Psychosis is defined as a condition that affects the brain and results in disruption of a person’s perceptions or thoughts.

According to the Diagnostic and Statistical Manual of Mental Disorders, psychosis symptoms include:

- Delusions
- Hallucinations
- Disorganized speech
- Grossly disorganized behavior (including catatonia)
- Negative symptoms (dampened emotions, diminished speech or responsiveness)

While psychotic symptoms can be the result of substance use or neurological trauma, they are also the hallmark of chronic and severe mental illnesses such as schizophrenia, bipolar disorder with psychotic features and schizoaffective disorder.

Psychosis is usually first seen in people in their early teens and young adulthood. This condition has the potential to disrupt the development of a young adult, resulting in loss of ability to maintain employment, establish relationships and function independently over their lifetime.

According to the National Institute of Mental Health (NIMH), approximately 100,000 Americans are diagnosed with a psychotic disorder for the first time each year.
The Schizophrenia and Psychosis Action Alliance reported that the direct and indirect cost of schizophrenia is over $281 billion dollars a year. Almost half of that estimate ($115 billion) is the result of lost wages, reduced quality of life and shorter life expectancy. And $27.2 billion account for the direct health care cost for people with schizophrenia.

Early intervention, however, has been shown to greatly impact the course of treatment:

- Recent research has emphasized the importance of early intervention and treatment for decreasing the lifetime impact of psychotic disorders.  
- Untreated psychosis is correlated with diminished response to antipsychotic medication, greater duration of positive symptoms and overall poorer outcomes.  
- Psychotic episodes have been shown to reduce gray matter, so each additional psychotic episode results in greater damage to the brain.  

Most importantly, shorter duration of untreated psychosis (DUP) can be achieved through early intervention. Substantial evidence indicates that the following methods can help improve symptoms and preserve social and occupational functioning:

- Outreach  
- Long-acting injectable antipsychotics  
- Early consideration of clozapine  
- Family therapy  
- Cognitive behavioral therapy (CBT) for psychosis/ attenuated psychosis  
- Services focused on competitive employment
Early intervention for FEP: Best practices

Best practice recommendations for the treatment of schizophrenia and other psychotic disorders include both medication management and psychosocial interventions. These services are most effective when they are coordinated across all treatment providers and support persons. For individuals with FEP, the best outcomes are achieved when pharmacologic, case management, psychoeducation, supported employment and psychotherapy services are provided in a coordinated specialty care (CSC) program for FEP.

Medications: Each additional psychotic episode impacts the brain structure of the person with a psychotic disorder and decreases their ability to function. Antipsychotic medication is the best way to reduce the recurrence of psychotic episodes. Long-acting injectable medications (LAI) have been shown to both reduce hospitalization rate and discontinuation of medication. The American Psychiatric Association recommends the use of LAIs for anyone who has had difficulty maintaining adherence. This should be discussed early in treatment with the individual and their caregivers. APA also recommends treatment with Clozapine for those who do not respond to other antipsychotic medications or for those with persisting suicidal or aggressive behaviors. Anyone taking an antipsychotic medication should be monitored for metabolic and cardiac conditions commonly associated with those medications.

Psychosocial treatment: While psychosocial interventions are not sufficient to reduce or eliminate psychosis, they are necessary to help maintain stability and improve the quality of life for those suffering from schizophrenia. Numerous industry organizations agree on the necessary components of psychosocial treatment for schizophrenia:

<table>
<thead>
<tr>
<th>Treatment Type</th>
<th>APA</th>
<th>NICE</th>
<th>AACAP</th>
<th>NIMH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive behavior therapy for psychosis (CBTP)</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Psychoeducation</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Supported employment</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Assertive community treatment (ACT)</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Family education and support</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Coordinated specialty program for FEP</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

While not included currently in published best practices, peer support services (PSS) have received support in the literature as being effective in extending services to individuals and for benefiting the peer support workers as well. Optum actively engages with and supports the provision of PSS.

Coordinated specialty programs for FEP: Best practice recommendations for pharmacologic and psychosocial treatments all come together in the form of coordinated specialty programs for FEP. Recognizing that the majority of individuals with serious mental illness 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 federal government in 2014 put aside funds and directed SAMHSA and NIMH to provide block grants to support early psychosis treatment programs across the United States. The goal of this legislation is to create viable treatment models for improving symptoms, reducing relapse episodes, and preventing deterioration and disability among individuals suffering from psychotic illness.

According to the SAMHSA Policy Brief, “The CSC-FEP program model is a team-based approach for youth or young adults experiencing symptoms of psychosis associated with disorders such as schizophrenia. This model program promotes the youth/young adult, their family, psychiatrist and recovery specialists to work together to support the youth/young adult’s recovery. These programs emphasize shared decision making to address the youth/young adult’s unique needs and recovery goals. Most CSC-FEP programs aim to provide low-dose, evidence-based pharmacotherapy that strives to minimize side effects and nonadherence to medication.”
Table 1. Key CSC roles and clinical services

<table>
<thead>
<tr>
<th>CSC role</th>
<th>Description</th>
<th>Rationale</th>
</tr>
</thead>
</table>
| **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  
  - 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 individual 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  
  - Procuring stable housing |
<table>
<thead>
<tr>
<th>CSC role</th>
<th>Description</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supported employment and education (SEE)</strong></td>
<td>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.</td>
<td>For younger individuals, the experience of FEP can disrupt school attendance and academic performance. For young adults, FEP can impede attempts to obtain or maintain employment. Young people 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 individuals and their family members. SEE services are highly valued by many people, and often provide a motivation for adhering to other aspects of the CSC program.</td>
</tr>
<tr>
<td><strong>Psychotherapy</strong></td>
<td>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.</td>
<td>Psychological interventions are essential for symptomatic and functional recovery, and may aide in the prevention of comorbidities, such as nicotine addiction and substance abuse. The experience of FEP disrupts the person’s sense of wellness and often derails confidence and pursuit of pre-illness life goals. Psychotherapy 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.</td>
</tr>
<tr>
<td><strong>Family education and support</strong></td>
<td>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. 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.</td>
<td>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 persons, who struggle to adjust to changed circumstances and new demands. 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.</td>
</tr>
</tbody>
</table>
**Pharmacotherapy and primary care coordination**

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 toward 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.

Guideline-based use of medication optimizes the speed and extent of recovery, as well as acceptance of pharmacologic interventions.

The health 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.

---

SAMHSA maintains a treatment locator for early serious mental illness. As of 2018, 51 states and territories had programs partially or fully operational. The NIMH also maintains the Early Psychosis Intervention Network (EPINET), which includes eight regional hubs, 101 early psychosis clinics across 17 states, and the EPINET National Data Coordinating Center (ENDCC). The Core Assessment Battery (CAB) was developed to provide a core set of standardized assessment tools for use across all regional hubs.

Programs are funded through federal block grants and Medicaid, though some are successfully billing commercial insurance for health care related services associated with these programs. A major U.S. study, part of the Recovery After an Initial Schizophrenia Episode (RAISE) initiative, found what studies in other countries have demonstrated: Participants who started in a CSC-FEP program within the first year and a half after experiencing symptoms had greater improvement in quality of life and fewer psychotic symptoms than young people receiving usual care. Participants were much more likely to be working, going to school, and living successfully without disability.

The RAISE study further demonstrated the cost for CSC-FEP care was slightly more than the costs of usual care during the first two years, but that the programming was cost-effective because it resulted in greater health value than usual care. "CSC-FEP clients had higher outpatient mental health and antipsychotic medication costs, but overall benefits in quality of life, reduced symptoms and community functioning were worth the additional costs. The modest additional costs of the CSC-FEP program are likely to be recouped multiple times over when considering the societal costs associated with serious mental illness (SMI) under our current treatment approaches, including potential long-term savings to the health care system. It is important to note the usual treatment intervention used in the RAISE study was a high-quality treatment program using traditional treatment methods."

**The opportunity: Optum data**

Analyses conducted by Optum® Behavioral Health Value Optimization reveal that 3% of all inpatient admissions are for a first episode psychosis. Almost 6,500 individuals were hospitalized with a first episode psychosis. We currently do not have data on how many of these individuals are seen in an outpatient setting and do not get hospitalized. Any intervention needs to focus on both those individuals who enter the system through an inpatient stay and those who only obtain services in lower levels of care. This likely is a large yet manageable population.
Further analysis indicates that 28% of members prescribed a long-acting injectable have only one injection. Members do not follow up for multiple reasons, including side effects, ineffectiveness, payment and transportation issues. Further analysis is needed to identify common barriers and potential mitigation strategies.

Finally, readmission rates for people with schizophrenia consistently run higher than other high-volume diagnostic categories.

The identified needs of this membership include:

- Identify and support individuals admitted to facility-based and lower levels of care for first episode psychosis.
- Interventions could include medication evaluation, including LAI and MD consult and referral to FEP support programs, and provide longitudinal FEP-specific case management.
- Assist member and family in removing barriers to provider recommended treatment, especially around continued use of LAIs.

**Recommended actions and next steps**

1. **Early identification of members with FEP**

We are currently able to identify members through claims-based algorithms that identify members with a psychotic episode who are less than 30 years old with no previous claim for treatment of psychosis. With the recent introduction of the Guidepost for Optimal Care and Service (GPOCS) in the STAR utilization system, providers will be asked to identify if a member is being admitted for an FEP. Optum staff will then be able to intervene early in the treatment episode. Both enhancements will aid in the identification of members with FEP, but there continues to be a gap. While we can identify individuals across diverse settings, we are not currently actively identifying and working with members who are first seen in an outpatient behavioral health, pediatrician or PCP office. We also are not currently identifying these members if they visit an emergency department as their first point of contact.

**Next steps:**

- Optum will identify all initial points of contact with members and their families to intervene as quickly as possible. This may include training care advocate and intake staff on how to identify these members and what services to offer for early intervention.
• Optum will work with health plans to provide education and resources for PCPs and pediatricians to educate them on the signs and symptoms of FEP and provide appropriate treatment and referral resources.

• Various initiatives are underway to identify Optum members in real time in emergency rooms and outpatient behavioral health services. Identification of members with FEP would provide the opportunity to intervene at the point of initial care during a crisis or early onset of the illness.

2. Education for members and their families
Optum is currently revising its user interface pages to provide information targeted specifically to members and their families. This information will be available on our member portal, liveandworkwell.com. Ultimately, the goal is to have links available for our staff to easily email or text members while we are interacting with them. Additionally, several organizations have developed very effective communication tools for members and their families dealing with a first episode psychosis. These organizations include National Alliance on Mental Illness (NAMI), SAMHSA, as well as state organizations such as Oregon’s Early Assessment and Support Alliance (EASA) and New York’s OnTrackNY program.

Next step:
• Our educational material should join up and be consistent with trusted industry sources. We should also explore tailoring material so that members receive state-specific information. We should make these materials available to all providers who may be working with these individuals, including non-behavioral health medical providers and emergency departments.

3. Registry of resources
As mentioned earlier, SAMHSA maintains a registry of services for early-onset psychosis and serious mental illness. This list should be made available to all Optum staff who may be interacting with members and providers around FEP. There is also an opportunity to work with the EPINET project to both encourage the use of the CAB and potentially to use that data to help drive our members to high quality programs. Optum does not currently have a registry of in network providers who are proficient in working with this population.

4. Coding and claim payment
Given the cost benefit of early referral to FEP programs, Optum needs to explore how to reimburse these programs. This would best be accomplished through an episode payment structure rather than for individual services. This will require partnering with both network and the value-based purchasing (VBP) leadership to explore innovative payment structures.

5. Connecting with local resources
Optum should explore relationships with high-performing community programs to identify additional opportunities to support this population. There may be opportunities to develop vendor relationships and innovative remote programs to help fill gaps in coverage.

6. Diversity and equity
This population is vulnerable to economic and social hardships. Optum needs to keep equity issues at the forefront of all interventions. Staff need to be trained to listen for cultural bias in the application of diagnoses of schizophrenia and psychosis, and to be aware of biases among our treating providers. We need to consistently train and educate staff on diversity issues, especially among this vulnerable population.
Sources


