



Stepped Care as an Implementation and Service Delivery Model for Cognitive Behavioral Therapy for Psychosis

Sarah L. Kopelovich¹ · Eric Strachan¹ · Harry Sivec² · Valerie Kreider²

Received: 26 June 2018 / Accepted: 29 December 2018 / Published online: 8 January 2019
© Springer Science+Business Media, LLC, part of Springer Nature 2019

Abstract

Cognitive behavioral therapy for schizophrenia spectrum disorders is an evidence-based treatment that is recommended by United States schizophrenia treatment guidelines. Based on recent estimates, only 0.3% of individuals with a primary psychotic disorder are able to access this treatment in the United States. Stepped care interventions have shown promise as an applied treatment delivery model in other settings and for other psychotherapeutic interventions. The current paper describes how the stepped care model can be applied to CBT for psychosis in the US to increase access to the intervention in community mental health settings by leveraging the multidisciplinary team.

Keywords Cognitive behavioral therapy for psychosis · Schizophrenia spectrum disorders · Stepped care · Community mental health agencies

Introduction

Psychological and psychosocial treatments for schizophrenia spectrum disorders (SSD) are effective. Current evidence suggests that they not only reduce positive symptoms but also relieve distress and impairment (Dixon et al. 2010; Kreyenbuhl et al. 2010). Unfortunately, despite national guidelines recommending psychosocial treatments as standard of care, access to evidence-based psychotherapeutic interventions (EBPI) remains poor in the United States. Commonly reported barriers to administering EBPIs for psychosis include long wait lists (Gournay 2006); scarcity of appropriately-trained clinicians (Generali et al. 2011; Kimhy et al. 2013; Mueser and Noordsy 2005), and systems of care that favor medication and case management for a limited set of psychotic symptoms—especially the positive symptoms—over interventions that can address skills deficits, demoralization, and residual negative symptoms (Mojtabai and Olfson 2008; Mueser and Noordsy 2005). The

substantial gap between the need for EBPIs targeting SSD and the available supply has generated efforts to establish and promote implementation and service delivery frameworks to guide the delivery of these treatments in real-world settings (Creed et al. 2014; Stirman et al. 2010).

Cognitive behavioral therapy for psychosis (CBTp) typifies the gross disparity between empirical support and treatment availability. CBTp has amassed a respectable experimental evidence base for addressing positive symptoms, secondary mood symptoms, and insight among individuals with SSD (Burns et al. 2014; McDonough et al. 2017; Mueser and Glynn 2014; Sivec and Montesano 2012; Tarrier and Wykes 2004; Wykes et al. 2008) and is indeed listed as one of a handful of recommended EBPIs in United States guidelines for schizophrenia treatment (Dixon et al. 2010). An emerging literature on CBTp implementation derives from Australia (e.g., Dark et al. 2015) and the United Kingdom (e.g., Jolley et al. 2015a, b), but there is little guidance pertaining to CBTp implementation and dissemination in US-based community mental health agencies (see Creed et al. 2016; Kopelovich et al. 2018a). A preliminary survey of the national CBTp landscape suggests that only 0.1% of the roughly 300,000 licensed clinical mental health workforce is trained in the intervention (Mueser et al. 2015; Heisler 2018). Based on these estimates, only 0.3% of the 5 million Americans with a primary psychotic disorder is presumed to have access to CBTp. For comparison, recent

✉ Sarah L. Kopelovich
skopelov@uw.edu

¹ Department of Psychiatry and Behavioral Sciences,
University of Washington School of Medicine, 325 9th
Avenue, Box 359911, 98104 Seattle, WA, USA

² Best Practices in Schizophrenia Treatment (BeST) Center,
Northeast Ohio Medical University, Rootstown, OH, USA

estimates of CBTp availability in the United Kingdom suggest that roughly 20–35% of individuals with psychosis there receive at least one session of CBTp (Colling et al. 2017).

Stepped care service delivery models have been advanced as a means of addressing limited accessibility to treatments in medical practice (Franx et al. 2012) and mental healthcare (Bower and Gilbody 2005; Davison 2000; Gournay 2006; Hegel et al. 2002; Scogin et al. 2003; Sobell and Sobell 2000). Stepped care attempts to maximize efficiency by intentionally allocating interventions through initiating treatment with the least-intrusive and resource-intensive treatment indicated by the patient's current level of medical or psychiatric necessity (Haaga 2000). Patients who do not respond adequately to the first-line treatment are offered an evidence-based treatment of higher intensity, as clinically indicated. The stepped care model has two defining features: (1) the recommended treatment within the stepped care model is the least intensive treatment for each consumer's treatment needs, and (2) treatment outcomes are monitored systematically so that changes can be made if the consumer's current level of care is not achieving desired treatment effects (Bower and Gilbody 2005). Stepped care is a compelling service delivery model for interventions that are in short supply and are amenable to delivery in varying doses or degrees of intensity, as is the case for CBTp (Bennett-Levy et al. 2010).

Stepped care for mental health treatment has been piloted in the National Health Service in the United Kingdom (UK) through the Improving Access to Psychological Therapies (IAPT) program (Clark et al. 2009; Gyani et al. 2013; Jolley et al. 2015a; Williams and Martinez 2008). IAPT aims to increase the availability of the National Institute for Health and Clinical Excellence (NICE)-recommended psychological treatments for depression, anxiety, and psychosis (Clark 2011). NICE recommends a stepped care model of service provision for Evidence-Based Practices in which a substantial proportion of individuals are first offered a low-intensity intervention (such as psychoeducation or guided self-help), with individuals who do not respond adequately to low-intensity intervention being stepped up to more traditional face-to-face therapy (a high-intensity intervention; Gyani et al. 2013). Although stepped care has demonstrated promise as a model for delivering mental health treatments to individuals served by public mental health agencies or systems, it has received far less attention as method of implementing EBPIs in community mental health agencies (e.g., training providers in the CBT protocol that is appropriate for their credentials, role, and previous experience). The remainder of this paper will conceptually delineate CBTp stepped care as a service delivery model and an implementation model. This article does not contain any studies with human participants or animals performed by any of the authors.

Theoretical Principles of CBTp Stepped Care

Principle 1: Stepped Care Decisions are Based on Structured Professional Judgment and Shared Decision-Making

Inherent in stepped care models is the variability in the dose, intensity, or frequency of treatment administration aimed to facilitate personalized treatment. Stepped care algorithms use standardized assessment tools to facilitate structured professional judgment. Level of CBTp treatment is prescribed on the basis of symptom severity and degree of impairment secondary to psychiatric symptoms. In Washington State, where CBTp stepped care has been piloted in three community mental health agencies (Kopelovich et al. 2017), treatment allocations for clients with a primary psychotic disorder rely on an assessment of symptoms using the Clinician-Rated Dimensions of Psychosis Symptom Severity (American Psychiatric Association 2013), and an assessment of functioning secondary to psychiatric symptoms using the clinician-rated Social and Occupational Functioning Assessment Scale (SOFAS; American Psychiatric Association 1994; Morosini et al. 2000). Alternative assessments are equally viable and can be adapted to the setting and target population. For instance, a clinical program for individuals who are at clinical high risk for developing a psychotic disorder may determine level of care on the basis of the identified psychosis risk syndrome and associated severity generated by the Structured Interview for Psychosis-Risk Syndromes (SIPS; Miller et al. 2004). Treatment allocation also relies on shared decision making with clients (Adams and Drake 2006; see Fig. 1). Clients who are agreeable to the CBTp stepped care program opt in to the level of care recommended by the overall assessment. Regular progress monitoring is a critical component of CBTp stepped care. Ideally, clients and treatment providers share progress monitoring data to facilitate shared treatment planning.

Principle 2: Levels of CBTp Treatment are Discrete

The CBTp stepped care model advanced in this paper proposes that individuals receive the least intensive treatment relative to the degree of distress and impairment they are currently experiencing. Accordingly, clients experiencing a high degree of distress or dysfunction will be started with the highest intensity CBTp intervention, thereby expediting access to formulation-based CBT to address psychotic and mood symptoms, whereas clients experiencing less distress and impairment will be started with a less-intensive treatment and only moved up as-needed.

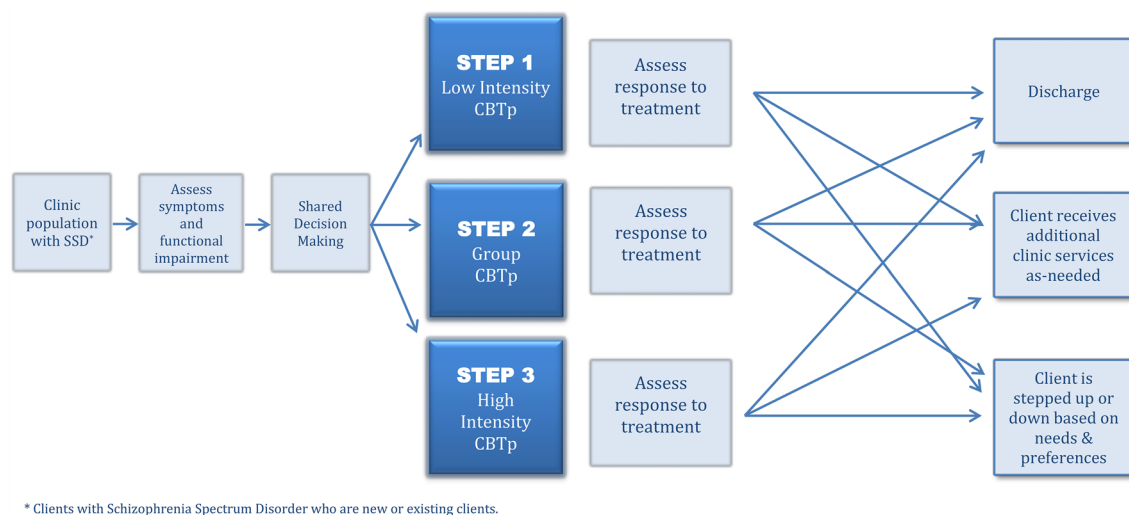


Fig. 1 CBTp stepped care service delivery model based on shared decision making

This model contrasts with other approaches to providing different types of CBTp protocols within a treatment setting, which advocate for contemporaneous low- and high-intensity forms of treatment (Jolley et al. 2015a; Sivec et al. 2017) or administering low-intensity treatment initially to all clients and only stepping up as-needed (Jolley et al. 2015a).

Principle 3: CBTp Stepped Care is Structured But Flexible

Continuous monitoring through structured assessment permits for timely self-correction. Clients for whom a lower level of care is insufficient, as evidenced by nonresponse or deterioration as measured by standardized progress monitoring measures, would, on the basis of treatment response, be stepped up to a higher level of CBTp. Clients who have benefitted from a higher level of care but are concerned about discontinuing CBTp may be gently stepped down to a lower level of CBTp. Such a step down is rare to find in already-overburdened and under-resourced CMHAs. However, if additional psychotherapy is cost-effective and feasible, clients who have received high-intensity CBTp can, for instance, provide mutually beneficial peer mentorship in CBTp groups. In this way, CBTp stepped care is responsive to individual and organizational needs and preferences, while maintaining adherence to a general structure. Divergences from the traditional model must be justified therapeutically (e.g., the client is not willing to engage with a new treatment provider at this time) or organizationally (e.g., the next available slot with a high-intensity provider is in 3 months, and the client requires psychotherapy now to address poor sleep and increased distress associated with more menacing voices; accordingly, she will be referred

to a Step 1 provider to address sleep and enhance coping strategies for voices while awaiting a high-intensity CBTp provider. She will be re-assessed in 3 months to determine whether Step 3 continues to be warranted).

Optimal provision of CBTp stepped care requires that all treatment teams or units that serve clients with SSD have at least one Step 1 (low-intensity CBTp) provider and at least one Step 3 (high-intensity CBTp) provider per treatment team or unit. Although it is highly beneficial to have a Step 2 (group CBTp) provider on each treatment team as well, there are two additional considerations for implementing group therapy. Although group therapy opens up treatment to a larger number of individual clients per clinician, group facilitation is a skill that not all clinicians have without specific training. In addition, group formats can be intimidating and anxiety-provoking to clients, especially in agencies where group-based interventions are uncommon. Good group cohesion is important not only to encourage members to attend and participate but is also relevant to symptom improvement (Lecomte et al. 2015, 2018). Motivational enhancement strategies can be applied to clients who exhibit ambivalence to entering the program or a particular type of protocol within the program (e.g., the client asserts she/he is “too paranoid” to attend group therapy).

CBTp Stepped Care as a Service Delivery Model

Limited resources in behavioral health settings and poor reimbursement of services targeting functional recovery and community tenure (e.g., CBTp, psychiatric rehabilitation, nutritional counseling, integrated substance use disorder treatment, vocational services) have resulted in institutions

of care that provide interventions aimed at maintaining stability but that fail to help the individual achieve personal goals and milestones. Increased availability of providers trained in evidence-based psychosocial intervention, coupled with other contextual factors that facilitate the uptake and sustainment of these efficacious interventions (see Beidas and Kendall 2010), can facilitate a paradigm shift in serious mental illness service delivery from palliative to rehabilitative. Stepped care models can facilitate the delivery of a range of services that promotes integrated care and recovery (Perkins 2016). A stepped care service delivery model enables greater access to personalized level-of-need-based service dose and intensity. Once a part of the stepped care service, response to treatment can be monitored and used to inform clinical decision-making. Consistent with large-scale models of applied mental health stepped care service delivery, CBTP stepped care is categorized into mild (Step 1), moderate (Step 2), and severe (Step 3) treatment need categories (defined by symptom severity and functional impairment secondary to psychiatric symptoms; Cross and Hickie 2017).

Step 1: Low-intensity CBT for Psychosis

Step 1 CBTP, alternatively termed *low-intensity CBTP* and *high-yield cognitive behavioral techniques for psychosis* consists of intervention methods and strategies informed by CBT principles that can be flexibly delivered by a wide range of mental health providers in a brief format (typically 8–12 sessions ranging between 20 and 45 min). Although variably defined, low-intensity CBTP has demonstrated post-intervention effects on positive symptoms ($d = 0.46$; Hazell et al. 2016; Naeem et al. 2014). Interventions appropriate for low-intensity cognitive behavioral treatment include guided self-help CBTP approaches (e.g., Naeem et al. 2015, 2016), computerized interventions (e.g., Kaltenthaler et al. 2002; Scogin et al. 2003), digital mental health interventions (e.g., Ben-Zeev et al. 2018; Gottlieb et al. 2017; Jonathan et al. 2017), symptom-targeted interventions (e.g., Freeman et al. 2015a, b), and provider-delivered manualized low-intensity treatment (e.g., Montesano et al. 2014; Sivec et al. 2015; Turkington et al. 2014; Waller et al. 2013).

While some individuals may be stepped down to Step 1 from more intensive CBT-based interventions, primary candidates for Step 1 are individuals experiencing attenuated or residual psychotic symptoms. Such individuals traditionally have the poorest access to CBTP within CMHA settings in the absence of a specialized treatment program such as a prodromal clinic or first episode psychosis program. This brief intervention administered by a larger cohort of multi-disciplinary providers and/or through electronic platforms increases access to CBTP for individuals with a non-acute symptom profile without straining limited resources.

Step 2: Group-Delivered CBTP

Group CBTP comes in a variety of forms and can be adapted for the needs of a particular client base and clinical staff. Interventions typically include some combination of psychoeducation, symptom identification and assessment, coping skills development, and relapse prevention. A focus on specific symptoms (e.g. a “hearing voices group”) can be very effective but more heterogeneous groups also have demonstrated effectiveness in reducing symptoms and improving functioning. Group CBTP demonstrates benefits in coping, self-esteem, and functioning, often with, but occasionally without, concomitant reductions in symptom frequency and intensity (Johns et al. 2002; Lecomte et al. 2003, 2008; Owen et al. 2015; Wykes et al. 2005).

Primary candidates for the manualized (or otherwise published) CBTP groups are individuals experiencing current positive symptoms who are amenable to the group format. The spectrum of severity within the category of active symptoms can be fairly wide (i.e. in between Step 1 and Step 3 acuity) but selection of participants for a group includes some consideration of “who will work well with others” in a way that is different from more traditional one-on-one psychotherapy (Lecomte et al. 2018; Menon et al. 2015). That is, rapport between facilitators and the group members is important but so is cohesion among the group members (Johnson et al. 2008). As Lecomte et al. (2016) note in their CBTP group manual, there are no clear indicators of who will benefit (or not) from group work but some obvious variables such as age (often best to have similar ages), gender (aiming for a balance), and phase of illness (first episode versus ongoing/stable, residual) should be considered for group cohesion in addition to the individual ability to tolerate a group format. Prominent negative symptoms are not problematic in terms of the content of group CBTP but may present an obstacle to attendance and participation. For negative symptoms, groups that provide CBT and social skill training may be recommended (see Turner et al. 2014 comparative efficacy for negative symptoms).

Although group CBTP has solid empirical support in the published literature compared to treatment as usual (TAU) and other control groups, studies focusing specifically on implementation are rare and the findings are mixed. Haddock and colleagues (2017) reported that, given a choice of TAU versus a CBT intervention that included a group, only 25% of service users selected the group option. Those who did showed somewhat less improvement compared to the TAU group. However, Owen and colleagues (2015) found that, on an inpatient unit where potential group members were recommended by the treatment team and then given the option of participating, CBTP group participants showed greater improvements compared to TAU in levels of distress and confidence. Group participants also expressed satisfaction

with the group, and noted the importance of feeling “I’m not alone.” Although seemingly at odds, this combination of findings may in fact support the stepped care model in that assignment to steps is based not only on symptom severity but also on shared decision-making with service users. It also speaks to the importance of integrating motivational interviewing and engagement practices to facilitate shared decision-making.

Session frequency and duration will vary among clinics and agencies but a typical approach for an outpatient clinic would be weekly sessions lasting between 45 and 60 min at a time of day that is convenient for the group members. Some consideration of travel time and means, work/structured activity schedules, and other logistical variables will help ensure success in enrolling and retaining group members.

Step 3: High-Intensity CBTp

High-intensity CBTp sessions are administered individually, typically last 45–55 min each, and are occur weekly for approximately 24 weeks. High-intensity CBTp protocols are both theory- and model-driven. They adhere to phases of treatment (typically engagement, assessment, intervention, and relapse prevention) and general cognitive and behavioral theories are individualized through the development and refinement of a case formulation. A large proportion of the more than 40 randomized clinical trials of CBTp are based on this type of formulation-based CBTp protocol, and clinical outcomes tend to support this intervention as effective for positive symptoms, mood symptoms, and—to a lesser extent—negative symptoms (Rector and Beck 2001; van der Gaag et al. 2014; Wykes et al. 2008). In addition, available data tends to support use of high-intensity CBTp protocols for individuals with previously poor responses to medication (Burns et al. 2014). Finally, formulation-based approaches are critical for individuals who present with comorbid conditions, complex clinical presentations, previous poor response to other EBPIs, poor therapeutic alliance, or challenges with treatment adherence (Persons 2008). Accordingly, individuals who should be considered for high-intensity CBTp as a first-line intervention include those who are experiencing a high degree of distress and dysfunction as a result of psychotic symptoms, have one or more psychiatric comorbidities and/or a substance use disorder, those for whom suicidality or harm to others is an active concern, those who have been deemed “treatment resistant” or “treatment refractory,” or who—based on previous presentations to the clinical team—are hypothesized to have developed core beliefs that may undermine change attempts unless targeted with more advanced cognitive and behavioral interventions (e.g., hopeless beliefs such as “nothing will ever get better,” or stigmatizing beliefs such as, “people with schizophrenia do not lead normal lives”). Mental health consumers who fit

one or more of the descriptors above will likely require a case formulation to guide effective selection and application of interventions and will require dedicated attention to graded cognitive restructuring of automatic, intermediate, and core beliefs. Clients are re-assessed during and at the end of a high-intensity course of CBTp. Some clients may benefit from symptom-targeted interventions not introduced in high-intensity CBTp (e.g., CBT for insomnia; Waters et al. 2017), in which case they can be stepped down to a Step 1 intervention at the conclusion of Step 3. Alternatively, clients may be willing to share what they have learned with others while also receiving support and reinforcement of key skills and concepts in Step 2 group CBTp. Such an approach is consistent with a growing movement in which individuals with lived experience of psychosis contribute to the recovery of others.

CBTp Stepped Care as an Implementation Model

As alluded to above, there are multiple impediments to promoting traditional, high-intensity CBTp as standard of care for individuals with SSDs. Graduate-level clinicians with advanced training in CBT and other EBPIs rarely staff CMHAs. Graduate mental health programs seldom teach specific evidence-based treatments as a stand-alone course; instead, they often provide an overview of EBPIs in an integrated psychotherapy course (Leith et al. 2016). Few graduate training programs provide dedicated instruction in the proper assessment and treatment of serious mental illness. Furthermore, there are currently no post-graduate training programs designed to certify a clinician in CBTp in the US (Hardy and Riggs 2017). High rates of turnover in community mental health confer the additional challenge of retaining CBTp-trained providers (Bukach et al. 2017).

The stepped care implementation model permits for a broader group of eligible trainees, as interventions are provided by a spectrum mental healthcare and allied workers, from frontline providers (e.g., case managers, psychiatric technicians) to more advanced therapists. Learning high-intensity CBTp within the 6- to 12-month training period typical of many workforce development initiatives (e.g., Hardy n.d.; Kopelovich et al. 2018a; Okamura et al. 2018) requires that trainees already have a master’s degree in a counseling field and have at least working knowledge of CBT. In contrast, CBTp stepped care engages mental healthcare providers with a spectrum of skills and abilities in varying levels of CBT and CBT-informed interventions. Frontline mental health staff and allied providers (e.g., registered nurses, case managers, and vocational specialists) can be trained in behavioral principles, provide psychoeducation, and engage consumers in guided self-help CBT

interventions. At the next level of care, mental healthcare providers (e.g., social workers, clinical counselors, psychologists, and psychiatrists) would be trained to administer an adaptation of CBTp developed to increase consumer access, such as group CBTp or brief treatment courses (Pinniniti and Gogineni 2016). Training and consultation would be focused on a select set of CBTp interventions that have demonstrated efficacy in reducing the distress and dysfunction associated with psychotic symptoms (Wright et al. 2010). Finally, training and consultation in the full model of CBTp would be available to mental healthcare workers who function as therapists and are able and willing to provide full CBTp sessions to individuals who require a higher dose and intensity of treatment. Allocation into the appropriate training cohort (Steps 1, 2, or 3) or tasking certain clinicians with learning and delivering CBTp protocols across the stepped care model may be based on an algorithm that factors in baseline CBT knowledge, competence, scope of practice, and provider preference and attitudes.

Step 1: Low-Intensity CBT for Psychosis

Step 1 interventions may be taught to mental health and allied professionals with little or no formal training in psychotherapy generally or CBT specifically (Turkington et al. 2002, 2006, 2014). In order to ensure that delivery of these services is optimized, it should be delivered by those who have the most frequent interactions with individuals who would benefit from these interventions. Within the mental health system, case managers are the likely provider-of-choice. Frontline staff in inpatient psychiatric and forensic settings, nurses or healthcare technicians on medical units, and housing managers in residential settings should also be considered as providers of a low-intensity CBTp intervention. It is critical that the system is able to adopt referral practices that ensure that clients are pre-screened so that providers are asked to treat those who are hypothesized to be most likely to respond to a low-intensity CBTp.

Training and Consultation

Mental health providers who spend the most time interacting with individuals with psychosis often received little or no specific training. Case managers often feel that much of what they receive in their current training is not relevant or helpful for working with schizophrenia and that they need basic information for interventions and more of a mentoring approach (Eack et al. 2009). A stepped care model provides a systemic way to include a wide range of providers not only in service delivery, but also in much-needed training.

In the United States, some training groups have begun to provide training in low-intensity strategies for working with psychosis (e.g., BeST Center 2014). Training has focused on

helping staff better understand psychosis, improving engagement, as well as teaching staff to use normalization and psychoeducation strategies, goal-setting strategies, and specific coping strategies to address psychotic and mood symptoms (Hardy and Riggs 2017). Step 1 or low-intensity training of this type would be appropriate for mental health providers who routinely work with individuals diagnosed with schizophrenia and may be appropriate for providers who have not received formal training in strategies for working with psychosis (e.g., case managers, nurses, counselors, pharmacists, social workers, occupational therapists, and peers), depending on the intervention. Published studies which include providers who were not formally trained in psychotherapies are trained in a low-intensity intervention are limited, but include nurses (Turkington et al. 2002), case managers (Turkington et al. 2014), interdisciplinary outpatient teams (occupational therapist, nurse, social worker, graduate student; see Pinniniti et al. 2010; Waller et al. 2013), interdisciplinary inpatient teams (Chang et al. 2014) and certified peer specialists (Perry et al. 2013). Further research is sorely needed to determine the credentials and qualifications needed to administer different forms of low-intensity interventions, as the clinical acumen needed to deliver a targeted intervention like high-yield cognitive behavioral techniques likely differ from those needed to guide a client in the use of a mobile health interventions.

Fidelity

Adherence is the extent to which practitioners' behaviors conform to the intervention protocol (Hogue et al. 2008), whereas competence refers to the skillfulness of delivering the intervention (Forgatch et al. 2005). Both are aspects of treatment fidelity. Assessment of adherence to a Step 1 protocol depends upon the type of protocol being used. To the authors' knowledge, only two groups have attempted to develop an adherence, competence, or fidelity tool for a low-intensity CBTp intervention (BeST Center 2016; Tai 2017). In the few studies employing low-intensity interventions by non-therapists, intervention adherence has been assessed using a standard measure of CBT competence (CTS-PSY; Haddock et al. 2001). Fidelity ratings for low-intensity practitioners (nurses, case managers) were often lower on average than CBT-trained therapists, but that they fell within a pre-defined range of acceptability for providing brief or low-intensity interventions (Turkington et al. 2002, 2014).

Step 2: Group-Delivered CBTp

Step 2 interventions rest on standard CBT techniques but the implementation requires clinicians who can develop themes in a potentially heterogeneous group, elicit engagement, and manage the inevitable intrusions on group process. These

skills do not automatically flow from those required for individual interventions. Where possible, prospective group providers should be experienced in general psychotherapeutic principles and/or have experience running psychotherapy groups. In addition, specific training should be provided for group facilitators. Having two facilitators (one lead facilitators, one co-facilitator) is a common recommendation for psychotherapy groups. An ideal combination that would leverage resources often found in community mental health agencies is to include a masters-level (or above) clinician with the associated professional training as the lead facilitator with co-facilitation from a certified peer support specialist or counselor who has both training in and lived experience with mental health care. Once a CBTp group is established within an agency, it provides a natural way for experienced group facilitators to train and mentor junior staff who have received didactic training in group work.

Training and Consultation

As noted above, group facilitation is a specific skill that is not often a focus in most graduate training programs. In Washington State, trainees (who are master's-level clinicians or peer support specialists) who intend to provide CBTp groups receive didactic training on the basics of CBT followed by an additional full day focused on learning group content and practicing group facilitation skills. These in-person trainings are then followed by a minimum of 6 months bi-weekly videoconference consultation sessions that include didactics, behavioral rehearsals using mock group sessions, and consultation on specific applications to the actual groups that facilitators are running at their clinical sites.

Fidelity

Although specific tools for measuring group CBTp fidelity are not currently available, fidelity for manualized groups is conceptually straightforward given the structured or semi-structured nature of most groups and the precedence of group CBTp fidelity tools (e.g., Eiraldi et al. 2016; Hepner et al. 2011). There is precedence for adapting the Cognitive-Behavioral Therapy Scale (Young and Beck 1980) for group CBTp (Lecomte et al. 2008). An appraisal of group process and group cohesion can be incorporated into a rating system. Alternatively, behavioral rehearsal may be useful as an analogue fidelity tool (Beidas et al. 2014) or simply to assess competence.

Step 3: High-Intensity CBTp

Previous scholars have documented the fact that few graduate students obtain specialized training in working with

individuals with psychosis (Combs et al. 2006; Mueser and Noordsy 2005). In addition, community mental health clinicians who are attempting to learn, use, and master CBT in their clinical practice struggle with higher-level skills such as the use of guided discovery and relating the intervention to a well-grounded and evolving case conceptualization (Waltman et al. 2017), both of which high-intensity CBTp are dependent. Certain clinician characteristics should be considered for high-intensity training candidates, such as CBT knowledge and foundational therapeutic competencies (Stein and Lambert 1995). Clinicians who are trained in the full model CBTp treatment should have roles that are conducive to providing psychotherapy sessions.

Training and Consultation

Clinicians-in-practice can be trained to competence in CBTp (Jolley et al. 2015b). Establishing training and competence standards for CBTp is an area of current discussion. Riggs et al. (2012) and Riggs and Creed (2017) provide specific suggestions for training using the ACCESS model (Assess and adapt, Convey the basics, Consult, Evaluate work samples, Study outcomes, Sustain) in order to help mental health providers to implement CBT-related strategies in community mental health settings. Training typically involves an intensive multiday workshop, which includes didactic and experiential exercises, followed by routine case consultation for 6–12 months, and individualized feedback through review of taped sessions or behavioral rehearsal. Given the expense associated with these training efforts (Okamura et al. 2018) and the high rates of attrition (Beidas and Kendall 2010), providers prioritized for learning and delivering formulation-based CBT to address psychotic and related symptoms should include Master's-level and above clinicians with formal training and experience delivering CBT.

Fidelity

Tools used to assess fidelity to CBTp include the Cognitive Therapy Rating Scale (Young and Beck 1980), Cognitive Therapy Rating Scale-Revised (Blackburn et al. 2001), Revised Cognitive Therapy for Psychosis Adherence Scale (Rollinson et al. 2008), and the Cognitive Therapy Scale for psychosis (Haddock et al. 2001). There is currently no consensus regarding CBTp competency standards in the United States, although this is under consideration by relevant professional bodies (North American CBT for psychosis Network, n.d.).

Systems-Level Considerations

Organizational characteristics, although mostly beyond the scope of this paper, are critical when considering CBTp

stepped care implementation (Aarons et al. 2011; Dark et al. 2015). A multitude of inner and outer contextual factors affect the implementation and sustainment of high-fidelity EBPIs (Generali et al. 2011; Stirman et al. 2016). Implementation of CBTP in US-based CMHAs encounter unique challenges. Unlike EBPI implementation for anxiety, PTSD, and depression, CBTP implementation necessitates consideration of attitudes toward the treatability of psychosis among both providers and administrators (Brabban et al. 2017; Morrison and Barratt 2010). Mental health providers tend to disfavor working with individuals with SMI and are challenged to take the perspective of individuals who experience hallucinations and delusions (Combs et al. 2006; McLeod et al. 2002).

Given both the novelty that a psychotherapy for psychosis program will introduce to many CMHAs in the US and the additional complexity of a referral system that is contingent on structured professional judgment, substantial consideration and attention should be paid to supporting CMHAs to adopt and adapt CBTP stepped care. In Washington State, for instance, where CBTP stepped care has been piloted in three multi-site CMHAs, external facilitators have worked with executive and middle managers, IT specialists, clinical supervisors, and administrative personnel to ensure that all parties are knowledgeable about CBTP stepped care and can facilitate the needed infrastructural or practice modifications (e.g., integrating assessments in to the Electronic Health Record, establishing waitlists and referral systems for new and existing clients with eligible diagnoses). Designation of CBTP Leads (sometimes referred to as “champions”) has helped to ensure continuous assessment and routine monitoring, which are critical to stepped care. In addition, all staff must be engaged in continuous quality improvement so that problems and opportunities to improve the system are identified and addressed (Torrey et al. 2012).

Systematic measurement-based care is critical to effective stepped care programs. Measurement-based care helps to ensure that providers are attuned to treatment response and make appropriate, informed level of care decisions with the clients. Providers across all levels of CBTP care are advised to administer the same set of progress monitoring measures to assess for changes in psychiatric symptoms, confer with clinical teams on treatment planning, and reflect on progress with the client (Fortney et al. 2017). Measurement-based care used in this way may reflect a marked departure from prevailing clinical processes, and require that agency leadership actively support efforts to systematically administer and use patient outcome data to inform care.

Areas for Future Research

Preliminary evidence suggests that the CBTP stepped care model is acceptable and feasible to providers and agencies

(Jolley et al. 2015a; Kopelovich et al. 2018b). Pilot data from three Washington State CMHAs indicated a threefold increase in the number of clients who received a CBTP intervention during the initial 6-month training period among those agencies that had received CBTP stepped care implementation versus high-intensity CBTP alone. Likewise, there was a threefold increase in the number of providers trained at CBTP stepped care agencies as compared to those agencies that received high-intensity CBTP only. A hybrid implementation-effectiveness trial is needed to evaluate implementation outcomes such as fidelity, penetration, and adoption, as well as clinical outcomes, such as acceptability, targeted symptom improvement, distress, and level of functioning.

Further implementation trials are needed to evaluate the theoretical supposition that levels of care delineated herein do correspond to degree of intensity as proposed, that clients are best matched to levels of care on the basis of symptom severity and functional impairment, whether and how providers can be matched to levels of intervention based on organization and personal characteristics, and that CBTP stepped care can facilitate increased access to CBTP without compromising the efficacy of the treatment. It is not yet known which low-intensity interventions should be recommended, or whether there should be a menu of “light-touch” interventions within the least intensive level of care, such as recovery-oriented psychoeducation, digital mental health technologies, and guided self-help CBTP. Additional research is needed to evaluate CBTP stepped care within a single agency and across the continuum of care (e.g., Assertive Community Treatment teams, inpatient, intensive outpatient/partial hospitalization, outpatient and primary care setting).

It remains to be seen how most clients will use and respond to the CBTP stepped care program. In order for the stepped care model to free up limited CBTP resources and be cost-effective (Newman 2000; Radhakrishnan et al. 2013), most clients’ needs should be addressed by the level of CBTP care to which they are initially referred. Systematic evaluations concerning the trajectories of clients within a CBTP stepped care program will help to elucidate the effect of CBTP stepped care on the cost effectiveness of CBTP implementation and service delivery efforts. Finally, the question of whether CBTP stepped care facilitates functional recovery is sorely needed. The preponderance of CBTP efficacy and effectiveness trials focus on symptomatology as primary outcomes.

Treatment fidelity for group CBT and low-intensity CBTP also require empirical attention. While established fidelity measures for high-intensity CBTP have been well-validated and are commonly used (e.g., Fowler et al. 2011; Rollinson et al. 2008), there are no comparable fidelity tools for group or low-intensity CBTP. Measures of fidelity to CBTP interventions is particularly needed to test the assumption

that providers recommended for administering the CBTp interventions can be trained to provide the treatments with adherence to the model, as fidelity is correlated with treatment outcomes (Elliot and Mihalic 2004).

Conclusion

Ninety-one million adults in the US live in mental health shortage areas, and 55% of the nation's 3100 counties are without a practicing psychiatrist, psychologist, or clinical counselor (Fields and Dooren 2013). One-third of Americans with a serious mental illness receive no psychological or psychiatric treatment at all, let alone evidence-based care; access to care among African Americans and Latinx Americans is even poorer (Mental Health America 2017). CBTp, an evidence-based psychotherapy recommended by national treatment guidelines, shows promise in facilitating recovery from SSD when delivered as a component of comprehensive care and community integration. Given the dearth of licensed mental health professionals with the requisite skills and training to provide high-intensity CBTp, treatment and implementation adaptations must be made to exponentially increase the availability of CBTp interventions that target the distress and dysfunction associated with psychosis. CBTp stepped care holds promise as an implementation and service delivery model, and preliminary evidence suggest that the model can enhance the scale and spread of CBTp in the United States.

References

- Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 4–23. <https://doi.org/10.1007/s10488-010-0327-7>.
- Adams, J. R., & Drake, R. E. (2006). Shared decision-making and evidence-based practice. *Community Mental Health Journal*, 42(1), 87–105. <https://doi.org/10.1007/s10597-005-9005-8>.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th edn.). Arlington: American Psychiatric Publishing.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th edn.). Arlington: American Psychiatric Publishing.
- Beidas, R. S., Cross, W., & Dorsey, S. (2014). Show me, don't tell me: Behavioral rehearsal as a training and analogue fidelity tool. *Cognitive and Behavioral Practice*, 21(1), 1–11. <https://doi.org/10.1016/j.cbpra.2013.04.002>.
- Beidas, R. S., & Kendall, P. C. (2010). Training therapists in evidence-based practice: A critical review of studies from a systems-contextual perspective. *Clinical Psychology: Science and Practice*, 17(1), 1–30. <https://doi.org/10.1111/j.1468-2850.2009.01187.x>.
- Bennett-Levy, J., Richards, D. A., & Farrand, P. (2010). Low-intensity CBT interventions: A revolution in mental health care. In J. Bennett-Levy, D. A. Richards, P. Farrand, H. Christensen, K. M. Griffiths & D. J. Kavanaugh, ...C. Williams (Eds.), *Oxford guide to low-intensity CBT interventions* (pp. 3–18). New York: Oxford University Press. <https://doi.org/10.1093/med:psych/9780199590117.003.0001>.
- Ben-Zeev, D., Brian, R. M., Aschbrenner, K. A., Jonathan, G., & Steingard, S. (2018). Video-based mobile health interventions for people with schizophrenia: Bringing the 'pocket therapist' to life. *Psychiatric Rehabilitation Journal*, 41(1), 39–45. <https://doi.org/10.1037/prj0000197>.
- Best practices in Schizophrenia Treatment (BeST) Center, Northeast Ohio Medical University. (2016). *Cognitive Therapy Rating Scale Modified for Cognitive Behavioral techniques for Psychosis*. Unpublished manuscript.
- Best practices in Schizophrenia Treatment (BeST) Center, Northeast Ohio Medical University. (2014). *Cognitive behavioral techniques for psychosis: A guide for the mental health provider*. Unpublished manual.
- Blackburn, I., James, I. A., Milne, D., Baker, C., Standart, A., Garland, A., & Reichelt, F. K. (2001). The revised cognitive therapy rating scale (CTS-R). Psychometric properties. *Behavioural and Cognitive Psychotherapy*, 29, 431–446.
- Bower, P., & Gilbody, S. (2005). Stepped care in psychological therapies: Access, effectiveness and efficiency. *British Journal of Psychiatry*, 186, 11–17. <https://doi.org/10.1192/bjp.186.1.11>.
- Brabban, A., Byrne, R., Longden, E., & Morrison, A. P. (2017). The importance of human relationships, ethics and recovery-oriented values in the delivery of CBT for people with psychosis. *Psychosis: Psychological, Social and Integrative Approaches*, 9(2), 157–166. <https://doi.org/10.1080/17522439.2016.1259648>.
- Bukach, A. M., Ejaz, F. K., Dawson, N., & Gitter, R. J. (2017). Turnover among community mental health workers in Ohio. *Administration and Policy in Mental Health and Mental Health Services Research*, 44(1), 115–122. <https://doi.org/10.1007/s10488-015-0706-1>.
- Burns, A. M., Erickson, D. H., & Brenner, C. A. (2014). Cognitive behavioral therapy for medication-resistant psychosis: A meta-analytic review. *Psychiatric Services*, 65(7), 874–880. <https://doi.org/10.1037/t00741-000>.
- Chang, N. A., Grant, P., Luther, L., & Beck, A. (2014). Effects of a recovery-oriented cognitive therapy training program on inpatient staff attitudes and incidents of seclusion and restraint. *Community Mental Health Journal*, 50(4), 415–412. <https://doi.org/10.1007/s10597-013-9675-6>.
- Clark, D. (2011). Implementing NICE guidelines for the psychological treatment of depression and anxiety disorders: The IAPT experience. *International Review of Psychiatry*, 23(4), 318–327. <https://doi.org/10.3109/09540261.2011.606803>.
- Clark, D. M., Layard, R., Smithies, R., Richards, D. A., Suckling, R., & Wright, B. (2009). Improving access to psychological therapy: Initial evaluation of two UK demonstration sites. *Behaviour Research and Therapy*, 47(11), 910–920. <https://doi.org/10.1016/j.brat.2009.07.010>.
- Colling, C., Evans, L., Broadbent, M., Chandran, D., Craig, T. J., Koliakou, A., Stewart, R., & Garety, P. A. (2017). Identification of the delivery of cognitive behavioural therapy for psychosis (CBTp) using a cross-sectional sample from electronic health records and open-text information in a large UK-based mental health case register. *British Medical Journal Open Access*. <https://doi.org/10.1136/bmjopen-2016-015297>.
- Combs, D. R., Penn, D. L., Spaulding, W. D., Adams, S. D., Roberts, D. L., & Iyer, S. N. (2006). Graduate training in cognitive-behavioral therapy for psychosis: The approaches of three generations of clinical researchers. *The Behavior Therapist*, 29(1), 12–16.
- Creed, T., Wiltsey-Stirman, S., Evans, A., & Beck, A. T. (2014). A model for implementation of cognitive therapy in community

- mental health: The Beck Initiative. *The Behavior Therapist*, 37(3), 58–64.
- Creed, T. A., Frankel, S. A., German, R. E., Green, K. L., Jager-Hyman, S., Taylor, K. P., & ... Beck, A. T. (2016). Implementation of transdiagnostic cognitive therapy in community behavioral health: The Beck Community Initiative. *Journal of Consulting and Clinical Psychology*, 84(12), 1116–1126. <https://doi.org/10.1037/ccp0000105>.
- Cross, S. P., & Hickie, I. (2017). Transdiagnostic stepped care in mental health. *Public Health Research & Practice*, 27(2). <https://doi.org/10.17061/phrp2721712>.
- Dark, F., Whiteford, H., Ashkanasy, N. M., Harvey, C., Crompton, D., & Newman, E. (2015). Implementing cognitive therapies into routine psychosis care. *BMC Health Services Research*, 15, 310–317. <https://doi.org/10.1186/s12913-015-0953-6>.
- Davison, G. C. (2000). Stepped care: Doing more with less? *Journal of Consulting and Clinical Psychology*, 68(4), 580–585. <https://doi.org/10.1037/0022-006X.68.4.580>.
- Dixon, L. B., Dickerson, F., Bellack, A. S., Bennett, M., Dickinson, D., Goldberg, R. W., et al. Schizophrenia Patient Outcomes Research Team (PORT). (2010). The 2009 schizophrenia PORT psychosocial treatment recommendations and summary statements. *Schizophrenia Bulletin*, 36, 48–70. <https://doi.org/10.1093/schbu/sbp115>.
- Eack, S. M., Greeno, C. G., Christian-Michaels, S., Dennis, A., & Anderson, C. M. (2009). Case managers' perspectives on what they need to do their job. *Psychiatric Rehabilitation Journal*, 32(4), 309–312. <https://doi.org/10.2975/32.4.2009.309.312>.
- Eiraldi, R., Power, T. J., Schwartz, B. S., Keiffer, J. N., McCurdy, B. L., Mathen, M., & Jawad, A. F. (2016). Examining effectiveness of group cognitive-behavioral therapy for externalizing and internalizing disorders in urban schools. *Behavior Modification*, 40(4), 611–639. <https://doi.org/10.1177/0145445516631093>.
- Elliot, D., & Mihalic, S. (2004). Issues in disseminating and replicating effective prevention programs. *Prevention Science*, 5, 47–53. <https://doi.org/10.1023/B:PREV.0000013981.28071.52>.
- Fields, G., & Dooren, J. C. (2013). For the mentally ill, finding treatment grows harder. *The Wall Street Journal*. Retrieved December 27, 2017 from <https://www.wsj.com/articles/for-the-mentally-ill-finding-treatment-grows-harder-1387596220>.
- Forgatch, M. S., Patterson, G. R., & DeGarmo, D. S. (2005). Evaluating fidelity: Predictive validity for a measure of competent adherence to the Oregon model of parent management training. *Behavior Therapy*, 36, 3–13.
- Fortney, J. C., Unützer, J., Wrenn, G., Pyne, J. M., Smith, G. R., Schoenbaum, M., & Harbin, H. T. (2017). A tipping point for measurement-based care. *Psychiatric Services*, 68, 179–188. <https://doi.org/10.1176/appi.ps.201500439>.
- Fowler, D., Rollinson, R., & French, P. (2011). Adherence and competence assessment in studies of CBT for psychosis: Current status and future directions. *Epidemiology and Psychiatric Sciences*, 20(2), 121–126. <https://doi.org/10.1017/S2045796011000199>.
- Franx, G., Oud, M., de Lange, J., Wensing, M., & Grol, R. (2012). Implementing a stepped-care approach in primary care: Results of a qualitative study. *Implementation Science*, 7(1), 8. <https://doi.org/10.1186/1748-5908-7-8>.
- Freeman, D., Dunn, G., Startup, H., Pugh, K., Cordwell, J., Mander, H., ... Kingdon, D. (2015a). Effects of cognitive behavior therapy for worry on persecutory delusions in patients with psychosis (WIT): A parallel, single-blind, randomized controlled trial with a mediation analysis. *Lancet Psychiatry*, 2, 305–313. [https://doi.org/10.1016/S2215-0366\(15\)00039-5](https://doi.org/10.1016/S2215-0366(15)00039-5).
- Freeman, D., Waite, F., Startup, H., Myers, E., Lister, R., McInerney, J., ... Yu, L. M. (2015b). Efficacy of cognitive behavior therapy for sleep improvements in patients with persistent delusions and hallucinations (BEST): A prospective, assessor-blind, randomized controlled pilot trial. *Lancet Psychiatry*, 2, 975–983. [https://doi.org/10.1016/S2215-0366\(15\)00314-4](https://doi.org/10.1016/S2215-0366(15)00314-4).
- Generali, M. M., Foss-Kelly, L. L., & McNamara, K. (2011). Barriers to evidence-based counseling practices: A counselor educator training model. Retrieved April 12, 2018, from <https://www.counseling.org/docs/default-source/vistas/barriers-to-evidence-based-counseling-practices-a-counselor-educator-training-model.pdf?sfvrsn=4>.
- Gottlieb, J. D., Gidugu, V., Maru, M., Tepper, M. C., Davis, M. J., Greenwold, J., & ... Mueser, K. T. (2017). Randomized controlled trial of an internet cognitive behavioral skills-based program for auditory hallucinations in persons with psychosis. *Psychiatric Rehabilitation Journal*, 40(3), 283–292. <https://doi.org/10.1037/prj0000258>.
- Gournay, K. (2006). The availability of therapy and therapists: The stepped care model as a possible solution. *The Journal of Mental Health Training, Education and Practice*, 1(2), 16–22. <https://doi.org/10.1108/17556228200600012>.
- Gyani, A., Shafraan, R., Layard, R., & Clark, D. (2013). Enhancing recovery rates: Lessons from year one of IAPT. *Behaviour Research and Therapy*, 51(9), 597–606. <https://doi.org/10.1016/j.brat.2013.06.004>.
- Haaga, D. (2000). Introduction to the special section on stepped care models in psychotherapy. *Journal of Consulting and Clinical Psychology*, 68(4), 547–548. <https://doi.org/10.1037/0022-006X.68.4.547>.
- Haddock, G., Berry, K., Davies, G., Dunn, G., Harris, K., Hartley, S., ... Barrowclough, C. (2017). Delivery of cognitive-behaviour therapy for psychosis: A service user preference trial. *Journal of Mental Health*, 27(4), 336–344. <https://doi.org/10.1080/09638237.2017.1417549>.
- Haddock, G., Devane, S., Bradshaw, T., McGovern, J., Tarrier, N., Kinderman, P., & ... Harris, N. (2001). An investigation into the psychometric properties of the Cognitive Therapy Scale for Psychosis (CTS-Psy). *Behavioural and Cognitive Psychotherapy*, 29(2), 221–233. <https://doi.org/10.1017/S1352465801002089>.
- Hardy, K. (n.d.). Cognitive Behavioral Therapy for Psychosis (CBTp) fact sheet. Retrieved April 21, 2018 from https://www.nasmhpd.org/sites/default/files/DH-CBTp_Fact_Sheet.pdf.
- Hardy, K. V., & Riggs, S. (2017). *Mission impossible? Addressing the issue of supply and demand for CBTp training and supervision in the United States*. In Presented at the International CBT for Psychosis Consortium Meeting, Vancouver, Canada.
- Hazell, C. M., Hayward, M., Cavanagh, K., & Strauss, C. (2016). A systematic review and meta-analysis of low-intensity CBT for psychosis. *Clinical Psychology Review*, 45, 183–192. <https://doi.org/10.1016/j.cpr.2016.03.004>.
- Hegel, M. T., Imming, J., Cyr-Provost, M., Noel, P. H., Arean, P. A., & Unutzer, J. (2002). Role of behavioral health professionals in a collaborative stepped care treatment model for depression in primary care: Project IMPACT. *Families, Systems & Health*, 20(3), 265–277.
- Heisler, E. J. (2018). The mental health workforce: A primer. *Congressional Research Service*. Retrieved January 2, 2019, from <https://fas.org/sgp/crs/misc/R43255.pdf>.
- Hepner, K. A., Hunter, S. B., Paddock, S. M., Zhou, A. J., & Watkins, K. E. (2011). Training addiction counselors to implement CBT for depression. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(4), 313–323. <https://doi.org/10.1007/s10488-011-0359-7>.
- Hogue, A., Henderson, C. E., Dauber, S., Barajas, P. C., Fried, A., & Liddle, H. A. (2008). Treatment adherence, competence, and outcome in individual and family therapy for adolescent behavior problems. *Journal of consulting and clinical psychology*, 76(4), 544–555.

- Johns, L. C., Sellwood, W., McGovern, J., & Haddock, G. (2002). Battling boredom: Group cognitive behaviour therapy for negative symptoms of schizophrenia. *Behavioural and Cognitive Psychotherapy*, 30(3), 341–346. <https://doi.org/10.1017/S1352465802003089>.
- Johnson, D. P., Penn, D. L., Bauer, D. J., Meyer, P., & Evans, E. (2008). Predictors of the therapeutic alliance in group therapy for individuals with treatment-resistant auditory hallucinations. *British Journal of Clinical Psychology*, 47(2), 171–183. <https://doi.org/10.1348/014466507X241604>.
- Jolley, S., Garety, P., Peters, E., Fornells-Ambrojo, M., Onumere, J., Harries, V., Brabban, A., & Johns, L. (2015a). Opportunities and challenges in improving access to psychological therapies for people with severe mental illness (IAPT-SMI): Evaluating the first operational year of the South London and Maudsley (SLaM) demonstration site for psychosis. *Behavior Research and Therapy*, 64, 24–30. <https://doi.org/10.1016/j.brat.2014.11.006>.
- Jolley, S., Onumere, J., Bissoli, S., Bhayani, P., Singh, G., Kuipers, E., Craig, T., & Garety, P. (2015b). A pilot evaluation of therapist training in cognitive therapy for psychosis: Therapy quality and clinical outcomes. *Behavioural and Cognitive Psychotherapy*, 43(4), 478–489. <https://doi.org/10.1017/S1352465813001100>.
- Jonathan, G. K., Pivaral, L., & Ben-Zeev, D. (2017). Augmenting mHealth with human support: Notes from community care of people with serious mental illnesses. *Psychiatric Rehabilitation Journal*, 40(3), 336–338. <https://doi.org/10.1037/prj0000275>.
- Kalntenthaler, E., Shackley, P., Stevens, P., Beverley, C., Parry, G., & Chilcott, J. (2002). A systematic review and economic evaluation of computerised cognitive behaviour therapy for depression and anxiety. *Health Technology Assessment*, 6(22), 1–89. <https://doi.org/10.3310/hta6220>.
- Kimhy, D., Tarrier, N., Essock, S., Malaspina, D., Cabannis, D., & Beck, A. T. (2013). Cognitive behavioral therapy for psychosis—Training practices and dissemination in the United States. *Psychosis: Psychological, Social and Integrative Approaches*, 5(3), 296–305. <https://doi.org/10.1080/17522439.2012.704932>.
- Kopelovich, S., Monroe-DeVita, M., Hughes, M., Peterson, R., & Roskelley, J. (2017). *Adopting technology and a stepped care approach to advance the implementation of cognitive behavioral therapy for psychosis (CBTp) in community mental health settings: Introducing the CBTp project ECHO clinic*. In Poster presented at the 16th International Congress on Schizophrenia Research (ICOSR), San Diego, CA.
- Kopelovich, S. L., Monroe-DeVita, M., Hughes, M., Peterson, R., Cather, C., & Gottlieb, J. (2018a). Statewide implementation of cognitive behavioral therapy for psychosis through a learning collaborative model. *Cognitive and Behavioral Practice*. <https://doi.org/10.1016/j.cbpra.2018.08.004>.
- Kopelovich, S. L., Strachan, E., Roskelley, J., Hughes, M., & Gray, R. (2018b). *Cognitive behavioral therapy for psychosis: Quarterly Report (Report No. 1265-62496)*. Washington: Department of Social and Health Services.
- Kreyenbuhl, J., Buchanan, R. W., Dickerson, F. B., & Dixon, L. B. (2010). The schizophrenia Patient Outcomes Research Team (PORT): Updated treatment recommendations 2009. *Schizophrenia Bulletin*, 36(1), 94–103. <https://doi.org/10.1093/schbul/sbp130>.
- Lecomte, T., Leclerc, C., Corbière, M., Wykes, T., Wallace, C. J., & Spidel, A. (2008). Group cognitive behavior therapy or social skills training for individuals with a recent onset of psychosis? Results of a randomized controlled trial. *Journal of Nervous and Mental Disease*, 196(12), 866–875.
- Lecomte, T., Leclerc, C., & Wykes, T. (2016). *Group CBT for psychosis: A guidebook for clinicians*. New York: Oxford University Press.
- Lecomte, T., Leclerc, C., & Wykes, T. (2018). Symptom fluctuations, self-esteem, and cohesion during group cognitive behaviour therapy for early psychosis. *Psychology and Psychotherapy: Theory, Research and Practice*, 91(1), 15–26. <https://doi.org/10.1111/papt.12139>.
- Lecomte, T., Leclerc, C., Wykes, T., & Lecomte, J. (2003). Group CBT for clients with a first episode of schizophrenia. *Journal of Cognitive Psychotherapy*, 17(4), 375–383. <https://doi.org/10.1891/jcop.17.4.375.52538>.
- Lecomte, T., Leclerc, C., Wykes, T., Nicole, L., & Abdel Baki, A. (2015). Understanding process in group cognitive behaviour therapy for psychosis. *Psychology and Psychotherapy: Theory, Research and Practice*, 88(2), 163–177. <https://doi.org/10.1111/papt.12039>.
- Leith, J., Carey, C., Sedlar, G., & Trupin, E. (2016). *Survey of research and evidence-based practice in WA State Universities and Colleges*. Retrieved January 9, 2018, from University of Washington's Evidence Based Practice website: <https://www.ebp.institute/s/EBP-Curriculum-Survey-results.pdf>.
- McDonough, M., Dana, T., Cantor, A., Selph, S., Monroe-DeVita, M., Kopelovich, S., Devine, B., Blazina, I., Bougatsos, C., Grusing, S., Fu, R., & Haupt, D. (2017). *Treatments for adults with schizophrenia: A systematic review*. (Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. HHS290201500009I.) AHRQ Publication No. XX-EHCXXX-EF. Rockville: Agency for Healthcare Research and Quality. Retrieved January 4, 2019, from <http://www.effectivehealthcare.ahrq.gov/reports/final.cfm>.
- McLeod, H. J., Dean, F. P., & Hogbin, B. (2002). Changing staff attitudes and empathy for working with people with psychosis. *Behavioural and Cognitive Psychotherapy*, 30, 459–470. <https://doi.org/10.1017/S1352465802004071>.
- Menon, M., Andersen, D. R., Quilty, L. C., & Woodward, T. S. (2015). Individual factors predicted to influence outcome in group CBT for psychosis (CBTp) and related therapies. *Frontiers in Psychology*, 6, 1563.
- Mental Health America. (2017). Mental Health America—Access to Care Data. Retrieved January 9, 2018, from <http://www.mentalhealthamerica.net/issues/mental-health-america-access-care-data>.
- Miller, T. J., Chicchetti, D., Markovich, P. J., McGlashan, T. H., & Woods, S. W. (2004). The SIPS screen: A brief self-report screen to detect the schizophrenia prodrome. *Schizophrenia Research*, 70(suppl1), 78.
- Mojtabai, R., & Olfson, M. (2008). National trends in psychotherapy by office-based psychiatrists. *Archives of General Psychiatry*, 65(8), 962–970. <https://doi.org/10.1001/archpsyc.65.8.962>.
- Montesano, V. L., Sivec, H. J., Munetz, M. R., Pelton, J. R., & Turkington, D. (2014). Adapting cognitive behavioral therapy for psychosis for case managers: Increasing access to services in a community mental health agency. *Psychiatric Rehabilitation Journal*, 37(1), 11–16. <https://doi.org/10.1037/prj0000037>.
- Morosini, P., Magliano, L., Brambilla, L., Ugolini, S., & Pioli, R. (2000). Development, reliability and acceptability of a new version of the DSM-IV Social and Occupational Functioning Assessment Scale (SOFAS) to assess routine social functioning. *Acta Psychiatrica Scandinavica*, 101(4), 323–329.
- Morrison, A., & Barratt, S. (2010). What are the components of CBT for psychosis? A Delphi study. *Schizophrenia Bulletin*, 36(1), 136–142. <https://doi.org/10.1093/schbul/sbp118>.
- Mueser, K., & Glynn, S. (2014). Have the potential benefits of CBT for severe mental disorders been undersold? *World Psychiatry*, 13(3), 253–256. <https://doi.org/10.1002/wps.20160>.
- Mueser, K., Granholm, E., Hardy, K., Sudak, D., Sivec, H., Burkholder, P., & Riggs, S. (2015). *A call to action 10 years on: Training US*

- therapists in CBT for psychosis. Panel discussion at the Association of Cognitive and Behavioral Therapies, Chicago.
- Mueser, K., & Noordsy, D. (2005). Cognitive Behavior Therapy for psychosis: A call to action. *Clinical Psychology: Science and Practice*, 12(1), 68–71. <https://doi.org/10.1093/clipsy/bpi008>. doi.
- Naeem, F., Farooq, S., & Kingdon, D. (2014). Cognitive behavioral therapy (brief vs standard duration) for schizophrenia. *Schizophrenia Bulletin*, 40(5), 958–959.
- Naeem, F., Khoury, B., Munshi, T., Ayub, M., Lecomte, T., Kingdon, D., & Farooq, S. (2016). Brief cognitive behavioral therapy for psychosis (CBTp) for schizophrenia: Literature review and meta-analysis. *International Journal of Cognitive Therapy*, 9(1), 73–86. https://doi.org/10.1521/ijctpass.5B.5D2016_09_04.
- Naeem, F., Xiang, S., Munshi, T. A., Kingdon, D., & Farooq, S. (2015). Self-help and guided self-help interventions for schizophrenia and related disorders. *Cochrane Database of Systematic Reviews*, Issue 5. <https://doi.org/10.1002/14651858.CD011698>.
- Newman, M. (2000). Recommendations for a cost-offset model of psychotherapy allocation using generalized anxiety disorder as an example. *Journal of Consulting and Clinical Psychology*, 68(4), 549–555.
- North American CBT for psychosis Network. (n.d.). CBTp competence standards. Retrieved January 2, 2019, from <https://www.nacbt.org/cbtp-competence-standards>.
- Okamura, K., Wolk, C. L. B., Kang-Yi, C., Stewart, R., Rubin, R., Weaver, S., ... Mandell, D. S. (2018). The price per prospective consumer of providing therapist training and consultation in seven evidence-based treatments within a large public behavioral health system: An example cost-analysis metric. *Frontiers in Public Health*, 5, 356. <https://doi.org/10.3389/fpubh.2017.00356>.
- Owen, M., Sellwood, W., Kan, S., Murray, J., & Sarsam, M. (2015). Group CBT for psychosis: A longitudinal, controlled trial with inpatients. *Behaviour Research and Therapy*, 65, 76–85. <https://doi.org/10.1016/j.brat.2014.12.008>.
- Perkins, D. (2016). Stepped care, system architecture and mental health services in Australia. *International Journal of Integrated Care*, 16(3), 16–19. <https://doi.org/10.5334/ijic.2505>.
- Perry, Y., Murakami-Brundage, J., Grant, P., & Beck, A. (2013). Training peer specialists in cognitive therapy strategies for recovery. *Psychiatric Services*, 64, 929–930. <https://doi.org/10.1176/appi.ps.640903>.
- Persons, J. (2008). *The case formulation approach to cognitive behavior therapy*. New York: The Guilford Press.
- Pinninti, N. R., Fisher, J., Thompson, K., & Steer, R. (2010). Feasibility and usefulness of training assertive community treatment team in cognitive behavioral therapy. *Community Mental Health Journal*, 46, 337–341. <https://doi.org/10.1007/s10597-009-9271-y>.
- Pinninti, N. R., & Gogineni, R. R. (2016). Brief cognitive behavioral therapy interventions for psychosis. *Psychiatric Times*, 33(10). Retrieved January 2, 2019, from <http://www.psychiatrictimes.com/special-reports/brief-cognitive-behavioral-therapy-interventions-psychosis>.
- Radhakrishnan, M., Hammond, G., Jones, P. B., Watson, A., McMillan-Shields, F., & LaFortune, L. (2013). Cost of Improving Access to Psychological Therapies (IAPT) programme: An analysis of cost of session, treatment and recovery in selected Primary Care Trusts in the East of England region. *Behaviour Research and Therapy*, 51(1), 37–45. <https://doi.org/10.1016/j.brat.2012.10.001>.
- Rector, N. A., & Beck, A. T. (2001). Cognitive behavioral therapy for schizophrenia: An empirical review. *Journal of Nervous and Mental Disease*, 189(5), 278–287. <https://doi.org/10.1097/00005053-200105000-00002>.
- Riggs, S. E., & Creed, T. A. (2017). A model to transform psychosis milieu treatment using CBT-informed interventions. *Cognitive and Behavioral Practice*, 24(3), 353–362. <https://doi.org/10.1016/j.cbpra.2016.08.001>.
- Riggs, S. E., Wiltsey-Stirman, S., & Beck, A. T. (2012). Training community mental health agencies in cognitive therapy for schizophrenia. *The Behavior Therapist*, 35(2), 34–39.
- Rollinson, R., Smith, B., Steel, C., Jolley, S., Onwumere, J., et al. (2008). Measuring adherence in CBT for psychosis: A psychometric analysis of an adherence scale. *Behavioral Psychotherapy*, 36, 163–178. <https://doi.org/10.1017/S1352465807003980>.
- Scogin, F., Hanson, A., & Welsh, D. (2003). Self-administered treatment in stepped-care models of depression treatment. *Journal of Clinical Psychology*, 59, 341–349. <https://doi.org/10.1002/jclp.10133>.
- Sivec, H. J., Hewit, M., Jia, Z., Montesano, V., Munetz, M. R., & Kingdon, D. (2015). Reanalyses of Turkington et al. (2014): Correcting errors and clarifying findings. *Journal of Nervous and Mental Disease*, 203(12), 975–976. <https://doi.org/10.1097/NMD.0000000000000402>.
- Sivec, H. J., & Montesano, V. L. (2012). Cognitive behavioral therapy for psychosis in clinical practice. *Psychotherapy*, 49(2), 258–270. <https://doi.org/10.1037/a0028256>.
- Sivec, H. J., Montesano, V. L., Skubby, D., Knepp, K. A., & Munetz, M. R. (2017). Cognitive behavioral therapy for psychosis (CBTp) delivered in a community mental health setting: A case comparison of clients receiving CBT informed strategies by case managers prior to therapy. *Community Mental Health Journal*, 53(2), 134–142. <https://doi.org/10.1007/s10597-015-9930-0>.
- Sobell, M. B., & Sobell, L. C. (2000). Stepped care as a heuristic approach to the treatment of alcohol problems. *Journal of Clinical and Counseling Psychology*, 68(4), 573–579.
- Stein, D. M., & Lambert, M. J. (1995). Graduate training in psychotherapy: Are therapy outcomes enhanced? *Journal of Consulting and Clinical Psychology*, 63(2), 182–196.
- Stirman, S. W., Gutner, C. A., Langdon, K., & Graham, J. R. (2016). Bridging the gap between research and practice in mental health service settings: An overview of developments in implementation theory and research. *Behavior Therapy*, 47(6), 920–936. <https://doi.org/10.1016/j.beth.2015.12.001>.
- Stirman, S. W., Spokas, M., Creed, T., Farabaugh, D. T., Bhar, S. S., Brown, G. K., ... Beck, A. (2010). Training and consultation in evidence-based psychosocial treatment in public mental health settings: The ACCESS model. *Professional Psychology: Research and Practice*, 41(1), 48–56. <https://doi.org/10.1037/a0018099>.
- Tai, S. (2017). *CBTp FLP supervisor checklist. Training Version 2.0*. Unpublished manuscript.
- Tarrier, N., & Wykes, T. (2004). Is there evidence that cognitive behavior therapy is an effective treatment for schizophrenia? A cautious or cautionary tale? *Behaviour Research and Therapy*, 42, 1377–1401. <https://doi.org/10.1016/j.brat.2004.06.020>.
- Torrey, W. C., Bond, G. R., McHugo, G. J., & Swain, K. (2012). Evidence-based practice implementation in community mental health settings: The relative importance of key domains of implementation activity. *Administration and Policy in Mental Health and Mental Health Services Research*, 39(5), 353–364. <https://doi.org/10.1007/s10488-011-0357-9>.
- Turkington, D., Kingdon, D., Rathod, S., Hammond, K., Pelton, J., & Mehta, R. (2006). Outcomes of an effectiveness trial of cognitive-behavioural intervention by mental health nurses in schizophrenia. *British Journal of Psychiatry*, 189, 36–40. <https://doi.org/10.1192/bjp.bp.105.010884>.
- Turkington, D., Kingdon, D., & Turner, T. (2002). Effectiveness of a brief cognitive-behavioural therapy intervention in the treatment

- of schizophrenia. *The British Journal of Psychiatry*, 180(6), 523–527. <https://doi.org/10.1192/bjp.180.6.523>.
- Turkington, D., Munetz, M., Pelton, J., Montesano, V., Sivec, H., Nausheen, B., & Kingdon, D. (2014). High-yield cognitive behavioral techniques for psychosis delivered by case managers to their clients with persistent psychotic symptoms: An exploratory trial. *Journal of Nervous and Mental Disease*, 202(1), 30–34. <https://doi.org/10.1097/NMD.0000000000000070>.
- Turner, D. T., van der Gaag, M., Karyotaki, E., & Cuijpers, P. (2014). Psychological interventions for psychosis: A meta-analysis of comparative outcome studies. *American Journal of Psychiatry*, 171, 523–538.
- van der Gaag, M., Valmaggia, L. R., & Smit, F. (2014). The effects of individually tailored formulation-based cognitive behavioural therapy in auditory hallucinations and delusions: A meta-analysis. *Schizophrenia Research*, 156(1), 30–37. <https://doi.org/10.1016/j.schres.2014.03.016>.
- Waller, H., Garety, P. A., Jolley, S., Fornells-Ambrojo, M., Kuipers, E., Onwumere, J., ... Craig, T. (2013). Low-intensity cognitive behavioural therapy for psychosis: A pilot study. *Journal of Behavior Therapy and Experimental Psychiatry*, 44(1), 98–104. <https://doi.org/10.1016/j.jbtep.2012.07.013>.
- Waltman, S., Hall, B., McFarr, L. M., Beck, A. T., & Creed, T. A. (2017). In-session stuck points and pitfalls of community clinicians learning CBT: Qualitative investigation. *Cognitive and Behavioral Practice*, 24, 256–267. <https://doi.org/10.1016/j.cbpra.2016.04.002>.
- Waters, F., Ree, M., & Chiu, V. (2017). *Delivering CBT for insomnia in psychosis: A clinical guide*. New York: Routledge.
- Williams, C., & Martinez, R. (2008). Increase access to CBT: Stepped care and CBT self-help models in practice. *Behavioural and Cognitive Psychotherapy*, 36(6), 675–683. <https://doi.org/10.1017/S1352465808004864>.
- Wright, J. H., Sudak, D. M., Turkington, D., & Thase, M. E. (2010). *High-yield cognitive behavioral therapy for brief sessions: An illustrated guide*. Washington, DC: American Psychiatric Publishing, Inc.
- Wykes, T., Hayward, P., Thomas, N., Green, N., Surguladze, S., Fannon, D., & Landau, S. (2005). What are the effect sizes of group cognitive behavior therapy for voices? A randomized control trial. *Schizophrenia Research*, 77, 201–210. <https://doi.org/10.1016/j.schres.2005.03.013>.
- Wykes, T., Steel, C., Everitt, B., & Tarrier, N. (2008). Cognitive Behavior Therapy for schizophrenia: Effect sizes, clinical models, and methodological rigor. *Schizophrenia Bulletin*, 34(3), 523–537. <https://doi.org/10.1093/schbul/sbm114>.
- Young, J. E., & Beck, A. T. (1980). *Cognitive therapy scale rating manual*. Unpublished manuscript.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.