Neurologists popularized the adage “time is brain” to emphasize the urgency of stroke treatment. In psychiatry, we are also learning that “time is brain” when it comes to the treatment of psychosis, with the current push to develop interventions for early detection and treatment of First Episode Psychosis (FEP) in order to improve long-term outcomes.

1. DEFINITIONS

The first time someone has a psychotic episode is a period of fear and opportunity. Fear comes from the haunting psychotic symptoms, while opportunity comes from the understanding that interventions in this period have a chance to reduce long-term disability, shorten acute distress, and prevent comorbidities. Following more than a decade of international studies demonstrating the effectiveness of interventions for FEP, in 2008, the National Institute of Mental Health (NIMH) launched Recovery After an Initial Schizophrenia Episode (RAISE) to develop and measure the impact of coordinated specialty care (CSC) on those having their first episode of psychosis in multiple U.S. settings. The results are in and support the idea that early treatment significantly improves quality of life as well as decreases psychopathology. The NIMH has published a white paper on the components of CSC. Below table illustrates the components of evidence-based care.

Table 1 Modified from NIMH White Paper on CSC

<table>
<thead>
<tr>
<th>Coordinate Specialty Care Roles</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team leadership</td>
<td>Cultivate referral networks, facilitate access to care, outreach to families and patients</td>
</tr>
<tr>
<td>Team-level activities</td>
<td>Weekly team meetings, coordination of services, 24-hour phone coverage for crisis</td>
</tr>
<tr>
<td>Pharmacotherapy and primary care coordination</td>
<td>FEP-specific medication management—emphasis on low dose antipsychotic use, coordination with PCP</td>
</tr>
<tr>
<td>Psychotherapy</td>
<td>Individual and group recovery-focused psychotherapy integrate with substance use disorder care, if needed</td>
</tr>
<tr>
<td>Family education and support</td>
<td>Psychoeducation, relapse prevention counseling, and crisis intervention</td>
</tr>
<tr>
<td>Supported employment and education</td>
<td>Facilitate return to school or competitive work, provide ongoing support after school or job placement</td>
</tr>
<tr>
<td>Case management</td>
<td>Assertive care management in clinic and community settings to address practical problems, coordinate social services across multiple areas of need</td>
</tr>
</tbody>
</table>

Epidemiology: The age of FEP is in the early 20’s for males and in the late 20’s for females; it’s estimated 100,000 persons in the U.S. alone will experience it each year.

Risk factors and comorbidities: Risk factors for worse outcomes following FEP include: longer Duration of Untreated Psychosis (DUP), lower global cognition scores, and comorbid substance use disorder.

2. DIAGNOSIS

DSM-5 defines five key areas in psychosis: 1. delusions are fixed beliefs not amenable to change in light of evidence; 2. hallucinations are perception-like experiences without external stimuli; 3. disorganized thinking, usually inferred from speech and including loose association and tangentiality; 4. disorganized motor behavior, including catatonia; and 5. negative symptoms, such as diminished emotional expression and avolition. It is important to note that, when diagnosing FEP, there are no prognostic differences among brief psychotic episodes, including acute and transient psychotic disorder; brief psychotic disorder; brief intermittent psychotic symptoms; and brief limited intermittent psychotic symptoms. (Fusar-Poli 2016)
3. TREATMENT
a. **Medication:** Practice guidelines emphasize the need for antipsychotic medication, use of low antipsychotic dosing, and for reducing side effects to enhance treatment adherence. A recent study on how these guidelines are followed found 39.4% of its regimens sample could be improved. Of those, 36.5% were on antidepressants without clear indication; 32.1% on olanzapine—not indicated as first treatment; 23.3% on more than one antipsychotic; 10.1% on no antipsychotics; 8.8% on higher than recommended doses; and 1.2% on stimulants (Robinson, et al. 2015). Factors influencing prescription patterns include: African-Americans are more likely to be prescribed first-generation antipsychotics; women are prescribed lower doses; and those with private insurance are less likely to be prescribed more than one antipsychotic medication. **Psychotherapy:** As part of the RAISE study, a comprehensive manual on Individual Resilience Therapy (IRT) (Fusar-Poli 2016) was produced, including modules on goal-setting, psychoeducation, processing psychotic episodes, developing resiliency, and coping with symptoms, and relapse prevention.

b. **Other:** Vocational intervention—conceptualized as Individual Placement and Support (IPS)—has been shown to foster employment and reduce reliance on benefits in a small Australian study. (Jackson, Jackson and McGorry 2008)

4. PROGNOSIS
A Danish study comparing standard versus integrated treatment for FEP found that patients receiving integrated care had further reduction in psychotic symptoms, less substance misuse, better treatment adherence, and higher satisfaction with care (Petersen, et al. 2005). In general, the prognosis following a psychotic episode is as follows: 42% have a good long-term prognosis; 35% have an intermediate outcome; and 27% had poor outcomes, including suicide.

5. SUMMARY
Interventions for FEP are multifaceted, including low-dose psychopharmacology—to improve compliance and decrease side effects; psychotherapy and maximizing psychosocial interventions—including family, community, and primary care resources.

6. THREE QUESTIONS FOR CLINICAL TEAM DISCUSSION
a. How can families and patients, as well as primary care clinicians, better identify the early signs of an impending psychotic episode?

b. How can adherence to treatment be improved, especially given the potential side effects associated with some of these medications?

c. What can be done to reach the recommended standard of DUP of less than three months when it’s currently more than one year?

7. KEY REFERENCES AND RESOURCES FOR FURTHER INFORMATION
The International Early Psychosis Association (IEPA), hosts annual conferences. The National Council for Behavioral Health launched the Early Onset Schizophrenia Community of Practice (CoP) in March 2015. The Navigate initiative has materials and videos online. The World Health Organization has issued an Early Psychosis Declaration as well.


