

**Evidence-Based Treatments for First Episode Psychosis:
Components of Coordinated Specialty Care**

Robert K. Heinsse, Ph.D., ABPP

Director, Division of Services and Intervention Research
National Institute of Mental Health
Room 7164, Mail Stop 9635
6001 Executive Blvd.
Bethesda, MD 20892-9635
rheinsse@mail.nih.gov

Amy B. Goldstein, Ph.D.

Associate Director of Prevention Research, and
Chief, Child and Adolescent Preventive Intervention Program
National Institute of Mental Health
301-496-7227; goldsteinam@mail.nih.gov

Susan T. Azrin, Ph.D.

Chief, Primary Care Research Program
NIMH Division of Services and Intervention Research
301-443-3267; susan.azrin@nih.gov

[April 14, 2014](#)

1. Background

On January 17, 2014, President Barack Obama signed into law H.R. 3547, the “Consolidated Appropriations Act, 2014.” Recognizing that the majority of individuals with serious mental illness, such as schizophrenia, bipolar disorder, and major depression, experience the first signs of illness during adolescence or early adulthood, and that there are often long delays between symptom onset and the receipt of evidence-based interventions, the legislation provides funds to the Substance Abuse and Mental Health Services Administration (SAMHSA) to support the development of early psychosis treatment programs across the United States. A 5% set-aside (approximately \$25M) has been allocated to SAMHSA’s Mental Health Block Grant program to support the work. [Senate Report 113-71](#), which accompanies the legislation, notes that multicomponent first episode psychosis (FEP) treatment programs already implemented in Australia, Canada, and the United Kingdom represent viable treatment models for improving symptoms, reducing relapse episodes, and preventing deterioration and disability among individuals suffering from psychotic illness. In order to ensure that programs with a demonstrated evidence base are established in the United States, the National Institute of Mental Health (NIMH) has been directed to assist SAMHSA in developing input for states regarding promising FEP treatment models. In response to that directive, this document provides an overview of the evidence-based components of coordinated specialty care programs for the treatment of FEP.

2. First Episode Psychosis

Approximately 100,000 adolescents and young adults in the United States experience FEP each year (calculated from McGrath, Saha, Chant, et al., 2008). With a peak onset occurring between 15-25 years of age, psychotic disorders such as schizophrenia can derail a young person’s social, academic, and vocational development and initiate a trajectory of accumulating disability. Youth who are experiencing FEP are often frightened and confused, and struggle to understand what is happening to them. They also present unique challenges to family members and clinical providers, including irrational behavior, aggression against self or others, difficulties communicating and relating, and conflicts with authority figures. Impaired awareness of illness may be an additional complicating factor. Despite these complexities, early intervention with evidence-based therapies offers real hope for clinical and functional recovery. Both meta-analytic and narrative reviews of randomized and quasi-experimental treatment studies conclude that early intervention services for psychosis can improve symptoms and restore adaptive functioning in a manner superior to standard care (Bird et al., 2010; Penn et al., 2005).

3. Evidence Supporting Early Intervention

An abundance of data accumulated over the past two decades supports the value of early intervention following the first episode of psychosis. Clinical research conducted world-wide supports a variety of interventions for ameliorating psychotic symptoms and promoting functional recovery in FEP, including low doses of atypical antipsychotic medications (Robinson et al., 2005; Sanger et al., 1999); cognitive and behavioral psychotherapy (Jackson et al., 2005; Lecomte et al., 2009; Lewis et al., 2005; Wang et al., 2003); family education and support (Goldstein et al., 1978; Leavey et al., 2004; Zhang et al., 1994); and

educational and vocational rehabilitation (Killackey et al., 2008; Nuechterlein et al., 2008; Nuechterlein et al., 2013). These evidence-based components often come together in specialized early intervention programs that emphasize prompt detection of psychosis, acute care during or following periods of crisis, and recovery-oriented services offered over a 2-3 year period following psychosis onset. Recent studies emphasize continuity of specialized care for up to five years post-psychosis onset in order to consolidate gains achieved through initial treatment (Norman et al., 2011). Randomized controlled trials (Craig et al., 2004; Petersen et al., 2005), historical control investigations (Fowler et al., 2009; McGorry et al., 1996; Mihalopoulos et al., 2009), and naturalistic effectiveness studies (Uzenoff et al., 2012) indicate that coordinated specialized services offered during or shortly after FEP are effective for improving clinical and functional outcomes among youth and young adults at risk for serious mental illness.

In 2009, NIMH launched the [Recovery After an Initial Schizophrenia Episode \(RAISE\)](#) research initiative to explore methods for establishing coordinated specialty care programs for FEP in the United States. Two research investigations—the RAISE [Early Treatment Program](#) and the RAISE [Connection Program](#)—were funded to develop, test, and implement coordinated specialty care programs in non-academic treatment settings. Initial results from the RAISE projects suggest that mental health providers across multiple disciplines can learn the principles of coordinated specialty care for FEP, and apply these skills to engage and treat persons in the early stages of psychotic illness. These early findings, combined with the already reviewed evidence supporting early intervention in psychosis, are so compelling that the question to ask is not whether early intervention works for FEP, but how specialty care programs can be implemented in community settings throughout the United States.

4. Coordinated Specialty Care

Coordinated Specialty Care (CSC) is a team-based, multi-element approach to treating FEP that has been broadly implemented in Australia, the United Kingdom, Scandinavia, and Canada. Component interventions include assertive case management, individual or group psychotherapy, supported employment and education services, family education and support, and low doses of select antipsychotic agents. In clinical trials, CSC has been restricted to persons with non-organic, non-affective psychotic disorders who have been ill for five years or less; empirical evidence regarding the effectiveness of CSC is greatest for persons who meet these criteria. CSC is intended primarily for youth, adolescents, and young adults ages 15-25, although some programs extend eligibility to age 30. Early intervention programs are designed to bridge existing services for these groups and eliminate gaps between child, adolescent, and adult mental health programs.

At its core, CSC is a collaborative, recovery-oriented approach involving clients, treatment team members, and when appropriate, relatives, as active participants. CSC emphasizes shared decision making as a means for addressing the unique needs, preferences, and recovery goals of individuals with FEP. Collaborative treatment planning in CSC is a respectful and effective means for establishing a positive therapeutic alliance and maintaining engagement with clients and their family members over time. CSC services are also highly coordinated with primary medical care, with a focus on optimizing a client's overall mental and physical health.

4.1 Team-Based Approach

In some regards, the CSC framework for FEP resembles the widely disseminated Assertive Community Treatment (ACT) model of community-based psychiatric care. Shared aspects include reliance on multi-disciplinary treatment teams, a small client to staff ratio, and a menu of services directed at supporting adaptive functioning in the community (e.g., case management, psychiatric treatment, housing and vocational assistance, substance abuse services, family education and support, and 24/7 accessibility). There are important differences between ACT and CSC models, however, including the clients served and the goals of treatment. In contrast to ACT, CSC teams serve a younger population without established disability, have the capacity for out-of-office visits but do not require them as the modal practice, and set expectations for a time-limited treatment experience of 2-3 years. If treatment is required beyond 3 years, most clients can step down to a lower level of specialized care, with eventual transition to regular services at the mental health center.

CSC is typically delivered by 4-6 clinicians who are trained in the principles of phase-specific care for FEP and maintain a shared caseload of 30-35 clients; providers' individual caseloads vary depending on how the CSC program is organized, as explained in Section 5, *Configuring and Staffing CSC Programs*. Allied health professionals—i.e., psychologists, social workers, mental health counselors, and rehabilitation counselors—generally provide case management, individual and family therapy, and supportive employment and education services; psychiatrists and nurse practitioners are primarily responsible for pharmacotherapy and coordination with primary healthcare. Weekly team meetings and frequent communication among team members bolsters fidelity to the early intervention model, focuses treatment on each client's recovery goals and needs, and builds interdisciplinary team morale that sustains high-quality service provision over time.

A developing program should consider including individuals with lived experience of psychosis as team members, particularly peers who can help ensure the "youth friendliness" of the CSC program (Stavely et al., 2013). Recent studies illustrate that persons with lived experience can effectively deliver CSC interventions such as supported employment services, and add unique value to recovery-oriented programs (Kern et al., 2013). Any of the key functions described below can be filled by persons with lived experience, provided that the individual meets credentialing and/or licensing requirements associated with the CSC role and has successfully completed training in all aspects of phase-specific care for FEP.

Although an individual with FEP may work with multiple members of the CSC team, one provider is always identified as the client's principal care manager. This person is responsible for coordinating all aspects of the client's care, and serves as the client's link to the rest of the treatment team, as well as outside social service agencies and emergency treatment facilities.

4.2 Key Roles on CSC Teams

Successful implementation of CSC depends more on assuring adequate coverage of key roles rather than achieving 1:1 correspondence between the number of providers and CSC service components. Table 1 summarizes critical roles and clinical services provided in CSC programs. Essential functions include (1) overall team leadership and management and (2) competent delivery of core clinical services, including case management, psychotherapy, supported employment and education, family education and support, and pharmacotherapy/primary care coordination. The number of providers necessary to fill key roles may vary from site to site depending on the size of the FEP cohort served, the number of providers available, and the level of effort each provider devotes to the CSC program. In programs with smaller caseloads, key roles may be combined so long as the provider has achieved competency in each assigned CSC function. For example, the Team Leader may deliver clinical interventions such as primary care management or family education and support while also providing overall administrative and supervisory oversight to the team. Alternately, the roles of individual psychotherapist and care manager might be combined. The only exception to this practice is the supported employment/education role, which involves highly specialized skills and the majority of work time spent in the community assisting job seekers with locating employment. Section 5, *Configuring and Staffing CSC Programs*, provides several examples of staffing models and role configurations implemented in the RAISE Early Treatment and Connection Programs.

Table 1. Key CSC Roles and Clinical Services.

CSC Role	Description	Rationale
Team Leadership	The CSC Team Leader is an experienced clinician with a clear commitment to recovery-oriented care and strong communication, management, and program development skills. The Leader provides ongoing consultation to team members regarding the principles of early psychosis intervention and coordinates key services such as screening potential clients for admission into the program, leading weekly team meetings, overseeing treatment planning and case review conferences, and cultivating referral pathways to and from the CSC program.	Building and sustaining an effective mental health team requires committed leadership that provides clarity of purpose, a shared vision, coordination of services, and frequent review of team operations to maintain high quality care. Strong leadership results in greater collaboration and coordination within multidisciplinary teams; solid teamwork translates into improved patient care and superior clinical outcomes for persons with first episode psychosis.
Case Management	Case management assists clients with problem solving, offering solutions to address practical problems, and coordinating social services across multiple areas of need. Case management involves frequent in-person contact between the clinician and the young person and their family, with sessions occurring in clinic, community, and home settings, as required.	Successful treatment of individuals with FEP often requires a high degree of coordinated care which is effectively delivered using a case management model. Individuals who experience FEP frequently need assistance with practical problems such as obtaining medical care, managing money, securing transportation, navigating the criminal justice system, and procuring stable housing.

<p>Supported Employment and Education (SEE)</p>	<p>SEE services facilitate the recovering person’s return to work or school, as well as attainment of expected vocational and educational milestones. SEE emphasizes rapid placement in the individual’s desired work or school setting and provides active and sustained coaching and support to ensure the individual’s success. The SEE Specialist strives to integrate vocational and mental health services, is the CSC team liaison with outside educators and employers, and frequently works with the client in the community to enhance school or job performance.</p>	<p>For younger clients, the experience of FEP can disrupt school attendance and academic performance. For young adults, FEP can impede attempts to obtain or maintain employment.</p> <p>Young clients with FEP are often in school or are establishing their initial work career. Resumption of normal educational or vocational activity is a common goal for clients and family members. SEE services are highly valued by many clients, and often provide a motivation for adhering to other aspects of the CSC program.</p>
<p>Psychotherapy</p>	<p>Psychotherapy for FEP is based upon cognitive and behavioral treatment principles and emphasizes resilience training, illness and wellness management, and general coping skills. Treatment consists of core and supplemental modules and is tailored to each client’s needs. Clients and psychotherapists work one-on-one or in groups, meeting weekly or bi-weekly, with the duration and frequency of sessions personalized for each individual.</p>	<p>Psychological interventions are essential for symptomatic and functional recovery, and may aide in the prevention of comorbidities, such as nicotine addiction and substance abuse.</p> <p>The experience of FEP disrupts the person’s sense of wellness and often derails confidence and pursuit of pre-illness life goals. Psychotherapy—individual or group—aims to restore the person’s feelings of personal wellness, reinforce coping and resilience, and lessen the likelihood of subsequent psychotic episodes and prevent or treat co-morbidities.</p>
<p>Family Education and Support</p>	<p>Family education and support teaches relatives or other individuals providing support about psychosis and its treatment and strengthens their capacity to aide in the client’s recovery. To the greatest extent possible, and consistent with the client’s preferences, supportive individuals are included in all phases of treatment planning and decision making. For individuals less than 18 years of age, participation of a family or guardian is generally required.</p> <p>Depending on the number of clients served at any given time, family therapy may be offered on an individual basis, or through multi-family workshops and support groups.</p>	<p>A first episode of psychosis can have a devastating impact on the ill person’s relatives and other support persons, who struggle to adjust to changed circumstances and new demands.</p> <p>Education about psychosis and its treatment is recommended for all families during the initial phase of FEP care. Increasing relatives’ understanding of psychotic symptoms, treatment options, and the likelihood of recovery can lessen family members’ distress and feelings of helplessness. In addition, an alliance between the CSC team and family members often helps to maintain contact with the client in the event that psychotic symptoms reoccur.</p>
<p>Pharmacotherapy and Primary Care Coordination</p>	<p>Evidence-based pharmacologic approaches guide medication selection and dosing for persons with FEP. Pharmacotherapy typically begins with a low dose of a single antipsychotic medication and involves monitoring for psychopathology, side effects, and attitudes towards medication at every visit. Special emphasis should be given to cardiometabolic risk factors such as smoking, weight gain, hypertension, dyslipidemia, and pre-diabetes. Prescribers maintain close contact with primary care providers to assure optimal medical treatment for risk factors related to cardiovascular disease and diabetes.</p>	<p>Guideline-based use of medication optimizes the speed and extent of recovery, as well as acceptance of pharmacologic interventions.</p> <p>The medical care of young people during the early stages of mental illness is considerably different in style and content compared to approaches used in older individuals with established illness.</p>

Licensed clinicians—i.e., psychologists, social workers, mental health counselors, and rehabilitation counselors—typically possess the education and training required for the CSC team leader, case manager, psychotherapist, and family therapist roles. Supported employment and education specialists should be selected on the basis of (1) an undergraduate degree in mental health, social services, or business; (2) experience working with people with serious mental illnesses; and (3) experience providing employment services within the Individual Placement and Support (IPS) model (Drake et al., 2012). Licensed physicians and nurses are required to fill CSC medical roles.

4.3 Core Functions of Coordinated Specialty Care

In addition to the clinical services noted above, CSC provides six critical functions for young people experiencing a first episode of psychosis: (1) access to clinical providers with specialized training in FEP care; (2) easy entrée to the FEP specialty program through active outreach and engagement; (3) provision of services in home, community, and clinic settings, as needed; (4) acute care during or following a psychiatric crisis; (5) transition to step-down services with the CSC team or discharge to regular care after 2-3 years, depending on the client's level of symptomatic and functional recovery; and (6) assurance of program quality through continuous monitoring of treatment fidelity.

Specialized Training in FEP Care

Training in evidence-based treatment for FEP occurs at two levels: (1) the overall philosophy of team-based care for FEP, and (2) specialized services that support the client's recovery. Each team member must master the overall theoretical framework of CSC treatment, including the recovery potential for FEP persons, developmental issues specific to adolescents and young adults experiencing a first episode of psychosis, the concepts of shared decision making and person-centered care, and the importance of maintaining an optimistic therapeutic perspective at all times. In addition, CSC staff members must understand common problems that cut across all service categories, such as difficulties in engaging the client and their family members, clients' vulnerability for developing substance use problems, and heightened risk of suicide during the early years of treatment.

Both the RAISE Early Treatment Program and the RAISE Connection Program have developed training materials that (1) present the rationale for early intervention in first episode psychosis; (2) introduce the principles of team-based coordinated specialty care; (3) orient providers to the key roles and clinical services provided in the CSC program; and (4) detail core competencies related to specific treatment modalities. These materials—manuals, instructional videos, educational handouts, and worksheets—are listed in Section 8, *CSC Program Development Resources*, and are available on-line.

In order to enhance fidelity to the CSC model, workforce development also involves ongoing supervision and continuing education for all staff involved in the treatment program. Supervision may occur at multiple levels, including in-person sessions with the CSC Team Leader for case managers and supported employment specialists, or consultation with FEP subject matter experts via conference calls, webinars, or distance learning programs for medical professionals, psychotherapists, and family therapists. Case review during weekly team meetings is also an effective means for reinforcing CSC

treatment principles and ensuring competent FEP clinical care. Soliciting input from current and former clients is an excellent method to ensure the “youth friendliness” of the CSC program and increase its relevance to young people recovering from FEP (Stavely et al., 2013).

Community Outreach

Early intervention programs aim to reduce the duration of untreated psychosis by improving early detection of FEP in the community and facilitating rapid access to CSC services. As was the case in the two RAISE studies, a single provider must be responsible for community outreach, with a charge to remove barriers to CSC access and to speed entrée to FEP services. The outreach specialist is given dedicated time to develop referral pathways with inpatient facilities, emergency departments, crisis intervention services, and the criminal justice system, cultivating relationships with admission and discharge personnel at these agencies through frequent visits, phone calls, email communication and timely evaluation of potential FEP cases. The outreach specialist also communicates regularly with administrators of child and youth mental health programs to identify clients in those systems who might benefit from CSC treatment. Similarly, the outreach specialist monitors referrals and intakes to the parent agency, facilitating connection of likely candidates to the CSC program.

For programs newly established under the fiscal year (FY) 2014 budgetary set-aside funds, it is recommended that CSC staff emulate the strategy of engaging proximal referral sources first, as noted above, and to defer outreach to other potential referrers—e.g., schools, primary care physicians, and social services agencies—until the CSC program is firmly established.

Client and Family Engagement

Persons experiencing FEP, and their family members, are often difficult to engage in treatment, requiring a thoughtful approach to presenting the CSC program from the moment of initial contact. Assertive outreach, efficient enrollment, and hopeful messages are critical at the time of intake. Descriptive materials should be free of stigmatizing and clinical language, and emphasize the program’s focus on helping individuals address and accomplish their own goals. Examples of descriptive brochures and flyers developed in the RAISE Connection Program for prospective clients and their family members can be found in Section 8, *CSC Program Development Resources*.

First contacts with clients and family members should be supportive and reassuring, with emphasis placed on learning about how the individual experiences symptoms, how such experiences impact their daily lives, and how changes related to FEP have affected family members or other significant others. The CSC team uses this information as a starting point for describing the CSC program, emphasizing specific services that may be most helpful to the individual and family members. Initial ambivalence is common among clients and relatives, so effective engagement requires ongoing education and support and a willingness on the part of providers to negotiate changes in treatment goals and strategies. Engagement is also facilitated by establishing a “youth friendly” atmosphere in the clinic setting and instilling such a mindset among providers. Such efforts will require locating the CSC program in a space distinct from the larger clinic, ideally with a separate entrance and waiting room. Receptionists and

office personnel—who may be accustomed to serving adults with long-standing psychotic disorders—may require additional training on the recovery model and needs of transition age youth with FEP.

The CSC care manager should contact the referred individual as soon as possible, ideally within 24 hours, to describe the CSC service and screen for program eligibility. Offering appointments on evenings and/or weekends is essential to meet the needs of youth and family members with school or work commitments, and allows for more rapid evaluation. If referred individuals are in the hospital, ‘in reach’ to the inpatient unit is optimal. The CSC care manager should gather information relevant to establishing eligibility including age, time since onset of psychosis, previous treatment, response to treatment, degree of established disability, and history of medical problems, substance use, and affective symptoms. Consistent with the overall program orientation, the process of gathering information should be supportive, person-centered, and youth friendly. Individuals meeting eligibility criteria should be offered an admission interview with the CSC team quickly, ideally within seven days of the screening interview.

Individuals ineligible for the CSC program (e.g., who do not meet FEP diagnostic criteria, or who have been ill for more than 5 years) should be referred to other mental health services. For those admitted to CSC, collaborative treatment planning (Heinssen et al., 1995) and shared decision-making (Deegan and Drake, 2006) regarding medical, psychological, and rehabilitative interventions will serve to build mutual respect between clients with FEP and providers, and enhance ongoing cooperation. Personalized, recovery-oriented goals that focus on normal developmental milestones (e.g., returning to school or work, re-engaging with peers) are most likely to sustain motivation for treatment beyond the initial phase of care.

Mobile Outreach and Crisis Intervention Services

Mobile outreach is provided to young people who have difficulty engaging with clinic-based services, or those who have complex needs requiring intensive support, such as legal issues, homelessness, or obtaining medical care for comorbid physical conditions. The CSC team employs a multi-disciplinary approach to mobile case management, with supportive interventions occurring in clinic, community, and home settings as required. For example, case managers may escort clients to appointments in the community, and facilitate engagement with needed social services. Likewise, supported employment and education specialists provide active coaching and support school and work settings. Similarly, family clinicians may offer support in the FEP client’s home, including practical assistance to clients and relatives during periods of turmoil or instability.

The RAISE Connection Program found that 24-hour telephone coverage was sufficient for managing most crisis situations and, in many instances, averted the need for acute services such as emergency department visits or inpatient hospitalization. In instances where an emergency could not be managed remotely, the on-call person facilitated rapid and effective use of crisis services available outside the CSC program. In the event of hospitalization, the on-call person alerted the client’s primary care manager, who contacted the inpatient team to coordinate discharge planning and transfer back to the CSC program for follow-up care.

Transition of Care

CSC treatment programs in the RAISE initiative did not mandate a specific intensity or duration of services, but developed treatment plans based on the individual client's specific needs, goals, and pace of recovery. CSC programs developed abroad often offer services for no more than 24 months, but evidence suggests that abrupt transfer to usual care after two years compromises the immediate benefits of early intervention (Bertelsen et al., 2008; Gafoor et al., 2010). These data have been cited as evidence that the short-term benefits of early psychosis intervention do not automatically translate into longer term gains (Bosanac et al., 2010), and argue for continuity of care for up to five years after psychosis begins. A recent Canadian study supports the notion of continuity of care, with reported maintenance of early treatment gains at five-year follow-up for clients who transitioned to a lower intensity of specialized intervention after two years (Norman et al., 2011). This step down in care involved ongoing connection with one member of the CSC team (e.g., case manager or psychiatrist) for an additional 1-3 years, with eventual transition to regular services at the mental health center.

Determining when a client is ready for transition to a less intensive level of care should be a collaborative process involving the client, their relatives and important others, and members of the CSC team. Together, there should be an assessment of the client's progress in achieving treatment goals in key domains (e.g., school and work functioning, quality of peer and family relationships, relief from symptoms, abstinence from substances, effective management of health issues) and identification of areas that require additional work. An important consideration in planning the transition from CSC is the client's personal vision of stability, success in community functioning, and personal autonomy. Focusing on these issues enable the CSC team to work effectively with the client to achieve an optimal balance between professionally delivered treatment, therapeutic activities and supports available in the community, and self-directed recovery goals. Transition planning guides and worksheets can be found in the supplemental resource list found in Section 8, *CSC Program Development Resources*.

Assuring Fidelity to the Early Intervention Treatment Model

Fidelity and outcome measures allow program planners and administrators to answer key questions around CSC program implementation such as:

1. Are CSC team members implementing interventions as intended?
2. Are providers delivering what was promised in the service contract?
3. Have CSC services achieved desired clinical and functional outcomes for clients with FEP?

Fidelity monitoring also addresses the needs of clients and family members who seek assurance that services offered are of satisfactory quality, and will lead to desired school, work, social, and health outcomes.

Efficiency calls for a very practical approach to fidelity monitoring, with measures drawn from information readily available from routine clinical operations. The best fidelity measures are those that are acceptable proxies for key components of CSC. For example, a core expectation of FEP specialty care is that antipsychotic medications are a central part of treatment for almost everyone, with careful

monitoring for effectiveness, side effects, and metabolic changes over time. Medication records and associated laboratory orders provide information necessary to assess the quality of psychopharmacology interventions, including medication type and dose, and whether metabolic parameters were assessed. The fidelity of a CSC clinic to pharmacotherapy guidelines (e.g., Buchanan et al., 2010) can be assessed by computing the proportion of clients (1) who were prescribed a recommended antipsychotic medication; (2) who had at least one trial of a recommended medication, within the recommended dosage range, for at least four continuous weeks; and (3) who received the recommended metabolic monitoring. The RAISE Early Treatment Program has developed a decision support system for prescribers which can enhance the implementation of evidence-based pharmacotherapy, while also providing a seamless framework to monitor quality and fidelity of medical interventions. Information about this medication decision support system can be found in Section 8, *CSC Program Development Resources*.

Many clinics or hospitals with CSC teams will document service contacts and clinical data via an electronic health record (EHR), allowing fidelity and outcome information to be obtained from electronic claims data or other automated reports. In the absence of an EHR, routine service logs may be used to inform many fidelity measures so long as they note the client and staff member involved, whether family members were present, and the location of the service (i.e., office versus community). When abstraction from electronic claims data is not an option, implementing a chart abstraction system is a feasible approach. Finally, the Supported Employment Fidelity Scale, part of SAMHSA's Supported Employment toolkit (SAMHSA, 2009), provides a means for measuring the quality and impact of supported employment services. Illustration of how key CSC components—i.e., team structure and functioning, psychopharmacology, individual psychotherapy, family intervention, supported employment/education—were operationalized in the RAISE Connection Program, with benchmarks that indicate fidelity to the CSC intervention model can be found in Section 8, *CSC Program Development Resources*.

5. Configuring and Staffing CSC Programs

In collaboration with the New York State Office of Mental Health, RAISE researchers have developed a publicly available decision support tool to determine the number of CSC teams needed to provide services in a given region, as well as the approximate cost of providing services (Humensky et al., 2013). The tool accounts for several variables, such as estimated incidence of FEP for a given catchment area, the percentage of eligible individuals who will actually enroll in the program, and the average duration of time an individual with FEP will receive services. The tool can help states select the CSC program configurations that best match local circumstances.

CSC team members should be selected on the basis of credentials, clinical experience, affinity for recovery oriented care, and respect for clients' independence and self-determination. Seasoned clinicians are the preferred candidates for CSC roles, with emphasis on those clinicians who embrace the challenges of working with adolescents and young adults experiencing psychosis, are flexible regarding intervention approaches to engage clients and family members, and can tolerate uncertainty regarding

clients' preferred recovery strategies. Peers and those with lived experience have also been shown to be important resources for these programs given their ability to engage and support young people struggling with a psychotic disorder (Stavely et al., 2013).

In staffing the programs, agency administrators may select the majority of CSC team members from existing personnel and fill gaps in expertise by hiring professionals with needed skills. Alternatively, a clinic may opt to hire additional staff for this new service. Personnel selected would then be formed into integrated teams to serve the FEP population through (1) extended training in the principles of team-based, stage-specific care for early psychosis and (2) protected time for fulfilling the key CSC roles and core functions described in Sections 4.2 and 4.3 of this document.

The case studies that follow illustrate variations in how the CSC model has been implemented in the two NIMH RAISE investigations. In each instance the CSC team was embedded within the parent health care organization to capitalize on synergies with existing clinical programs and administrative resources. While CSC team members' primary clinical responsibilities were for FEP clients, certain clinicians may have fulfilled other roles within the agency, and provided services to both FEP and non-FEP clients. This arrangement provided the parent agency with maximum flexibility for allocating clinical resources to multiple areas of need. The examples below reflect acceptable models for how new programs might implement the CSC model.

5.1 RAISE Connection Program

The RAISE Connection Program created CSC programs in New York City, New York and Baltimore, Maryland; each team consisted of four staff members (2.7 full-time equivalent [FTE] employees) for a target caseload of 25 clients. A licensed clinician served as full-time team leader. The team leader provided administrative oversight of the program and supervised other team members to assure fidelity to the CSC model. The team leader also served as the primary care manager for most clients. A full-time supported employment/education specialist provided services based on the IPS model. A half-time recovery coach provided individual and group cognitive and behavioral psychotherapy interventions for clients with FEP and psychoeducation sessions for clients' family members. Finally, the total FTE for the program psychiatrist was 0.2. It was helpful if the psychiatrist was otherwise employed in the agency so that he/she would be available in the case of a crisis. Of note, the team members were not responsible for conducting evaluations for program eligibility; this was done by a separate outreach and enrollment specialist who worked with the team.

In June 2013 the New York State Office of Mental Health announced [OnTrackNY](#), an initiative designed to implement CSC programs in the downstate region. For this project, the RAISE Connection program model was modified to increase flexibility and to allow for staff time to do CSC outreach and evaluations for eligibility. In the *OnTrackNY* approach, CSC teams serve between 30 and 35 clients and require two FTE licensed staff members who cover four roles: team leader; recovery coach; primary care manager; and outreach and recruitment coordinator. The team leader must be full-time. The other clinician FTE can be a full-time staff member or divided among two part-time staff. Additional staff members include

a full-time supported employment/education specialist, a psychiatrist who is 0.3 FTE, and a 0.2 FTE nurse who assists with medication and health related issues.

In this approach to CSC, individual providers assume more than one role on the treatment team. In practice, each clinician serves as primary care manager for a group of patients and then assumes at least one other clinical responsibility in the program. This creates optimal flexibility and allows for staff members with appropriate training to assume various roles as needed. The team leader oversees role and client assignment. Depending on the preferences of the team and staff backgrounds, several permutations of the *OnTrackNY* model will work.

Example 1: The team leader is full-time and the other two clinician staff members are half-time. In addition to serving as team leader, the team leader could be in charge of outreach and recruitment and have a small caseload. One of the half-time staff members could serve as recovery coach and primary clinician. The third half-time staff member could serve as primary care manager only.

Example 2: Both the team leader and second clinician are full-time. The team leader serves as primary care manager as well as team leader with a larger caseload. The second clinician could serve as recovery coach and do outreach and recruitment with a smaller caseload.

5.2 RAISE Early Treatment Program

The RAISE Early Treatment Program established CSC programs in 17 community clinics located in urban, suburban, and rural settings across the United States. The embedded team model worked well in a variety of agency contexts, as illustrated in the following examples.

Example 3 (urban setting): One CSC program was developed in a mental health center that served a small urban area. With a catchment area covering ~160,000 individuals, agency administrators anticipated an FEP caseload of 25-30 clients. An existing team-based treatment program for outpatients at high risk for hospitalization (HRH) was leveraged in order to form a team of CSC providers. A subset of six HRH team members were selected for the roles of CSC team leader (0.3 FTE), family therapist (0.25 FTE), supported employment/education specialist (0.5 FTE) and psychiatrist (0.2 FTE). Two additional clinicians (0.5 FTE each) filled the role of psychotherapist/case manager. While the primary function of the CSC subgroup was to care for FEP clients, team members also provided services in the HRH program. Each provider's HRH caseload was adjusted downward based on the number of CSC clients enrolled in the program.

Example 4 (suburban setting): One CSC program was formed within a suburban mental health center that anticipated a caseload of 20-25 clients with FEP. Four agency personnel were selected for new clinical positions on the FEP treatment team. The CSC team leader and family therapist roles were combined into a single full-time position. Likewise, psychotherapist and case manager roles were performed by one full-time provider. The psychiatrist and supported education/employment specialist were full-time employees of the mental health center, but devoted 0.2 FTE and 0.5 FTE level of effort to the CSC program, respectively. The psychiatrist and supported employment specialist worked with all CSC

participants, but also served clients from other agency programs. The non-CSC caseloads of the employment specialist and the psychiatrist were reduced to accommodate the needs of clients in the FEP treatment program.

Example 5 (rural setting): One CSC program was developed in a rural mental health center that had no prior experience with team-based care. With a sparsely populated catchment area, program planners predicted an FEP caseload of 12-15 clients. Agency administrators selected five clinicians from four separate departments to create a cross-agency CSC team consisting of a team leader/family therapist (0.3 FTE), a case manager (0.2 FTE), a psychotherapist (0.25 FTE), a supported employment/education specialist (0.25 FTE), and a medication prescriber (0.1 FTE). As in the previous examples, all team members maintained separate caseloads outside of the CSC team, with non-CSC caseloads adjusted downward based on the number of FEP clients. The challenge of this model is the degree of coordination required between the CSC team leader and departmental chiefs to meet the staffing needs of the respective clinical programs.

6. Financing Services

Table 2 lists the key elements of CSC, along with information on whether/how each element is typically covered under fee-for-service insurance. We note that our focus here is on some vs. no coverage, i.e., we do not consider the amount of reimbursement for services if they are covered; nor do we consider possible benefit limits, except as noted. The effects of the latter may be partially mitigated by the [Mental Health Parity and Addiction Equity Act of 2008](#).

Table 2. Coverage of CSC Components under Public and Private Fee-for-Service Programs

CSC Role	Services	Coverage Status
Team Leadership	Cultivate referral networks; facilitate access to care; outreach to patients and family members; coordinate clinical services among team members; provide ongoing clinician supervision	Not covered
Psychotherapy	Provide individual and group psychotherapy sessions, including integrated substance abuse sessions when needed	Billable via CPT 90832; 90834; 90853
Case Management	Perform assertive case management functions in clinic and community settings	Inconsistently covered*
Family Education and Support	Provide psychoeducation, relapse prevention counseling, and crisis intervention services	Billable via CPT 90846; 90847; 90849
Supported Employment/ Education	Implement IPS model of supported employment and supported education; provide ongoing client support following job or school placement	Inconsistently covered*
Pharmacotherapy and Primary Care Coordination	Medication management; coordination with primary medical care	Billable via CPT 99214

CSC Team-Level Activity	Team meetings, coordination of services among team members, CSC training, clinical supervision, 24-hour phone coverage for managing crisis situations	Not covered
--------------------------------	---	-------------

*if covered, coverage is almost only provided by Medicaid

As illustrated in Table 2, [Current Procedural Terminology](#) (CPT) codes exist for some of the major components of CSC for FEP. The availability of CPT codes generally indicates that providers can bill the service under public insurance, particularly Medicaid, as well as under private insurance. CSC services with corresponding CPT codes include individual and group psychotherapy, family therapy, and medication management. Pharmacotherapy, particularly the antipsychotic medications themselves, is also generally covered under private and public health insurance.

In terms of the CSC components that involve direct provision of care, the principal exceptions to current coverage are supported employment/education and assertive case management services. Supported employment/education services have no corresponding CPT code. While private insurance seldom covers supported employment, some states' public health insurance provides some coverage via separate programs (Latimer et al., 2004). Medicaid programs—but not private insurance—typically cover some case management services for persons with serious and persistent mental illness. However, in many states, eligibility for such coverage is limited to individuals with established illness and disability; by definition, individuals with FEP typically do not meet such chronicity criteria, and may therefore be ineligible for coverage of case management services.

In general, neither public nor private insurance programs cover most CSC team leadership and team-level activities listed in Table 2 that are essential for: (1) assertive outreach to referral networks; (2) facilitating patients' access to FEP care; (3) engaging and retaining patients in treatment; (4) coordinating services in team meetings; (5) clinical supervision; or (6) assuring the quality of services through fidelity monitoring. The absence of specific coverage for these activities is a barrier to providing them; evidence gathered from the RAISE Early Treatment Program suggests that this coverage gap limits the ability to provide effective, coordinated treatment for FEP in many community clinics, and that the gap in coverage may undermine the effectiveness of treatment components that are currently covered.

The Office of the Assistant Secretary for Planning and Evaluation (ASPE) within the U.S. Department of Health and Human Services recently examined a range of policy questions related to early intervention in mental disorders. This included a report (Goldman et al., 2012) and associated journal article (Goldman et al., 2013) that focused on understanding the financing of CSC for FEP in the context of the RAISE Early Treatment Program. The investigators visited several community clinics participating in the Early Treatment Program and described how the respective sites addressed issues of financing various CSC components. As the reports describe, strategies included implicit cost-shifting from CSC program participants with relatively comprehensive coverage to those with limited or no insurance; capitated payment arrangements that were sufficient to cover otherwise non-covered components of CSC for FEP; and non-patient-specific funding from state mental health authorities that individual sites applied to CSC for FEP. Further details are available in the cited reports.

The assessment of financing issues in the RAISE Early Treatment Program predated full implementation of the Patient Protection and Affordable Care Act of 2010 (ACA). The reports mention several aspects of the ACA that may help address some financing gaps. These include several ways in which the ACA is likely to increase the fraction of individuals experiencing FEP who have health insurance, which would reduce the extent to which a CSC for FEP program would need to find funding to serve individuals who lacked any insurance. The reports also describe several ways that the ACA would likely make it easier for states to cover CSC components like case management, supported employment/education, team-leadership, and team-level activities through section 1915(i) of the Social Security Act, the Home and Community-Based Services State Plan Option. Since relevant provisions of the ACA are being implemented at the time of this writing, the extent to which they may mitigate or even resolve some of the coverage gaps identified in this section is not known.

The coverage gaps identified here need to be addressed in order to achieve robust implementation of CSC for FEP. At minimum, states' mental health authorities should work with CSC programs to utilize the kind of funding mechanisms described in the ASPE reports to whatever extent is feasible and appropriate. "At minimum" is written because it is likely to strengthen CSC programs – and thus benefit individuals experiencing FEP – for there to be specific funding mechanism in place to cover all the components of CSC for FEP in a systematic and ongoing fashion. For the services listed in Table 2 with corresponding CPT codes, as well as for supported education and employment services, such funding could be implemented via fee-for-service or capitated payment mechanisms, as long as reimbursement levels adequately cover program costs and Summary Plan Descriptions are explicit about eligibility and coverage rules. For care management and the program support activities in Table 2 that do not involve direct provision of care, it may be more effective to finance these on a case-rate basis than via fee-for service, or also include them explicitly within the scope of a capitated payment mechanism.

7. How to Begin Planning Implementation of the FY2014 Set Aside

CSC programs associated with the RAISE initiative are currently operating in 20 states (CA, CO, FL, GA, IA, KS, LA, MD, MI, MN, MO, NE, NH, NJ, NY, NM, OH, OR, RI, and VT). Based on publically available information, at least 5 additional states with community programs for FEP that appear to be consistent with the CSC model have been identified (AZ, CT, MA, NC, and PA). States with existing CSC resources could use the FY2014 set aside funds to increase capacity for offering specialty care services, including (1) expanding the number of CSC programs throughout the state; (2) extending community outreach beyond emergency care settings for existing programs to include public education and developing new referral relationships with schools, primary care physicians, and child welfare agencies; and (3) instituting an in-state training and consultation program to broaden resident expertise in FEP care.

In states without CSC programs, FY 2014 set-aside funds should be used to develop initial capacity for FEP specialty care. Any state implementing a CSC program for the first time is encouraged to focus on starting a single program that adheres closely to the CSC principles described in this document. As a first step, the state could leverage existing clinical and administrative resources that might serve as a platform for developing an integrated CSC program for youth with FEP. For example, is there an agency with experience in offering team-based treatment, like ACT Teams? Are there clinicians with expertise in

adolescent and youth mental health? Are core CSC services, i.e., case management, individual or group psychotherapy, supported employment and education, family education and support, pharmacotherapy and primary care coordination, already available? The agency may deliver some or most of these services, but will need to fill gaps and tailor interventions to meet the needs of youth and young adults with FEP.

New hires, or creative partnerships between agencies, may be necessary to acquire needed expertise, such as clinicians with supported employment and supported education skills. In addition, organizational restructuring, staff training, and ongoing consultation with FEP experts may be necessary to repurpose existing services and providers into an integrated, team-based CSC treatment program. Administrative changes may be needed to facilitate the integrated delivery of services, like protecting staff members' time for team meetings and providing ongoing supervision to assure fidelity to CSC principles. Finally, a variety of community outreach activities are necessary to stimulate and maintain referral pathways to the CSC program. One CSC team member must be designated as responsible for cultivating and maintaining these contacts, with protected time for outreach functions.

8. CSC Program Development Resources

A variety of CSC program development and training materials—manuals, videos, educational handouts, and worksheets—are available to assist states' efforts to initiate or expand CSC services for youth and young adults with FEP. Resources developed under the RAISE initiative are listed below, with hyperlinks. Other training resources will be developed over time via the SAMHSA MHBG Technical Assistance Center, such as distance learning for continuing education, webinars for group supervision, consultation time with FEP subject matter experts, etc.

A. [RAISE Coordinated Specialty Care for First Episode Psychosis Manuals:](#)

1. Coordinated Specialty Care for First Episode Psychosis Manual I: Outreach and Recruitment
 - Summarizes key concepts, principles and processes involved in community outreach and developing and maintaining referral networks
 - Includes examples of person-centered language to use when presenting the program
 - Includes sample brochures, contact forms and screening packets
 - Provides an overview of how to establish outreach and referral tracking systems
 - Offers sample emails and articles to use when informing others about the CSC program
2. Coordinated Specialty Care for First Episode Psychosis Manual II: Implementation
 - This manual provides a concise overview of administrative, training and supervision activities needed to start a first episode psychosis treatment program.
 - Resources provided include a 'Getting Started' Checklist, example program inclusion/exclusion criteria, and sample job descriptions for team hires
 - Provides training materials, including vignettes for team training, scripts for training role plays, and slides to use for team training
 - Includes resources for maintaining program fidelity

B. RAISE Connection Program Manuals and Resources:

1. [Voices of Recovery Videos Series](#)

- A series of 24 vignettes of consumer and family members, the videos share inspirational and informative recovery stories focusing on a variety of topics.
- A manual is available to help integrate the videos into treatment and training.

2. Performance, Quality, and Fidelity Indicators

- Overview Table summarizes quality and fidelity indicators and overall measurement approach used for the RAISE Connection Program study.
- Available in the [Coordinated Specialty Care for First Episode Psychosis Manual II: Implementation](#)

C. [RAISE Early Treatment Program Manuals and Program Resources:](#)

1. CSC (Navigate) Team Members Guide

- Gives an overview of the CSC-Navigate Program and describes how it works
- Provides information that all team members need to know, including background on schizophrenia and the special needs of persons with FEP
- Covers logistics of staffing
- Should be read by all CSC-Navigate team members

2. CSC (Navigate) Team Leader Manual

- Details the CSC-Navigate Team Leader's role and responsibilities
- Includes chapters on logistics; outreach; developing referrals; forming, leading and supervising the team; engaging the client and family members; and more
- Includes worksheets and checklists
- Should be read by Team Leaders

3. Individual Psychotherapy (Resiliency Training) Manual

- Details how to provide Individual Resiliency Training (IRT) which is aimed at helping clients set and work towards personal goals, enhancing wellness and personal resiliency, teaching about psychosis and treatment, and improving illness management
- Includes client handouts
- May be used in conjunction with IRT videos
- Should be read by IRT Clinicians

4. Individual Psychotherapy (Resiliency Training) Demonstration Videos

- Hosted by the developers of Individual Resiliency Training (IRT), the video set consists of 15 short training videos, most 5-13 minutes in length
- Each training video demonstrates one of the IRT modules with a mock-client.
- Intended to accompany the IRT Manual
- Should be viewed by IRT Clinicians

5. CSC (Navigate) Family Intervention Manual
 - Details how to conduct the CSC-Navigate Family Intervention, which aims to help relatives support the recovery of a loved one who has experienced a first episode of psychosis.
 - Topics align with Individual Resilience Training
 - Contains educational handouts for family members
 - Should be read by Family Clinicians and Team Leaders
6. Supported Employment and Education Manual
 - Details how to provide Supported Employment and Education (SEE), which aims to help clients achieve their work and/or school goals.
 - Includes forms and worksheets
 - Should be read by SEE Specialists and Team Leaders
7. Psychopharmacological Treatment Manual
 - Details how to provide pharmacological treatment to clients with early phase psychosis within a shared decision making framework
 - Covered topics include recommended medications, management of side effects, enhancing adherence, and medical management of cardiovascular and metabolic abnormalities
 - Describes a medication decision support system to inform pharmacological treatment options
 - Includes tables of medication dose ranges and side effect profiles for early phase clients
 - Includes client and prescriber forms
 - Should be read by CSC-Navigate Prescribers (nurse practitioners or physicians)

D. Additional FEP Training Tools and Resources:

Resources, such as intervention manuals from other CSC programs and training materials (webinars, power point presentations, etc.) may be available through the RAISE initiative investigators and their collaborators. Some of these materials are available at no cost; others may have fees associated with their use.

1. *OnTrackNY* Manuals and Program Resources:

The RAISE Connection Program clinical manuals were revised and adapted for use in the implementation of a statewide CSC program, '*OnTrackNY*.' These materials will be available for download at <http://practiceinnovations.org/OnTrackUSA/tabid/253/Default.aspx>.

a. Outreach and Recruitment Manual

- Represents an adaptation of the *Coordinated Specialty Care for First Episode Psychosis Manual I: Outreach and Recruitment*, and details how outreach and recruitment is being conducted in NY FEP program.
- Includes forms for screening and evaluation, including those used to determine pathways to care and duration of untreated psychosis.

- Provides tools for tracking outreach/referral activities, template for resource lists for individuals not eligible for the program, and sample promotional materials using non-stigmatizing language.
- b. Team Manual
- Provides an overview of rationale and principles of FEP treatment.
 - Includes a series of shared decision making tools to be used in treatment.
 - Lists readings and resources relevant to the treatment of early psychosis.
- c. Supported Employment/Education (SEE) Manual
- Describes principles and activities for SEE specialist according to IPS model.
 - Includes examples of career profiles, plans for approaching employers and receiving assistance with school.
 - Resources include employer/school contact logs, job/education support plans and an SEE supervision log.
 - Lists readings and resources relevant to the treatment of early psychosis.
- d. Primary Clinician Manual
- Provides overview and description of primary clinician role including family support.
 - Includes an overview of the *OnTrackNY* treatment program and team functioning/roles.
 - Details core treatment sessions and themes.
 - Offers handouts to be used in treatment.
 - Includes forms for needs assessments, safety plans, wellness management and transition planning, as well as cognitive behavioral therapy treatment tools.
 - Includes materials relevant for the family intervention component of treatment.
 - Offers a list of readings and resources relevant to early psychosis treatment.
- e. Recovery Coach Manual
- Provides overview and description of recovery coach role including skills training, skills based substance abuse treatment and family psychoeducation.
 - Includes tools to be used in the treatment process.
 - Notes and checklists to track work and progress.
 - Includes monthly family psychoeducation group materials.
- f. Psychopharmacology Manual
- Provides evidence-based approach to prescribing and monitoring antipsychotic medications.
 - Includes an overview of core treatment sessions.
 - Provides a copy of the *OnTrackNY* Side Effects Checklist.
 - Lists readings and resources relevant to the treatment of early psychosis.

E. Performance, Quality, and Fidelity Materials:

1. *OnTrackNY* forms and indicators

- Summarizes indicators selected by the *OnTrackNY* program to track outcomes and fidelity.
- Provides an example of how an existing program is tracking 'real-time' outcomes through program implementation and existing resources.

F. Employment Resource Book:

- Provides tools and exercises to help individuals with FEP with obtaining employment

G. Interactive Early Psychosis Program Planning Tool:

- Estimates number of teams needed to serve a given population; a spreadsheet version of the tool can be made available for interested users.

Acknowledgements

Portions of this report have been drawn from the final reports of the RAISE Connection Program [Contract No. HHSN271200900020C] and interim progress reports of the RAISE Early Treatment Program [Contract No. HHSN271200900019C]. We thank the following subject matter experts for their careful review of this document, insightful feedback, and helpful editorial suggestions: Lisa Dixon, Susan Essock, and Howard Goldman (RAISE Connection Program); John Kane, Nina Schooler, Delbert Robinson, Jean Addington, Mary Brunette, David Penn, and Patricia Marcy (RAISE Early Treatment Program); Kristin Cadenhead, Barbara Cornblatt, Keith Nuechterlein, Diana Perkins, and Scott Woods. Finally, we thank Patrick McGorry (AO, M.D., Ph.D, FRCP, FRANZCP) for generously sharing resources developed in Australia to support broad implementation of evidence-based treatment approaches for FEP, as well as lessons learned from the national roll out of coordinated specialty care programs in that country.

References

- Bertelsen, M., Jeppesen, P., Petersen, L., Thorup, A., Ohlenschlaeger, J., le Quach, P., Christensen, T.O., Krarup, G., Jorgensen, P., & Nordentoft, M. (2008). 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, 65* (7), 762–771.
- Bird, V., Premkumar, P., Kendall, T., Whittington, C., Mitchell, J. & Kuipers, E. (2010). Early intervention services, cognitive-behavior therapy and family intervention in early psychosis: systematic review. *British Journal of Psychiatry, 197*, 350-356.
- Bosanac, P., Patton, G.C., & Castle, D.J. (2010). Early intervention in psychotic disorders: faith before facts? *Psychological Medicine, 40* (3), 353-358.
- Buchanan R.W., Kreyenbuhl J., Kelly D.L., Noel J.M., Boggs D.L., Fischer B.A. et al. (2010). The 2009 schizophrenia PORT psychopharmacological treatment recommendations and summary statements. *Schizophrenia Bulletin, 36* (1), 71–93.
- Craig T., Garety P., Power P., Rahaman N., Colbert S., Fornells-Ambrojo M., & Dunn G. (2004). The Lambeth Early Onset (LEO) Team: randomised controlled trial of the effectiveness of specialized care for early psychosis. *British Medical Journal, 329*, 1067-1071.
- Deegan P.E., & Drake R.E. (2006). Shared decision making and medication management in the recovery process. *Psychiatric Services, 57*, 1636-1639.
- Drake, R.E., Bond, G.R., & Becker, D.R. (2012). *Individual Placement and Support: An Evidence-Based Approach to Supported Employment*. New York: Oxford University Press.
- Fowler D., Hodgekins J., Howells L., Millward M., Ivins A., Taylor G., Hackmann C., Hill K., Bishop N., Macmillan I. (2009). Can targeted early intervention improve functional recovery in psychosis? A historical control evaluation of the effectiveness of different models of early intervention service provision in Norfolk 1998–2007. *Early Intervention in Psychiatry, 3*, 282-288.
- Gafoor, R., Nitsch, D., McCrone, P., Craig, T.K., Garety, P.A., Power, P., McGuire, P., (2010). Effect of early intervention on 5-year outcome in non-affective psychosis. *British Journal of Psychiatry 196* (5), 372–376.
- Goldman H., Karakus M., & Frey W. (2012). *Early Intervention Financing and Resources: Final Report for the Office of Disability, Aging and Long-Term Care Policy; Office of the Assistant Secretary for Planning and Evaluation; Department of Health and Human Services*. Rockville, MD: Westat.
- Goldman, H.H., et al. (2013). Financing First-Episode Psychosis Services in the United States. *Psychiatric Services, 64* (6), 506-8.
- Goldstein M.J., Rodnick E.H., Evans J.R., May P.R.A., & Steinberg, M.R. (1978). Drug and family therapy in the aftercare of acute schizophrenics. *Archives of General Psychiatry 35*, 1169–77.

- Haddock, G., Tarrier, N., Morrison, A. P., Hopkins R., Drake R., & Lewis S. (1999). A pilot study evaluating the effectiveness of individual inpatient cognitive-behavioural therapy in psychosis. *Social Psychiatry and Psychiatric Epidemiology*, *34*, 254-258.
- Harris M., Henry L., Harrigan S., Purcell R., Schwartz I.S., Farrelly S.E., Prosser A.L., Jackson H.J., McGorry P.D. (2005). The relationship between duration of untreated psychosis and outcome: an eight-year prospective study. *Schizophrenia Research* *79*, 85-93.
- Heinssen, R.K., Levendusky, P.G., & Hunter, R.H. (1995). Client as colleague: therapeutic contracting with the seriously mentally ill. *American Psychologist*, *50*, 522-532.
- Henry, L.P., Edwards J., Jackson H., Hulbert C., & McGorry P. (2002). *Cognitively Oriented Psychotherapy for First Episode Psychosis (COPE): A Practitioner's Manual*. Melbourne, EPPIC: The Early Psychosis Prevention and Intervention Centre.
- Humensky J.L., Dixon L.B., & Essock S.M., (2013). An interactive tool to estimate costs and resources for a first-episode psychosis initiative in New York State. *Psychiatric Services*, *64*, 832-834.
- Jackson H., McGorry P., Edwards J., Hulbert C., Henry L., Harrigan S., et al. (2005). A controlled trial of cognitively oriented psychotherapy for early psychosis (COPE) with four-year follow-up readmission data. *Psychological Medicine*, *35*, 1295–306.
- Kern R.S., Zarate R., Glynn S.M., Turner L.R., Smith K.M., Mitchell S.S., Becker D.R., Drake R.E., Kopelowicz A., Tovey W., Liberman R.P. (2013). A Demonstration project involving peers as providers of evidence-based, supported employment services. *Psychiatric Rehabilitation Journal*, *63*, 99-107.
- Killackey E., Jackson H.J., & McGorry P.D. (2008). Vocational intervention in first-episode psychosis: individual placement and support v. treatment as usual. *British Journal of Psychiatry*, *193*(2), 114-120.
- Latimer E., Bush P., Becker D., Drake R; & Bond G. (2004). The Cost of High-Fidelity Supported Employment Programs for People with Severe Mental Illness. *Psychiatric Services*, *Vol. 55* I, 401-6.
- Leavey G., Gulamhussein S., Papadopoulous C., Johnson-Sabine E., Blizard B., & King M. (2004). A randomized controlled trial of a brief intervention for families of patients with a first episode of psychosis. *Psychological Medicine*, *34*, 423–31.
- Lecomte T., Leclerc C., Corbie`re M., Wykes T., Wallace C.J., & Spidel A. (2009). Group cognitive behavior therapy or social skills training for individuals with a recent onset of psychosis? Results of a randomized controlled trial. *Journal of Nervous and Mental Disease*, *196*, 866–75.
- Lewis, S., Tarrier,N., Haddock,G., Bentall R., Kinderman P., Kingdon D., Siddler R., Drake R., Everitt J., Leadley K., Benn A., Grazebrook K., Haley C., Akhtar S., Davies L., Palmer S., Faragher B., Dunn G. (2002). Randomised, controlled trial of cognitive behavioural therapy in early schizophrenia: acute-phase outcomes. *British Journal of Psychiatry*, *181* (suppl. 43), 91-97.

- McGorry, P.D., Edwards J., Mihalopoulos C., Harrigan S.M., & Jackson H.J. (1996). EPPIC: an evolving system of early detection and optimal management. *Schizophrenia Bulletin*, 22 (2), 305-326.
- McGrath J., Saha S., Chant D., & Welham J. (2008). Schizophrenia: a concise overview of incidence, prevalence, and mortality. *Epidemiologic Reviews*, 30, 67-76.
- Mihalopoulos C., Harris M., Henry L., Harrigan S., & McGorry P. (2009). Is early intervention in psychosis cost-effective over the long term? *Schizophrenia Bulletin*, 35, 909-18.
- Norman R., Merchana R., Malla A., Windell D., Harricharan R., & Northcott S. (2011). Symptom and Functional Recovery Outcomes for a 5 year early intervention program for psychosis. *Schizophrenia Research*, 129(2-3), 111-115.
- Nuechterlein K.H., Subotnik K.L., Turner L.R., Ventura J., Becker D.R., & Drake R.E. (2008). Individual placement and support for individuals with recent-onset schizophrenia: integrating supported education and supported employment. *Psychiatric Rehabilitation Journal*, 31 (4), 340-349.
- Nuechterlein K.H., Subotnik K.L., Ventura J., Turner L.R., Gitlin M.J., Gretchen-Doorly D., Becker D.R., Drake R.E., Wallace C.J., Liberman R.P. (2013). Successful return to work or school after a first episode of schizophrenia: The UCLA RCT of individual placement and support and workplace fundamentals module training. Manuscript submitted for publication.
- Penn D., Waldheter E., Perkins D., Mueser K., & Lieberman J. (2005). Psychosocial treatment for first-episode psychosis: A research update. *American Journal of Psychiatry*, 162, 2220–2232.
- Petersen L., Jeppesen P., Thorup A., Abel M.B., Ohlenschlaeger J., Christensen T.O., Krarup G., Jørgensen P., Nordentoft M. (2005). A randomized multicenter trial of integrated versus standard treatment for patients with a first episode of psychotic illness. *British Medical Journal*, 331, 602-608.
- Robinson, D.G., Woerner M., Delman H., & Kane J. (2005). Pharmacological treatments for first episode schizophrenia. *Schizophrenia Bulletin*, 31(3), 705-722.
- Sanger, T.M., Lieberman J.A., Tohen M., Grundy S., Beasley C. Jr. & Tollefson G.D. (1999). Olanzapine versus haloperidol treatment in first episode psychosis. *American Journal of Psychiatry*, 156(1), 79-87.
- Stavely, H., Hughes, F., Pennell, K., McGorry, P.D., & Purcell, R. (2013). *EPPIC Model and Service Implementation Guide*, Orygen Youth Health Research Center, Melbourne, AU.
- Substance Abuse and Mental Health Services Administration. (2009). *Supported Employment: Evaluating Your Program*. DHHS Pub. No. SMA-08-4364, Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.
- Uzenoff S., Penn D., Graham K., Saade S., Smith B., & Perkins D. (2012). Evaluation of a multi-element treatment center for early psychosis in the United States. *Social Psychiatry and Psychiatric Epidemiology*, 47(10), 1607-1615.

Wang C., Li Y., Zhao Z., Pan M., Feng Y., Sun F., et al. (2003). Controlled study on long-term effect of cognitive behavior intervention on first episode schizophrenia. *Chinese Mental Health Journal*, 17, 200–2.

Zhang M., Wang M., Li J., & Phillips M.R. (1994). Randomised-control trial of family intervention for 78 first-episode male schizophrenic patients. An 18-month study in Suzhou, Jiangsu. *British Journal of Psychiatry, Supplement*, 165 (suppl 24), 96–102.