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First Episode Psychosis Services Fidelity Scale (FEPS-FS 1.0) and Manual

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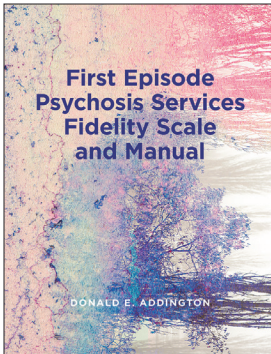
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FIRST EPISODE PSYCHOSIS SERVICES FIDELITY SCALE AND MANUAL

by Donald E. Addington

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COMPONENT CRITERIA AND RATINGS

1. Practicing Team Leader

Definition: Program staff receive both administrative leadership and clinical supervision. These roles may be held by the same individual (likely a manager or team leader) or by two different individuals. To get the highest rating, the individual who provides clinical supervision should also provide some direct clinical services in the first episode psychosis program. It is *not* required that these individuals have a master's-level education, but in some services, this is a requirement for this role.

Rationale: Longitudinal studies of implementing best practices show a significant correlation between the presence of a practicing team leader and program fidelity.

Component Scoring:

- *Data source to use for rating:* Interviews
- *Component response rating:* If the team leader (or other individual) provides administrative direction and clinical supervision to all staff *as well as* providing some direct clinical service, code the component as '5'.
- *Direct clinical service:* The supervisor is providing a service and not just observing another clinician as part of supervision. It does not have to be functioning as a care coordinator or case manager with a caseload. It can be completing the intakes or family psychoeducation or offering individual therapy.

Comments:

- *Additional data sources to support comments:*
 - Interviews with the team leader and clinicians.
- *Specific information to include:*
 - Does the team leader hold multiple positions (i.e., Team Leader role for other programs or formal role as intake person for the first episode psychosis program)?

2. Patient-to-Provider Ratio

Definition: There is a target ratio of patients to Full Time Equivalent (FTE) clinical staff.

Rationale: Optimal ratios have been reported in the range of 15-20 cases per FTE.

Component Scoring:

- *Data source to use for rating:* Interviews
- *Component response coding:* If interviews indicate that the caseload ratio is 20:1 or less, rate the component as '5'.

To calculate: Divide the total number of currently registered patients by the total number of clinical FTEs. A Full Time Equivalent (FTE) is a unit that indicates the workload of an employed person in a way that makes workloads comparable across various contexts. FTE is often used to measure a worker's involvement in a program. The calculation of full-time equivalent (FTE) is an employee's scheduled hours divided by the employer's hours for a full-time workweek. When an employer has a 40-hour workweek, employees who are scheduled to work 40 hours per week are 1.0 FTEs. Employees scheduled to work 20 hours per week are 0.5 FTEs, and 0.1 FTE represents one half-day of work. In the FEPS-FS, FTEs include all direct clinical care staff. Direct care staff include family support worker, peer support worker, nurse, employment specialist, addiction specialist, psychologist, therapist, and case manager. Do not include residents/interns even if they have their own caseload. Do not include any staff members who have no clinical role. These may include administrators, data managers, managers, and researchers. Do not include prescribers. If the team leader has both an administrative role and a caseload, in the calculation only include the percentage of time the team leader dedicates to clinical services.

Comments:

- *Additional data sources to support comments:*
 - Interviews with team leader, clinicians, and Supported Employment specialist
 - Document review
 - Policy and practice documents

3. Services Delivered by Team

Definition: Includes qualified professionals to provide both case management and specific service components including:

- i. Case management/care coordination
2. Health services (registering with primary care, weight and metabolic monitoring)
3. Psychotherapies including Cognitive Behavioral Therapy (CBT) and Motivational Enhancement (ME) (aka Motivational Interviewing)
4. Substance use management
5. Supported employment/Supported education

6. Family education and support
7. Patient psychoeducation
8. Pharmacotherapy

The focus for rating this component is the services received by the patients rather than the professions of the providers. Some of these components may be delivered by a staff member paid by another program but can still be included if that staff member is an active participant in the patient's multidisciplinary team. More than one function may be provided by the same individual. Rating the service as present is separate from the rating of the quality of the service, which is covered by the assessment of each component. A minimum rating of '2' on the specific component score should be required to define the service as present.

Rationale: Patients and families benefit from a range of services which need to be coordinated to deliver consistent care.

Component Scoring:

- *Data source to use for rating:* Interviews and document review.
- Most services are defined under the rating for that component.
- *Component response coding:* If team members provide all the listed services, code the component as '5'.

Comments:

- *Additional data sources to support comments:*
 - Interviews with team leader and clinicians.
 - Document review (program staff role descriptions)

4. Assigned Case Manager/Care Coordinator

Definition: Patient has an assigned case manager/care coordinator (individual may have a different title at different programs) who is a professional qualified clinician in nursing, psychology, social work, or occupational therapy.

Case managers (or "care managers/coordinators") are staff members on coordinated specialty care teams who assess and address the individual and unique needs of each patient, providing direct services or making referrals with follow-up ensuring that individualized needs are addressed. Case managers are part of the team, attend team meetings and coordinate care for patients. Case management responsibilities may include mental health counseling, skills training, financial counseling, housing assistance, substance abuse counseling and treatment, and family counseling.

Rationale: Case management is a component of all treatment guidelines.

Component Scoring:

- *Data source to use for rating:* Health record review or administrative data
- *Component response coding:* If 80% or more patients have been assigned a case manager, code the component as '5'.

Comments:

- *Additional data sources to support comments:*
 - Interviews with team leader and clinicians

5. Psychiatrist Caseload

Definition: Access to psychiatry is an important component of the first episode psychosis treatment model, and each patient should be seen up to once a week by a psychiatrist if necessary. It is important that psychiatrists maintain low caseloads to facilitate this frequency. Other appropriately trained prescribers can take responsibility for pharmacotherapy. Appropriately trained means that the licensed prescriber can evaluate symptoms and functioning, is aware of the available antipsychotics, their risks and benefits, as well as the indications for other psychopharmacological interventions in psychosis. Moreover, they should be able to monitor and manage the side-effects.

Rationale: Implementation guidelines specify the need for psychiatrists or other appropriately trained providers to be part of the team.

Component Scoring:

- *Data source to use for rating:* Interviews with team leader and prescriber, and program documents
- *Component response coding:* If interviews indicate that psychiatrist works with ≤ 29 patients per 0.2 FTE, code the component as '5'.

To calculate:

1. Add up the total psychiatry FTEs available to the program per week.
2. Divide the total number of enrolled patients by the total psychiatry FTEs.
3. Multiply that number by 0.2.

For example, if you have 30 currently registered patients and a 0.1 psychiatrist FTE, your caseload is 60 per 0.2 psychiatry FTE.

Use the prescriber with the highest ratio who serves at least 30% of the full caseload to code the component. If the caseload is divided more or less equally across multiple prescribers who have equivalent time allocations but variable caseloads, calculate the patient-to-prescriber FTE ratio for each prescriber.

For example, a program has 43 active patients and 3 prescribers. Prescriber 1 is 0.1 FTE and has a caseload of 16, Prescriber 2 is 0.2 FTE and has a caseload of 25, and Prescriber 3 is 0.1 FTE and has a caseload of 20. Converting their caseload ratios to a 0.2 FTE:

Prescriber 1 – 0.2: 16

Prescriber 2 – 0.2: 25

Prescriber 3 – 0.1: 20

Combined (FTE 0.5): 65

Prescriber caseload 25/ 0.2 FTE score 5

Comments:

- *Additional data sources to support comments:*
 - Staff FTE documents
- *Specific information to include:*
 - How many FTEs of psychiatry do you have available?
 - If a patient needs to be seen every two weeks by a psychiatrist, is that possible?

6. Psychiatrist Role on Team

Definition: Psychiatrists/licensed prescribers are team members who provide direct clinical services to individual patients and their families. They share an integrated health record with other team members. In addition, as team members they attend team meetings, may see patients with other clinicians and are accessible for consultation by team during the work week.

Rationale: Program guidelines specify the need to have a psychiatrist/prescriber as part of the team.

Component Scoring:

- *Data source to use for rating:* Interviews with the team leader and psychiatrist/prescriber
- *Component response coding:* If interviews indicate that the psychiatrist/prescriber attends team meetings, sees patients with other clinicians, shares the team health record, and is available for consultations with staff during the work week, code the component as '5'.
- The psychiatrist/prescriber participation must be consistent. Appropriate and accountable funding for these activities reinforces this pattern of practice and strengthens the evidence for the rating.
- The psychiatrist must attend three or more team meetings per month to meet the criterion of attendance at team meetings.
- Some programs may use outside prescribers who are not involved as team members or who do not share the same health record for certain patients. If this affects $\leq 20\%$ of the current caseload, this should be noted as deficiency in any written review. If it affects $>20\%$ of the current caseload the team should not receive the point for sharing the health record with other team members.

NOTE: *If there are multiple psychiatrists/prescribers who work with the program and who have different practices regarding their participation on the team, the rating should be made based on the main psychiatrist/prescriber (the one with the most patients) and discrepancies can be discussed in the comments.*

7. Weekly Multi-Disciplinary Team Meetings

Definition: Multi-disciplinary team meetings are conducted weekly to discuss the following:

1. Case review (new admissions and caseloads)
2. Assessment and treatment planning
3. Complex cases
4. Termination of services

Rationale: Regular team meetings are conducted to review the status of first episode psychosis patients and foster staff communication.

Component Scoring:

- *Data source to use for rating:* Team Leader Interview
- *All team members must be present.*
- *If the psychiatrist is absent* this still counts as a team meeting, but the absence is rated under the psychiatrist role. To be present the psychiatrist must attend three or more of the team meetings in a month.
- *Component response coding:* If the team meetings are conducted weekly, and involve discussion of all four issues, code the component as '5'.
- *Admissions and caseload* refer to discussion of new cases and to maintaining an adequate number of cases or reviewing premature discharges.
- *Termination of services* refers to the clinical detail involved in transition in care after the end of the program.

Comments:

- *Additional data sources to support comments:*
 - Interview with case manager

8. Explicit Diagnostic Admission Criteria

Definition: The FEP program has a clearly identified mandate to serve specific diagnostic groups with a psychosis and uses measurable and operationally defined criteria to select appropriate referrals. There exists a consistent process for screening and documenting uncertain cases and those with co-morbid substance use. The exact diagnostic criteria admitted vary according to the program. Typically, all include those with a schizophrenia spectrum disorder, and some include those with a bipolar disorder or major depressive disorder with psychotic features. Some also serve those with a DSM-5 Attenuated Psychosis Syndrome,

also known as those at Clinical High Risk. It is necessary to know the proportions of these groups in the program, since this affects the components that assess pharmacotherapy.

Rationale: The program needs explicit criteria to conduct effective evaluations and make comparisons with similar programs.

Component Scoring:

- *Data sources to use for rating:*
 - Interview with team leader and document review
 - Policy document
- *Specific information to include:*
 - Describe the program inclusion and exclusion criteria for admission.
 - Provide the number of people enrolled in the program by diagnostic group.
- *Component response coding:* If over 90% of the patients served meet admission criteria, code the component as '5'.
- *Patients with ambiguous diagnoses:* Count patients with ambiguous diagnoses who later meet criteria for a non-included diagnosis as meeting criteria for program entry.

9. Population Served

Definition: This component evaluates the extent to which first episode psychosis programs are meeting population need. In other words, are they serving the number of new patients expected, based on the incidence of new cases expected from the population in the catchment area? Catchment area may be defined by city, county, or state or region. For guidance, we have included recommended incidence rates based upon data from a systematic review of the literature. If there is data available that describes the precise incidence of new cases in your service area, this should be used.

Rationale: Programs should enroll patients with a schizophrenia spectrum disorder at the annual incidence rate of 16:100,000 people (McGrath, Saha, Chant, & Welham, 2008). Use local data on incidence if available; for example, in England a data base provides specific incidence data for each region (Kirkbride et al., 2013).

Component response coding: If the program serves $\geq 80\%$ of incident cases expected within the region served by the program, score '5'.

If the program or the service provider organization does not compare the admission rate to the expected incidence rate, rate the component as '1'.

Comments:

- *Data sources to support comments:*
 - Interviews with the team leader
 - Program administrative data on new admissions
 - Publicly available population statistics*

- *Specific information to include:*
 - Number of *new* patients admitted in the past 12 months per 100,000 population

**Use a government-based census source (e.g., www.census.gov) to find the population of catchment area.*

NOTE: Calculation should be based on the typical number of unique patients admitted in the past 12-month period and the population of the program's catchment area. Information on new patients and estimated boundaries of the program catchment area can be obtained from the program.

To calculate:

1. Gather necessary numbers:
 - a. Identify the number of new patients admitted to the program in the past 12 months.
 - b. Identify program catchment area boundaries.
2. To calculate the proportion of total potential patients served:
 - a. Look up catchment area population size.
 - b. Divide the number of new patients by the total catchment area population.
 - c. Multiply this number by 100,000.
 - d. The result is the number new cases per 100,000 population.

10. Age Range Served

Definition: The age range accepted by the program.

Rationale: The epidemiology of schizophrenia indicates that the age range of onset covers the age range from early teens to 65. Programs that restrict the age range exclude older patients who are more often female and more likely to be married.

- *Data Source:* Program policies, team leader interview

11. Duration of First Episode Psychosis (FEP) Program

Definition: The mandate of the program is to serve patients for a specified period.

Rationale: Due to the nature of the early course of illness, patients and families often benefit from receiving first episode psychosis services for at least three years. The level of services required varies between individual patients and their families and over time.

Component Scoring:

- *Data source to use for rating:* Interviews and program policies review
- *Component response coding:* If the intended duration of the service is more than three years, code the component as '5'. For this component, duration is based on the program policy and stated mandate (though length of time in program for individual patients may vary).

Comments:

- *Additional data sources to support comments:*
 - Interview with team leader and clinicians
 - Program policy documentation review

12. Targeted Education to Health/Social Service/Community Groups

Definition: Provision of information to first-contact professionals, including family physicians, school and post-secondary counseling services, youth social service agencies, community mental health services, police services, hospital emergency rooms, and other community organizations. Public education may be provided by any source within the program or network.

Rationale: Early identification approaches that involve proactively seeking out patients with early psychosis reduce the duration of untreated psychosis. Enhancing the education, communication, and liaison with health and service providers who may identify or treat patients with early psychosis will reduce the duration of untreated psychosis.

Component Scoring:

- *Data source to use for rating:* Interviews and document review
- *Component response coding:* If community education is provided to service providers more than 12 times in previous 12 months, code the component as '5'.
- *Hospital liaison* is rated under component 33. It does not get rated under this component unless it is for emergency room contacts.
- *Repeated visits to one site:* It is reasonable to visit a site more than once given staff turnover leads to loss of information. Ongoing contact with a site around clinical cases does not count.
- *Within-agency education:* Do not count in-house agency education sessions.
- *Do not count inpatient unit education since this is part of component 33, Communication between FEP and inpatient services. Furthermore, it does not promote community awareness.*

NOTE: *This should be based on face-to-face education. Although potentially useful, activities such as poster campaigns, mass mail outs, phone calls, faxing, or emailing should not be counted towards this component.*

Comments:

- *Additional data sources to support comments:*
 - Interviews with team leader, clinician, and outreach coordinator
 - Public education materials (e.g., slides, handouts, speaking schedule, etc.)
 - Program policy

13. Early Intervention

Definition: The proportion of first episode psychosis patients who have been hospitalized prior to FEPS program admission.

Rationale: The proportion of first episode psychosis patients who have been hospitalized prior to admission to the FEP services reflects success in early intervention.

Component Scoring: If *no more than* 19% of the current caseload were hospitalized in an inpatient psychiatric unit prior to enrollment, code the component as '5'. The numerator for this measure is the number of patients admitted in the last year.

NOTE: *Do not include patients categorized as “clinical high risk” in calculating the proportion.*

Comments:

- *Data sources to support comments:*
 - Interviews with the team leader
 - Program administrative data

14. Timely Contact with Referred Individual

Definition: Patients should receive an in-person appointment within two weeks of referral (10 business days) to the program. The time starts on the date that the referral from the original referral source is received at the program and ends when the patient has an in-person appointment. To meet criteria, appointments must be face-to-face and must include the opportunity to start some element of treatment. Treatment can include any activities that begin with the engagement of the patient and the process of recovery. This can include the first intake appointment where initial assessment, education, and the engagement process begin. The rating is based on appointments attended, not appointments scheduled or offered.

Rationale: Patients who experience a first episode of psychosis require urgent or emergent care. Treatment should be initiated within two weeks of referral. Clear intake and admissions procedures support receipt of a timely initial assessment and treatment.

Component Scoring:

- *Data source to use for rating:* Health record review or administrative data (If program can pull all initial appointment data, the full dataset rather than the health record review can be used to assign the rating.)
- *Component response coding:* If 80% or more patients receive a face-to-face appointment within two weeks, code the component as '5'.
- *Hospitalized patients:* Some patients are first seen by FEPS staff in hospital. This would count as their initial assessment and there would be zero time between referral and assessment.

NOTE: *If a patient is hospitalized after referral but before their first appointment, thereby preventing them from attending a first appointment within 2 weeks, they should be excluded from this calculation. If the patient is referred again to the program, the time is then calculated from the time of hospital discharge.*

Comments:

- *Additional data sources to support comments:*
 - Interviews with program manager, case manager, or intake coordinator
 - Documented program policy and procedure

15. Family Involvement in Assessments

Definition: Service engages family in initial patient assessment to improve the quality of the assessment, and to engage both in the treatment program. Occasionally the patient is first seen alone. In these cases, if the family is seen within a month of the initial individual meeting, this can be counted as part of the initial assessment.

Rationale: The engagement of individuals and families or other carers as partners in the assessment process and care improves the overall reliability of the assessment and may foster therapeutic alliance (e.g., helping choose targets for intervention).

Component Scoring:

- *Data source to use for rating:* Health record review or administrative data
- *Component response coding:* If 80% or more of families are seen during initial assessment or within a month of that meeting, code the component as '5'.

Comments:

- *Additional data sources to support comments:*
 - Interviews with program manager, case manager, or clinicians responsible for initial assessments
 - Program policies and procedures for intake/assessment

16. Comprehensive Clinical Assessment

Definition: Each patient should have a comprehensive clinical assessment as part of their initial assessment. It should include the following:

1. Time course of symptoms, change in functioning, and substance abuse (assessing whether there was change in functioning correlated with substance use changes or other changes)
2. Recent changes in behavior
3. Risk assessment of harm to self/others
4. Mental status exam
5. Psychiatric history

6. Premorbid functioning
7. Comorbid medical illness
8. Comorbid substance use
9. Family History

Rationale: Comprehensive assessments provide essential information for diagnosis, treatment decisions, and care planning.

Component Scoring:

- *Data source to use for rating:* Health record review, clinician interview.
- *Component response coding:* If 8 of the 9 items above are assessed at enrollment for 80% or more of patients, code the component as '5'.
- The comprehensive assessment may be completed over time, for example, as a combination of assessments from the screening interview to the initial assessment by the psychiatrist and other clinicians. The initial assessment must be completed within one month of enrollment.

Comments:

- *Additional data sources to support comments:*
 - Interview with the team leader
 - Policy and procedure manuals, assessment templates (if available)

17. Comprehensive Psychosocial Needs Assessment

Definition: Each patient should have an assessment of their psychosocial needs. The assessment should include the following:

1. Housing
2. Employment
3. Education
4. Social support
5. Financial support
6. Primary care access
7. Family support
8. Past trauma
9. Legal

Rationale: Comprehensive psychosocial needs assessment provides essential information to support patient-centered care planning to support recovery in the community.

Component Scoring:

- *Data source to use for rating:* Health record review or clinician interview.
- *Component response coding:* If eight or more psychosocial needs of patients are included in 80% of needs assessments, code the component as '5'.

Comments:

- *Additional data sources to support comments:*
 - Relevant policy or protocol
 - Interview with the team leader
- This component assesses the thoroughness of the assessment process. It is not meant to suggest that all these items should be included in a treatment plan. The treatment plan will reflect the needs identified and the preferences of the patient.

18. Clinical Treatment Plan/Care Plan after Initial Assessment

Definition: It is important that treatment plans/care plans reflect patient and family preference as well as clinical and psychosocial needs. Evidence that patient and staff collaborate to develop a treatment plan include:

- a. Patient's signature on the plan

Rationale: The clinical presentation and impact of psychosis is variable, and it is important that treatment is individualized.

Component Scoring:

- *Data source to use for rating:* Health record review, Clinician Interview
- *Component response coding:* If 80% or more patients have an individualized treatment plan that reflects patient preference, code the component as '5'.

Comments:

- *Additional data sources to support comments:*
 - Interviews with team leader
 - Program policy/procedures

19. Antipsychotic Medication Prescription

Definition: After assessment confirms a diagnosis of a psychosis and the need for pharmacotherapy, anti-psychotic medication is prescribed with consideration given to patient preference.

Rationale: Antipsychotic medication is an evidence-based core intervention to treat symptoms of psychosis and reduce relapse rates for patients with a first episode of a schizophrenia spectrum disorder.

Component Scoring:

- *Data source to use for rating:* Health record review or administrative data
- *Component response coding:* If 80% or more patients with a schizophrenia spectrum disorder receive a prescription for antipsychotic medication or enter the program already on an antipsychotic, code the component as '5'.
- Do not count patients with a clinical high risk for developing a schizophrenia spectrum disorder (DSM-5 Specified Schizophrenia Spectrum Disorder Attenuated Psychosis Syndrome) or those with bipolar disorder. These patients do not contribute to the denominator.
- This component refers to a prescription in the first month of starting the program. The dose may not be initiated at the full treatment dose.

Comments:

- *Additional data sources to support comments:*
 - Interviews with team leader, clinician, and prescriber
 - Program policy

20. Antipsychotic Dosing within Recommendations for Individuals with Psychosis

Definition: Antipsychotic medication dosing is within government-approved guidelines for second-generation antipsychotics and between 200 and 800 Chlorpromazine Equivalents for first-generation antipsychotic medications at six months (See Appendix J for **Medication Dosing Guidelines**).

Rationale: First episode psychosis patients tend to respond to lower doses of antipsychotic medications and are more sensitive to side-effects than multi-episode patients. At the same time, a proportion do not respond to medication at all, which means that in practice the full range of doses should be used.

Component Scoring:

- *Data source to use for rating:* Health record review or administrative data
- *Component response coding:* If by six months of starting the program, 80% or more of patients are on a dose within the target range, code the component as '5'.
- *Multiple antipsychotics:* If the patient is prescribed more than one antipsychotic, take the current dosage of each and divide them each by their maximum dosage. Add the fractions. If the total is >1, then the patient is not receiving antipsychotic dosing within guidelines.
 - *Example 1:* Patient is prescribed 15 mg aripiprazole and 4mg risperidone. Divide aripiprazole dosage by the maximum aripiprazole dose ($15\text{mg}/30\text{mg} = 0.5$) and divide risperidone dosage by the maximum risperidone dosage ($4\text{mg}/16.0\text{mg} = 0.25$). Add the two fractions ($0.5 + 0.25 = 0.75$). Total value (0.75) is < 1. Therefore, the prescribed dosage is within dosage guidelines.

- *Example 2:* Patient is prescribed 5 mg aripiprazole and 20mg olanzapine. Divide aripiprazole dosage by the maximum aripiprazole dose ($5\text{mg}/30\text{mg} = 0.17$) and divide olanzapine dosage by the maximum olanzapine dosage ($20\text{mg}/20\text{mg} = 1.0$). Add the two fractions ($0.17 + 1.0 = 1.17$). Total value (1.17) is >1 . Therefore, the prescribed dosage is not within dosage guidelines.

Comments:

- *Additional data sources to support comments:*
 - Interview with prescriber
 - Program policy

21. Clozapine for Medication-Resistant Symptoms

Definition: Use of clozapine if patient does not respond adequately after two trials of antipsychotics (medication resistance occurs in approximately 20% of cases with schizophrenia spectrum disorders).

Treatment equivalent to 10 mg haloperidol, and over 3-month period.

Rationale: Clozapine is indicated for the treatment of inadequate or non-response to first-line antipsychotics.

Component Scoring:

- *Data source to use for rating:* Clozapine monitoring enrollment records, administrative data or interviews (depending on what is available)
- *Component response coding:* If more than 4% of caseload of patients with schizophrenia spectrum disorder are on clozapine, code the component as '5'.

To calculate:

Divide the total number of program patients with a schizophrenia spectrum disorder who are on clozapine by the total number of currently enrolled patients diagnosed with a schizophrenia spectrum disorder.

NOTE: For programs that serve multiple groups of patients (i.e., schizophrenia spectrum disorders, bipolar disorder, depression, and clinical high risk or attenuated psychosis syndrome) the numerator and denominator are exclusively patients with a schizophrenia spectrum disorder.

Comments:

- *Additional data sources to support comments:*
 - Interviews with prescriber
 - If there is a discrepancy between the prescriber and documents prepared and submitted by the team leader, it is likely that the prescriber is more aware of the numbers due to the practical impact of having patients on clozapine. If the numbers are discrepant, provide the prescriber with the number provided by the team leader for clarification. Use the prescriber's final determination as the count for the number of patients on clozapine.
 - Program policy

22. Patient Psychoeducation

Definition: Provision of at least 12 episodes of patient psychoeducation in the first year. Psychoeducation refers to the provision of support, information, and management strategies related to familial, social, biological, and pharmacological perspectives on illness. (See below for a detailed list of topics that may be addressed through psychoeducation.) An episode or session is usually 45-60 minutes covering a specific topic and its relevance to a patient.

The person delivering the psychoeducation must have received formal training in patient psychoeducation as well as supervision. The training may have been part of their formal professional training or as continuing professional development (CPD). For both professional training and CPD, the training should comprise both learning and supervision. Attending courses without supervision is not evidence of effective training.

Psychoeducation can be delivered individually or in a group and may be delivered by any member of the care team with formal training including peer support workers. A structured psychoeducation manual may be used, or psychoeducation may be delivered more informally, embedded as a component of case management. The RAISE research Individual Resiliency Manual sessions 1-3 and 7 are considered to cover psychoeducation, as are modules 12 and 13 on health.

Rationale: Psychoeducation is a way of providing information to patients to both engage them and support autonomy and recovery.

Component Scoring:

- *Data source to use for rating:* Health record review or administrative data (e.g., group attendance)
 - May be captured in structured documentation or in topics listed in progress notes, including:
 - developing coping and self-help strategies
 - developing resiliency
 - dealing with the symptoms of psychosis
 - activities of daily living
 - educational/academic supports
 - vocational/employment supports
 - housing supports
 - substance abuse supports
 - support in establishing social relationships or connections
 - peer support
 - income support, when necessary (i.e., benefits planning)
 - recreational supports

- *Component response coding:* If 80% or more patients participate in the equivalent of 12 episodes of psychoeducation, code the component as '5'.
- *Ideally the sessions are provided during the first year.* That is one of the reasons for selecting health records of patients who have been in the program for at least one year. If the total of twelve sessions is only achieved in the second year this should be counted towards the rating.

Comments:

- *Additional data sources to support comments:*
 - Interviews with team leader and clinician
 - Psychoeducation manual or handouts
- *Specific information to include:*
 - Are patients offered group or individual psychoeducation?
 - Is there a formal manual or curriculum that is followed?

23. Family Education and Support

Definition: Families should receive at least eight episodes of psychoeducation in the first year. Family psychoeducation typically offers information on a range of topics including:

- Information about psychosis
- Information about medications
- Information about coping with stress
- Recognition and prevention of relapse
- Collaboration with clinicians
- Effective communication
- Supporting recovery

An episode or session is usually a 45-minute to one-hour session covering a specific topic and its relevance to a family. It can be delivered individually or in a group and may be delivered by the case manager or by a dedicated family worker. Evidence-based one-day training workshops can be part of a family education program. These typically last for four to six hours and can count for between 4 and 6 sessions, depending upon the schedule of the day.

The person delivering the therapy must have received formal training in family psychoeducation and supervision. The training may have been part of their formal professional training or as continuing professional development (CPD). For both professional training and CPD, the training should comprise both learning and supervision. Attending courses without supervision is not evidence of effective training. The Multifamily Group Treatment (MFGT) model is an evidence-based approach that offers a specific training course. The use of a research-supported manualized program such as the RAISE Navigate Family Education Program Manual or the On Track New York Family Resource and Treatment Manual increases the confidence of a rating.

Rationale: Family psychoeducation is a robust contributor to lower relapse rates.

Component Scoring:

- *Data source to use for rating:* Health record review, interviews or administrative data (e.g., group attendance)
- *Component response coding:* If 80% or more families receive at least eight sessions of family psychoeducation sessions from staff formally trained in family psychoeducation, code the component as '5'.
- *Ideally the sessions are provided during the first year.* That is one of the reasons for selecting health records of patients who have been in the program for at least one year. If the total of eight sessions is only achieved in the second year this should be counted towards the rating.

Comments:

- *Additional data sources to support comments:*
 - Interviews with team leader, clinicians
 - Family psychoeducation manual, curriculum, or handouts
- *Specific information to include:*
 - Are families offered group or individual psychoeducation? If they are not offered groups, are families connected to other families in any other way? Explain.
 - Is there a formal manual or curriculum that is followed?

24. Cognitive Behavioral Therapy (CBT)

Definition: Individual or group cognitive Behavioral therapy (CBT) delivered to individuals where indicated in the first year. CBT is an evidence-based treatment that is indicated for several clinical problems not limited to medication-resistant positive symptoms, anxiety, or depression. An appropriately trained professional should deliver CBT.

The training may have been part of formal professional training or as continuing professional development (CPD). For both professional training and CPD the training should comprise both learning and supervision. Attending courses without supervision is not evidence of effective training.

If provided as part of CPD training, the training should be from an established, authorized provider of CBT training (general CBT training as well as CBT for psychosis (CBT-P) are both acceptable). Recovery-oriented cognitive therapy (CT-R) for individuals with persistent schizophrenia is another validated CBT model. A formal certificate of competence provides confirmation of CPD training or training followed by supervision.

Another way that CBT training and supervision can be confirmed is if the clinician has specific training in the use of a formal manual such as the RAISE Individual Resiliency Training (IRT) Manual. The IRT Manual provides a guide for CBT when the following modules have been delivered: Modules 5 (processing the psychotic episode), 6 and 14 (resiliencies), 8 (dealing with negative feelings), and 9 (coping with

symptoms). To meet criteria for this component, formal CBT should be provided for at least 10 sessions. Providing CBT informed-care or incorporating CBT principles into general case management is valuable (and could be acknowledged in the comments) but does not qualify for this component. Group formats for CBT have also been validated and can count towards this component.

Rationale: CBT has been widely investigated and has been shown to be effective for symptom management and many other aspects of recovery.

Component Scoring:

- *Data source to use for rating:* Team leader and clinician interviews
- *Component response coding:* If 60% or more of patients receive at least 10 sessions of CBT delivered by an appropriately trained professional, code the component as '5'.
- *Ideally the sessions are provided during the first year.* That is one of the reasons for selecting health records of patients who have been in the program for at least one year. If the total of ten sessions is only achieved in the second year this should be counted towards the rating.

Comments:

- *Additional data sources to support comments:*
 - CBT curriculum/manual and materials
- *Specific information to include:*
 - Where was CBT training received? Training can be received during professional training. It can also be obtained during continuing professional development. This is best confirmed by receipt of a diploma or professional recognition by a licensing authority which may be required for billing purposes.
 - Were any staff specifically trained in CBT for psychosis?

25. Supporting Health

Definition: Program takes steps to support patient health, including:

1. Refer to and engage with primary care
2. Measure and record weight at least quarterly in the first year
3. Provide feedback on weight gain and general advice on diet and exercise
4. Monitor and document extrapyramidal side-effects
5. Monitor glucose and or Haemoglobin 1a and triglycerides annually
6. Monitor and document cigarette smoking habits annually
7. Prescribe pharmacological supports to smokers wishing to quit
 - a. Nicotine Replacement Therapy
 - b. Varenicline
 - c. Bupropion

These steps must be taken with all patients unless otherwise specified.

Rationale: Individuals with severe and persistent mental disorders such as schizophrenia have their lifespan shortened by at least a decade in part due to increased mortality from a range of physical illnesses. Early during illness, they have increased rates of smoking and weight gain, have poor exercise habits, and do not access primary health care. In addition, the determinants of health such as income, housing, and social support put them at increased risk of poor health outcomes. Connecting individuals to primary care, monitoring health indicators, and promoting smoking cessation can all impact health status.

Component Scoring:

- *Data source to use for rating:* Team leader, clinician, and prescriber interviews
- Referral and engagement in primary care is rated as present if a team member records the details of the primary care provider in the health record or encourages and supports the patient to register with a primary health care provider.
- *Component response coding:* If all seven items are present, code the component as '5'.

Comments:

- *Additional data sources to support comments:*
 - Interviews with team leader and clinicians

26. Annual Comprehensive Assessment

Definition: All patients should receive an annual or ongoing comprehensive assessment, including:

1. Educational involvement
2. Occupational involvement
3. Social functioning
4. Symptoms
5. Psychosocial needs
6. Risk assessment of harm to self or others
7. Substance use

Rationale: Individual patient circumstances change with time, and several diagnoses are time-dependent. Annual or ongoing assessments are considered a good clinical practice and provide the opportunity for updating treatment plans, communication with primary care providers, and ongoing planning.

Component Scoring:

- *Data source to use for rating:* Health record review
- *Component response coding:* If 80% or more patients undergo annual or ongoing assessments that include at least six items above, code the component as '5'.

- The elements of this assessment may be found in different areas of the health record. For example, weight/BMI and laboratory assessment are often found in the prescriber's component of the health record.

Comments:

- *Additional data sources to support comments:*
 - Interviews with team leader and clinicians

27. Services for Patients with Substance Use Disorders

Definition: The FEP program offers the following:

1. Assessment of substance use for all patients at intake and at annual review
2. Addresses substance use in patient psychoeducation
3. Addresses substance use in family psychoeducation
4. Provides brief evidence-based psychotherapies such as motivational enhancement/ interviewing (ME/MI) or CBT for patients with substance use problems. Staff who provide these services must have had formal training and supervision in these therapies either during training or as Continuing Professional Development (CPD). This may include training on the specific modules used in the RAISE Individual Resilience Training. These are a few of several techniques that have been described as part of ME/MI:
 - Designate a change goal (i.e., substance use)
 - Ask related questions: What? How much? Benefits? Impact? Negatives?
 - Provide simple reflections
 - Provide complex reflections
 - Affirm
 - Summarize
 - Elicit/reinforce change talk
 - Collaborate with patient
 - Support self-efficacy
 - Roll with resistance
 - Address ambivalence
5. Maintains continuity of care and patient engagement if patient is referred to specialized substance use services (e.g., detox, residential treatment).
6. These criteria for FEPS substance use services meet criteria described as Dual Disorders Capability (Gotham, Brown, Comaty, McGovern, & Claus, 2013).
7. Specialized services refer to addiction services such as detoxification, opiate treatment services such as outpatient maintenance programs, and residential addiction programs.

Alcoholics Anonymous or an outpatient addictions group do not count as a specialized service.

Rationale: There is a high prevalence of substance use disorders in those with a first episode psychosis. The program should have staff trained to recognize and provide first-line interventions such as motivational enhancement. The training may have been part of their formal professional training or as continuing professional development (CPD). For both professional training and CPD, the training should comprise both learning and supervision. Attending courses without supervision is not evidence of effective training.

Component Scoring:

- *Data source to use for rating:* Interviews
- *Component response coding:* If the first five items listed above under definition are present, code the component as '5'.

Comments:

- Additional data sources to support comments:
 - Interviews with the team leader, clinicians, and addiction/CBT specialist (if relevant)
 - Program policy and procedures, SUD program manual/materials

28. Supported Employment (SE)

Definition: Supported Employment (SE) or Individual Placement and Support (IPS) is provided to patients interested in gaining competitive employment. In contrast with mainstream employment services, SE is an evidence-based intervention targeted at individuals with mental illness and includes additional supports such as rapid job search, on the job support, negotiating workplace accommodations, and an emphasis on patient choice. The elements of SE include:

1. Supported employment specialist is formally trained and has at least six months of experience as a supported employment specialist.
2. Supported employment specialist is a member of the FEP team and attends team meetings.
3. Supported employment specialist receives supervision at least two times per month from a trained supervisor.
4. Ratio of caseload is 1:20 or less.
5. Completes at least six employer contacts per week.
6. Uses the career profile or an equivalent form.
7. Tracks in-person employer contacts in a format that can be organized and searched. (Hand recorded in a personal notebook does not meet this criterion.)

Rationale: Supported employment is an evidence-based program which increases employment rates.

Component Scoring:

- *Data source to use for rating:* Interviews
- This component assesses the individual components of IPS and rates the program on the number of elements provided to patients
- *Component response coding:* If seven or more of the items listed above are present, code the component as '5'

NOTE: *Identify percentage of time devoted to case management activities. If greater than 10%, remove that time from the supported employment specialist's FTE in determining the 1:20 ratio. For example, the supported employment specialist is a full-time staff member. In the interview the supported employment specialist tells you they do case management activities 30% of the time. Because 30% is greater than the maximum allowable 10%, reduce the employment specialist FTE from 1.0 to 0.7 when calculating the 1:20 ratio.*

Comments:

- *Additional data sources to support comments:*
 - Interviews with the team manager and SE specialist
 - SE program description or materials

29. Supported Education (SEd)

Definition: Supported Education (SEd) is provided to patients who are interested in participating in education. The SEd provider should be integrated into the treatment team, assess educational potential, recommend education that supports the goals of the individual, and link to appropriate local education and accommodation services. Evidence of supported education services include:

1. FEPS program has a designated SEd specialist.
2. SEd specialist is a FEPS team member and attends team meetings.
3. SEd specialist has a caseload of at least three patients with education goals.
4. SEd specialist uses a standardized form to document patient education goals.
5. SEd specialist provides ongoing support including:
 - a. Identification of educational programs
 - b. Identification of sources of financial aid
 - c. Completion of applications and enrollment
 - d. Management of coursework
 - e. Acting as liaison between high school patient and high school teachers/counselors to develop disability/special education supports and transition plans

Rationale: Supported education is a program which increases participation in education.

Component Scoring:

- *Data source to use for rating:* Interviews
- *Component response coding:* If SEd does not have a caseload of at least three patients, code component as '1'. If FEPS team meets items 1-4 above and at least four support sub items from item 5 ongoing support, code the component as '5'.

Comments:

- *Additional data sources to support comments:*
 - Interviews with the team leader and SEd specialist
 - SE program description or materials.

30. Active Engagement and Retention

Definition: Use of proactive outreach services (i.e., patient visits in the community) by clinicians to reduce missed appointments, engage patients with a first episode psychosis, and minimize drop-outs.

Rationale: Active outreach promotes engagement and reduces drop-outs.

Component Scoring:

- *Data source to use for rating:* Team leader and clinician interviews
- *Component response coding:* In the calculation only include percentage of out-in-the-community time by case managers/care coordinators. Average across case managers, but weight by their caseload. If more than 40% of all patient and family visits are out-of-office, code the component as '5'.

Comments:

- *Additional data sources to support comments:*
 - Program policies/procedures. For example, are they set up to do community visits? Policies that support outreach include financial support for transportation, insurance, and staff safety protocols.

31. Patient Retention

Definition: The dropout index is the ratio of the number of early dropouts (stayed in program <1 year) in the last 12 months to the total current caseload. This is a measure of all-cause discontinuation or the degree to which the program keeps individuals engaged in the program.

Rationale: Patient and family engagement can be indirectly assessed through patient retention, as reflected in the numbers retained in the first year.

Component Scoring:

- *Data source to use for rating:* Administrative data
- *Component response coding:* The denominator is the number of FEPS patients in the program. The numerator is the number of patients who left the program in the last year before completing one year in the program.

32. Crisis Intervention Services

Definition: First Episode Psychosis program delivers crisis services or has links to crisis response services including crisis lines, mobile response teams, urgent care center, or hospital emergency rooms

Rationale: Crises are a common occurrence in this population, and both organizational linkages and individual patients/patients care plans must reflect crisis plans.

Component Scoring:

- *Data source to use for rating:* Interviews
- *Component response coding:* If the first episode psychosis team provides five-day a week, eight-hour per day drop-in services plus 24-hour phone crisis services, code the component as '5'.

Comments:

- *Additional data sources to support comments:*
 - Interviews with the program manager and case manager
 - Review of policy documents

33. Communication between FEP and Inpatient Services

Definition: If there is a hospitalization of a patient, the staff contacts the inpatient staff to be involved in treatment and discharge planning. Communication includes:

1. Contact inpatient unit to establish communication plan.
2. Visit with patient on inpatient unit.
3. Communicate with family about admission.
4. Involvement in discharge planning process.
5. Receive/obtain hospital discharge summary.
6. Schedule outpatient appointment prior to discharge.

Rationale: Close coordination between the treatment team and hospital staff is a hallmark of the assertive community treatment model, which has a strong evidence base demonstrating effectiveness in reducing hospital admissions.

Component Scoring:

- *Data source to use for rating:* Health record review, Interviews
- *Component response coding:* Health record review of the most recent five patients who have been admitted to hospital after starting the First Episode Psychosis program and discharged back to the care of the team. If the team performs all six communication activities when a patient is hospitalized, code the component as '5'. If the team has not had five admissions in the last year, records from earlier years could be used. If the number is still less than five, the evaluation could be made on three records. If there are fewer than three, the component cannot be rated.

Comments:

- *Additional data sources to support comments:*
 - Interviews with program manager and case manager
 - Program policy documentation review
- *Specific information to include:*
 - What is the typical communication between first episode psychosis service staff and inpatient staff during hospitalization?
 - Are first episode psychosis staff typically involved in discharge planning?

34. Timely Contact After Discharge from Hospital

Definition: Patient in FEP service has face-to-face contact with FEP service provider within two weeks of discharge from hospital.

Rationale: Post-discharge follow-up has been shown to reduce re-hospitalization.

Component Scoring:

- *Data source to use for rating:* Health record; Program documents.
- If the patient is referred to another clinical service after discharge from hospital, this is rated as a discharge and is not rated under this component.
- *Component response coding:* If 80% or more of first episode psychosis patients admitted to hospital are seen at the first episode psychosis service for an outpatient appointment within 14 days of hospital discharge, code the component as '5'.

Comments:

- *Additional data sources to support comments:*
 - Interviews with program manager and case manager
 - Program policy documentation review
- *Specific information to include:*
 - What is the typical communication between first episode psychosis service staff and inpatient staff during hospitalization?

35. Assuring Fidelity

Definition: Program monitors quality using a fidelity scale or quality indicators linked to standards for program treatment components such as pharmacological and psychosocial treatments.

Rationale: Adherence to the components identified in research as effective increases the chances of successful implementation. In general, higher fidelity is associated with improved outcomes, although this has yet to be demonstrated for the FEPS-FS 1.0.

Component Scoring:

- *Data source to use for rating:* Administrative Data; Interview with Team Leader.
- The fidelity scale must have been published and previously used in fidelity assessments.
- The quality indicators must be linked to discreet service components. For example, the proportion of new referrals receiving a telephone response within three working days and the proportion of new referrals being seen for an assessment within two weeks cannot be counted as two indicators.
- Acceptable indicators include the following:
 - Percentage of referrals seen within two weeks
 - Percentage receiving Cognitive Behavioral Therapy
 - Percentage receiving Family Psychoeducation
 - Percentage receiving clozapine
 - Percentage receiving Supported Employment
 - Percentage receiving annual physical assessment
 - Percentage receiving motivational enhancement for substance use disorder
 - Any other indicators
- *Component response coding:* If the program fidelity is assessed using a published fidelity scale by an external assessor, or if 11 or more discreet quality indicators are used to assess quality every two years, code the component as '5'.

Comments:

- *Additional data sources to support comments:*
 - Interviews with program manager. If the results of quality indicators or of a fidelity assessment are not part of the administrative data supplied by the program, ask the program manager. Ask about the measures used and ask for a copy of the most recent assessment.
- *Specific information to include:*
 - The fidelity scale used or the quality indicators used and the method of collecting data for the quality indicators.
 - Health record review is the most reliable source of quality indicators.

