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Outcomes and Progress Monitoring in Psychotherapy

A report of the Canadian Psychological Association

Prepared by the Task Force on Outcomes and Progress Monitoring in Psychotherapy

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Table of Contents

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Executive Summary

Systematic evaluation of treatment outcome and progress is crucial for determining the effects of treatments and providing quality information to therapists (e.g., to adjust treatment based on patient status and progress). However, despite ethical obligations to do so, the majority of psychotherapists in North America do not currently assess patient progress or outcomes (e.g., only 12% of Canadian psychologists use progress monitoring measures). Further, like medical professionals, psychotherapists consistently overestimate their effectiveness and underestimate the likelihood of unsuccessful treatment (e.g., 90% rate their skills at or above the 75th percentile). The research indicates that the systematic implementation of progress and outcome monitoring, using psychometrically sound instruments, has the potential to benefit both psychological service providers and the populations they serve.

Minimally, *outcome monitoring* should involve the assessment, at both intake and at the cessation of treatment, of patient functioning by the therapist, patient, and/or a third party in areas deemed important by the patient and therapist. The majority of the evidence demonstrating the effectiveness of psychological treatments relies upon data similar to those gathered by systematic outcome monitoring (i.e., assessments before and after treatment). The widespread implementation of outcome monitoring has the potential to supplement the clinical literature, improve clinical practice, and add to the research demonstrating the effectiveness of psychological treatments in routine settings.

Progress monitoring involves repeated assessment of patient progress during therapy, typically conducted from the patient's perspective at every session or every other session. A key aspect of progress monitoring involves continuous feedback to the therapist on the patient's status, which facilitates the assessment of treatment progress and may suggest changes to the course of treatment, if necessary. Research indicates that progress monitoring is related to positive patient outcomes, increases in treatment efficiency, decreases in negative outcomes, and increases in trainee improvement when used in clinical supervision. Further, growing evidence suggests that progress monitoring can help to increase treatment efficacy with diverse populations and in diverse contexts.

The selection of outcome and progress monitoring measures should be guided by: replicated evidence of reliability, validity, and sensitivity to change; established norms reflecting multiple patient characteristics to aid in interpretation of patient status (and determine clinically meaningful change); and the extent to which the measure suits intended use (e.g., frequency of use; treatment goals). Depending on the context and population served, additional factors should be taken into consideration when selecting measures (e.g., measures of risk for reoffending in correctional contexts). Given the widespread availability of psychometrically sound measures that are brief and free to use, both cost and time to complete may not be major considerations for therapists in most contexts and for most treatment goals.

Research focusing on Canadian practitioners and training sites has helped to identify barriers to the use of outcome and progress monitoring. Major barriers include insufficient knowledge,

insufficient training, and practical concerns. In light of these barriers and other issues pertaining to the systematic implementation of outcome and progress monitoring, the Canadian Psychological Association's (CPA) task force on outcome and progress monitoring in psychotherapy recommends the following:

1. Implementing Outcome and Progress Monitoring in Clinical Contexts

    - All psychology practitioners should routinely obtain outcome data on patients (minimally before and after providing services, but should be more frequent).
    - All psychology practitioners should seek out continuing education (CE) on outcome and progress monitoring, and the CPA should regularly provide such CE.

2. Ensuring Uptake and Maintenance of Outcome and Progress Monitoring

    - Psychologists working in agencies and institutions should lobby for the use of outcome and progress monitoring.
    - Psychologists should use the principles outlined in this report to advocate for adequate implementation and uptake of outcome and progress monitoring.

3. Training

    - Outcome and progress monitoring should be part of the clinical curriculum.
    - The CPA's Accreditation Panel should include training and supervision in outcome and progress monitoring among its Standards.

4. Ethics

    - Standard II.22 of the Canadian Code of Ethics for Psychologists should be revised to state more explicitly that psychologists should monitor outcomes and progress.
    - The CPA's board of directors should work with provincial regulatory bodies to encourage training in, and the use of, outcome and progress monitoring.

Outcomes and Progress Monitoring in Psychotherapy

Introduction

In 2017, the board of directors of the Canadian Psychological Association (CPA) charged a task force to produce a report on outcome and progress monitoring of psychological interventions. Systematic evaluation of treatment progress and outcome is crucial for determining the effects of psychological treatments and for providing quality information to therapists in order to adjust treatment to their patients' status and progress. This is particularly important given that psychological service providers consistently over-estimate their effectiveness relative to peers. For example, Walfish, McAlister, O'Donnell, and Lambert (2012) reported that over 90% of therapists in their study self-rated their psychotherapy skills at the 75th percentile or greater, and that all of the therapists rated themselves above the 50th percentile. Further, research indicates that therapists under-detect patients who are at risk of treatment failure (e.g., Hannan et al., 2005) and underestimate their own rates of unsuccessful treatment (e.g., Hunsley, Aubry, Vestervelt, & Vito, 1999). This is not a problem exclusive to psychotherapists. Many medical professionals demonstrate limitations in their abilities for self-evaluation of their competence and adherence to good health care practices (Caban-Martinez et al., 2010; Costelloe, Metcalfe, Lovering, Mant, & Hay, 2010; Davis et al., 2006; Schweizer et al., 2013).

Nevertheless, for psychotherapists, collecting valid information about progress and outcomes through psychometric assessment is a key component to providing evidence-based care that is relatively free of bias. Outcome and progress monitoring is also an opportunity for organized networks of clinical practice to engage in enhanced program evaluation and psychotherapy research. This is especially important with the imminent development of government-funded structured psychotherapy in Ontario, Quebec, and other jurisdictions in Canada.

Despite their importance, efforts to promote the evaluation of treatment outcomes and to make use of progress monitoring have not been widely successful. Surveys conducted in recent years show that most professionals that provide psychotherapy infrequently evaluate treatment outcomes in a systematic manner (e.g., Garland, Kruse, & Aarons, 2005; Hatfield & Ogles, 2004; Phelps, Eisman, & Kohout, 1998). For example, in a survey of members of the American Psychological Association (APA), only 39% reported frequently using assessment measures to evaluate patient progress in treatment (Wright et al., 2017). Part of the problem may be that clinicians often are not taught in their professional training programs to systematically assess outcomes and to use progress monitoring. A survey of APA accredited clinical psychology programs found that only half of the programs included the topic of evaluating treatment effectiveness in the assessment training provided to their graduate students (Ready & Veague, 2014). Similarly, in their survey of APA accredited clinical psychology programs, Mihura, Roy, and Graceffo (2017) reported that only half of these accredited programs were associated with training clinics or practicum settings in which students routinely used outcome measures to evaluate the effectiveness of treatment.

Hence, the goal of this report is to provide guidance to psychotherapy practitioners as well as to policy-makers, educators, and funders of psychological interventions regarding the need to measure outcome and patient progress in order to provide evidence-based treatment. We review the state of the art in outcome monitoring that can guide clinicians in meeting this undertaking. Further, we evaluate briefly the state of the research on progress monitoring, which is a variant of outcome monitoring but designed specifically to provide practitioners with ongoing feedback to facilitate reflective practice and improve patient outcomes. The report then reviews barriers to implementing outcome and progress monitoring in clinical practice. Finally, the report ends with recommendations to facilitate the use of outcome and progress monitoring to improve therapist effectiveness and patient outcomes.

Contexts for Providing Psychotherapy

Much of the writing and research on outcome and progress monitoring has focused on providing psychological services to outpatients in private practices, clinics, and university counselling services, where the majority of psychologists and psychotherapists practice. One could argue that the prototypical setting in studies of psychotherapy is the private practice, counselling centre, or outpatient clinic in which patients with mental health concerns are treated. Although such settings and patient populations still define what most of psychologists and psychotherapists do, the practice of many health professionals has evolved over time so that the number of psychologists working in public health facilities continues to grow in some parts of the country. Accordingly, some psychologists have expanded their practice beyond the traditional interventions for mental health (Arnett, 2005). Psychologists who are employed in health care settings have competencies in the areas of neuropsychology, rehabilitation psychology, and health psychology. Often psychologists are seen as specialists in medical facilities and, therefore, receive referrals for only the most complex patients or for those who have multiple physical and mental health comorbidities and are not benefitting from the medical treatments offered. Some of these patients are in hospital for acute injuries or trauma, and outcome monitoring may be for relatively brief stays.

Psychologists who work in hospital settings and are tasked to work with patients with chronic or progressive illness may not be able to demonstrate the effectiveness of their intervention in precisely the same manner as those working in mental health outpatient settings.

Therapy outcome data for these medical patient populations may include questionnaires that monitor changes in mental health, but often include measures that assess other aspects of psychosocial functioning. For example, outcome measures might also include the assessment of changes in pain experience, illness-specific symptoms, and adherence to multifaceted treatment regimens (e.g., completing regular blood work, adhering to medication and exercise regimes). For this report, although we assume that outcome and progress monitoring procedures and measures are relevant to traditional mental health practice, we also see them as pertinent to other treatment contexts and, to this end, we will make special reference to the use of outcome measurement in medical, forensic, and school settings.

Definitions

The task force defines *outcome monitoring* as the evaluation of patient outcomes with psychometrically sound instruments at least pre- and post-therapy, but which may occur more frequently. The purpose of outcome monitoring is to assess the effectiveness of the treatment for symptom reduction, quality of life, and other areas of functioning deemed important by the patient and therapist. The perspective of the assessment can be from the therapist, the patient, or an observer who has intimate knowledge of the patient's functioning or behaviours (e.g., a parent, teacher, or spouse). Given the possibility of confirmatory bias among therapists (Nickerson, 1998), whenever outcome assessment is conducted from the therapist's perspective, it should be supplemented with outcome measures from the patient or a third-party perspective. The evaluation of outcomes at follow-up periods also may be important to assess the sustainability of patient outcomes after treatment, although longer term-follow up assessment is often not practical in everyday clinical practice and may be impacted by other factors in a patient's life not associated with psychotherapy.

By *progress monitoring*, the task force means the regular assessment of patient progress during therapy (e.g., weekly or bi-weekly) with psychometrically sound instruments followed by feedback to the therapist on the status of the patient relative to standardized norms and relative to the patient's own status in previous weeks or sessions (Overington & Ionita, 2012). Continuous feedback to the therapist throughout therapy differentiates progress from outcome monitoring. The feedback to therapists may take the form of status alerts indicating that a patient is on track for attaining successful outcomes or is potentially experiencing deterioration in functioning. The assessment is typically from the patient's perspective, however, a third party perspective (e.g., parent or teacher) also can be collected. When therapists do employ progress monitoring, they commonly do so regularly (e.g., at every session or every second session) during the course of treatment. The main function of progress monitoring is to provide practitioners with a patient's "vital-signs" of psychological functioning, thus allowing practitioners to easily and quickly assess progress in treatment and to change the course of therapy if necessary (Lambert & Shimokawa, 2011).

Ethics and Obligations of Psychologists

Consistent with the scientific underpinnings of the profession, psychologists have an ethical obligation to evaluate the services they provide. Indeed, for Canadian psychologists, this obligation has been codified in both third and fourth editions of the Canadian Code of Ethics for Psychologists (Canadian Psychological Association, 2000, 2017). Standard II.22 of the Code states that psychologists are expected to: "monitor and evaluate the effect of their activities, record their findings, and communicate new knowledge to relevant others." This requirement pertains to all professional services, including the provision of psychological treatments. Most other professionals who offer psychotherapy services also have similar obligations.

In 2011, the CPA's board of directors launched a task force on evidence-based practice of psychological treatments to support and guide the practice of psychologists and to inform service users, policy makers, and other stakeholders. The group's report defined evidence-based practice (EBP), operationalized what constitutes EBP in the context of delivering

psychological treatments, and provided a hierarchy of evidence that can be used to inform treatment decisions. In its report (Canadian Psychological Association, 2012) and in a later publication (Dozois et al., 2014), the task force defined evidence-based practice as: "…the conscientious, explicit and judicious use of the best available research evidence to inform each stage of clinical decision making and service delivery. This requires that psychologists apply their knowledge of the best available research in the context of specific patient characteristics, cultural backgrounds, and treatment preferences." (p. 7).

In addition, and unlike in the statements on EBP issued by other organizations, the CPA's task force also explicitly stated that EBP entails "the monitoring and evaluation of services provided to patients throughout treatment (from initial intake to treatment termination and maintenance of gains)" (Dozois et al., 2014, p. 155) and that "regardless of the nature or strength of the evidence used to inform treatment selection and planning, psychologists should be prepared to alter the treatment being provided based on data from ongoing treatment monitoring, including both in-session and between-session patient reactions and changes in symptoms and functioning" (CPA, 2012, p. 10).

Hence, outcome and progress monitoring are a crucial and integral part of evidence-based practice. Ethical guidelines and the report of the CPA's task force on EBP require psychologists to obtain data on the effects of the treatment they provide. Psychological service providers should use data from ongoing monitoring of the patient's reactions, symptoms, and general functioning to inform decisions about treatment planning and delivery. The task force on outcome and progress monitoring argues that this tracking should be done using tools that are structured, psychometrically sound, and go beyond a reliance on the practitioner's clinical judgement alone, which may be biased (Walfish et al., 2012). In this report, we briefly review some of the more commonly used well-validated outcome and progress monitoring measures.

Outcome Monitoring

The assessment of patient psychosocial functioning prior to and following treatment has, for decades, formed the cornerstone of evaluation strategies used in research to examine the impact of psychological treatments for mental disorders and related psychosocial conditions/ problems. Without evaluating patient functioning prior to and following treatment it is not possible to accurately determine the effects of the service (Campbell & Stanley, 1963). By virtue of collecting pre-treatment and post-treatment data in many studies, meta-analyses of treatment outcome research in the 1980s and 1990s concluded that many forms of psychological treatment were efficacious for a range of disorders and conditions experienced by both youth and adults (e.g., Casey & Berman, 1985; Landman & Dawes, 1982; Lipsey & Wilson, 1993; Smith, Glass, & Miller, 1980; Weisz, Weiss, Han, Granger, & Morton, 1995).

The publication of consistent and compelling meta-analytic evidence for treatment efficacy occurred at the same time as demands for accountability were growing in health care systems. In the United States, accountability for mental health services has been seen as extremely important, as numerous concerns have been raised about the effectiveness and costs of these services (Lyons, Howard, O'Mahoney, & Lish, 1997). A related accountability issue raised in the 1990s pertained to the degree to which psychological treatments provided

in routine settings achieved results similar to the results of clinical trials of psychological treatments. The move to emphasize quality assurance indicators and continuous quality improvement in the provision of mental health services generally, and psychological treatments more specifically, meant that the third-party payers for these services began to require evidence that the services were working for patients (Maruish, 1994a; Ogles, Lambert, & Masters, 1996). In response to the need for guidance on how to meet the evaluation demands, many articles and books were published that outlined options for assessing treatment outcome, the strengths and shortcomings of available measures, and the challenges likely to be faced in implementing treatment outcome procedures in routine practice (e.g., Kazdin, 1993; Lyons et al., 1997; Maruish, 1994b; Ogles et al., 1996).

There is clear evidence that the evaluation of treatment outcome is possible in the context of typical psychological practice. For example, Hunsley and Lee (2007) summarized the findings of 35 treatment effectiveness trials set in routine practice settings, for both adult and youth psychological treatments, in which pre- and post-treatment data were collected. They reported that improvement rates in these studies were comparable to the benchmarks derived from methodologically sound clinical trials. Not only does Hunsley and Lee's review demonstrate that the collection of pre- and post-treatment data is possible, but it also illustrates that the collection of these data allows for a comparison of outcomes observed in the real-world setting to benchmarks for treatment outcomes derived from published clinical trials (see also Spilka & Dobson, 2015).

Although effectiveness findings such as these demonstrate the feasibility of collecting outcome data in clinical settings, it is critical to take into account the impact of unilateral termination by patients (i.e., those who drop-out) when assessing outcomes. Based on data from a Canadian national population study, nearly half of patients will terminate treatment not because they have improved, but because of barriers to receiving treatment, a dislike of treatment, or wishing to solve their problems in a different manner (Westmacott & Hunsley, 2010).

One way to have reliable data on most or all patients is to evaluate their functioning as close as possible to their final session. Even if unilateral termination is inevitable for some patients, having such data allows clinicians to more accurately determine patient functioning at termination, which, in turn, will provide a more accurate overall perspective on treatment effectiveness for patients. Consistent with this, over the past decade, there has been a growing tendency for clinicians who do evaluate treatment outcome to use outcome measures at multiple points in treatment, thus providing data that can serve as best estimates of functioning when patients terminate services. Indeed, the repeated use of outcome measures throughout treatment is a key part of the evaluation strategy used in the United Kingdom's initiative *Improving Access to Psychological Therapies*. Prior to every session, patients complete brief measures of depression, anxiety, and other symptoms that are relevant to their presenting concerns and treatment focus (Clark, 2011). Not only are all these measures psychometrically sound, there is no cost associated with their use—an important consideration in most clinical settings. Having access to data on patient functioning, gathered on a frequent basis, allows the therapist to modify the treatment in order to respond to the possibility that treatment is either: (a) failing to reduce the patient's problems, or (b) is succeeding more rapidly than expected.

Outcome Measures

When selecting assessment measures, clinicians should consider replicated evidence for the reliability and validity, and especially evidence for the sensitivity to change of the measure's scores. Guidelines to evaluate such evidence can be found in numerous sources (e.g., Hunsley & Mash, 2018). Also, norms must be available to aid in the accurate interpretation of a patient's score. Moreover, norms can be used to determine the patient's level of functioning before and after treatment, thus allowing the clinician to determine if changes in functioning have occurred, if these changes are clinically meaningful, and if patient functioning after treatment is situated within the population norm. Multiple sets of norms may be required for a measure to reflect relevant patient characteristics (e.g., gender, age, and ethnicity), and to be sensitive to differences stemming from who completes the instrument (e.g., patient, parent, teacher, and clinician). Other considerations beyond these scientific criteria also should be taken into account, including the time required to complete and score a measure, and any costs associated with using the measure. Finally, care must be taken to ensure that the time period covered by the measure matches the frequency with which the measure will be used in practice (i.e., a patient self-report measure of symptoms during the past two weeks should not be administered weekly during treatment).

There are many psychometrically sound measures available to evaluate treatment outcome. Here we provide some examples of commonly used outcome measures and sources that list and review these measures, although this is not meant to be an exhaustive list. Evaluations of numerous measures of symptoms, general psychosocial functioning, and quality of life are available in Hunsley and Mash (2018). Reviews of several commonly used patient self-report instruments that are suitable for evaluating treatment outcome (such as the Depression Anxiety Stress Scale [Lovibond & Lovibond, 1995], the 36-Item Short Form Health Survey [RAND Health, n.d.], and the Symptom Checklist 90-Revised [Derogatis, 1983]) can be found in Tarescavage and Ben-Porath (2014). Additionally, Sales and Alves (2016) provide a thorough review of idiographic measures that are commonly used in measuring treatment process and outcome.

Given the frequently expressed concern that instrument costs can be an obstacle to use in many settings, there has been a recent focus on developing psychometrically strong measures that are both relatively short and free to use. Numerous examples of such measures can be found at https://psychologytools.com/download-scales-and-measures.html and at https://www.div12.org/assessment-repository/. Beidas et al. (2015) provided a listing of almost 50 psychometrically sound mental health measures for youth and adults that are freely available – many of which are appropriate for use as outcome measures. Finally, there is an impressive range of psychometrically sound symptom measures for youth and adults that is available in the free-to-use Patient-Reported Outcomes Measurement Information System (PROMIS: http://www.healthmeasures.net/explore-measurement-systems/promis). Measures focusing on psychological symptoms, physical symptoms, generalized aspects of functioning, and life satisfaction are available in the system. Given the range of available measures, cost considerations should no longer be an obstacle to the routine assessment of psychological treatment outcome.

Quality of Life as a Common Outcome for Medical Populations

One key factor that is often assessed in medical settings is quality of life of the individual, which includes social, mental, and physical well-being. For example, in a recent meta-analysis of individuals with rheumatoid arthritis, the authors found that rheumatoid arthritis has major diverse effects on one's quality of life across both physical and mental domains of well-being (Matcham et al., 2014). Therefore, the authors suggested that in addition to disease-specific measures, the monitoring of psychological treatment in patient populations should include quality of life measures.

The Medical Outcomes Study's 36-item short-form health survey (SF-36) is a popular tool designed to assess health-related quality of life (Matcham et al., 2014). The SF-36 is used in the assessment of many physical health conditions, including patients with hypertension, congestive heart failure, Type 2 diabetes, myocardial infarction and in a variety of healthcare settings. The SF-36 has eight individual subscales divided across physical and psychological domains. Scores on the eight subscales can be combined to form two higher-order summary scores, the Physical Component Summary and the Mental Component Summary. The SF-36 and its shorter version, the SF-12, are often used to assess outcomes in terms of improved quality of life in those with health conditions.

Outcomes in the Context of Third Party Payers in Health Facilities

Two issues often faced in facilities where there is a third party payer, such as a government vehicle insurance or Workers' Compensation Board are: (1) delineating accident-related vs. co-morbid mental health conditions, which has a bearing on whether the insurer is responsible for funding treatment of a condition; and (2) patient secondary gain, which is most often financial in nature and in which the patient may be financially advantaged by remaining disabled, even in a no-fault system of insurance. In light of these issues, outcome monitoring of psychological interventions increases in complexity.

Patients who attend these clinics do so in the context of complex musculoskeletal injuries sustained in accidents, and they are treated by a multidisciplinary team. These patients' poor mental health may be as a consequence of the accident (e.g., depression, PTSD, vehicle phobia, adjustment) or may have pre-existed the accident (e.g., addiction, eating disorder, pre-existing mood disorder). Thus, there is no single measure of mental health functioning given to everyone over the course of treatment to measure progress or outcome. That said, with very few exceptions, the majority of these patients are in chronic pain. Thus, some clinics administer numerous pain questionnaires to everyone on assessment and again on discharge from treatment in order to evaluate changes in pain perception and capacity for self-management. These questionnaires may include the: (a) Tampa Scale of Kinesiophobia (Goubert et al., 2004; Kori, Miller, & Todd, 1990), (b) Pain Catastrophizing Scale (Sullivan, 2009), (c) Pain Management Inventory (Brown & Nicassio, 1987), and (d) Pain Disability Index (Chibnall & Tait, 1994). Finally, for those patients with diagnosable mental health conditions related to the vehicle or work-place accident (e.g., depression or PTSD), psychologists may repeatedly administer some common psychometric tests (e.g., Beck Depression Inventory – II [BDI-2; Beck, Steer, & Brown, 1996] for depression, and the Clinician-Administered PTSD scale

for DSM-5 [CAPS-5; Weathers et al., 2013] for post-traumatic stress disorder [PTSD]) to evaluate treatment effectiveness and symptom reduction. Repeated administrations and review of mental health functioning with the patient may be a valuable component of ongoing interventions.

Outcome Monitoring in Correctional Facilities

Psychologists working in government funded correctional facilities have unique challenges in the collection of outcome data for psychological intervention. In these facilities, there is an emphasis on incorporating the assessment and re-assessment of risk for reoffending when informing decisions about institutional placement, treatment, parole, and so forth. For instance, psychologists may use clinician-rated risk assessment and treatment planning tools such as the Violence Risk Scale (VRS; Wong & Gordon, 1999-2003), Violence Risk Scale: Sex Offender version (VRS-SO; Wong, Olver, Nicholaichuk, & Gordon, 2003), and the Violence Risk Scale: Youth Version (VRS-YV; Wong, Lewis, Stockdale, & Gordon, 2004-2011). These tools can assess initial level of risk for future reoffending, identify treatment targets/criminogenic needs and associated stage of change, as well as quantify the amount of change made, and re-assess risk post-intervention. The use of such measures to assess changes in risk for recidivism is viewed as a priority by clinicians and administrators in correctional settings given the mandate to reduce risk, prevent violence, and increase community safety. These scales may be used on an individual case basis and for program evaluation when combined with outcome data (e.g., reductions in risk, any additional charges/offences including of less serious offences). In some correctional settings, exit interviews with clients (e.g., to assess patient satisfaction) and external program evaluations (e.g., to assess cost-effectiveness) are also conducted. Although initially validated in correctional populations, use of these and similar tools have been extended to other forensic populations and settings (e.g., forensic hospitals and health facilities).

Outcome Monitoring in Schools

In recent years, considerable attention has been devoted to the monitoring of mental health services provided in a school-based context (e.g., Borntrager & Lyon, 2015; Connors, Arora, Curtis, & Stephan, 2015). Outcome monitoring in public facilities, such as schools and other learning environments, comes with its own set of challenges (Shaw, 2018). For example, to be maximally effective, school psychologists must consider interventions that directly affect outcomes for children and their families. Some of the other challenges in designing interventions in these institutions include: low ratios of psychologists to students, special circumstances associated with both rural and urban school psychology, diversity and equity considerations, and multilingual environments. In light of the importance of evaluating these mental health services, Shaw (2018) strongly encourages the use of systematic methods for studying the implementation of psychological interventions at both the micro-level (e.g., therapy with individual students) and macro-level (e.g., province-wide educational policies for persons with fetal alcohol effects).

Progress Monitoring

Measuring, monitoring, and providing feedback to therapists can be useful to modify therapist behaviours in order to improve patient outcomes. More specifically, progress monitoring assumes that a patient's measured response to treatment will enable a psychotherapist to be more responsive to the patient's needs on a session-by-session basis. This process has been described by some as an essential component of therapist deliberate practice – that is, the process of therapists continually monitoring and adjusting their interventions to achieve a high level of expertise and positive patient outcome (Tracey, Wampold, Lichtenberg, & Goodyear, 2014). This will occur if the feedback source is credible and the feedback is immediate, frequent, and systematic. Accordingly, it is not enough to formally measure and monitor a patient's mental health status to improve the outcomes of treatment for an individual case. The feedback must also alert a clinician to any emerging problems in order to facilitate patient progress.

Research on progress monitoring has demonstrated the utility of the approach in improving outcomes. In a meta-analysis of patient feedback systems, Lambert and Shimokawa (2011) found patient outcome monitoring with feedback to the therapist was moderately and significantly associated with positive patient outcomes. Notably, the number of psychotherapy patients who deteriorated was cut in half by using a progress monitoring system. This has important practice implications because approximately 8% of all patients get worse after psychotherapy (Lambert, 2010). Similarly, meta-analytic results have reported the positive effects of using progress monitoring in psychological services for youth (Tam & Ronan, 2017).

Research has also demonstrated that progress monitoring increases the efficiency of services by allowing patients to get better faster (Reese, Norsworthy, & Rowlands, 2009) and by allocating sessions based on patient need (Harmon et al., 2007; Lambert, Hansen, & Finch, 2001; Whipple et al., 2003). Systematic reviews (Gondek, Edbrooke-Childs, Fink, Deighton, & Wolpert, 2016) and meta-analyses (Lambert & Shimokawa, 2011; Shimokawa, Lambert, & Smart, 2010) that synthesized the evidence confirmed the benefits of progress monitoring especially in reducing negative outcomes (Lambert & Shimokawa, 2011). Progress monitoring has demonstrated efficacy in university counselling centres (Reese, Norsworthy, & Rowlands, 2009), hospital settings (Dyer, Hooke, & Page, 2016), and community mental health settings (Connolly Gibbons et al., 2015). Many studies have examined the impact on individual therapy, but there is also growing evidence for the value of progress monitoring in group therapy (Schuman, Slone, Reese, & Duncan, 2015; Slone, Reese, Mathews-Duvall, & Kodet, 2015) and couple therapy (Reese, Toland, Slone, & Norsworthy, 2010).

Progress monitoring may help therapists to be aware of their strengths and weaknesses and to optimize their continuing education. It may also be useful in matching patients to therapists, maximizing the likelihood of positive patient outcomes (Hayes, McAleavey, Castonguay, & Locke, 2016; Kraus, Castonguay, Boswell, Nordberg, & Hayes, 2011). Miller, Hubble, and Duncan (2008) conducted a study of highly effective therapists and concluded that these therapists implemented practices aimed to determine their baseline effectiveness and to solicit feedback from patients. The ability of progress monitoring procedures to facilitate these practices makes it an important ingredient in effective service delivery and therapist

professional development. Finally, when used in clinical supervision, progress monitoring increases trainee improvement (Reese, Usher, et al., 2009) as well as patient rate of change (Barkham et al., 2006).

Progress Monitoring Measures

Progress monitoring measures tend to be brief, routinely administered scales that permit clinicians to evaluate and improve patient outcomes. They are generally pan-theoretical and comprehensive with regard to patient functioning (Overington & Ionita, 2012). Several resources provide information about a number of progress monitoring tools, including their description, administration, scoring, interpretation, and cost (Drapeau, 2012; Overington & Ionita, 2012). To illustrate the nature of these measures we comment on two of the most commonly used progress monitoring tools.

The *Outcome Questionnaire-45* (OQ-45; Lambert et al., 1996; Lambert et al., 2004) (http://www.oqmeasures.com) provides three subscale scores (Symptom Distress, Interpersonal Relationships, and Social Role) and a total score, all of which come with population-based norms and clinical cut-offs. The OQ-45 has been implemented broadly in private and public training clinics in Canada, the United States, and some European countries, and in several treatment clinics operated by Veteran Affairs Canada (see Ross, Ionita, & Stirman, 2016). The OQ-Analyst software is a web-based scoring system that uses colours to indicate patient status (Lambert, 2015). This system combined with the OQ-45 provides practitioners with results regarding patient progress in treatment, including whether patients are ready for termination, making expected improvement, deviating from the expected rate of change, or are likely to have a negative outcome. The OQ-Analyst report contains: (a) client scores on the three subscales, (b) client ratings on critical items (including suicide, substance abuse, and violence), and (c) a graphical representation of the relation between number of sessions and the client's OQ-45 scores throughout treatment, relative to the client's own predicted scores based on population norms. The report also provides recommendations that the practitioner may consider, such as discussing termination with the patient, reviewing the patient's treatment plan, or taking intense and immediate action to address deterioration in patient functioning.

The *Partners for Change Outcomes Monitoring System* (PCOMS; Miller, Duncan, Sorrell, & Brown, 2005) comprises the Outcome Rating Scale (ORS; Duncan, 2012; Miller, Duncan, Brown, Sparks, & Claud, 2003) and Session Rating Scale (SRS; Duncan, Miller, & Sparks, 2003). The ORS (Duncan, 2012) is a short four-item visual analogue measure indicating symptomatic distress, interpersonal relationships, social role functioning, and well-being. In addition, the developers also created the Session Rating Scale (SRS), a four-item visual analogue scale that measures the therapeutic alliance between patient and therapist. That is, the SRS measures the collaborative agreement on the tasks and goals of therapy, and the bond between therapist and patient. Therapeutic alliance is consistently associated with better patient outcomes (Horvath, Del Re, Flückiger, & Symonds, 2011). Typically, one administers the SRS to the patient near the end of each session. When used together, the ORS and SRS encourage patient and therapist to discuss, at each session of care, their progress and relationship issues (with the goal of increasing collaborative efforts and patient engagement in treatment). The

PCOMS also has a method of identifying off-track cases on both progress and alliance measures, alerting the therapist to possible problems, and thus prompting actions on the part of the therapist to resolve problems in therapy. In a review, Lambert and Whipple (in press) report that six of nine studies found that feedback-assisted treatment using the PCOMS resulted in better outcomes compared to treatment as usual without feedback. Like the OQ-System, PCOMS has been studied across a wide variety of patient populations and problems, and in individual, group, and couple treatment.

Progress monitoring tools like the OQ-45 (Lambert et al., 1996; Lambert et al., 2004) and the PCOMS (Miller et al., 2005) have accumulated enough support in the research literature that they have been accepted into the U.S. Substance Abuse & Mental Health Services Administration's (SAMHSA) National Registry of Evidence-based Programs and Practices (SAMHSA, 2018). In Canada, the Department of Veteran Affairs has selected for use the OQ-45 (including both an English and French-Canadian versions), and the Saskatchewan Provincial Ministry of Health has mandated the implementation of PCOMS for use by mental health and addictions staff (Duncan, 2012). Other measures for progress monitoring are listed in a special issue of *Cahier recherche et pratique/Integrating Science and Practice* (Drapeau, 2012).

Facilitating Implementation of Outcome and Progress Monitoring

A Practice-Research Gap

As indicated above, practice-research gaps exist in many areas of health care and among many health professions (Caban-Martinez et al., 2010; Costelloe et al., 2010; Schweizer et al., 2013). Hence, it is not surprising that despite the strong evidence base and documented benefits, the majority of psychotherapists do not use outcome or progress monitoring. For example, a recent survey found that only 12% of Canadian psychologists were using a progress monitoring measure and 67% were unaware that these measures exist, despite the strong research ethos in psychology (Ionita & Fitzpatrick, 2014). Among those who were aware but were not using them, barriers to use included insufficient knowledge (e.g., of the different measures and of the differences between the measures), insufficient training (e.g., a lack of or limited access to training), and concerns about the measures taking too much time or burdening patients. When asked about what would help to overcome such barriers, clinicians suggested receiving brief training, hearing positive patient testimonials, and learning that these measures require only a few minutes to be completed. In fact, research does indicate that brief progress monitoring training is readily available (e.g., Duncan, 2017), patients report positive experiences (Kilbride et al., 2013; Solstad, Castonguay, & Moltu, 2017; Steinfeld, Franklin, Mercer, Fraynt, & Simon, 2016; Unsworth, Cowie, & Green, 2012), and these measures are generally very brief.

The practice-research gap on the uptake of outcome and progress monitoring among therapists may be due to barriers in knowledge translation and dissemination. We turn to Rogers' (2003) Diffusion of Innovations Theory to conceptualize ways of improving implementation and uptake of outcome and progress monitoring. This theory posits that improving clinician knowledge, persuading clinicians that the innovation is worthwhile, and

helping them decide to adopt these measures are key to implementing and maintaining innovations in practice (Rogers, 2003).

With regards to *clinician knowledge*, a survey indicated that only 33% of psychologists (Ionita & Fitzpatrick, 2014) and 63% of predoctoral psychology internship training directors (Overington, Fitzpatrick, Drapeau, & Hunsley, 2016) were aware of progress monitoring. However, a lack of knowledge of how progress monitoring works may also be a barrier among non-users who are aware of the existence of such methods (Ionita, 2015). These findings suggest that clinicians need more information on how to use outcome and progress monitoring and how they work.

Regarding *persuading clinicians*, therapists have expressed resistance and fears that the measures will be used for therapist evaluation, although they also acknowledge the value and potential of these measures (Callaly, Hyland, Coombs, & Trauer, 2006; Unsworth et al., 2012). Training appears to positively impact attitudes and the use of evidence-based practices (Cook, Schnurr, Biyanova, & Coyne, 2009; Nelson & Steele, 2007). For example, a computer-based intervention and live outcome monitoring training led to more positive attitudes and notable improvements in the belief that feedback promotes motivation, engagement, and collaboration (Edbrooke-Childs, Wolpert, & Deighton, 2016; Willis, Deane, & Coombs, 2009). These findings suggest that it is important to consider the place of outcome and progress monitoring in graduate training programs. In 2009, more than half of APA accredited, APPIC-membership training sites were not using any form of outcome monitoring to inform decisions, treatment, and clinical practice (Mours, Campbell, Gathercoal, & Peterson, 2009). A more recent survey found that close to 25% of APA accredited internship training directors were aware of, but had not implemented progress monitoring measures at their site (Overington et al., 2016). Thus, outcome and progress implementation efforts should work to augment training opportunities, thereby increasing students' exposure to outcome and progress monitoring in psychology training programs.

Regarding *clinician decision-making*, there is evidence that clinicians were motivated to begin using progress monitoring measures when the measures fit with their approach, theory, and/or values (Knoll, Ionita, Tomaro, Chen, & Fitzpatrick, 2016). Clinicians were also more likely to use such measures if they were viewed as contributing to the effectiveness of their practice and professional development; enhancing the role of the patient in therapy; and facilitating accountability to themselves, their patients, and third parties (Knoll et al., 2016). In other words, direct clinical experience with outcome or progress monitoring may be key to their eventual implementation among clinicians (Gyani, Shafran, Rose, & Lee, 2013; Powell, Hausmann-Stabile, & McMillen, 2013; Stewart & Chambless, 2007; Stewart, Stirman, & Chambless, 2012).

Implementation and Maintenance

When it comes to maintenance of progress monitoring, 6% of practitioners (Ionita & Fitzpatrick, 2014) and 12% of training sites (Overington et al., 2016) report having implemented but then discontinued using a progress monitoring measure. Typical challenges reported by clinicians when implementing such measures included practical concerns,

dissatisfaction with a particular feature of the measure (e.g., length), or a feeling that the measure did not fit with their clientele or their theoretical orientation (Ionita, 2015).

Mental health professionals have discussed various factors that would ease and simplify implementation such as having technical support, adequate resources (e.g., time; Callaly & Hallebone, 2001), a smaller case-load, using a single measure (Aoun, Pennebaker, & Janca, 2002), and adequate training (Aoun et al., 2002; Callaly & Hallebone, 2001; Callaly et al., 2006; Unsworth et al., 2012). Studies found therapist training to result in significant and sustained increases in the use of progress monitoring (Persons, Koerner, Eidelman, Thomas, & Liu, 2016; Steinfeld et al., 2016). Such training programs have provided skills training, adherence tracking, opportunities to practice, and modes of regular checking-in with regards to use (e.g., staff meetings, reflection exercises; Persons et al., 2016; Steinfeld et al., 2016).

Another key issue for therapists may be patient response to the outcome or progress monitoring. A review of studies found that patients experience the measures as empowering and that using them facilitates collaboration with their therapist (Solstad et al., 2017). Patients also indicated that the measures are easy to understand, add structure and focus to sessions, and allow them to see progress (Kilbride et al., 2013; Solstad et al., 2017; Stedman et al., 2000; Steinfeld et al., 2016; Unsworth et al., 2012). Clinicians need to be encouraged to solicit patient feedback about the measures they use, as reports of positive patient experiences may improve therapist adherence to progress monitoring.

Recommendations

Implementing Outcome and Progress Monitoring in Clinical Contexts

Consistent with the scientific underpinnings of the profession, psychologists have an ethical obligation to evaluate the services they provide. The CPA task force on EBP explicitly stated that EBP entails “the monitoring and evaluation of services provided to patients throughout treatment (from initial intake to treatment termination and maintenance of gains)” (Dozois et al., 2014, p. 155). Further, agencies that want to achieve the best outcomes for their patients and ensure quality service can most reliably do so by implementing outcome monitoring. Therefore, we recommend the following:

1. Psychologists and all psychotherapy practitioners, whether in a private practice or part of an agency or institution, should routinely obtain outcome data on patients they are treating by using psychometrically sound scales (i.e., evidence that the scores are valid, reliable, sensitive to change, and that they have both relevant population norms reflecting the patient’s demographics and clinical cut-off scores).

2. At a minimum, psychotherapists should assess patient outcomes, preferably from the patient’s perspective and/or from a third-party perspective, before and after providing services. However, we recommend that psychotherapists assess outcomes at multiple time points during therapy so as to have data close to termination for patients who unilaterally leave treatment.

3. As part of continuing education, psychologists and psychotherapists should seek out and receive training on how to implement and use outcome and progress monitoring in their practices.

4. To this end, we recommend that the CPA regularly provide professional development opportunities for outcome and progress monitoring among their offerings at the association's annual national convention.

Ensuring Uptake and Maintenance of Outcome and Progress Monitoring

As indicated, key factors in the uptake and maintenance of outcome and progress monitoring are exposure and clinical experience. Having adequate training, technical support, and resources are also necessary.

1. We encourage psychologists working in agencies and institutions to lobby for the use of outcome and progress monitoring and to actively serve as local consultants/resources for the implementation of these procedures.

2. Psychologists can use principles outlined in this report to advocate for adequate implementation and uptake of progress and/or outcome monitoring. For example, they can encourage agencies, institutions, and clinics to engage clinical staff in the planning and implementation of progress and outcome monitoring procedures for program evaluation and quality assurance; provide sufficient technical support, resources (time, hardware, software), and adequate training to clinical staff; use quality standards related to outcomes based on published benchmarks, such as those provided by the IAPT program in the UK; and take a developmental rather than evaluative approach by providing any staff not meeting quality standards related to outcomes with supplementary clinical training to improve their skills.

Training

Many barriers to psychotherapists using progress and outcome monitoring are related to lack of knowledge and experience with such tools. Hence, training programs, including university doctoral training programs, pre-doctoral internships, and practicum settings play a critical role in exposing trainees to these methods to influence trainees' professional identity and practice habits, and to develop positive attitudes towards outcome and progress monitoring. We recommend:

1. University clinical doctoral training programs and pre-doctoral internships should teach students about outcome evaluation and progress monitoring as part of the clinical curriculum. Training should emphasize the use of these measures in everyday practice and their impact on patient outcomes, and issues, such as engaging patients in the evaluation process and any potential impacts on the therapeutic alliance, should be discussed as part of these training efforts. Direct clinical experience with outcome or progress monitoring will be key to their eventual implementation among future psychology providers.

2. The CPA Accreditation Panel should include training and supervision in outcome and progress monitoring among its Standards, assessed during the accreditation process. The panel can support training programs in developing the necessary competence to provide such training by sponsoring outcome and progress monitoring workshops for psychologists who work in accredited programs and internships.

Ethics

As indicated, psychologists have an ethical obligation to evaluate services they provide (*Canadian Code of Ethics for Psychologists*, Standard II.22; CPA, 2000; 2017). We interpret this to mean that psychologists must obtain necessary training and implement outcome and/or progress monitoring in order to meet this standard. Professional regulatory bodies in Canada are increasingly requiring their registrants to be more accountable for their ongoing professional development, including documenting that they have attained designated amounts and kinds professional development as a condition of continued licensure or registration.

1. Currently the *Canadian Code of Ethics* indicate that psychologists "Monitor and evaluate the effect of their activities, record their findings, and communicate new knowledge to relevant others" (Standard II.22). This Standard could be revised to state more explicitly that psychologists are expected to evaluate outcomes with every patient, to use continuous progress monitoring in their everyday practice, and to rely on psychometrically sound instruments when doing so.

2. The CPA's board of directors should work with Canadian provincial regulatory bodies to encourage members to receive training for outcome and progress monitoring and to implement these systems in their practice whenever feasible.

3. The board of directors may also encourage regulatory bodies to prioritize training in outcome and progress monitoring in their quality assurance and continuing education reporting process.

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