Successfully Breaking a 20-Year Cycle of Hospitalizations With Recovery-Oriented Cognitive Therapy for Schizophrenia

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Individuals with severe and persistent schizophrenia can present challenges (e.g., difficulties sustaining motivation and conducting information processing tasks) to the implementation of recovery-oriented care. We present a successful application of recovery-oriented cognitive therapy (CT-R), a fusion of the spirit and principles of the recovery movement with the evidence base and know-how of cognitive therapy, that helped an individual with schizophrenia move along her recovery path by overcoming specific obstacles, including a 20-year cycle of hospitalizations (five per year), daily phone calls to local authorities, threatening and berating "voices," the belief that she would be killed at any moment, and social isolation. Building on strengths, treatment included collaboratively identifying meaningful personal goals that were broken down into successfully accomplishable tasks (e.g., making coffee) that disconfirmed negative beliefs and replaced the phone calling. At the end of treatment and at a 6-month follow-up, the phone calls had ceased, psychosocial functioning and neurocognitive performance had increased, and avolition and positive symptoms had decreased. She was not hospitalized once in 24 months. Results suggest that individuals with schizophrenia have untapped potential for recovery that can be mobilized through individualized, goal-focused psychosocial interventions.

Keywords: schizophrenia, recovery, cognitive therapy

Research over the past 30 years has refuted the notion that schizophrenia is a degenerative condition: many individuals recover completely; many are in the process of recovery (Bellack, 2006; Davidson, Harding, & Spaniol, 2005, 2006; Lysaker & Buck, 2008). It is for this latter group that recovery-based services are critical to foster hope, self-efficacy, connection to others, and a satisfying quality of life (Davidson, Tondora, Lawless, O’Connell, & Rowe, 2009). Accordingly, the federal government has mandated recovery-oriented care for mental health providers in the United States (Department of Health & Human Services, 1999, 2003, 2005). The aim of recovery-based care is to “develop approaches and strategies for instilling hope and encouraging the person to mobilize his or her remaining strengths and resources in order to gain mastery over the illness; identify, set, pursue, and accomplish personal goals; and, in general, to live a meaningful and satisfying life in face of an ongoing . . . condition” (Davidson, Rakfeldt, & Strauss, 2010, pp. 3–4). However, it may not always be clear how to translate recovery principles into concrete interventions that clearly facilitate recovery for individuals with schizophrenia (Bellack & Drapalski, 2012; Silverstein & Bellack, 2008). Evidenced-based psychotherapies for schizophrenia (Dickerson & Lehman, 2011) are particularly well-constituted to guide recovery efforts of individuals with schizophrenia (Lysaker, Glynn, Wilkness, & Silverstein, 2010), and several recovery-promoting approaches have recently been proposed (Gumley, Braehler, Laithwaite, MacBeth, & Gilbert, 2010; Laithwaite et al., 2009; Lysaker et al., 2005; Lysaker, Davis, Jones, Strasburger, & Beattie, 2007; Salvatore et al., 2012).

To more directly address the primary sources of disability that challenge the recovery efforts of individuals with schizophrenia (prolonged illness course, repeated hospitalization, persistent negative symptoms, exacerbated positive symptoms, and significant neurocognitive difficulties; Kreyenbuhl, Nossel, & Dixon, 2009), our group has adapted cognitive therapy. With roots stretching back 60 years (Beck, 1952), recovery-oriented cognitive therapy (CT-R) fuses the recovery movement’s spirit (Davidson et al., 2009) and cognitive therapy’s evidence base and know-how to provide a roadmap to recovery for individuals with persistent schizophrenia. CT-R is collaborative and prioritizes attaining personally set goals,1 removing obstacles to goal achievement, and leading a nonstigmatized and meaningful life. Recovery is catalyzed through increased positive action (Davidson et al., 2010; Lysaker & Leonhardt, 2012) and the removal of roadblocks (e.g.,

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1 We use “goals” to refer to desired results. The achievement of personally set long-term, medium-term, and short-term goals serves as the recovery-promoting backbone of CT-R.
commanding voices, difficulty mustering motivation) in order to sustain action. In a recent clinical trial, we have demonstrated the efficacy of CT-R to improve functional outcomes, raise motivation, and reduce positive symptoms (Grant, Huh, Perivoliotis, Stolar, & Beck, 2012). The CT-R model of schizophrenia (Beck, Rector, Stolar, & Grant, 2009) is based upon cross-sectional (Beck, Grant, Huh, Perivoliotis, & Chang, 2013; Grant & Beck, 2009a, 2009b) and longitudinal (Grant & Beck, 2010) studies showing that individuals on the lower end of the functioning continuum have negative attitudes about their ability to achieve personal goals (“there is no point in trying because I will only fail”) and the desirability of social contact that impede motivation and diminish engagement in constructive and pleasurable activity.

CT-R employs a variety of experiential interventions (e.g., promotion of positive action, skills training, cognitive restructuring) to target these negative attitudes and associated beliefs in order to foster change, promote personal mastery, and remove roadblocks to self-sustaining movement toward recovery. CT-R is collaborative, person-centered, and personalized, with all therapeutic interventions guided by the individual’s cognitive case formulation. A more detailed description of CT-R can be found in our treatment manual (Perivoliotis, Grant, & Beck, in press). The following discussion illustrates how CT-R successfully helped an individual with severe and persistent schizophrenia break a 20-year cycle of repeated hospitalization and make decisive movement along the pathway of hope, personal empowerment, and engagement in meaningful activity.

Mary

Background and Presenting Problems

Mary, a 57-year-old Irish American woman, was referred to the center by her psychiatrist, who reported treating her for 25 years. Living at home with her sister, Mary received help with most of her daily living activities. Mary tended to isolate herself, spending the better part of each day alone. Mary also displayed significant blunting of facial affect and tended to answer questions with unelaborated answers. Carrying a diagnosis of schizophrenia, undifferentiated type, Mary was prescribed 10 mg of Zyprexa and 1 mg ofCogentin throughout her 18 months of CT-R treatment. Mary had significant tardive dyskinesia (rocking, intermittent shaking, and excessive hand movements) caused by a long history of taking antipsychotic medications.

Since her first psychotic episode, Mary had experienced significant auditory and visual hallucinations on a daily basis. These included an unnamed voice saying, “Kill yourself,” others telling her, “We will kill you,” as well as her deceased mother issuing reprimands such as, “You aren’t doing anything!” and “Why don’t you do something useful?” Mary also believed that people were coming to kill her and that she needed to save local hospitals. Accordingly, she incessantly called the police department, the Federal Bureau of Investigation (FBI), local hospitals, and family members. This pattern of making phone calls occurred approximately 15 times a day prior to participating in treatment, and she attempted to make approximately 10 phone calls during her baseline assessment.

The calling pattern had a deleterious effect upon Mary’s daily life. It caused her to quit a nurse’s aide job, to remain unemployed, and to be banned from community mental health programs. The phone calls also caused frequent visits to her home from the police, which strained the relationship with her sister. Importantly, the calling behavior produced an average of five inpatient admissions per year across two decades. Mary’s calling behavior appeared deeply entrenched, which demoralized her family and treatment providers. Her treating psychiatrist stated, “She has always and will continue to inappropriately make these calls; it is just a matter of keeping her calm.”

Baseline Assessment

Prior to the start of treatment, a trained assessor administered a structured clinical interview to Mary that included validated measures of psychosocial functioning (Global Assessment Scale; Endicott, Spitzer, Fleiss, & Cohen, 1976), negative (Scale for the Assessment of Negative Symptoms; Andreasen, 1984) and positive (Scale for the Assessment of Positive Symptoms; Andreasen, 1983) symptoms, functional skills (UCSD Performance Skills Assessment; Mausbach, Harvey, Goldman, Jeste, & Patterson, 2007), and neurocognitive performance (Computerized Neurocognitive Battery; Gur et al., 2010). The clinician ratings included information from collateral sources. Table 1 presents Mary’s pretreatment (baseline) assessment findings. Mary scored in the low range on the measure of global functioning. She had elevated negative and positive symptoms. Her scores were also in the low range on role-played functional skills and neurocognitive tasks (abstraction/mental flexibility, verbal memory, and attention).

Course of Treatment

Mary attended a total of 70 individual 50-min CT-R sessions that occurred weekly during the first year and fortnightly during the following 6 months (see Figure 1). The therapist and treatment team developed a cognitive conceptualization that guided strategies2 for the specific interventions. At the start of therapy, Mary and her therapist collaboratively set a list of personal goals. They began to break these goals down into concrete steps and develop a list of obstacles to those goals. Initial sessions focused on fostering engagement, improving therapeutic communication, becoming more active, and learning coping skills for auditory hallucinations. In the middle stage of therapy, Mary learned behavioral routines (e.g., how to brew coffee and deliver it) that allowed her to begin volunteering and develop adaptive beliefs about herself. She also corrected unhelpful paranoid thinking and broadened her coping skills for hallucinations. Toward the end of treatment, Mary practiced relapse prevention exercises, began socializing more, and generalized her volunteering to new tasks and situations. Over the course of therapy, Mary and her therapist worked together to overcome many obstacles to progress—low energy, alogia, neu-
recovery goals.

The first challenge in treatment was to help Mary identify specific goals that she found motivating. Initially, Mary identified very general long-term goals such as “become happier.” The therapist helped Mary sharpen these into concrete goals that were easily measured. Thus, “happier” was described as smiling more, having more energy and information processing difficulties posed significant challenges to helping Mary identify progress and sustain effort. To help Mary recognize and experience each successive success experience, the therapist employed a brightly colored and interactive progress meter (see Figure 2). Each of the three prongs on the progress meter corresponded to one of her goals and contained a numbered scale to measure progress, which Mary indicated by moving a magnet on the numbered scale. Because placing a number on her progress toward her goal (e.g., 5 out of 10) was difficult for Mary to comprehend at the start of therapy, Mary and her therapist developed an idiosyncratic rating system whereby she disclosed their thoughts readily and are easily confused by abstract concepts. The treatment team employed a useful heuristic: The content of hallucinations can be the royal road to the key beliefs.

**Table 1**  
Mary’s Functioning and Symptom Scores at Pretreatment, Midtreatment, Posttreatment, and 6-Month Follow-Up

<table>
<thead>
<tr>
<th>Variable</th>
<th>Baseline (Pretreatment)</th>
<th>6 month</th>
<th>12 month (Midtreatment)</th>
<th>18 month (End of treatment)</th>
<th>24 month (Follow-up)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global functioning</td>
<td>30</td>
<td>31</td>
<td>41</td>
<td>45</td>
<td>40</td>
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<tr>
<td>Negative symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective-flattening</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Alogia</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Avolition-apathy</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Anhedonia-asociality</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Positive symptoms</td>
<td>13</td>
<td>2</td>
<td>17</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Functional skills</td>
<td>26</td>
<td>40</td>
<td>60</td>
<td>53</td>
<td>67</td>
</tr>
<tr>
<td>Neurocognition</td>
<td>−2.37</td>
<td>−1.65</td>
<td>−2.15</td>
<td>−2.02</td>
<td>−1.51</td>
</tr>
</tbody>
</table>

Note. Global Functioning = Global Assessment Scale; Affective Flattening, Alogia, Avolition-Apathy, Anhedonia-Asociality = global subscale scores. Scale for the Assessment of Negative Symptoms; Positive Symptoms = total score, Scale for the Assessment of Positive Symptoms; Functional Skills = total score, UCSD Performance-Based Skills Assessment-Brief; Neurocognition = average standardized domain scores for abstraction/mental flexibility, attention, and verbal memory, Computerized Neurocognitive Battery.

Despite Alogia and Desire to Please; Strategy = Use Visual Aids and Employ Simple Concrete Language

At the start of therapy, Mary tended to respond with one-word replies (alogia), and she often gave answers that she thought her therapist expected to hear (desire to please). For example, when asked how she was feeling, Mary would state, “okay.” To facilitate more effective communication with Mary, the therapist made several modifications. First, icons of emotion faces (emoticons) helped Mary share how she was feeling, as she could touch (or draw) the “face” that best reflected her emotional state. Mary frequently pointed to (or drew) faces that communicated exhaustion or sadness despite verbally stating that she was feeling “okay.” Second, frequent use of verbal reinforcement (e.g., “... that is so helpful to know that you may be feeling exhausted, and I bet there are a lot of things that are making you feel this way.”) helped Mary appreciate that the therapist valued honest disclosure. Third, shifting away from open-ended questions (e.g., “Name the three most tiring things about last week” instead of “Why are you so tired?”) helped lessen the strain on neurocognitive resources. Fourth, offering guesses (e.g., “feeling tired?”) and allowing Mary to select the most appropriate ones helped during times when she was unable to answer a question.

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3 We use the term “challenges” as a more empowering alternative to “problems” or “deficits.”

4 We have found that the term “action plan” is more energizing and affirming than “homework” as a label for between session activities.
Mary frequently heard voices telling her they would kill her, suggesting that she must feel vulnerable much of the time and believe the world and other people to be sources of danger. These beliefs, in turn, perpetuated her withdrawal behavior because it would be safer for her to stay inside than to venture outside into danger. The calling behavior also promoted safety, as it provided temporary relief from her sense of danger and reinforced frequent calling.

The voice content also provided an additional important clue to the conceptualization: Mary heard her deceased mother’s criticizing voice telling her to be useful. The treatment team speculated that Mary might hold beliefs that she was both worthless and bad, and that the calls might also compensate for these negative thoughts. This formulation was supported a little over halfway through therapy when Mary asked the therapist, “Do you need help?” Mary then proceeded to explain that she called the hospital to help them and that she had been doing this for a very long time.

In the subsequent session, Mary explained, “I am a bad person.” She also indicated that her calls are “acts of goodness”—the calls to help the hospital compensated for her belief that she is a bad person.

Mary’s belief, “I am a bad person,” explained why she expected that she would be killed, why she heard a demeaning voice, and why she felt useless and worthless. Thinking that she was worthless, sad, and unsafe produced unsettling feelings of anxiety and depression. Isolating was an avoidance behavior that unwittingly exacerbated her discomfort. The phone calls temporarily ameliorated her distress but could not fundamentally address the underlying beliefs driving Mary’s distress. As Mary would become more distressed, her demoralization would increase, reducing executive resources that might otherwise inhibit the voices, producing yet more distress. Hospitalization occurred when Mary became overwhelmed as anxiety and helplessness spiraled.

**Challenge = Reduce Calls and Hospitalizations (Part 1); Strategy = Becoming Active, Experiencing Success, and Changing Beliefs**

One of Mary’s important strengths was that she wanted to help people. The phone calls fulfilled this desire and compensated for her beliefs that she was useless and a “bad person.” The therapist collaboratively guided Mary to correct negative beliefs about herself by helping others in a more adaptive manner, raising her quality of life and self-regard simultaneously. The initial step was Mary’s short-term goal of “doing more activities.” Mary and the therapist played games, went for snacks, and listened to music, all of which promoted engagement in therapy and countered Mary’s belief that she could not experience enjoyment. Importantly, the therapist guided Mary to link becoming active and feeling good with her long-term goal of being happier:

*Therapist: Okay, Mary, how are you feeling now (after doing an activity)?*  
*Mary: Okay.  
*T: On a scale of one to ten?*
Mary and her therapist proceeded to build up a list of positive activities, revisiting the list at each session to draw the link between being active and feeling better. Early in therapy, activity scheduling involved simple tasks such as attending her community health center and talking to one person. As she began to improve, Mary added more fun activities (e.g., drawing, going shopping), as well as ones that made her feel proud (e.g., doing chores at home). Eventually, she developed the skill to use a formal activity schedule sheet to plan and conduct each week.

As Mary became more active, her energy level increased. When an opportunity arose for Mary to volunteer to prepare and serve coffee, she responded enthusiastically. However, it quickly became apparent that Mary did not know how to brew coffee. The therapist invited Mary to brew coffee in session. Initially, the therapist provided significant support (e.g., directions, reminders, reinforcement of success), but in each subsequent session Mary made coffee with the therapist providing less support. Eventually, Mary brewed coffee without support, springing to do it with a smile on her face. Mindful of Mary’s belief of being useless, the therapist repeatedly used questioning (e.g., “Did you know how to work this machine before therapy? What does that tell you about yourself?”) to help her draw accurate conclusions about herself during the success experiences.

The next step was to help people by giving them coffee. To facilitate skill learning for this critical, social aspect of the volunteering job, Mary delivered coffee to workers in nearby offices after brewing it. The therapist provided situation-specific social skills training: He helped her identify maladaptive behaviors and modify them to improve her interactions. Initially, Mary walked into offices without knocking, she did not make eye contact, she never smiled, and she did not use polite phrases such as “thank you” and “good bye.” Mary’s therapist tackled the lack of smiling, for example, by commenting upon her smiling while brewing coffee: “Mary, it is so helpful when you smile and look at me because it tells me you like me and are satisfied with what I am saying.” Mary agreed, and they developed a plan to increase smiling and to maintain eye contact while giving coffee to the workers.

Brewing and delivering coffee accomplished multiple goals for Mary. It became a positive way to help people, which replaced the usefulness of making phone calls. Indeed, Mary stopped making the calls coincident with the start of her volunteering job. Additionally, the coffee brewing and delivery were a series of success experiences that increased her energy, elevated her mood, promoted a sense of self-efficacy and interpersonal purpose, and helped to correct the negative beliefs she had of being useless and a bad person, points that the therapist helped her draw repeatedly:

T: Did you enjoy giving coffee out?
M: Yeah.
T: Okay, am I putting words in your mouth?
M: (shakes head from side-to-side indicating “no”)
T: What does that say about you that you’re helping those people out?
M: They get their coffee . . . and they can relax . . . and don’t feel so tired! (laughs)
T: Given that you’re helping them, what does that say about you?
M: That I’m a good person.
T: I think so, that makes a lot of sense. Yeah, how does that feel to think about?
M: Good.
T: How much do you believe it?
M: A whole lot.

**Challenge = Reducing Calls and Hospitalizations (Part 2); Strategy = Manage Distressing Hallucinations**

One of Mary’s goals was to decrease the bothersome effects of her voices. The therapist helped Mary remove voices as a roadblock to her recovery using a two-pronged strategy: (a) Mary became more active to feel better, which left less time to listen to the voices and lessened the demoralization that prompted them, and (b) Mary developed coping skills that lessened distress and fostered more productive beliefs about the voices.

To work on coping skills, the therapist initially queried Mary about routines she already knew that reduced distress when hear-
ing voices: singing and humming. The therapist then taught Mary a new coping skill\(^5\) to manage the volume of the voices and demonstrate that she could control the voice experience. The therapist first had Mary rate the intensity of the voices on a 10-point scale. He then modeled the skill and asked Mary to perform it. After Mary had used the skill for several moments, the therapist asked her to rereate the volume. Mary reported that the volume decreased. Each time she experienced a reduction in the volume of the voices, the therapist asked, “What does this say about you being able to control the voices?”—explicitly linking the reduction in distress to her own actions. When Mary was not experiencing voices in session, the therapist used guided imagery to elicit voices for practice. Mary closed her eyes and imagined the last time she heard voices; after a few moments in silence, she would hear them again.\(^6\) After mastering the new coping skill in session, Mary started using it at home to manage the voices. She felt better and reported increased conviction that she controlled the voices.

Given that demoralization and anxiety at night prompted Mary’s experience of voices, the therapist taught Mary routines to lessen distress and improve mood: progressive muscle relaxation and listening to music. Mary and her therapist consolidated coping skills in a list that she kept by her bed. Periodically they conducted a “dress rehearsal” during session in which Mary imagined hearing the voices at night and looked at the list to remind her what to do. Next, the therapist helped Mary create a single sheet combining her activity schedule with the coping list, bringing the two prongs of managing voices together. By the end of therapy, Mary rated her control over the voices as complete (e.g., a 10 on a 10-point scale): They were not credible and did not influence her. This change in beliefs about the voices led Mary to feel happier and more hopeful during the week, helped her stay in the community, and prevented hospitalization.

**Challenge = Reducing Calls and Hospitalizations (Part 3); Strategy = Counter Paranoid Beliefs That She Will Be Killed**

At the start of therapy, Mary did not share thoughts that others might regard as “wrong” or “crazy.” The therapist fostered open communication by (a) reinforcing Mary for sharing such thoughts, (b) validating and empathizing with the accompanying emotions, and (c) treating the thoughts as warranting further investigation. A trusting therapeutic relationship developed that enabled Mary to share and work on her most distressing thoughts.

Mary’s therapist taught her the Three Cs,\(^7\) a simplified method for learning cognitive restructuring. The Three Cs are *catch it* (identify the thought), *check it* (test the thought for accuracy and helpfulness), and *correct it* (select a thought that is more accurate or helpful). Being sensitive to Mary’s neurocognitive challenges, the therapist utilized visual aids to teach the Three Cs over 11 sessions.

**Catch.** The idea of catching a thought can be confusing for individuals demonstrating difficulties with attention and abstraction. To skirt this challenge, the therapist stated a thought out loud (e.g., “My sister doesn’t like me”), wrote the thought down, crumpled up the paper into a ball, and tossed it to her. Mary would catch the paper ball. The therapist would then state an emotion that matched the content of the thought (e.g., “sad”). Mary straightened out the paper and read the thought out loud. They repeated this game many times across three sessions to help her grasp the concept of catching her own thoughts.

**Check.** Evaluating thoughts is also abstract and involves knowing that thoughts can be accurate or inaccurate, as well as using evidence to determine their accuracy. Initially, the therapist employed a concrete example to demonstrate both parts of the process:

- T: If I told you I have five desks in my office, would you believe me?
- M: No.
- T: And, how would you know?
- M: I see you got one.
- T: Excellent! You checked the evidence!

Mary and the therapist then applied the idea of “checking the evidence” to other examples (a snake in the desk). Returning to the game—using a visual aid of a large cardboard check mark (a reminder to check) with a large square hole in the middle and an important reminder phrase at the top, “Is this thought supported by the evidence?” He tossed balls of paper with thoughts written on them to Mary. Mary straightened each out, read the thought, placed the thought in the hole of the check mark, and decided if the thought was accurate or helpful.

**Correct.** Once Mary could explain and demonstrate the first two Cs, she was ready for *correct it*. Mary caught the paper ball, put it into the check mark, and if she found the evidence did not support the thought, she corrected it by writing a new thought down on the piece of paper. Once Mary was able to state and demonstrate the Three Cs with the visual aids, then the therapist taught her how to do so without them.

After she had mastered cognitive restructuring in this manner, the therapist and Mary repeatedly applied it to a range of thoughts (e.g., “The neighbor wants to kill me”). Mary’s conviction that someone was trying to kill her reduced each time she applied the Three Cs to that thought. Because Mary had believed for more than 20 years that she was going to be killed, it was necessary to complete the Three Cs exercise repeatedly in and out of session. At the end of therapy, Mary’s conviction in the belief was 0%, and she did not worry about it.

**Challenge = Helping the Family Support Mary’s Recovery; Strategy = Bring Family in Session, Use Psychoeducation, Have Periodic Check-Ins**

Mary desired a better relationship with her sister. During a joint session early in therapy, the sister explained that she was tired and frustrated. The therapist observed her trying to help Mary dismiss

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\(^5\) For example, we have used Look-Point-Name to successfully help manage and control voices. The skill is simple: The person is asked to look at different items around the room, one at a time, point to them, and name them. The skill reduces the volume of voices because it utilizes auditory processing resources that require attention.

\(^6\) Consistent with experience sampling studies (Delespaul, deVries, & van Os, 2002), dyadic conversation tends to lessen the experience of voices; by recreating being alone (the situation that leads to the most voice hearing experiences), the therapist is able to elicit the voices in session.

\(^7\) Developed by John McQuaid (personal communication, August 4, 2011) for inpatients as “catch it, check it, change it.” We have modified the third C, based upon our clinical experience, to “correct it,” which is more precise.
paranoid thoughts by contradicting them (e.g., “that’s not right”), which unwittingly made matters more difficult. The therapist subsequently helped the sister understand Mary’s experiences, leading her to empathize with what it is like to hear voices saying you will be killed. He also explained that Mary not helping around the house is not laziness but the result of defeatist beliefs. With Mary’s consent and collaboration, they developed weekly check-ins with the sister. During these check-ins, the therapist would explain why challenging Mary’s belief that she would be killed is not helpful, catch up on progress with chores and reducing phone calls, and determine if there were any problems. As Mary helped around the house (part of her activity schedule), became less agitated, and enjoyed outings, her sister’s appreciation for the therapy process grew, and she became a more effective advocate and aid to Mary’s recovery.

**Challenge = Consolidating Change and Supporting**

Gains Outside of Session; Strategy = Prevent Relapse, Increase Socializing, Improve Community Support

Toward Mary’s twelfth month of treatment, she began talking about checking herself into the hospital because she felt tired. The therapist approached this wish evenhandedly by presenting two options: checking into the hospital versus staying in the community, staying active, and utilizing coping skills. Once Mary began to volunteer, she decided against going to the hospital. Next, Mary began the last 6 months of fortnightly sessions, focused upon preventing relapse, strengthening coping mechanisms, maintaining activity level, and promoting helpful thoughts about herself and others. During this time, Mary began volunteering to help a short-order cook, developed more social supports, and started a friendship—her first friend in more than 20 years. At the final session, the therapist asked Mary to assess her improvement:

- **T:** Do you think you’ve made a lot of progress?
- **M:** Yeah.
- **T:** Before you came in here, how many times were you hospitalized?
- **M:** About five.
- **T:** Five times in that year before you came in here. And you haven’t been hospitalized for over a year.
- **M:** Yes.
- **T:** What have you been doing instead of being hospitalized?
- **M:** Trying to cope with my everyday living.

**Follow-Up and Discussion**

Mary was not hospitalized over a 24-month period, a considerable improvement over several hospitalizations per year spanning the previous two decades. Furthermore, at Session 50, Mary stopped making calls to the police and hospital. In place of making calls and being hospitalized, Mary was volunteering and had made a friend. Mary’s relationship with her sister also improved, and she reported being happy when she was with her family members. Mary also had better control over her voices and decreased conviction in maladaptive paranoid beliefs after therapy. Indeed, therapy helped Mary achieve each of the hallmarks of recovery (Davidson et al., 2009): renewed hope and commitment (becoming active, attending therapy sessions), being supported by others (sister, therapist, friend), finding a niche in the community (volunteering making coffee and helping the short-order cook), redefining self (a good person that helps people), incorporating illness and managing symptoms (control of voices, anxiety, and distressing thinking), and assuming control (activity scheduling, volunteering, directing her own life).

A blind assessor reevaluated Mary at the end of the initial stage of therapy (6 months), the end of the middle phase of therapy (12 months), at the end of treatment (18 months), and at follow-up (24 months). Table 1 contains these data. Relative to her baseline levels, Mary showed a meaningful improvement in global functioning at 18 months that was maintained at 24 months. She also showed a reduction in avolition-apathy and positive symptoms both at 18 and 24 months. These improvements in global functioning and symptoms are comparable with those observed in our clinical trial (Grant et al., 2012). Most impressively in terms of her recovery process, Mary showed a two standard deviation improvement over her baseline on the role-play measure of everyday functional skills, and her scores on the neurocognitive battery also increased by a standard deviation compared with her baseline values. As she had not been explicitly trained on these tasks, this suggests evidence of generalization of efficacy from other learning in therapy.

This case study demonstrates that recovery-oriented cognitive therapy can promote personally meaningful improvement in the day-to-day life of an individual with a long history of schizophrenia. Mary began therapy on the fringes of the flow of life, unintentionally stuck in a cycle of hospitalization, unchanged for 20 years, and unhappy. The treatment was based upon a tailored cognitive case conceptualization. Mary and her therapist collaboratively set, broke down, and achieved goals, with adjustments made for neurocognitive challenges. As Mary acquired skills, experienced success, and gained mastery over symptoms, dysfunctional behavioral routines were replaced with acts of everyday living that promoted a better self-concept, and she developed a higher quality of life. Mary was able to become more active, master her own distress, begin to help other people, and socialize. She was not hospitalized across 2 years, no longer made calls to local authorities and family, and was less bothered by her voices or thoughts that she would be killed. In short, Mary clearly had untapped potential that was brought out by the success experiences of systematically achieving her own personalized goals.

Tapping into Mary’s latent potential also led to a considerable savings in medical costs. Based on the average cost of an ambulance transport ($415; Hatley & Patterson, 2007), cost per inpatient hospital day for individuals with schizophrenia ($850; Stensland, Watson, & Grazier, 2012), and length of hospital stay for individuals with schizophrenia (11 days; Stensland et al., 2012), we estimate that 10 hospitalizations over the 2-year period would have cost at least $97,650. For comparison sake, we also estimated the cost of 70 outpatient psychotherapy sessions in the community ($94.59 per hour; Olson & Marcus, 2010) as $6,621. Though crude estimates, these values lend support to the conclusion that successful recovery-oriented treatment improves self-efficacy, enhances quality of life, and significantly reduces health care costs.

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8 We thank a reviewer for suggesting this analysis.
9 To determine the average length of inpatient hospital stays for individuals with government funded insurance, we averaged the length of stay reported in Stensland et al. (2012) for individuals on either Medicare (11.1 days) or Medicaid (10.9 days).
Many individuals like Mary with severe and persistent schizophrenia are faced with significant challenges to recovery. Some have passed decades in state hospitals or the penal system. Others receive services from taxed Assertive Community Treatment (ACT) teams or community behavioral health center personnel. Still others live at home with estranged, struggling families or are homeless and receive little support or treatment. The present case study and our clinical trial (Grant et al., 2012) together suggest these individuals have untapped potential that can be brought out by providers who use CT-R as a systematic roadmap to successfully help them move along their unique recovery path. Thus, there is promise that CT-R, or similar psychotherapeutic efforts, can fully help them move along their unique recovery path. These individuals have untapped potential that can be brought out by providers who use CT-R as a systematic roadmap to successfully help them move along their unique recovery path. Thus, there is promise that CT-R, or similar psychotherapeutic efforts, can improve outcomes, reduce treatment costs, and most importantly promote recovery for individuals with schizophrenia.

References


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