information regarding Y-OQ and TSM and increase measure integration within the software (particularly as it relates to the TSM) will likely increase measure implementation.

At the staff level, measure implementation will likely increase if staff view the measures as evidence-based tools that aid in client treatment, match their personal values and help in moments when they feel “stuck” with clients as opposed to viewing the measures as tools that are used or presented in ways that feel punitive or demeaning to their clinical efforts. At the client level, implementation may be increased through taking time to gain client buy-in and provide them with understanding of the measures and integrating measure feedback with client population in mind (e.g. expect under-reporting from certain client populations). At the measure level, researchers should consider continuing to improve on the psychometrics of these measures, explore the pros and cons of decreasing administration frequency, update and promote user-friendliness of feedback (particularly as it relates to the TSM). Researchers could also work to foster frequent and effective communication with organization staff (e.g. providing trainings, building liaison relationships with measure “champions” within the organization, presenting measures in a positive and nonabrasive way to staff, making room for and honoring staff questions and concerns regarding measures, etc.). More specifically, *champions* or *liaisons* play

an important role in measure introduction and maintenance among staff and will likely play an important role in furthering the use and implementation of the TSM moving forward.

In addition to the findings discussed above, it behooves researchers to point to an additional implication from these findings. These data were obtained through intentionally providing an open and safe place for dialogue about both the pros and cons of these measures from varied levels of staff within the organization. It is recommended that open and deferential dialogue continue beyond this particular study between researchers, administrators and the varied levels of staff within community mental health organizations. This is also emphasized by Mendel et al. (2008), where ongoing communication and partnership with agencies utilizing measures is fostered for the betterment of both parties to ultimately improve implementation and benefit to service populations. Regular reflection and recalibration is required from all stakeholders because everyone bears a responsibility in order to increase effective and helpful implementation (Aarons et al., 2014). Without an open dialogue and shared values, efforts moving forward will likely have limited success, as barriers and facilitators of measures reflect the ever-changing environment in which they exist (Aarons et al., 2016).

Comparison with Existing Literature

Research around implementation science is fairly well-documented due to its frequent occurrence in most fields of study where there exists both those who study and those who apply aspects of that field. However, this type of qualitative research regarding measure implementation in youth community mental health settings is rare, and not does not exist when specifically referring to the Y-OQ and TSM measures. Fortunately, although sparse, there is a growing body of literature that has examined implementation of innovations in mental health

settings (primarily community settings), and the majority of them have utilized qualitative methods due to the novelty of this particular focus.

The literature clearly bears recurrent patterns of multilevel aspects to innovation implementation. Mendel et al. (2008), in a summary of numerous studies with the UCLA/RAND NIMH Center for Research on Quality in Managed Care, and other studies outside this effort, found multiple factors that affect implementation, similar to the barriers and facilitators found within this study. These included norms and attitudes of staff such as values towards innovation, previous experience with innovation, belief in innovation use and appropriateness of its use for the setting or population, shared value of patient wellness and exceptional care and lack of training resulting in limited understanding of the innovation (s). Another factor included organizational structure and process such as readiness of organization for change and ability for the system to integrate a new innovation, similar to our findings of the organization integrating the Y-OQ into software facilitating daily use (Mendel et al., 2008).

Other factors included resources, policies and incentives, and networks and linkages. Within these there were familiar findings, such as having a well-integrated software system, a relationship and communication with a university, and employees who are well-versed in the innovation or have a special skill set that facilitates innovation use (Bate, Robert, & Bevan, 2004; Bickman et al., 2016; Bluthenthal et al., 2006). In our study, along with other studies, staff often lamented the loss of feedback from measures (due to larger RCT feedback study), demonstrating their view of the measure as a resource and significant part of their daily routine (Bickman et al., 2016). Other findings included end of year evaluations of innovation use, mandatory administration, supervision that promotes or recommends use, funding from outside stakeholders with similar values, adoption of innovation by high status personnel within the

organization, having a relationship with well-known researchers who promote innovation use, and continued conversation between researchers and clinicians with the shared purpose of pursuing greater care for the client (Mendel et al., 2008; Pastor, Meindl, & Hunt, 1998; Wells et al., 2006).

Similarly, in studies by Aarons et al. (2011) and Kotte et al. (2016), researchers show an influence from multiple levels, namely the system (similar to our “organization” domain), individual (similar to our “staff” domain) and innovation level (similar to our “measure” domain). Within these levels we see similar facilitators such as positive staff attitude, staff members problem-solving innovation use, support of administration and supervisors, policies or incentives, desire for evidence-based innovations and high standard of care, and the desire for additional information provided by innovation feedback. Similar barriers included inappropriateness of measure for certain client populations, too frequent administration, an innovation being more difficult to utilize when it is not incorporated into daily routine (similar to our findings relating to the TSM), insufficient training, heavy workload limiting time for innovation, and lack of client motivation to complete measure. The well-documented role of organizational support in innovation success was particularly similar to this study, where organizational level facilitators were seen as especially influential to implementation (Aarons et al., 2011; Gleacher et al., 2015).

There were many similarities found within the existing literature; however, there were differences that provide further insight. Compared to other studies, our study indicated fewer barriers and facilitators related to the measure itself (Kotte et al., 2016). In this study, interviewees did not place as a high a focus on the measure in and of itself; rather, more focus was placed on variables outside of the measure. This may be due to the way interview questions

were phrased, placing less of an emphasis on the measure and inquiring more towards environment and personal feelings. Another possible reason could be that the measures we studied are in a different phase of implementation, likely shifting the presence of certain barriers or facilitators (Aarons et al., 2011). Another primary difference was that software was frequently mentioned in literature as a barrier, due to lack of effective integration (Bickman et al., 2016; Gleacher et al., 2015). In contrast, our study more frequently emphasized software as a facilitator to innovation implementation. In fact, interviewees, when citing software as a strength, often referred to “previous times” where measures were administered on paper and how much of a barrier that was at the time. As was noted earlier in this document, and in this particular case, there seems to be a clear explanation that the measures were in different phases of implementation than those in the previously cited studies; the Y-OQ having been introduced and integrated many years prior to the TSM, thus effecting a different composition of barriers and facilitators for both measures.

Implications for Future Research

This study provided a foundation that can inform future research in areas of youth community mental health, implementation science and outcome, and clinical support tools. Often it is valuable to begin a line of inquiry with qualitative methods in order to gain initial understanding around certain phenomenon. It is then an appropriate next step to build upon those findings by integrating quantitative aspects into research methodology moving forward.

In this case, a next step may be creating a quantitative metric for the purpose of assessing measure implementation amongst staff within youth community mental health settings. This metric would use the findings within this study to inform elements such as structure, areas of assessment, and wording. Future research would then test the reliability and validity of this

measure, ensuring a prompt and accurate way of assessing and improving measure implementation. A metric of this kind would likely be used frequently and benefit staff and clientele by informing barriers that can be navigated and improved as well as facilitators that can be maintained within the working environment.

Also, the variety of findings was more robust within the Y-OQ data and less within comments made about the TSM. Overall, experiences and comments regarding the TSM comprised a significantly smaller portion of the data compared to the comments related to the Y-OQ. Researchers speculate that this may be due to the lack of breadth of experience the staff had with the TSM, seeing as it was a more recently implemented measure within the organization. As has been suggested by implementation research findings (Aarons et al., 2011; Mendel et al., 2008), factors influencing implementation is multiphasic, where a different combination of barriers and facilitators is to be expected when a measure is relatively newly introduced to an environment compared to a measure that has existed within an environment for a longer period of time. When conceptualizing through Aarons et al.'s (2011) model of implementation, it appears that the TSM is likely in the *active implementation* phase (second to last phase of implementation) compared to the Y-OQ, which is likely in the *sustainment* phase (the last phase of implementation). Therefore, efforts to re-evaluate TSM barriers and facilitators may lend different insight in the future after staff gain more experience using the TSM.

Another potential direction for future research would be to work towards expanding the sample to comprise more diverse settings. This could include exploring a range of organization types that use outcome and clinical support measures (e.g., private, community, hospital), various geographical areas and different client populations (e.g., severe mental illness, inpatient, adult). With a more comprehensive picture, the impact of findings would be bolstered and more

generalizable. As a result, a greater number of organizations and clients would benefit from improved implementation of evidence-based measures.

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Table 1
Domains and Categories for Participants' Experience in Implementing the Y-OQ

Domains, Categories, Subcategories	Frequency
Staff level facilitators	
Values and attributes that facilitate use of the Y-OQ.	
Staff described using attributes of proactivity and problem-solving to overcome barriers and increase use of the Y-OQ.	Typical(10)
Staff cited general belief in and regular reliance on the Y-OQ as important factors that facilitate use.	Typical(8)
Value in research and evidence-based approach promotes implementation of Y-OQ.	Typical(7)
Staff display a sense of responsibility (to themselves, clients and organization) in implementing the Y-OQ.	Variant(3)
Staff cites personal background in research as promoting their implementation of Y-OQ.	Variant(2)
Motivation to use the Y-OQ because it provides treatment promoting information	
Measure provides external indication of client progress or decline	Typical(9)
Measure helps staff keep the focus of treatment on salient concerns	Typical(7)
Measure helps to alleviate suffering of the client	Variant(4)
Organization level facilitators	
Y-OQ has been systematically integrated into the organization, promoting regular and frequent use.	
The organization has taken steps to make the Y-OQ helpful, efficient, and easy to access for staff and clients.	Typical(11)
Organization has integrated Y-OQ into trainings and meetings (e.g., consultation groups, staff meetings) facilitating people's understanding and implementation of Y-OQ.	Typical(10)
Clinicians are required and held accountable for implementation of the Y-OQ.	Typical(9)
Implementation is high because the Y-OQ is a regular, accepted, and routine part of the culture and everyday work at organization.	Typical(7)
Organization promotes use because the Y-OQ aligns with organization and administrative values.	
Organization's values of providing excellent healthcare services, promoting wellness and using evidence-based methods facilitates the use of the Y-OQ.	Typical(11)
Organization supervisors and administration actively promote Y-OQ use.	Typical(8)
Organization promotes Y-OQ because it is a standardized, objective, evidenced-based measure.	
Y-OQ's objectivity and evidence-based nature helps organization measure overall quality of services and have a common language within organization.	Typical(8)
The macrosystem (e.g., government agencies, benefactors, and insurance companies) uses audits and funding to motivate the organization to use an evidence-based measure.	Variant(4)
Measure level facilitators	
Y-OQ promotes itself by effectively helping with the therapy process.	
Y-OQ provides new or hidden information on client's condition.	Typical(9)
Participants reported that the Y-OQ provides information that facilitates conversation in session	Variant(5)
The Y-OQ is helpful in in areas of assessment and communication because it is an objective treatment tool.	
Y-OQ feedback about severity of certain symptoms helps improve the therapist's potential to provide quality interventions that attend to salient issues.	Variant(6)

The Y-OQ is meaningful and is likely used because it helps to objectively assess client progress.	Variant(6)
Staff level barriers	
Participants reported several reasons for their reluctance to implement the Y-OQ.	
Y-OQ was not seen as a useful measure under certain conditions, such as when working with certain populations and when little change is occurring for client.	Variant(5)
Clinicians were reluctant to administer the Y-OQ because they do not like the forceful/required and evaluative nature (toward therapists and clients) of the measure.	Variant(5)
It was reported that there is a lack of communication and understanding about the Y-OQ on both the therapist and client levels.	Variant(5)
Staff believe the Y-OQ is administered too frequently	Variant(4)
Staff believe that a barrier to Y-OQ use is that it takes time and focus away from more important aspects of therapy.	Variant(3)
Organization level barriers	
It was reported that the busy schedule at organization makes full implementation and benefit from the Y-OQ difficult.	Typical(7)
Several computer software issues were reported as making Y-OQ administration more difficult.	Variant(4)
Organization lacks effective training on the Y-OQ.	
It was reported that there is an absence of sufficient training and discourse regarding proper Y-OQ implementation, despite expectations from the organization that staff fully implement the measure.	Variant(3)
It was reported that staff are reluctant to fully implement the Y-OQ due to the organization's training techniques/selling points, which leave clinicians feeling demeaned and devalued.	Variant(3)
Client level barriers	
Some clients are not "bought-in" to the measure and express general apathy, reluctance, or refusal to complete the Y-OQ.	Typical(10)
Y-OQ lacks sensitivity and specificity with certain mental health populations (e.g. sexual offense, trauma, eating disorder).	Typical(7)
It was reported that proper use of the Y-OQ is diminished because clients often misunderstand measure items	Variant(5)
Recommendations	
Y-OQ implementation may be increased by increased trainings on its effective use.	
Increased frequency and consistency with regards to didactics about Y-OQ use is recommended.	Variant(6)
Positive and non-abrasive integration of measure is recommended for increased implementation and clinician "buy-in" to the measure.	Variant(2)
It is recommended that the Y-OQ be further integrated into software system to promote measure accessibility.	Variant(4)
Changes to the Y-OQ itself were recommended for increased usefulness.	Variant(3)

Note: $N=13$. Typical marks a category's presence in more than half of interviews (i.e. 7-11) and not all or almost all interviews (i.e. 12-13); Variant indicates the category's presence in more than two but fewer than half of the interviews (e.g. 2-6). All categories were included in the table above because all categories were at least variant or typical.

Table 2
Domains and Categories for Participants' Experience in Implementing the TSM

Domains, Categories, Subcategories	Frequency
New information facilitators	
TSM provides added information that is useful in helping clinicians understand clients further.	
Helps the clinician clarify and increase understanding of client, especially when they feel “stuck” with clients.	Typical(8)
Staff like using the TSM because it helps them effectively guide sessions, direct conversation, and make treatment decisions	Typical(7)
TSM provides benefits to session participants (clients and family).	
TSM provides therapist with a baseline or overview of clients.	Variant(4)
Staff cited positive attitudes towards the TSM as well as values that are consistent with the TSM, thus promoting their use of the TSM.	Variant(3)
Because clients typically do not inform the therapist of all details pertinent to client’s care, TSM provides the client and therapist with a way to bridge this information gap.	Variant(2)
TSM aids in understanding and interventions with parents of youth.	Variant(2)
External motivation facilitators	
TSM implementation was increased due to influences outside the organization.	
TSM implementation was heightened due to the current RCT study	Typical(9)
TSM use was increased due to researchers influence from the university.	Variant(3)
TSM implementation was increased due to influences inside the organization.	
Individual staff promote TSM use to other staff.	Typical(7)
Activities within organization, such as consultation groups and supervision promote discussion and use of the TSM.	Typical(7)
Recent organization-wide initiatives, such as directives from administration and integration of the TSM into the software, have increased TSM use.	Typical(7)
Lack of awareness and integration barriers	
Staff-level factors that inhibit use of the TSM include lack of awareness and integration of the measure.	
Staff report that use of the TSM is low because they are either unfamiliar with or they have not yet made the TSM a part of their daily practice.	Typical(8)
Clinician opposition/apathy was reported based on beliefs that the TSM reveals therapist deficits.	Variant(3)
Barriers to using the TSM included organization-level factors of lack of structure and support around TSM use.	
Staff reported that the process of using the TSM is not easy due to a lack of routine integration of the TSM into the software/day-to-day practice.	Typical(9)
Staff reported that the organization has not provided enough training or knowledge base to incorporate and use the TSM correctly.	Typical(8)
TSM use is left to therapist discretion, and it is not required or prompted regularly, as opposed to the requirement and frequent use of the Y-OQ.	Variant(5)
Other priorities barriers	
Staff indicated that their busy schedules, composed of many important tasks, become a barrier to incorporating and using the TSM.	Variant(5)
Staff indicated a preference for getting information about clients from other sources other than the TSM.	Variant(3)
Problems with the TSM’s actuarial feedback list and sensitivity to certain populations were reported as barriers to TSM use.	Variant(2)
Recommendations	
TSM should be more integrated into the software and regular practice.	Variant(6)

Added educational and training resources are recommended to improve TSM implementation. Variant(5)

Note: $N=13$. Typical marks a category's presence in more than half of interviews (i.e. 7-11) and not all or almost all interviews (i.e. 12-13); Variant indicates the category's presence in more than two but fewer than half of the interviews (e.g. 2-6). All categories were included in the table above because all categories were at least variant or typical.

Table 3

Y-OQ Unassignable Core Ideas/Comments

Categories

P notes that some therapists who did not think positively towards the Y-OQ have left the organization, which has increased measure use.

P's overall experience with measures are positive due to clients' willingness to complete the measures

Some staff are more Y-OQ affirmative than others, particularly at certain organization locations.

Most clients have no issues taking the Y-OQ, which facilitates use.

Most staff prefer not to administer the measures.

P feels like Y-OQ is so well integrated that it becomes rote. It becomes so habitual that there are no emotional responses or opinions toward measures.

It is possible to not notice missing scores for Y-OQ items because scores are now automatically inputted and no longer manually checked.

Note: P refers to participant/interviewee. These core ideas and the context surrounding were deemed inappropriate to place into existing categories by the research team. Core ideas are carefully constructed summaries of comments made by participants. Core ideas are created in order to capture essence of participants words with fewer words and greater clarity.

Table 4

TSM Unassignable Core Ideas/Comments

Categories

Actuarial feedback from the TSM is a great resource.

The TSM protects clinician and clinician's job by adequately assessing critical information such as suicide.

P decides and asks for the TSM to be administered.

P used to not feel as positively toward the TSM due to the evaluative nature of the measure but has since overcome fears about results.

P would like TSM more if it was presented as supplement that helps capture clients' thoughts, experiences, and points of view.

Note: P refers to participant/interviewee. These core ideas and the context surrounding were deemed inappropriate to place into existing categories by the research team. Core ideas are carefully constructed summaries of comments made by participants. Core ideas are created in order to capture essence of participants words with fewer words and greater clarity.

Appendix A

OQ-Analyst Barrier and Facilitator Interview

This outline is meant to gently guide the exploration of possible facilitators and barriers when using the OQ-Analyst feedback system. It allows for an initial exploratory approach with the option of more structured questions reflecting current implementation science literature. Above all, the interviewer is encouraged to understand the interviewee's experiences with the OQ-Analyst feedback system. Therefore, areas of experience arising in interviews that appear to be outside said theoretical framework should be pursued.

Thank you for your time and effort throughout this study and making time for this meeting. This discussion will mainly revolve around the use of the Y-OQ color-coded alert system and the associated TSM electronic reports and feedback suggestions for therapists that you have experienced prior to and during this study. I would like to understand your experience and thoughts towards the feedback system and am open to anything you would like to talk about in relation to this. I have some questions to fall back on but would like to talk comfortably and let the conversation guide itself. Please know that actions will be taken to keep your identity confidential and your answers will not be able to be traced back to you. Honesty about experience and impressions is very important to me and will be most beneficial to my being able to understand your experience with the system (positive and negative aspects of this system).

General

1. How would you describe your experience with the OQ-Analyst feedback system?
 - a. What are your thoughts about using this system in your workday?
 - b. How would you like to see this system change?
 - c. How would you like to see this system stay the same?
 - d. What do you like and dislike about the system?
 - e. What has hindered and promoted your use of the system?

Organization

2. How would you describe the organization's (WMH/IHC) relationship with the OQ-Analyst feedback system?
 - a. What characteristics of the organization influence use of the OQ-Analyst feedback system?
 - i. Structure, priorities/goals, readiness for change, receptive context, culture/climate

Innovation-Values Fit

3. How do you see the OQ-Analyst's relation to the values of your organization?
 - a. What is the level of agreement between the feedback values and your organization's values?
 - i. EBP structural, EBP ideological fit

Individual

4. How would you describe your personal relationship with the OQ-Analyst feedback system?
 - a. What are your thoughts towards the OQ-Analyst feedback system in relation to your personal characteristics?

- i. Demographics, adaptability, attitudes toward EBP

Other

5. Is there anything else you would like to discuss in relation to the OQ-Analyst feedback system?
 - a. Was there anything we didn't touch on or something you'd like to talk about further?
 - b. How has your experience been with this study and interview?
 - i. Feedback for half clientele, liaison at site, training, etc.
 - c. Is there someone who you might recommend for this interview?

I don't have any more questions for you. Again, thank you for your participation and willingness to share your thoughts with me today. Your insights are very important to us and the purpose of this meeting was to find any factors that may be barriers or facilitators to this system so that we can improve the experience of the OQ-Analyst feedback system as a whole.