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Defining Treatment Completion According to Patient Competency: A Case Example Using Brief Cognitive Behavioral Therapy (BCBT) for Suicidal Patients

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Treatment completion (commonly referred to as *termination*) is a routine and essential component of the treatment process. Although the relevant literature has discussed how to complete treatment, much less discussion and guidance exists regarding when, and under what conditions, treatment should be considered complete. The current article reviews various approaches to defining treatment completion, identifying three general patterns within the psychotherapy literature: clinician judgment, patient outcomes, and number of sessions attended. We propose defining treatment completion in terms of patient skill mastery and competency, and provide an overview of how patient competency is used to define treatment progress and completion within Brief Cognitive Behavioral Therapy for suicidal patients.

Keywords: suicide, psychotherapy, termination, treatment completion

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When is a patient "done" with psychotherapy or psychological treatment? The answer to this question can be elusive within clinical practice, which is curious given that treatment completion (often referred to as *termination*) is considered an essential element of clinical care, so much so that ethics codes for mental health professionals routinely address the need for terminating services with patients. For instance, the American Psychological Association (APA) ethics code (American Psychological Association, 2010) directs psychologists to "terminate therapy when it becomes reasonably clear that the client/patient no longer needs the service, is not likely to benefit, or is being harmed by continued service." Many state licensing boards have supplemented these directives with additional guidelines, typically called "rules of practice."

Treatment completion is a frequent topic of discussion within the psychotherapy literature and is strongly influenced by theoret-

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ical orientation and completion. Budman and Gurman (1988), for example, summarized various approaches and perspectives on completing psychotherapy. They noted that psychodynamically oriented clinicians are more likely to conceptualize treatment completion as total and absolute termination of contact with the patient with no plan for future follow-up or resumption of care, whereas cognitive–behavioral clinicians are more likely to approach completion with the assumption that if a patient "relapses" or experiences a recurrence of the condition, then they can return later for additional treatment. Cognitive–behavioral clinicians are also more likely to consider treatment "complete" much earlier than psychodynamic clinicians.

When considering treatment completion, however, psychotherapy texts and literature tend to focus on *how* to complete treatment, but do not provide much guidance on determining *when* treatment is "complete" (e.g., Beck, 1995; Budman & Gurman, 1988; Corey, 2001; Martin & Moore, 1995; Yalom, 1980, 1995). Nonetheless, as an intrinsic component of psychotherapy, clinicians routinely make determinations about treatment completion based on some form of criteria. We therefore conducted a nonexhaustive review of the psychotherapy and psychological treatment literature to identify general patterns in defining treatment completion. Our intent was not to include *all* therapies and treatments, but rather to consider a sample broad enough to identify general patterns. Three general approaches were identified, as summarized in Table 1: clinician judgment, patient outcomes, and number of sessions attended.

Clinician Judgment

A common approach to defining treatment completion and dropout is based on the clinician's subjective judgment about the patient's progress over the course therapy. Using this approach, treatment is typically not considered to be complete until the clinician either decides it is complete or agrees to a mutual, planned discontinuation of care with the patient. Dropout is typically defined as a discontinuation of therapy for any reason without the clinician's agreement. A strength of this approach is the flexibility with which treatments can be provided, specifically with regard to treatment duration, which has implications for overall cost effectiveness. Specifically, patients who improve faster than expected (i.e., early responders) might attend fewer sessions than would otherwise be provided, which reduces overall costs in the short- and long-term. Similarly, patients who improve slower than expected (i.e., delayed responders) would attend more sessions than usual, which could increase costs in the short-term but potentially reduce costs in the long-term on the assumption that additional sessions should reduce the likelihood of future relapse or ongoing functional impairment due to only partial recovery. Because the clinician judgment approach typically does not include explicit guidelines or directives for how or under what circumstances a clinician should determine that treatment is complete, treatment completion and dropout appear to be based largely, if not entirely, on the subjective perspective of the treating provider. Although it seems likely that clinicians are basing their judgments on some sort of clinical or behavioral criteria, given the well-known limitations to clinical judgment (e.g., Dawes, Faust, & Meehl, 1989), this subjectivity in operationalizing and delivering treatments is likely to limit clinicians' ability to determine if a treatment is effective and how it works.

Patient Outcomes

Another approach to defining treatment completion is to use patient outcomes. Within this approach, patients are repeatedly assessed across treatment using a relevant clinical outcome measure (e.g., symptom checklists) to track clinical response. Treatment completion is defined according to the patient's overall clinical change across the course of treatment relative to a predetermined level or threshold. Treatment is only considered to be complete when the patient no longer falls within the clinical range on the outcome indicator, and/or has demonstrated a clinically meaningful amount of improvement on the outcome indicator, and dropout is defined as discontinuing treatment before this clinical recovery or significant improvement occurs. A strength of the patient outcome approach is its flexibility for operationalizing treatment delivery. However, it goes one step further by explicitly tying completion to a primary goal of treatment: recovery from the clinical condition. The replacement of clinician subjectivity with an objective method for determining treatment progress introduces an element of empiricism into clinical care that can improve the clinician's ability to more definitively determine treatment effectiveness and can even improve outcomes (Harmon et al., 2007; Reese, Norsworthy, & Rowlands, 2009). Using patient outcomes to define treatment completion is limited, however, by the intrinsic limitations to the assessment process itself. Aside from measurement error, professional consensus on what and how to best measure outcomes remains elusive, and assessment instruments often do not provide information for predicting which patients will relapse or experience clinical worsening in the future, which would undoubtedly influence decisions about treatment completion.

Number of Sessions Attended

A third method for defining treatment completion is by establishing, in advance, the total number of sessions that a patient is expected to attend. The number of planned sessions is often presumed to be the amount required for clinical recovery and has been influenced by a number of forces including systemic demands (e.g., long wait lists exceeding service providers' capacity), economic factors (e.g., managed care cost-containment efforts), and scientific evidence (e.g., results of clinical trials). In such therapies, treatment completion is commonly defined as attending 100% of planned sessions (or in some therapies, another amount such as 75%), and dropout is generally defined as attending less than this number of planned sessions. Manualized psychotherapies (especially those from cognitive–behavioral orientations) tend to incorporate this method for defining treatment completion and dropout. The primary benefit of defining treatment completion according to a fixed number of sessions is that treatment parameters are clear and objectively determined, which enables us to answer valuable clinical questions about treatment provisions such as overall effectiveness, "dosing" effects, and dismantling analyses. Defining treatment completion in terms of total number of sessions attended could also potentially enhance patient adherence and reduce the likelihood of dropout by explicitly setting expectations for patients at the outset of treatment. For example, pro-

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Table 1
Approaches for Defining Treatment Completion and Dropout Across Psychotherapies and Psychological Treatments

Author(s)	Treatment completion	Treatment dropout
Clinician Judgment		
Wierzbicki & Pekarik (1993)	Clinician deems that treatment is complete or agrees to planned termination	Termination without therapist agreement
Pekarik (1992)	Continuing until clinician agrees to planned termination	Termination without therapist agreement
Richmond (1992)	Continuing until clinician agrees to planned termination	Termination without therapist agreement
Tutin (1987)	Continuing until clinician agrees to planned termination	Termination without therapist agreement
Berrigan & Garfield (1981)	Continuing until clinician agrees to planned termination	Termination without therapist agreement
Björck, Björk, Clinton, Sohlberg, & Norring (2008)	NA	Discontinuing treatment to pursue issues and treatment goals that differ from those of the therapist
Patient Outcomes		
Swift, Callahan, & Levine (2009)	Scoring in nonclinical range at follow-up or demonstrating significantly improved score on outcome measure	Discontinuing treatment prior to reaching nonclinical range or demonstrating significant improvement
Hatchett & Park (2003)	Scoring in nonclinical range at follow-up or demonstrating significantly improved score on outcome measure	Discontinuing treatment prior to reaching nonclinical range or demonstrating significant improvement
Jacobson & Truax (1991)	Scoring in nonclinical range at follow-up or demonstrating significantly improved score on outcome measure	Discontinuing treatment prior to reaching nonclinical range or demonstrating significant improvement
Jacobson, Follette, & Revenstorf (1984)	Scoring in nonclinical range at follow-up or demonstrating significantly improved score on outcome measure	Discontinuing treatment prior to reaching nonclinical range or demonstrating significant improvement
Wagner & Johnson (1988)	Complete remission of symptoms during 12-week program	Incomplete remission of symptoms during 12-week program
Number of Sessions Attended		
Saatsi, Hardy, & Cahill (2007)	Minimum of 12 sessions, or agreed-on number of additional sessions up to maximum of 20 sessions	Discontinuing treatment prior to minimum of 12 sessions, or agreed-on number of additional sessions up to maximum of 20 sessions
Foa et al. (2005)	Attending all 9–12 sessions included in manualized protocol	Discontinuing treatment prior to attending all 9–12 sessions included in manualized protocol
Hatchett, Han, & Cooker (2002)	Attending all sessions or planned termination with agreement of therapist	Not attending last scheduled session without therapist agreement
Monson et al. (2006)	Attending all 12 sessions	Discontinuing treatment prior to attending all 12 sessions
Resick & Schnicke (1992)	Attending all 12 sessions	Discontinuing treatment prior to attending all 12 sessions
Rizvi, Vogt, & Resick (2009)	Completing at least 75 % of sessions (at least 9 of 12 sessions for CPT; at least 7 of 9 sessions for PE)	Completing less than 75% of the treatment sessions (fewer than 9 of 12 sessions for CPT); fewer than 7 of 9 sessions for PE
Simpson et al. (2011)	Attendance at all 18 sessions	Discontinuing treatment prior to 18 sessions
Rondeau, Brodeur, Brochu, & Lemire (2001)	Attending planned number of sessions, ranging from 14 to 25	Attending less than planned number of sessions
Biller (2000)	Attending all 10 sessions	Attending fewer than 10 sessions
Tryon & Kane (1993)	Minimum of 10 sessions	Not attending sessions for 3 weeks
Beckham (1992)	Minimum of 6 sessions	Declining further service or inability to contact after one or more missed sessions, or attending fewer than 6 sessions after initial evaluation
Kolb, Beutler, Davis, Crago, & Shanfield (1985)	Patients who attended fewer than 3 sessions were excluded. *M* number of sessions attended = 16.37; range, 3 to 72	Missing 2 consecutive sessions regardless of treatment progress
Bados, Balaguer, & Saldana (2007)	Attending 14 sessions	Discontinuing prior to 14 sessions without therapist agreement of demonstrating clinically significant change
Arnow et al. (2007)	Attending 12 weeks of treatment	Discontinuing treatment prior to 12 weeks
Davis, Hooke, & Page (2006)	Completing entire 10-day program (60 total hours)	Discontinuing treatment prior to 10 days
Meier & Best (2006)	Continuing treatment for planned duration, *M* = 6 mo; range, 1 to 12 mo	Discontinuing treatment prior to planned duration or being asked to leave for disciplinary reasons
Linehan et al. (1999)	12 months of individual and group therapy	Missing four consecutive individual or group sessions
McCusker, Vickers-Lahti, Stoddard, & Hindin (1995)	Continuing treatment for planned duration of 6 or 12 months	Discontinuing treatment prior to planned duration
Chaffin (1992)	Two years of attendance	Less than 2 years of attendance
Frayn (1992)	Continuing treatment for 9-month planned duration	Unilaterally discontinuing therapy prior to 9 months
Longo, Lent, & Brown (1992)	Returning after intake	Failing to return after intake

Note. CPT = cognitive processing therapy; NA = not available; PE = prolonged exposure.

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viding patients with a clear sense of when treatment begins and ends, and how it will unfold, can increase their commitment to receiving the full course of treatment and decrease early dropout rates, especially when patients understand that treatments will be brief (Sledge, Moras, Hartley, & Levine, 1990).

A Skills Competency Approach to Defining Treatment Completion

As discussed above, treatment completion has been defined primarily with a variety of criteria that are easy and straightforward for clinicians to use, but have not routinely incorporated another central objective of treatment: developing core skills for improving and maintaining the patient's health and functioning (e.g., emotion regulation, cognitive reappraisal, problem solving). Defining treatment completion with this approach has a number of advantages.

First, using objective criteria for defining treatment parameters lends reliability to determining whether the treatment is being delivered consistently and faithfully both within a single clinician and across multiple clinicians (i.e., *treatment fidelity*). To illustrate the importance of treatment fidelity, consider an example treatment for an example disorder: prolonged exposure for posttraumatic stress disorder (PTSD). Treatment fidelity assessment helps to determine if clinician A is truly delivering prolonged exposure (as opposed to another form of treatment) across multiple patients with PTSD, and whether clinician A and clinician B are both delivering the same form of prolonged exposure across their respective patients with PTSD. Treatments delivered with higher fidelity obtain moderately better outcomes (Bond, Becker, & Drake, 2011), underscoring its importance within treatment. This may be due, at least in part, to reduced clinician bias or subjectivity with regard to determining progress (or lack thereof) in treatment. Fidelity can be especially important when treating particularly challenging or difficult cases that elicit strong negative countertransference reactions, because clinicians can be vulnerable to ruling treatment as "complete" based on their personal emotional reactions rather than the patient's needs or clinical status.

Second, a competency-based approach reflects the causal mechanisms that are proposed to underlie change within treatment. Specifically, interventions act on patients' skill sets and abilities across multiple domains (e.g., cognitive, emotional, behavioral), which in turn act on the clinical condition of interest (e.g., depression, anxiety, suicide risk). Indeed, if a distressed patient demonstrates improved clinical outcomes (e.g., decreased emotional distress, improve functioning) across treatment but does not demonstrate improvement in basic psychological skills (e.g., emotion regulation, cognitive reappraisal, problem solving), could this suggest vulnerability to future relapse or recurrence? If so, should treatment truly be considered "complete"? Elliott (2007) noted, for example, that the absence of engagement in enjoyable activities despite improvement in depressive symptoms is an important indicator of incomplete treatment for depression. Considering skills mastery independent of clinical status could therefore have significant implications for patient prognosis.

Third, a competency-based approach enables clinicians to balance treatment fidelity with flexibility. One common criticism of treatments that define completion according to number of sessions (especially manualized psychotherapies) is that such treatments are unable to flexibly meet the needs of individual patients. Is it possible that some patients complete treatment earlier and others later than planned simply because they learn the required skills at different rates? Evidence indicates, for instance, that sudden clinical improvements during the early stages of treatment tend to be maintained by patients over time (Stiles et al., 2003; Tang & DeRubeis, 1999), suggesting that some patients might acquire psychological skills faster than others, and that these early changes are adequate for enduring recovery. Perhaps of greater concern to clinicians is the possibility that some patients take longer to complete treatment than others because they are slower responders: is it possible that the predetermined number of sessions for a treatment might not be sufficient for some patients? In general, manualized therapies' predetermined number of sessions is adequate for the majority of patients in the majority of situations because this is, by default, the definition of an effective treatment. However, even with our most effective treatments, there is a small subset who will not respond as expected, although adequate clinical response might be realized with additional intervention.

Establishing treatment parameters that balance flexibility to meet the individual patient's needs with the rigor and fidelity of a structured treatment could therefore potentially improve the effectiveness of psychological treatments and clarify when treatment might be "complete." To illustrate these concepts, we will describe how a skills competency approach was incorporated into Brief Cognitive Behavior Therapy (BCBT) for suicide risk. BCBT is a time-limited outpatient psychotherapy for patients with current or recent suicidal behavior or ideation.

Using a Phased, Competency-Based Approach for Treating Suicidal Patients

BCBT is organized using a phased approach, which is an empirically supported model of treatment (e.g., Callahan, Swift, & Hynan, 2006; Howard, Lueger, Maling, & Martinovich, 1993). Specifically, BCBT sequentially orders interventions through three distinct phases (see Table 2): (a) emotion regulation, (b) problem-solving and cognitive reappraisal, and (c) relapse prevention. Progression through BCBT is determined by the achievement of the preceding phase's core objective, which is operationalized on demonstrated skill mastery.

Skill mastery is measured by four separate behavioral indicators. First, the patient must demonstrate an understanding of each specific skill or concept (e.g., mindfulness, relaxation) by verbally describing the rationale for the intervention and how it relates to the treatment's underlying model of suicidal behaviors (i.e., the suicidal mode; Rudd, 2006), which is introduced in the first session and repeatedly referenced throughout treatment. Second, the patient must demonstrate behavioral mastery via role play or practice in session with the clinician. Third, the patient must demonstrate behavioral mastery through successful skill use outside of session (i.e., successful completion of homework). Fourth, the patient must demonstrate the ability to practically apply each skill to real-life situations. Because the third and fourth criteria occur outside of treatment sessions and are therefore unable to be directly observed, clinicians gauge mastery by reviewing instances of successful (or unsuccessful) skill use in detail, such that patients "relive" the moment and reenact skill use in session. These four

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Table 2
Core Skills, Sample Interventions, and Competency Criteria for BCBT for Suicidal Patients, by Treatment Phase

Core skills	Sample interventions	Criteria for competency
	Phase I: Crisis management	
Emotion regulation	Relaxation Mindfulness Sleep hygiene/stimulus control Survival kit	Demonstrated ability to use emotion regulation skills to prevent suicide-facilitating behaviors during periods of intense emotional distress and/or crises
	Phase II: Deactivate suicidal beliefs	
Problem solving	ABC worksheets	Demonstrated ability to rapidly and fluidly use cognitive reappraisal and problem-solving skills in response to stressors
Cognitive reappraisal	Challenging beliefs worksheets Coping cards Reasons for living list	
	Phase III: Relapse prevention	
Relapse prevention task	Imaginal exposure Mental rehearsal	Demonstrated ability to use emotion regulation, cognitive reappraisal, and problem-solving skills during rehearsal of (a) index suicidal episode and (b) hypothetical future crises

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criteria are applied to each of the individual interventions of BCBT, several of which are listed in Table 2.

Specific interventions are selected to most efficiently accomplish the current phase's primary objective. Thus, in the first phase of treatment (emotion regulation), a clinician might choose to teach a patient relaxation in order to reduce physiological agitation contributing to increased emotional distress. Using the four criteria above, mastery of relaxation would be operationalized based on the patient's ability (a) to verbally explain how relaxation reduces emotional distress and suicide risk, (b) to use relaxation in-session to reduce agitation, (c) to self-report on successfully practicing relaxation use between sessions, and (d) to successfully use relaxation in response to actual problems or situations that occurred since the previous session. Once the patient has demonstrated the ability to consistently use skills to reduce acute emotional distress and to minimize suicide-facilitating behaviors (e.g., self-injury, substance use, suicide preparation or rehearsal), the patient moves to the second phase of treatment (problem solving and cognitive reappraisal). New skills are introduced and practiced, with mastery of each determined by demonstration of the four criteria above. Once the patient demonstrates the ability to consistently use skills to rapidly generate options for problem resolution and restructure suicidal beliefs (e.g., "I'm a horrible person", "People would be better off without me"), they move to the third and final phase of treatment (relapse prevention).

In this final phase of BCBT, patients consolidate all of the skills learned up to this point with a final competency assessment: the relapse prevention task. In the relapse prevention task, the clinician guides the patient through a detailed recounting of the suicidal episode that prompted the initiation of treatment. During this review of the suicidal episode, the patient must "break the chain" of the suicidal crisis by visualizing themselves using their emotion regulation, cognitive, and problem-solving skills successfully. This imaginal rehearsal is repeated several times, with clinicians gradually increasing the task's difficulty by introducing barriers to successful skill utilization. For example, if the patient imagines going for a walk when feeling suicidal, the clinician might suggest it is raining outside, thus requiring the patient to problem solve his or her way around this barrier (e.g., walking on the treadmill inside, grabbing an umbrella, selecting a different skill). On demonstrating the ability to successfully problem solve their way out of the original suicidal crisis, patients are next asked to develop hypothetical scenarios that might trigger suicidal crises in the future. The process of imaginal rehearsal is repeated multiple times until the patient consistently demonstrates competency and mastery of effective skills to avoid suicidal behaviors.

Completing BCBT

Within BCBT, treatment completion is defined according to the patient's ability to successful complete the relapse prevention task. Thus, although the expected duration of BCBT is 12 sessions, treatment duration could potentially vary from patient to patient depending on the speed with which the patient demonstrates skill mastery. Critically, the relapse prevention task is repeated until the patient can successfully use skills to avoid a suicide attempt, even if it requires additional sessions and brief reversals *backward* to review and further refine skills training from earlier phases. For example, if a patient is unable to successfully use emotion regulation skills during the relapse prevention task, the clinician shifts the clinical focus *backward* in the phased sequence to reemphasize these skills, then returns to the relapse prevention task for further practice and mastery acquisition. BCBT therefore incorporates objective patient outcomes as the primary criterion for determining treatment completion in a way that augments traditional methods for measuring patient outcome (e.g., symptom severity).

Implications for Clinical Research and Practice

Although a competency-based approach might be clinically intuitive, such an approach can pose considerable challenges from

a scientific perspective. As noted above, defining treatment completion in terms of number of sessions attended is especially prevalent among empirically supported, manualized psychotherapies, because this method is easily quantifiable and allows for direct comparisons across treatments. Number of sessions attended is also a critical variable for evaluating treatment dose effects, because patients who attend more sessions of treatment (i.e., a greater "dose") would be expected to improve more than those attending fewer sessions. High-quality clinical research requires the measurement of sessions attended to account for this dose effect to rule out the possibility that a given treatment is more (or less) effective simply due to total number of sessions attended. As applied to competency-based approaches to treatment, clinical researchers could potentially measure the number of sessions required for the patient to achieve skill competency, rather than simply measuring how many sessions were attended. This effectively separates the concept of treatment completion from dosing, which holds promise for further sharpening our understanding of treatment effectiveness (e.g., How many sessions are required to achieve skill mastery?).

Although we presented BCBT for suicidal patients as a specific example of how treatment completion can be defined according to competency-based criteria, these same principles would be highly relevant to any other clinical condition. Indeed, many treatments already incorporate skills competency as one method for determining treatment progress, even if skills competency is not be the primary criterion for defining treatment completion. For example, exposure-based therapies for anxiety disorders incorporate very clear behavioral markers of skills mastery: the ability to remain in an anxiety-provoking situation instead of engaging in escape or avoidance behaviors. Similarly, treatments for mood disorders often emphasize engagement in enjoyable activities despite mood state or the demonstrated ability to successfully restructure depressive thoughts or beliefs as they arise in real-life situations. Using skills-oriented criteria such as these might augment other, more common approaches for determining treatment completion. Research will be required to determine if using skills competency is a superior (or inferior) method for terminating clinical care.

As psychological treatments have advanced in sophistication and effectiveness, the parameters by which we define treatment completion have also evolved from the subjective impressions of clinicians to the explicit incorporation of clinical outcomes and the standardization of intervention and techniques. As our knowledge of "what works for whom" continues to expand, we must also begin to consider how to make effective treatments work even better. One potential direction for further refining and strengthening effective treatments is reconceptualizing treatment completion in terms of patient skill mastery.

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