The NAVIGATE Program for First-Episode Psychosis: Rationale, Overview, and Description of Psychosocial Components

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Over the past two decades, numerous specialized treatment programs have been developed and implemented throughout the world for first-episode psychosis (1–6). Although some programs have been implemented in the United States (7,8), most of this work has occurred in countries with single-payer medical systems (for example, Australia, Great Britain, Norway, and Canada), where integrated multicomponent community-focused care, typically recommended for first-episode psychosis, may be easier to implement. In 2008, in order to address the need for a feasible and effective comprehensive first-episode program that could be implemented in the context of the U.S. health care system, the National Institute of Mental Health’s Recovery After an Initial Schizophrenia Episode (RAISE) initiative focused on the development and evaluation of first-episode treatment programs designed for the U.S. health care system. This article describes the background, rationale, and nature of the intervention developed by the RAISE Early Treatment Program project—known as the NAVIGATE program—with a particular focus on its psychosocial components. NAVIGATE is a team-based, multicomponent treatment program designed to be implemented in routine mental health treatment settings and aimed at guiding people with a first episode of psychosis (and their families) toward psychological and functional health. The core services provided in the NAVIGATE program include the family education program (FEP), individual resiliency training (IRT), supported employment and education (SEE), and individualized medication treatment. NAVIGATE embraces a shared decision-making approach with a focus on strengths and resiliency and on collaboration with clients and family members in treatment planning and reviews. The NAVIGATE program has the potential to fill an important gap in the U.S. health care system by providing a comprehensive intervention specially designed to meet the unique treatment needs of persons recovering from a first episode of psychosis. A cluster-randomized controlled trial comparing NAVIGATE with usual community care has recently been completed.
In general, research supports the effectiveness of coordinated services, work and school functioning, and independent living and psychosocial programming to improve social relations.

Multiple pathways into treatment, often through the criminal justice system, engendering with mental health services, with long delays and side effects and nonadherence. Recovery strategies based on cognitive-behavioral techniques are often delivered in either an individual or a group format. Most persons who develop a first episode of psychosis are living with or in regular contact with family members, and thus family intervention is also a standard feature. Additional features of these programs include education about psychosis; relapse prevention training; specific targeting of substance abuse and suicidal thinking; and psychosocial programming to improve social relationships, work and school functioning, and independent living.

In general, research supports the effectiveness of coordinated specialty care programs for first-episode psychosis compared with usual services on outcomes such as reducing relapses and hospitalizations and improving psychosocial functioning, although the impact of these programs on substance abuse and educational outcomes has not yet been clearly demonstrated.

THE NAVIGATE PROGRAM

People with a first episode of psychosis often encounter challenges, barriers, and contradictory information about engaging with mental health services, with long delays and multiple pathways into treatment, often through the criminal justice system. When treatment is found, it is often not well suited to address the unique needs of these persons who, along with their family members, often struggle with the dual challenges of understanding the complex and confusing nature of psychosis and entering the similarly complex and often confusing mental health system. The NAVIGATE program is aimed at helping clients (and their family members) negotiate their way through the haze of mental illness and the maze of the mental health care system, through close collaboration with a small and committed treatment team, toward regaining control over their lives and achieving their personal goals.

Target Population and Setting

NAVIGATE is a coordinated specialty care program aimed at helping people with a first episode of psychosis meet the broad range of their psychiatric and psychosocial needs. The program primarily targets individuals ages 15 to 35 years, when schizophrenia spectrum disorders are most likely to develop, including diagnoses of schizoaffective disorder, schizotypal personality disorder, brief psychotic disorder, and psychotic disorder not otherwise specified. NAVIGATE can also accommodate older individuals (up to age 40) who have also recently developed a first episode of psychosis. The focus of NAVIGATE is on helping individuals who are experiencing their first episode of psychosis, regardless of the duration of symptoms, who have received no or limited antipsychotic medication or who have recently received treatment for a first episode and are therefore early in the treatment of psychosis.

The NAVIGATE program was designed to be implemented in typical nonacademic U.S. mental health care settings serving a broad population of persons with a serious mental illness (for example, community mental health centers). While a core set of services is provided in NAVIGATE, participation does not preclude access to other services that may be available at the same agency or at other agencies (for example, peer support and supported housing).

NAVIGATE is intended for individuals whose acute psychotic symptoms have remitted or been stabilized, as well as those who continue to have severe symptoms related to their first episode. For these individuals, the initial goals of treatment include engaging them and their support network, ensuring their safety, and achieving symptom stabilization. NAVIGATE does not include a formal inpatient component for individuals requiring this level of care. To facilitate referral and initial engagement of people into NAVIGATE, team members may work with inpatient staff and directly with the client. When acute symptoms are sufficiently managed or in remission and the client is living in the community, the goals of NAVIGATE shift to improving psychological, physical, and psychosocial functioning, including community integration. If subsequent hospitalization of a NAVIGATE client is required, team members work with inpatient staff to ensure continuity of care.

The NAVIGATE Treatment Team

Staffing for the NAVIGATE program is multidisciplinary, with team members working together to implement treatment and each person providing a specific intervention. The NAVIGATE team typically comprises five individuals who provide four core treatment services. However, there is flexibility in the size and composition of the team, the assignment of clinical roles, and the number of staff members in each role.

The medication prescriber (for example, a psychiatrist or nurse practitioner) provides individualized medication treatment, including systematic monitoring of signs, symptoms, and side effects, and guideline-based pharmacological treatment. Two clinicians (usually with master’s-level degrees) provide the individual resiliency training (IRT) program, a psychotherapeutic approach aimed at helping clients set
personal goals, enhance wellness and personal resiliency, learn about psychosis and its treatment, improve illness self-management, and progress toward personal goals. This role creates natural opportunities for these clinicians to also provide case management, although a separate (sixth) team member may alternatively provide it. The supported employment and education (SEE) specialist (usually with a bachelor’s-level degree) helps clients identify or develop and pursue personally meaningful goals related to education and competitive employment. The director (master’s-level degree) is the primary liaison for referrals to the NAVIGATE program, coordinates and leads the team, and supervises the IRT clinicians and SEE specialist. In addition, the director usually provides the family education program (FEP), which is aimed at developing a collaborative relationship with family members, educating them about psychosis and its treatment, and enlisting their support for the client’s involvement in treatment and pursuit of personal goals. These four interventions are described below.

Positions on the NAVIGATE team are not expected to be full-time, and members may have collateral responsibilities to clients who are not enrolled in NAVIGATE. This is a practical necessity because the proportion of first-episode psychosis clients is relatively small and most community mental health programs cannot mount a full-time team dedicated to their care. This flexibility is a major appeal of the NAVIGATE model. On the basis of population characteristics in the catchment area, a number of team configurations can be envisioned, ranging from dedicated teams that serve approximately 30 patients annually to teams that come together to serve a fewer number of clients each year.

NAVIGATE Team-Based Activities
Weekly meetings of the NAVIGATE team serve an important function for sharing current information about the client’s progress, stressors, and setbacks and for coordinating responses among team members. If important NAVIGATE services, such as case management, are provided by persons other than the team members listed above, these persons are included as team members in regular meetings. The information shared in these meetings feeds into the treatment planning and review activities.

Treatment Planning, Review, and Discharge
All of the services provided in NAVIGATE are individualized, based on the client’s goals and needs. Goals are collaboratively established and followed through in a process involving the client, critical team members, and family members or significant others. Research suggests that early improvements in functioning achieved during time-limited first-episode psychosis programs may be subsequently lost after people return to usual services (20). More recent research underscores the feasibility and benefits of continuity of specialized care for up to five years after the onset of psychosis, with a reduction in service intensity after the first two years (21). Thus the NAVIGATE program was not designed to last for a specific length of time. Instead, the length of treatment and transition to customary services are determined by a combination of client preferences, needs, and circumstances (for example, progress toward goals, symptom stabilization, and return to college), as well as by local funding resources. Most clients are expected to remain in the program for at least two years.

NAVIGATE Manuals
NAVIGATE is standardized in six manuals (www.raiseetp.org). The NAVIGATE Team Members’ Guide provides the background and rationale for the program, an overview of the services, guidelines for treatment planning and teamwork, and information about benefits (22). One manual is devoted to the director’s role as the team leader (23), and one each is devoted to the various interventions: individualized medication treatment (24), the FEP (25), IRT (26), and SEE (27).

CONCEPTUAL FOUNDATIONS OF THE NAVIGATE PROGRAM
The philosophy, goals, and services of NAVIGATE are guided by three broad conceptual frameworks in the mental health field, including the recovery model, the stress-vulnerability model, and the general field of psychiatric rehabilitation, as described below. The specific services provided are informed by issues of unique relevance to persons experiencing a first episode of psychosis. The issues include the alignment of goals with the client’s developmental stage of life; learning how to deal with the mental health system; fostering insight into and understanding of the illness; and facilitating empowerment and self-determination to counter the psychological trauma, sense of loss of control, and demoralization associated with developing a psychotic disorder.

Traditional medical definitions of recovery from mental illness, based on remission of symptoms and deficits, have been challenged in recent years by perspectives that emphasize a person’s ability to establish a rewarding and meaningful life, despite having to cope with symptoms (28–31). This new understanding of recovery is consistent with models of positive health that advocate the association of mental health with a purposeful life and close social connections (32,33). Thus the goal of the NAVIGATE program is recovery, defined by each individual in his or her own terms, including the quality of role functioning (for example, school and work), social and leisure functioning, and well-being (for example, self-esteem and sense of purpose), all of which are important life goals of people with a recent first episode of psychosis (34). Furthermore, to counter the experience of personal disempowerment and pessimistic messages from the public and some treatment providers, NAVIGATE embraces recovery-oriented services, including “person orientation” (that is, interest in the individual as a whole person, including his or her strengths, resources, and talents—and not just as a “patient” with impairments and deficits), “person involvement” in program design and in
guiding one’s own treatment, self-determination and choice informed by education to facilitate decision making and reinforce a sense of self, and hope for the future to instill motivation for pursuing a rewarding life (35).

The stress-vulnerability model serves as a heuristic in the NAVIGATE program for guiding strategies to improve illness management, including reducing symptoms and preventing relapses and hospitalizations, all of which frequently occur in first-episode psychosis (36,37) and have a negative impact on recovery trajectories (38,39). According to the model, illness severity is determined by the dynamic interplay between biological vulnerability, stress, social support, coping, and recovery management skills (for example, knowledge of psychosis and relapse prevention planning) (40–42). In NAVIGATE, biological vulnerability and stress are reduced through medication; motivational interviewing and cognitive-behavioral approaches to facilitate medication adherence; the FEP (by educating relatives about psychosis and engaging their support in treatment); and facilitating the client’s involvement in structured, meaningful life activities in SEE and IRT. Coping efforts and recovery management skills are enhanced in IRT as described in more detail below.

While illness management focuses on reducing psychopathology, psychiatric rehabilitation directly targets recovery goals, such as education, work, and social relationships. Psychiatric rehabilitation encompasses a wide range of strategies, which can be divided into either teaching people new skills or harnessing environmental supports (43,44). For example, the FEP focuses on increasing family support through education and consultation aimed at reducing tension and conflict and increasing relatives’ support for the client’s involvement in treatment and pursuit of goals. Similarly, the SEE program provides practical assistance and enlists natural supports (for example, school personnel and family members) to help individuals pursue work and educational goals. In contrast to the focus of the FEP and SEE on providing supports, IRT primarily aims at teaching skills to help clients achieve their goals, such as bolstering resiliency to improve well-being and self-efficacy and honing social and social-cognitive skills to improve relationships.

CORE SKILLS OF NAVIGATE TEAM MEMBERS

The coordinated implementation of the NAVIGATE program requires that all team members have a common set of skills (Table 1).

Shared Decision Making

Shared decision making recognizes that all people have the right to make decisions about their own treatment, based on their own preferences and goals (35). Treatment decisions are made by the client and clinician in partnership, with each person contributing his or her special knowledge and experience and arriving at a mutually agreeable treatment plan (45). This approach empowers the client and reduces internalized stigma (46).

Strengths and Resiliency Focus

Goal setting in psychiatric treatment has traditionally focused on the reduction or elimination of symptoms or deficits. For individuals who have already had many setbacks, this emphasis on deficits can worsen self-esteem. A strengths and resiliency focus involves drawing attention to positive attributes, such as personal qualities (for example, creativity, sensitivity to others, and determination), knowledge or skills (for example, playing a musical instrument and knowing computer software programs), and resources (for example, social support and a good living situation) (47). Helping clients (and family members) recognize, increase, and capitalize on their strengths not only makes people feel better about themselves but also facilitates their resiliency in coping with life challenges and achieving goals. This approach extends to reaching one’s potential and deriving meaning from life (48), including self-acceptance, positive relationships, and environmental mastery, which have been found to resonate for people with a first episode of psychosis (49).

Motivational Enhancement Skills

Difficulty sustaining motivation to follow through on plans and goals is a common negative symptom of schizophrenia that is often present during the first episode of psychosis and that contributes to poor treatment adherence and functioning. A critical approach to enhancing client motivation in NAVIGATE is the emphasis on setting and pursuing personally meaningful goals. A variety of other strategies are used to increase motivation (50,51), such as exploring how learning to better manage psychosis can help a person achieve personal goals and supporting self-efficacy by instilling hope that the person can change.

Psychoeducational Skills

Clients and their relatives need information about treatment options in order to participate in the shared decision making that is the backbone of the NAVIGATE program. This is especially relevant to persons with a first episode of psychosis and their families, who may have little experience with mental health services. Psychoeducation involves providing information to people in a flexible way that facilitates understanding of its relevance, retention of material, and collaboration with the treatment team. A variety of teaching strategies can be employed, such as presenting information in multiple modalities, eliciting the person’s experiences related to the topic, and seeking common ground when there are disagreements about topics such as diagnosis, symptoms, or need for medication.

Collaboration With Natural Supports

Supportive people who have a caring relationship and regular contact with the client, such as family members, are an especially important resource for people with a first episode of psychosis. These individuals can play a vital role in maximizing the effectiveness of the NAVIGATE interventions (52). Establishing collaborative and respectful
TABLE 1. Core skills of NAVIGATE team members

<table>
<thead>
<tr>
<th>Skill area and goals</th>
<th>Key elements</th>
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</thead>
<tbody>
<tr>
<td>Shared decision-making skills</td>
<td>Information provided about treatment options and likely consequences</td>
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<tr>
<td>Enlist active engagement in treatment</td>
<td>Client preferences elicited and respected</td>
</tr>
<tr>
<td>Establish and maintain good working alliance between client and team members</td>
<td>Treatment decisions negotiated and made jointly: family members involved (with client permission)</td>
</tr>
<tr>
<td>Support self-determination and personal autonomy</td>
<td>Identify personal qualities, knowledge, skills, and resources</td>
</tr>
<tr>
<td>Strengths and resiliency focus</td>
<td>Draw attention to strengths and consider how to capitalize on them to achieve goals</td>
</tr>
<tr>
<td>Enlist family support for client goals</td>
<td>Explore how person coped with and bounced back from previous challenges</td>
</tr>
<tr>
<td>Promote use of all available resources for achieving goals</td>
<td>Build upon and enhance skills for dealing with stress and rebounding from setbacks</td>
</tr>
<tr>
<td>Help person move forward in life after disruption of psychotic episode and any persistent difficulties</td>
<td>Enhance desire to improve illness</td>
</tr>
<tr>
<td>Help find a sense of purpose in one’s life</td>
<td>Resolve ambivalence about behavior change</td>
</tr>
<tr>
<td>Motivational enhancement</td>
<td>Help person move forward in life after disruption of psychotic episode and any persistent difficulties</td>
</tr>
<tr>
<td>Increase effort to work on personal goals</td>
<td>Help find a sense of purpose in one’s life</td>
</tr>
<tr>
<td>Enhance desire to improve illness management</td>
<td>Motivational enhancement</td>
</tr>
<tr>
<td>Resolve ambivalence about behavior change</td>
<td>Help find a sense of purpose in one’s life</td>
</tr>
<tr>
<td>Help find a sense of purpose in one’s life</td>
<td>Psychoeducational skills</td>
</tr>
<tr>
<td>Provide important information to enable shared decision making</td>
<td>Psychoeducational skills</td>
</tr>
<tr>
<td>Ensure relevant information is understood and retained</td>
<td>Psychoeducational skills</td>
</tr>
<tr>
<td>Facilitate ability to access and use information when needed</td>
<td>Psychoeducational skills</td>
</tr>
<tr>
<td>Help individual learn practical facts about illness and its treatment</td>
<td>Psychoeducational skills</td>
</tr>
<tr>
<td>Collaboration with natural supports</td>
<td>Broad definition of “family” based on client’s wishes; outreach to engage family members; provide information to family about illness and treatment similar to that in the standard work on IRT; elicit and respond to family members’ questions and concerns; avoid judgment; express empathy about challenging experiences and focus on resiliency; ensure that treatment team members are accessible to family; responsive to family requests for help</td>
</tr>
<tr>
<td>Enlist family support for client goals and participating in treatment</td>
<td>Broad definition of “family” based on client’s wishes; outreach to engage family members; provide information to family about illness and treatment similar to that in the standard work on IRT; elicit and respond to family members’ questions and concerns; avoid judgment; express empathy about challenging experiences and focus on resiliency; ensure that treatment team members are accessible to family; responsive to family requests for help</td>
</tr>
<tr>
<td>Improve positive feelings and self-esteem</td>
<td>Instill hope for achieving goals</td>
</tr>
<tr>
<td>Instill hope for the future</td>
<td>TREATMENT INTERVENTIONS PROVIDED IN THE NAVIGATE PROGRAM</td>
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Clients are free to choose which of the NAVIGATE interventions they wish to receive (individualized medication treatment, FEP, IRT, or SEE) and when to start, stop, and resume each one. A brief description of these interventions is provided below and summarized in Table 2.

**Individualized Medication Treatment**

NAVIGATE pharmacological treatment follows a shared decision-making model. Clients who want to discontinue their medication are encouraged to remain in NAVIGATE, including seeing the prescriber on a regular basis to maintain a working alliance with him or her and to facilitate the resumption of medication should the client decide. Medication selection involves providing the broadest array of evidence-based options to clients and prescribers for consideration, with choice based on individual preferences. A panel of experts reviewed the first-episode treatment literature and classified antipsychotic medications into groups for use at different treatment stages, primarily on the basis of side-effect profiles (the exception being clozapine for clients who did not improve with other antipsychotics). Recent data suggest that the medication prescriptions for up to 40% of first-episode clients do not conform to best medication practices for this group (53).

To assist adoption of best practices, NAVIGATE medication treatment is guided by COMPASS, a computerized clinical decision support system using a measurement-based care approach that was developed for NAVIGATE and is available to NAVIGATE prescribers and clients on a secure Web site. COMPASS facilitates client-prescriber communication through direct client input into the system of information about symptoms, side effects, treatment preferences, and other relationships between these individuals and the NAVIGATE team is critical for the client to reap the full benefits of these supports. All team members, not just the family clinician (usually the director), need skills for working with families and other natural supports, such as providing outreach and engagement, eliciting the concerns and opinions of family members, and facilitating involvement and support in treatment planning and reviews.
TABLE 2. Core interventions provided in the NAVIGATE program

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Provider</th>
<th>Goals</th>
<th>Description</th>
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<tbody>
<tr>
<td>Individualized medication management</td>
<td>Prescriber</td>
<td>Reduce symptoms; minimize side effects and adverse medical health outcomes</td>
<td>Provided to all clients; regular monitoring of symptoms, treatment adherence, and side effects by using standardized questions during regular office visits; continuous monitoring of risk factors for metabolic and cardiovascular disease; guideline-based pharmacological treatment emphasizing low doses; close coordination with primary care provider and referral for medical services, when appropriate; encourage healthy lifestyles, which can include coordination with the IRT clinician on lifestyle changes</td>
</tr>
<tr>
<td>Family education program</td>
<td>Director (typically)</td>
<td>Establish collaborative relationships between family and treatment team; instill hope for recovery from psychosis; teach family about psychosis and its treatment; strengthen communication; reduce family stress; improve family support for client’s goals and participation in treatment; prevent relapses</td>
<td>Offered to all families, with client consent; holding an individual session with each significant other and the client to get to know them, hear their experience, and get their point of view; family education (10–12 sessions; offered to all families; education about psychosis, treatment, and stress reduction; development of relapse prevention plan; emphasis on family resiliency and strengths); monthly check-ins (brief monthly in-person or phone contact to review progress and identify family concerns or clinical issues; conducted following completion of family education); family consultation (1 or 2 sessions per problem as needed; addresses specific problem identified by family; focused problem-solving approach used by family clinician; specific solutions identified, action plan formulated, and follow-up conducted); modified intensive skills training (8–12 sessions if needed after basic family education completed; targets persistently high levels of family stress; intensive skills-training methods used to teach communication and problem-solving skills)</td>
</tr>
<tr>
<td>Individual resiliency training (IRT)</td>
<td>IRT clinician</td>
<td>Help client achieve personal recovery goals; educate about psychosis and its treatment; process experience of the psychotic episode; improve illness self-management, including relapse prevention and coping; reduce substance abuse; increase social support and quality of relationships; increase resiliency and well-being; improve health</td>
<td>Psychotherapeutic interventions based on cognitive-behavioral therapy and motivational interviewing offered to all clients; individual sessions conducted weekly or biweekly for as long as needed; goal setting and tracking throughout the program; educational and skills curriculum organized into different topic areas (or modules), with handouts and clinician guides for each module; standard modules recommended for all clients; individualized modules provided as needed or when desired; flexibility in which modules to cover, when, and in what depth; information, strategies, and skills taught using motivational, psychoeducational, and cognitive-behavioral methods; home assignments collaboratively set and followed up each session</td>
</tr>
<tr>
<td>Supported employment and education (SEE)</td>
<td>SEE specialist</td>
<td>Obtain and keep competitive employment; enroll in mainstream education programs and obtain desired degrees</td>
<td>Offered to all clients; specific work and school goals developed based on client’s preferences; prevocational training not required; rapid job or school search following identification of client’s goals; most services provided in the community not the clinic; practical assistance in finding jobs or enrolling in school programs, including interacting with employers or school personnel; respect for client’s decision about disclosure of psychiatric disorder to employers or school personnel; follow-along supports after client gets a job or enrolls in school in order to facilitate job retention, school degree completion, or transition to another job or school</td>
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</table>

issues. These data then guide prescribers in their sessions with clients. COMPASS also provides guidance about evidence-based first-episode medication strategies (for example, use of low medication doses) that inform client-prescriber decision making about medication treatment. Complete descriptions of NAVIGATE medication strategies and the COMPASS system are the focus of separate publications.

Family Education Program

FEP focuses on relatives or significant others who have regular face-to-face contact with the client. The role of family members in providing social support and their potential importance as allies in treatment are explored with clients early in NAVIGATE, and with the client’s permission, families are contacted and engaged as soon as possible. Sessions are provided to individual families, including the
client and involved relatives or significant others, although if the client prefers, sessions can also be provided without him or her. Sessions can occur at the clinic, home, or some combination.

FEP includes four stages: engagement, orientation, and assessment; stabilization and facilitating recovery; consolidating gains; and promoting prolonged recovery (1). The engagement, orientation, and assessment stage aims at developing a working relationship between the family clinician and family, which usually takes place within the first two months of the client’s enrollment in NAVIGATE. This stage involves meetings with the client and relatives to explain the FEP and individual meetings with each person (client and relatives) to identify his or her strengths, concerns, and understanding of psychosis.

The stabilization and facilitating recovery stage provides families with information about psychosis and its treatment in a hopeful, upbeat manner that emphasizes family resiliency and strengths while also giving practical guidance for reducing stress, preventing relapses, and working with the NAVIGATE team. Accessible handouts are used to facilitate the teaching (for example, on psychosis, medications, and relapse prevention). Usually, ten to 12 sessions are conducted in this stage, with a structured but individually tailored teaching approach that emphasizes respect for each family member’s perspective, minimizing stress in sessions, and interactive teaching.

The consolidating gains stage seeks to maintain gains made by family members in their understanding and support of the client and to address any specific problems. If there are no specific problems, regular contact is maintained between family members and the NAVIGATE team through monthly check-ins. The clinician addresses specific problems via family consultation—a brief (one or two sessions) structured approach to problem solving. If the family continues to experience high levels of stress at this stage, family members can be offered modified intensive skills training, a skills-training approach to improving communication and problem solving based on behavioral family therapy (54). The prolonged recovery stage prepares the family for the client’s transition to less intensive services when recovery has been substantive and does not require the client’s continued involvement in NAVIGATE.

**Individual Resiliency Training**

The IRT program was modeled after two earlier programs aimed at improving illness self-management and psychosocial functioning—in this case, illness management and recovery (55,56) and graduated recovery from initial psychosis (57), which specifically targeted clients with a first episode of psychosis. IRT is provided by a clinician, usually weekly or biweekly at the beginning of NAVIGATE. Sessions are conducted either at the clinic or in the community and last approximately an hour. The focus is on helping clients achieve personal goals through developing personal resiliency and on learning information and skills about how to manage their illness and improve functioning.

There is a rich curriculum for IRT, with information and skills pertaining to specific topic areas (or modules), each including an educational handout for the client and teaching guidelines for the clinician. Modules are taught by using an individualized, structured format with a cognitive-behavioral therapy approach, combined with psychoeducation and motivational enhancement. The modules are divided into standard and individualized, based on the premise that most clients will benefit from the standard modules; individualized modules are selected on the basis of the specific needs and goals of each client.

Table 3 summarizes the IRT modules. The standard modules begin with an orientation and initial assessment and goal setting. The assessment includes identifying the client’s strengths, which is the critical component on which subsequent resiliency training is based. This is followed by providing information about psychosis, developing a relapse prevention plan, helping the client process traumatic experiences related to developing a psychosis, neutralizing stigmatizing beliefs about mental illness, and building resiliency. Progress made toward the person’s goals is then reevaluated at the end of the standard modules, and plans are made regarding provision of additional IRT modules.

The individualized modules cover a range of topics (for example, coping with distress and symptoms, substance abuse, improving social relationships, smoking cessation, and weight management), which can be introduced at any time during the client’s participation in NAVIGATE, including before the standard modules have been completed. For example, if suicidal ideation is prominent early in NAVIGATE treatment, the module that addresses dealing with negative feelings, which focuses on teaching cognitive restructuring to help individuals identify, modify, and change inaccurate and unhelpful thinking related to suicidal thoughts, can be taught. If the client abuses alcohol or drugs, at any time the IRT clinician can use the substance use module to educate the client about the effects of substances on symptoms and relapses; enhance motivation to cut down or stop using in order to achieve goals; and teach strategies to prevent relapses of substance use, such as refusing offers to use substances and developing alternative ways of meeting needs that are related to the client’s reasons for using substances (for example, socialization or coping with symptoms).

IRT has unique features that distinguish it from other cognitive-behavioral interventions. First, it emphasizes helping a client to process psychotic experiences (that is, how these experiences have affected the client’s life). It is expected that some degree of trauma will be present after an initial psychotic episode (58), so the clinician addresses this issue during the standard modules (and throughout IRT, if necessary). Because this is a sensitive area for many clients, personal accounts of other individuals with a first episode of psychosis are introduced and discussed. Clients are encouraged to “tell their story” and to create a narrative that helps them process all aspects of their psychotic episode (that is, precursors, triggers, and effects of the episode). Next, IRT...
helps clients challenge self-stigmatizing beliefs via cognitive restructuring, which can provide relief and lead to a shared formulation within which the clinician and client can work for the duration of IRT.

Second, processing psychotic experiences leads to identifying positive coping strategies, which ultimately can strengthen the client’s resiliency. A unique aspect of IRT is the incorporation of exercises from positive psychology into the curriculum (introduced in the developing resiliency module). Positive psychology interventions are aimed at improving psychological well-being and building positive feelings, behaviors, and cognitions (59). Individuals are taught strategies to refocus their attention and memory on positives aspects of life (60), as well as on specific adaptive and positive behaviors (61). For example, clients may be asked to use strengths that they identified early in IRT in a new situation and record how they did so. Another example is for the client to record at the end of the day at least one positive thing that happened. The rationale for these exercises is based on the “broaden and build” model (62), which posits that experiencing more positive emotions will strengthen and expand clients’ behavioral repertoires and resources, leading to improved life satisfaction and functioning. Preliminary research from people who have been coping with schizophrenia for years lends support to the promise of this approach (63,64). The hope is that these techniques can have particular impact early in the course of illness.

**Supported Employment and Education**

For many clients recovering from a first episode, help with returning to work or school is a particularly relevant and attractive service (34,65). In NAVIGATE, the assumption is that all clients have these goals and that SEE can facilitate their achievement. At the beginning of NAVIGATE, clients meet with the SEE specialist to discuss how the specialist can help them to achieve work or educational goals. SEE is available to clients who want to work or attend school, or both, regardless of their symptoms, with most services provided in the community (for example, the client’s home or coffee shops or while visiting educational programs or potential employers). For clients who are not initially interested in work or school, other team members actively seek opportunities to instill hope and motivation to work or attend school, at which point the client begins meeting with the SEE specialist again.

SEE is based on the principles of the individual placement and support model of supported employment (66,67), adapted to address education goals. Although previous research has shown that supported employment approaches improve work outcomes among persons with a first episode of psychosis
(68,69), significant gains in educational level have not been demonstrated (15), suggesting the need for specialized guidelines to target education. We were unable to locate supported employment manuals for this population that included such guidelines, so we incorporated guidance and resources for addressing both educational and employment goals in the SEE manual, as well as for addressing the training of SEE specialists. Promising results of similar specialized guidelines and training for improving education outcomes among clients with a first episode of psychosis have recently been reported (70).

SEE services are organized into three broad stages: developing a career and educational profile, search for jobs or educational programs, and follow-along supports. The stage of developing a career and educational profile focuses on gathering information to understand the individual; his or her employment or school history; and his or her preferences for school, types of work, and career. The stage of job search or educational enrollment usually begins within two months of entry into the NAVIGATE program and focuses on either competitive work or education (for example, GED classes, high school, and college). The final stage of SEE involves providing follow-along supports aimed at helping clients succeed at their job or school, preventing crises from arising, and achieving their career goals. Follow-along supports may also help the client transition to another job or school program. As in the previous stage, the SEE specialist is action oriented, working in close collaboration with the NAVIGATE team to provide supports to help the client achieve his or her goals, such as accessing student disability services or on-the-job training, teaching study skills, and meeting with teachers or employers (with the client’s permission).

CONCLUSIONS

The last 25 years have seen substantial innovation in the development of comprehensive coordinated specialty care programs for people with a first episode of psychosis in order to improve the long-term trajectory of schizophrenia. Much of this research has been conducted in Europe, Canada, and Australia, where unified health care systems predominate. Based on the lessons learned and principles identified from established programs, the NAVIGATE program was specifically designed to help people with first-episode psychosis in the more fragmented U.S. health care system. In this model, small teams of providers facilitate recovery by building skills for individual resiliency, reinforcing natural supports, providing practical help in achieving work and educational goals, and providing tailored pharmacological treatment specifically designed for people with a first episode of psychosis. If research on NAVIGATE demonstrates beneficial effects over usual care, it will offer a beacon of hope for people recovering from a first episode of psychosis and their loved ones. Because this model was developed for implementation in the U.S. mental health system, widespread dissemination is feasible.

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Funding for this study was supported by contract HHSN-271-2009-00001C from the National Institute of Mental Health (NIMH). Additional NIMH funding was provided by contract HHSN271200900019C and award P30MH090590 from the Advanced Center for Intervention and Services Research. This project also received funding from the American Recovery and Reinvestment Act. The authors express their appreciation to the following people for contributions to this project: Sue T. Azrin, Ph.D., Christoph U. Correll, M.D., Lisa Dixon, M.D., Susan Essock, Ph.D., Sue Estroff, Ph.D., Amy B. Goldstein, Ph.D., Christina Gomez, B.A., C.C.R.P., Robert K. Heinsen, Ph.D., Colin Iwanski, B.S., Paul Julian, Eoin Killackey, Ph.D., David G. Kingdon, M.D., Kelsey Ludwig, B.S., Patricia Marcy, B.S.N., Priya Matneja, B.S., William R. McFarlane, M.D., Charles Olbert, B.S., Sandra Reese, M.A., James A. Robinson, M.Ed., Richard M. Ryan, Ph.D., Joanne Severe, M.S., and Karen Sullivan, B.A.

Dr. Brunette has received research grants from Alkermes and Bristol-Myers Squibb Foundation. Dr. Robinson has served as a consultant to or received grants from Asubio, Bristol-Meyers Squibb, Janssen Pharmaceuticals, Otsuka, and Shire. Dr. Schooler has received research grants from, served on the advisory boards for, or served as a consultant to Alkermes, Forum (formerly EnVivo), Genentech, Neurocrine, Otsuka, Roche, and Sunovion. Dr. Kane has served as a consultant or advisor to or has received honoraria from Alkermes, Amgen, Bristol-Myers Squibb, Eli Lilly, Esai, Forest Laboratories, Genentech, Gerson Lehrman Group, IntraCellular Therapies, Janssen Pharmaceuticals, Jazz, Johnson & Johnson, Lundbeck, MedAvante, Merck, Novartis, Otsuka, Pfizer, Pierre Fabre, Proteus, Reviva, Roche, Sunovion, Takeda, Targacept, and Vanda. He is a shareholder of MedAvante. The other authors report no financial relationships with commercial interests.

Received September 16, 2014; revision received December 3, 2014; accepted January 26, 2015; published online March 16, 2015.

REFERENCES


3. Linszen D, Dingemans P, Lenior M: Early intervention and a five year follow up in young adults with a short duration of untreated
8. Program Directory of Early Psychosis Intervention Programs. Portland, Oreg, Early Assessment and Support Alliance, 2014