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

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### Abstract

Comprehensive coordinated specialty care programs for first episode psychosis have been widely implemented in other countries, but not in the U.S. The National Institute of Mental Health's (NIMH) Recovery After Initial Schizophrenia Episode (RAISE) initiative focused on the development and evaluation of first episode treatment programs designed for the U.S. healthcare system. This paper describes the background, rationale, and nature of the intervention developed by the Early Treatment Program project, the NAVIGATE program, with a particular focus on its psychosocial components. NAVIGATE is a team-based, multi-component 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) towards psychological and functional health. The core services provided in the NAVIGATE program include the Family Education Program, Individual Resiliency Training, Supported Employment and Education, and Individualized Medication Treatment. NAVIGATE embraces a shared decision-making approach with a focus on strengths and resiliency, and 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. healthcare system by providing a comprehensive intervention specially designed to meet the unique treatment needs of persons recovering from a first episode of psychosis. The program is currently being evaluated in cluster randomized controlled trial comparing NAVIGATE to usual community care.

> Over the past two decades, numerous specialized treatment programs have been developed and implemented for first episode psychosis throughout the world (1-6). Although some programs have been implemented in the U.S. (7, 8), most of this work has occurred in countries with single payer medical systems (e.g., Australia, Europe, 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 feasibility and effectiveness of a comprehensive first episode program that could be implemented in the context of the U.S. healthcare system, the National Institute of Mental Health (NIMH) issued a request for proposals for a research program, <u>Recovery After an Initial</u> <u>Schizophrenia Episode</u> (RAISE), aimed at developing and testing interventions designed to improve the long-term trajectory and prognosis of schizophrenia through early intervention. A critical requirement by NIMH of these interventions was that they could be implemented in "real world" community treatment settings and reimbursed through payment mechanisms available in the existing U.S. healthcare system.

The NAVIGATE program for first episode psychosis was developed as part of the RAISE Early Treatment Program (ETP), one project funded under the RAISE initiative. The program was named "NAVIGATE" in order to convey its goal of helping and guiding individuals with a first episode of psychosis towards psychological and functional health, and providing or accessing the services they need in the mental health system. A large, cluster randomized controlled trial involving 34 sites across 21 states was designed to compare the NAVIGATE program to customary community services, with participants followed up for a minimum of two years, as described in a separate paper (9).

This article describes the development of the NAVIGATE program, the target population and settings, the composition and roles of the NAVIGATE treatment team, and the nature of the specific services provided, with a primary emphasis on the psychosocial components.

# Treatment Programs for First Episode Psychosis

While there is a need to develop first episode psychosis programs that fit into the U.S. healthcare context (i.e., a multi- payer system), much can be learned from the clinical experience and research on programs created abroad. Comprehensive first episode programs, or coordinated specialty care programs, vary in the specific services they provide, but many share a core set of common elements (10, 11). Typically a multidisciplinary treatment team with a relatively low caseload serves a small number of people and has the ability to provide assertive outreach, including case management and other services, in the community. Most comprehensive programs provide individualized treatment planning and low dose, evidence-based pharmacotherapy that strives to minimize side effects and nonadherence. Recovery strategies based on cognitive-behavioral techniques are often delivered in either an individual or group format. Most persons who develop a first episode psychosis are living with or in regular contact with family members, so family intervention is also a standard. 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/school functioning, and independent living. In general, research supports the effectiveness of coordinated specialty care programs for first episode psychosis compared to usual services on outcomes such as reducing relapses and hospitalizations and improving psychosocial functioning (12-14), although their impact on substance abuse and educational outcomes has not yet been clearly demonstrated (15, 16).

# 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 (17-19). 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 healthcare system, through close collaboration with a small and committed treatment team, towards 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, aged 15 to 35 years, when schizophrenia-spectrum disorders are most likely to develop, including diagnoses of schizophreniform disorder, schizoaffective disorder, schizophrenia, brief psychotic disorder, and psychotic disorder NOS. 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, and have received no or limited antipsychotic medication, or who have recently received treatment for a first episode, and are therefore early in their treatment of psychosis.

The NAVIGATE program was designed to be implemented in typical non-academic U.S. mental health care settings serving the broad population of persons with a serious mental illness (e.g., community mental health centers). While a core set of services are provided in NAVIGATE, it does not preclude access to other services that may be available at the same or at other agencies (e.g., peer support, 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 client in NAVIGATE 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 is typically comprised of 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 number of staff members in each role (11).

The medication prescriber (e.g., 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 masters) provide the *individual resiliency training 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 towards 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 specialist (usually bachelor's level) helps clients identify or develop, and pursue personally meaningful goals related to education and competitive employment. The *director* (masters level) is the primary liaison for referrals to the NAVIGATE program, coordinates and leads the team, and supervises the individual resiliency training clinicians and supported employment and education specialist. The director usually also provides the *family education program*, 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 later in this article.

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, where depending on population characteristic of the catchment area, one can envision a number of team configurations, ranging from dedicated teams that serve approximately 30 patients annually to "virtual" 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 coordinating responses among team members. If important NAVIGATE services such as case management are provided by persons other than the team members listed above, they 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 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 post-psychosis, with a reduction in service intensity after the first two years (21). Thus, the NAVIGATE program was not designed to last a specific duration. Instead, the

length of treatment and transition to customary services is determined by a combination of client preferences, needs, and circumstances (e.g., progress towards goals, symptom stabilization, return to college), as well as local funding resources. Most clients are expected to remain in the program for at least one or two years.

#### **NAVIGATE Manuals**

NAVIGATE is standardized in six manuals (available at 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 to each of the interventions: individualized medication treatment (24), the family education program (FEP) (25), individual resiliency training (IRT) (26), and supported employment and education (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 client's developmental stage of life, inexperience in dealing with the mental-health system, denial of illness, and facilitating empowerment and self-determination to counter the psychological trauma, sense of loss of control, and demoralization associated with developing a psychotic illness.

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 quality social connections (32, 33). Thus, the goal of the NAVIGATE program is *recovery*, defined by each individual in their own terms, including: the quality of role functioning (e.g., school, work), social/leisure functioning, and well-being (e.g., self-esteem, sense of purpose), all of which are important life goals of people with a recent first episode of psychosis (34). Furthermore, in order to counter pessimistic messages from the public, some treatment providers, and the experience of personal disempowerment, NAVIGATE embraces *recovery-oriented services*, including *person orientation* (i.e., interest in the individual as a whole person, including their 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 (e.g., knowledge of psychosis, relapse prevention planning) (40-42). In NAVIGATE, *biological vulnerability* is reduced through medication, and motivational interviewing and cognitive behavioral approaches to facilitate medication adherence and FEP by educating relatives about psychosis, 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 later in this article.

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, 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 (e.g., school personnel, family) to help individuals pursue work or educational goals. In contrast to the focus of 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 a common set of skills across all team members (see 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 together, with each person contributing their special knowledge and experience, and then 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* (e.g., creativity, sensitivity

to others, determination), *knowledge or skills* (e.g., playing a musical instrument, knowing computer software programs), and *resources* (e.g., social support, 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 in people with a first episode of psychosis (49).

#### **Motivational Enhancement Skills**

Difficulty sustaining motivation to follow through on plans and goals are common negative symptoms of schizophrenia that are often present at the first episode of psychosis, and contribute 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 how to better manage one's psychosis can help the 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 who can play a vital role in maximizing the effectiveness of the NAVIGATE interventions (52). Establishing collaborative and respectful relationships between these individuals and the NAVIGATE team is critical in order for the client to reap the full benefits of these supports. All team members, not just family clinician (usually the director), need skills for working with families and other natural supports, such as outreach and engagement, eliciting their concerns and opinions, and facilitating involvement and support in treatment planning and reviews.

# Treatment Interventions Provided in the NAVIGATE Program

Clients are free to chose which of the NAVIGATE interventions they wish to receive (Individualized Medication Treatment, FEP, IRT, and 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 continue 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 upon individual preferences. A panel of experts reviewed the first episode treatment literature and classified antipsychotic medications into groups for use at different treatment stages based primarily upon 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 website. COMPASS facilitates client-prescriber communication through direct client input of information about symptoms, side effects, treatment preferences and other issues into the system. These data then guide prescribers in their sessions with clients. COMPASS also provides guidance about evidence-based first episode medication strategies (e.g., use of low medication doses) that inform clientprescriber 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)

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, is 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 thereof.

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 to identify their 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 fact sheets are used to facilitate the teaching (e.g., on psychosis, medications, relapse prevention). Usually 10-12 sessions are conducted in this stage, using a structured but individually tailored teaching approach that emphasizes respect for each person's perspective, minimizing stress in sessions, and interactive teaching.

The *consolidating gains stage* seeks to maintain gains made by the family 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 (1-2 sessions), structured approach to problem solving. If the family continues to experience high levels of stress at this stage, they can be offered *modified intensive skills training*, (MIST) 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 (IRT)

The IRT program was modeled after two earlier programs aimed at improving illness selfmanagement and psychosocial functioning, *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 at either the clinic or in the community, and last approximately an hour. The focus is on helping clients achieve personal goals through developing their own personal resiliency, and 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 using an individualized, structured format using 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, with the individualized modules selected based on 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, processing traumatic experiences related to psychosis, neutralizing stigmatizing beliefs, and building resiliency. Progress made towards the person's goals is then re-evaluated at the end, and plans are made regarding provision of additional IRT modules.

The individualized modules cover a range of topics (e.g., coping with distress and symptoms, substance abuse, improving social relationships, smoking cessation, managing weight), 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 *dealing with negative feelings* module, 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, to refuse offers to use substances, and to develop alternative ways of getting needs related to their reasons for using (e.g., socialization, coping with symptoms).

IRT has unique features that distinguish it from other cognitive-behavioral interventions. First, it emphasizes helping the client to process their psychotic experiences (i.e., how they have affected her or his life). It is expected that some degree of trauma will be present following an initial psychotic episode (58), so the clinician addresses this issue during the standard modules (and throughout IRT, if necessary). As 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 (i.e., 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 for the clinician and client to work within for the duration of IRT.

Second, processing the illness 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/positive behaviors (61). For example, clients may be asked to use their strengths identified early in IRT in a new situation and record how they did it. Another example is for the client to record at least one positive thing that happened at the end of the day. The rationale for these exercises is that experiencing more positive affect will strengthen and expand clients' resources, consistent with the "broaden and build" model (62). 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 (SEE)

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 they can help them to achieve work or educational goals. SEE is available to clients who want to work, attend school, or both, regardless of their symptoms, with most services provided in the community (e.g., client's home, coffee shops, 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 they begin 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. While previous research has shown that supported employment approaches improve work outcomes in 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 the training of SEE specialists. Promising results of similar specialized guidelines and training for improving education outcomes in 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 *developing of a career and educational profile* stage focuses on gathering information to understand the individual, their employment or school history, and preferences for school, types of work, and career. The *job search or educational enrollment* stage usually begins within two months of the person joining NAVIGATE, and focuses on either competitive work or education (e.g., GED classes, high school, 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. Similar to the previous stage, the SEE specialist is action-oriented, working in close collaboration with the NAVIGATE team to provide a supports to help the client achieve his or her goals, such as accessing student disability services, on-the-job training, teaching study skills, and meeting with teachers or employers (with client 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 healthcare systems predominate. Based on the lessons learned and principles identified, 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. Since this model was developed for implementation in the U.S. mental health system, widespread dissemination will be feasible.

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### References

- 1. Addington J, Collins A, McCleery A, et al. The role of family work in early psychosis. Schizophrenia Research. 2005; 79:77–83. [PubMed: 16198240]
- Cullberg J, Levander S, Holmqvist R, et al. One-year outcome in first episode psychosis patients in the Swedish Parachute project. Acta Psychiatrica Scandinavica. 2002; 106:276–85. [PubMed: 12225494]
- 3. Linszen D, Dingemans P, Lenoir M. Early intervention and a five year follow up in young adults with a short duration of untreated psychosis: ethical implications. Schizophrenia Research. 2001; 51:55–61. [PubMed: 11479066]
- McGorry, PD.; Jackson, HJ., editors. Recognition and Management of Early Psychosis: A Preventive Approach. New York: Cambridge University Press; 1999.
- Petersen L, Jeppesen P, Thorup A, et al. A randomized, multi-center trial of integrated versus standard treatment for patients with a first episode of psychotic illness. British Medical Journal. 2005; 331:602–9. [PubMed: 16141449]
- Sigrúnarson V, Gråwe RW, Morken G. Integrated treatment vs. treatment-as-usual for recent onset schizophrenia: 12 year follow-up on a randomized controlled trial. BMC Psychiatry. 2013; 13:200. [PubMed: 23898805]
- Uzenoff SR, Penn DL, Graham KA, et al. Evaluation of a multi-element treatment center for early psychosis in the United States. Social Psychiatry and Psychiatric Epidemiology. 2012; 47:1607–15. [PubMed: 22278376]
- 8. Early Assessment and Support Alliance:Program Directory of Early Psychosis Intervention Programs. Portland, OR: 2014.
- 9. [Reference omitted to conceal author identity.]
- Addington D, McKenzie E, Norman R, et al. Essential evidence-based components of first episode psychosis services. Psychiatric Services. 2013; 64:452–7. [PubMed: 23370444]
- 11. Heinssen, RK.; Goldstein, AB.; Azrin, ST. Evidence-Based Treatments for First Episode Psychosis: Components of Coordinated Specialty Care. National Institute of Mental Health; 2014.
- Alvarez-Jimenez M, Parker AG, Hetrick SE, et al. Preventing the second episode: A systematic review and meta-analysis of psychosocial and pharmacological trials in first episode psychosis. Schizophrenia Bulletin. 2011; 37:619–30. [PubMed: 19900962]
- Penn DL, Waldheter EJ, Mueser KT, et al. Psychosocial treatment for first episode psychosis: A research update. American Journal of Psychiatry. 2005; 162:2220–32. [PubMed: 16330584]
- 14. Yung AR. Early intervention in psychosis: Evidence, evidence gaps, criticism, and confusion. Australian & New Zealand Journal of Psychiatry. 2012; 46:7–9. [PubMed: 22247086]
- Bond GR, Drake RE, Luciano AE. Employment and educational outcomes in early intervention programmes for early psychosis: A systematic review. Epidemiology and Psychiatric Sciences. Jul.2014 1-12

- Wisdom JP, Manuel JI, Drake RE. Substance use disorder among people with first-episode psychosis: A systematic review of course and treatment. Psychiatric Services. 2011; 62:1007–12. [PubMed: 21885577]
- 17. Addington J, Van Mastrigt S, Hutchinson J, et al. Pathways to care: Help seeking behaviour in first episode psychosis. Acta Psychiatrica Scandinavica. 2002; 106:358–64. [PubMed: 12366470]
- 18. Judge A, Perkins DO, Nieri J, et al. Pathways to care in first episode psychosis: A pilot study on help-seeking precipitants and barriers to care. Journal of Mental Health. 2005; 14:465–9.
- Singh SP, Grange T. Measuring pathways to care in first-episode psychosis: A systematic review. Schizophrenia Research. 2006; 81:75–82. [PubMed: 16309892]
- Bertelsen M, Jeppesen P, Petersen L, et al. Five-year follow-up of a randomized multicenter trial of intensive early intervention vs standard treatment for patients with a first episode of psychotic illness: the OPUS trial. Archives of General Psychiatry. 2008; 65:762–71. [PubMed: 18606949]
- Norman R, Merchana R, Malla A, et al. Symptom and functional recovery outcomes for a 5 year early intervention program for psychosis. Schizophrenia Research. 2011; 129:111–5. [PubMed: 21549566]
- 22. [Reference omitted to conceal author identity.]
- 23. [Reference omitted to conceal author identity.]
- 24. [Reference omitted to conceal author identity.]
- 25. [Reference omitted to conceal author identity.]
- 26. [Reference omitted to conceal author identity.]
- 27. [Reference omitted to conceal author identity.]
- 28. Anthony WA. Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. Psychosocial Rehabilitation Journal. 1993; 16:11–23.
- 29. Bellack AS. Scientific and consumer models of recovery in schizophrenia: Concordance, contrasts, and implications. Schizophrenia Bulletin. 2006; 32:432–42. [PubMed: 16461575]
- Davidson L, Roe D. Recovery from versus recovery in serious mental illness: One strategy for lessening confusion plaguing recovery. Journal of Mental Health. 2005; 16:1–12.
- 31. Deegan PE. Recovery: The lived experience of rehabilitation. Psychosocial Rehabilitation Journal. 1988; 11:11–9.
- 32. Linley PA, Joseph S, Harrington S, et al. Positive psychology: Past, present, and (possible) future. The Journal of Positive Psychology. 2006; 1:3–16.
- 33. Ryff CD, Singer B. The contours of positive human health. Psychological Inquiry. 1998; 9:1–28.
- 34. Ramsay CE, Broussard B, Goulding SM, et al. Life and treatment goals of individuals hospitalized for first-episode nonaffective psychosis. Psychiatry Research. 2011; 189:344–8. [PubMed: 21708410]
- 35. Farkas MD. The vision of recovery today: What it is and what it means for services. World Psychiatry. 2007; 6:4–10.
- Addington J, Addington D. Neurocognitive and social functioning in schizophrenia: A 2.5 year follow-up study. Schizophrenia Research. 2000; 7:47–56. [PubMed: 10867311]
- Häfner H, Löffler W, Maurer K, et al. Depression, negative symptoms, social stagnation and social decline in the early course of schizophrenia. Acta Psychiatrica Scandinavica. 1999; 100:105–18. [PubMed: 10480196]
- Addington J, Saeedi H, Addington D. The course of cognitive functioning in first episode psychosis: Changes over time and impact on outcome. Schizophrenia Research. 2005; 78:35–43. [PubMed: 15978781]
- Malla A, Payne J. First-episode psychosis: psychopathology, quality of life, and functional outcome. Schizophrenia Bulletin. 2005; 31:650–71. [PubMed: 16006593]
- 40. Mueser KT, Gingerich S. Relapse prevention and recovery in patients with psychosis: The role of psychiatric rehabilitation. Psychiatric Times. 2011; 28:66–71.
- 41. Nuechterlein KH, Dawson ME. A heuristic vulnerability/stress model of schizophrenic episodes. Schizophrenia Bulletin. 1984; 10:300–12. [PubMed: 6729414]
- Zubin J, Spring B. Vulnerability: A new view of schizophrenia. Journal of Abnormal Psychology. 1977; 86:103–26. [PubMed: 858828]

- Anthony, W.; Cohen, M.; Farkas, M., et al. Psychiatric Rehabilitation. Boston: Boston University Center for Psychiatric Rehabilitation; 2002.
- 44. Corrigan, PW.; Mueser, KT.; Bond, GR., et al. The Principles and Practice of Psychiatric Rehabilitation: An Empirical Approach. New York: Guilford Press; 2008.
- 45. Towle A, Godolphin W. Framework for teaching and learning informed shared decision making. British Medical Journal. 1999; 319:766–71. [PubMed: 10488010]
- 46. Corrigan, PW., editor. On the Stigma of Mental Illness: Practical Strategies for Research and Social Change. Washington, DC: American Psychological Association; 2005.
- 47. Rapp, CA.; Goscha, RJ. The Strengths Model: Case Management with People with Psychiatric Disabilities. New York: Oxford University Press; 2006.
- Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. American Psychologist. 2000; 55:68–78. [PubMed: 11392867]
- Uzenoff SR, Perkins DO, Hamer RM, et al. A preliminary trial of adherence-coping-education (ACE) therapy for early psychosis. Journal of Nervous and Mental Disease. 2008; 196:572–5. [PubMed: 18626299]
- Miller, WR.; Rollnick, S., editors. Motivational Interviewing: Preparing People for Change. New York: Guilford Press; 2012.
- 51. Mueser, KT.; Noordsy, DL.; Drake, RE., et al. Integrated Treatment for Dual Disorders: A Guide to Effective Practice. New York: Guilford Press; 2003.
- 52. Lefley, HP. Family Caregiving in Mental Illness. Thousand Oaks, CA: Sage; 1996.
- 53. Robinson DG, Schooler NR, John M, et al. Medication prescription practices for the treatment of first episode schizophrenia-spectrum disorders: Data from the National RAISE-ETP Study. American Journal of Psychiatry. in press.
- 54. Mueser, KT.; Glynn, SM. Behavioral Family Therapy for Psychiatric Disorders. Oakland, CA: New Harbinger; 1999.
- 55. Gingerich, S.; Mueser, KT. Illness Management and Recovery: Personalized Skills and Strategies for Those with Mental Illness. Center City, MN: Hazelden; 2011.
- McGuire AB, Kukla M, Green AK, et al. Illness management and recovery: A review of the literature. Psychiatric Services. 2014; 65:171–9. [PubMed: 24178191]
- Penn DL, Uzenoff SR, Perkins D, et al. A pilot investigation of the Graduated Recovery Intervention Program (GRIP) for first episode psychosis. Schizophrenia Research. 2011; 125:247– 56. [PubMed: 20817484]
- Mueser KT, Lu W, Rosenberg SD, et al. The trauma of psychosis: Posttraumatic stress disorder and recent onset psychosis. Schizophrenia Research. 2010; 116:217–27. [PubMed: 19939633]
- Sin GL, Abdin E, Lee J, et al. Prevalence of post-traumatic stress disorder in first-episode psychosis. Early Intervention in Psychiatry. 2010; 4:299–304. [PubMed: 20977686]
- Rashid T. Positive interventions in clinical practice. Journal of Clinical Psychology. 2009; 65:461–
   [PubMed: 19294745]
- Seligman ME, Rashid T, Parks AC. Positive psychotherapy. American Psychologist. 2006; 61:774–88. [PubMed: 17115810]
- Fredrickson BL, Cohn MA, Coffey KA, et al. Open hearts build lives: positive emotions, induced through loving-kindness meditation, build consequential personal resources. Journal of Personality and Social Psychology. 2008; 95:1045–62. [PubMed: 18954193]
- Johnson DP, Penn DL, Fredrickson BL, et al. A pilot study of loving-kindness meditation for the negative symptoms of schizophrenia. Schizophrenia Research. 2011; 129:137–40. [PubMed: 21385664]
- 64. Meyer PS, Johnson DP, Parks A, et al. Positive living: A pilot study of group positive psychotherapy for people with schizophrenia. Journal of Positive Psychology. 2012; 7:239–48.
- 65. Iyer SN, Mangala R, Anitha J, et al. An examination of patient-identified goals for treatment in a first-episode programme in Chennai, India. Early Intervention in Psychiatry. 2011; 5:360–5. [PubMed: 21951752]
- 66. Becker, DR.; Drake, RE. A Working Life for People with Severe Mental Illness. New York: Oxford University Press; 2003.

- 67. Drake, RE.; Bond, GR.; Becker, DR. IPS Supported Employment: An Evidence-based Approach. New York: Oxford University Press; 2012.
- Killackey E, Jackson HJ, McGorry PD. Vocational intervention in first-episode psychosis: A randomised controlled trial of individual placement and support versus treatment as usual. British Journal of Psychiatry. 2008; 193:114–20. [PubMed: 18669993]
- Nuechterlein KH, Subotnik KL, Turner LR, et al. Individual placement and support for individuals with recent-onset schizophrenia: Integrating supported education and supported employment. Psychiatric Rehabilitation Journal. 2008; 31:340–9. [PubMed: 18407884]
- 70. Killackey, E.; Allott, K.; Woodhead, G., et al. Adapting Individual Placement and Support to education for young people with severe mental illness; in 9th International Conference on Early Psychosis; Tokyo, Japan. 2014.

#### Table 1

### Core Skills of NAVIGATE Team Members

| Skill Area/Goals  | Key Elements   |  |  |
|---|--|--|--|
| <ul> <li>Shared Decision Making Skills <ul> <li>Facilitate active engagement in treatment</li> <li>Establish and maintain good working alliance between client and team members</li> <li>Support self-determination and personal autonomy</li> </ul> </li> <li>Strengths and Resiliency Focus <ul> <li>Improve positive feelings and self-esteem</li> </ul> </li> </ul> | <ul> <li>Information provided about treatment options and likely consequences</li> <li>Client preferences elicited and respected</li> <li>Treatment decisions negotiated and made jointly</li> <li>Family members involved (with client permission)</li> <li>Identify personal qualities, knowledge, skills, and resources</li> <li>Draw attention to strengths, and consider how to capitalize on</li> </ul>  |  |  |
| <ul> <li>Instill hope for the future</li> <li>Promote use of all available resources for achieving goals</li> <li>Help person move forward in life after disruption of psychotic episode and any persistent difficulties</li> </ul>   | <ul> <li>Explore how person coped with and bounced back from previou challenges</li> <li>Build upon and enhance skills for dealing with stress and rebounding from setbacks</li> </ul>   |  |  |
| <ul> <li>Motivational Enhancement</li> <li>Increase effort to work on personal goals</li> <li>Enhance desire to improve illness management</li> <li>Resolve ambivalence about behavior change</li> <li>Help find a sense of purpose in one's life</li> </ul>  | <ul> <li>Empathic listening</li> <li>Elicit goals and support self-efficacy for achieving them</li> <li>Explore how improved illness management could help achieve goals</li> <li>Instill hope for achieving goals</li> </ul>  |  |  |
| <ul> <li>Psychoeducational Skills</li> <li>Provide important information to enable shared decision-making</li> <li>Ensure relevant information is understood and retained</li> <li>Facilitate ability to access/use information when needed</li> <li>Help individual learn practical facts about illness and its treatment</li> </ul>                                   | <ul> <li>Provide information in different formats (e.g., handouts, discussion, whiteboard)</li> <li>Break up information into small "chunks"</li> <li>Interactive teaching and discussion format, with frequent breaks to ask and answer questions, check understanding, and explore person's experience</li> <li>Adapt language, special terms (e.g., diagnosis), and amount of detail to the individual</li> <li>Seek common ground when there are disagreements about topic such as symptoms and diagnosis</li> </ul>   |  |  |
| <ul> <li>Family Collaboration Skills</li> <li>Enlist family support for client goals and participating in treatment</li> <li>Improve monitoring of client's disorder</li> <li>Reduce stress in the family</li> </ul>  | <ul> <li>Broad definition of "family" based on client's wishes</li> <li>Outreach to engage family members</li> <li>Provide information to family about illness and treatment</li> <li>Elicit and respond to family members' questions and concerns</li> <li>Avoiding judgment and expressing empathy about challenging experiences</li> <li>Ensure that treatment team members are accessible to family</li> <li>Responsive to family requests for help</li> <li>Information provided parallels much of the standard IRT work</li> <li>Resiliency focus</li> </ul> |  |  |

| Individualized Medication Management<br>Individualized Medication Management<br>Family Education Program | Prescriber<br>Director (typically) | Goals       Reduce symptoms         • Minimize side effects and adverse medical health outcomes       Minimize side effects and adverse medical health adverse medical health outcomes         • Minimize side effects and adverse medical health adverse medical health outcomes       Establish collaborative from provide for recovery from psychosis         • Teach family about psychosis and its treatment       Surenthen communication | ided<br>ided<br>inuo<br>inuo<br>inuo<br>inuo<br>inuo<br>inuo<br>cian<br>o<br>kno<br>o<br>kno<br>o<br>kno<br>o<br>kno<br>o<br>kno<br>o<br>kno<br>o<br>kno<br>o<br>kno<br>o<br>inuo<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i   |
|--|------------------------------------|---|--|
|  |                                    | <ul> <li>Reduce family stress</li> <li>Improve family support for client's goals &amp; participation in treatment</li> <li>Prevent relapses</li> </ul>  | <ul> <li>Development of relapse prevention plan</li> <li>Emphasis on family resiliency and strengths</li> <li>Monthly Check-in's</li> <li>Brief monthly in-person or phone contact to review progress and identify family concerns or clinical issues</li> <li>Bring Consultation (1-2 sessions/problem) as needed</li> <li>Family Consultation (1-2 sessions/problem) as needed</li> <li>Addresses specific problem identified by family clinician</li> <li>Pocused problem-solving approach used by family clinician</li> <li>Specific solutions identified, action plan formulated, follow up conducted</li> <li>Modified Intensive Skills Training (8-12 sessions) if needed after basic family ducation completed</li> <li>Targets persistently high levels of family stress</li> </ul> |

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| Intervention                         | Provider       | Goals |   | Description | 00  |
|--------------------------------------|----------------|-------|---|-------------|---|
|                                      |                |       |   |             | <ul> <li>Intensive skills training methods used to teach communication and<br/>problem-solving skills</li> </ul>  |
| Individual Resiliency Training (IRT) | IRT clinician  | •     | Help client achieve personal recovery goals                                     | •           | Psychotherapeutic interventions based on cognitive behavioral therapy and motivational interviewing offered to all clients  |
|                                      |                | •     | Educate about psychosis and its treatment                                       | •           | Individual sessions conducted weekly or biweekly for as long as needed  |
|                                      |                |       |   | •           | Goal-setting and tracking throughout the program  |
|                                      |                | •     | Process expenence of the<br>psychotic episode                                   | •           | Educational and skills curriculum organized into different topic areas (or<br>modules), with handouts and clinician guides for each module                                      |
|                                      |                | •     | Improve illness self-<br>management, including<br>relapse prevention and coping | •           | Standard modules recommended for all clients; Individualized modules provided as needed or when desired   |
|                                      |                | •     | Reduce substance abuse  | •           | Flexibility in which modules to cover, when, and in what depth  |
|                                      |                | •     | Increase social support and<br>quality of relationships                         | •           | Information, strategies, and skills taught using motivational, psychoeducational, and cognitive-behavioral methods  |
|                                      |                | •     | Increase resiliency and well-<br>being  | •           | Home assignments collaboratively set and followed up each session   |
|                                      |                | •     | Improve health  |             |   |
| Supported Education and Employment   | SEE Specialist | .     | Obtain and keep competitive   | .           | Offered to all clients  |
| (SEE)                                |                |       | employment  | •           | Specific work and school goals developed based on client's preferences  |
|                                      |                | •     | Enroll in mainstream<br>education programs and                                  | •           | Prevocational training not required   |
|                                      |                |       | obtain desired degrees  | •           | Rapid job or school search following identification of client's goals   |
|                                      |                |       |   | •           | Most services provided in community, not clinic   |
|                                      |                |       |   | •           | Practical assistance in finding jobs or enrolling in school programs,<br>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<br>facilitate job retention, school degree completion, or transition to another<br>job or school |
|                                      |                |       |   |             |   |

### Table 3

### Modules (Handouts and Clinician Guides) for Individual Resiliency Training (IRT) Program

| Module Name Description                         |  | Number of Sessions |
|---|--|--------------------|
| Orientation                                     | Overview of IRT program providing treatment expectations, description of all modules, and teaching and practice of breathing retraining skill for anxiety reduction                          | 1-2                |
| Assessment/Goal-Setting                         | Evaluation and discussion of clients' character strengths, areas of life<br>satisfaction and dissatisfaction in order to create specific short- and long-term<br>personally meaningful goals | 2-4                |
| Education about Psychosis                       | Didactics and discussion about the stress vulnerability model and various aspects of psychosis, including dispelling myths to de-stigmatize mental illness                                   | 7-11               |
| Relapse Prevention Planning                     | Discussion of triggers and warning signs, and development of personalized plan for preventing relapse and re-hospitalization   | 2-4                |
| Processing the Psychotic Episode                | Development of cohesive narrative of episode, narrative exposure-based processing of traumatic reactions, and targeted cognitive restructuring for self-stigmatizing beliefs                 | 3-5                |
| Developing Resiliency                           | Positive Psychology exercises to enhance resilient qualities, increase positive emotions, and build skills around using particular strengths in daily life                                   | 3-4                |
| Building a Bridge to Your Goals                 | Progress and goal review, discussion of possible use of Individualized<br>Modules with plan for continuation or termination  | 2-3                |
| Individualized Modules                          |  |                    |
| Module Name Description                         |  | Number of Sessions |
| Dealing with Negative Feelings                  | Cognitive restructuring for coping with psychotic, trauma/PTSD, mood, and anxiety symptoms   | 7-12               |
| Coping with Symptoms                            | Behavioral coping strategy enhancement for psychotic symptoms, mood, and anxiety symptoms  | 2 per symptom      |
| Substance Use                                   | Assessment of substance use and interference of substances combined with motivational interviewing approach to develop cognitive and behavioral strategies to reduce substance use           | 11-20              |
| Having Fun and Developing Good<br>Relationships | Social skills training-based, in order to increase pleasurable activities and adaptive interpersonal communications  | 3-27               |
| Making Choices about Smoking                    | Motivational interviewing approach coupled with behavioral and cognitive coping strategies to help with decision-making and next steps around smoking  | 2-4                |
| Nutrition and Exercise                          | Education about weight gain and psychosis, including metabolic syndrome, plus behavioral strategies for improving physical health  | 2-4                |