FAMILY PERSPECTIVE

Our son was 17 and in high school, when he suffered his first psychotic break. My husband and I were devastated. The word “psychosis” was not a part of our everyday vocabulary, but we knew our son was seriously ill. We immediately turned to the medical community for help, but through a series of delays and miscommunications, it took nearly three months for us to connect with PEPP. Fortunately our son’s school guidance counsellor, who was familiar with PEPP, made the call on our behalf and within hours, our son was scheduled for a screening assessment.

The initial screening interview was followed by a more detailed assessment. Our son was assigned a psychiatrist and a nurse case manager. Batteries of tests, psychological as well as physiological, were administered. We, the parents, were interviewed extensively to obtain a detailed family medical history. In addition, the PEPP team encouraged us, as a family, to attend a day-long information and skills workshop, which addressed so many of our questions and concerns.

We gained so much confidence and reassurance from our frequent meetings with members of the team. These professionals did not dismiss our questions – instead, they openly encouraged us to articulate our observations and concerns! PEPP not only embraced our son, the patient/client, but also my husband, our daughter and myself. At every turn, we, the parents, were kept fully informed as to the treatment protocol for our son.

Our journey, although challenging, has been made significantly easier with the assistance of the PEPP team. Together we have weathered a hospital stay, a variety of drug treatments, and the upheaval of what we once considered a normal family life. PEPP has been there, and continues to be there, every step of the way, providing not only patient support, but also family support and education. Every effort is made to maximize the potential for a positive outcome.

Our family is ever mindful of the incremental progress that our son has made during these past two and one-half years. He continues to receive treatment on an out-patient basis and has resumed his schooling. The PEPP case management team worked closely with him to ensure a successful start to his academic year. His case manager was present at the preliminary meetings with the subject teacher and the vice-principal to fully apprise them of our son’s medical status. Our son has forged a trusting relationship with his psychiatrist and nurse case manager and welcomes the opportunity to share with them his innermost thoughts, hopes and fears. He complies readily with his medication regimen and has not shown any interest in experimenting with street drugs. He still makes his home with us, but has expressed interest in living independently at some point.

The future seems promising and ever hopeful.

(B.W.) Mother of PEPP patient

Our son’s first episode of psychosis occurred at age 17 within a background history of three generations of similar illness. My family members with this illness did not receive any counselling at all. They were responsible for receiving their own treatment and we were afraid of them.

This time, however, the PEPP Program has enabled our family to have a much better and healthier understanding of the illness being a disorder of the brain. Growing up I thought that my family members had a weakness in their personalities that caused disruption and chaos in our family life. Our son’s illness has enabled me to discover that this is not the case. Taking baby steps at the beginning, working with a case manager, receiving counselling, working with the help of other professional staff, our son continues to learn and live with his illness. He is very active in the process of his recovery and our family is learning to work together to enable him to accept his limitations and realize his potential.

We have found that we, as a family, are the key ingredient in dealing with our son’s illness. However, we would find it very difficult to deal with every situation without outside help, which came from PEPP. Problem solving skills learnt over time and the family members working in unison with our son have become an ensemble working together in recovery. Two reasons PEPP has worked for us are that they have professional expertise that we, as parents, do not have and our son has built up a trust in the professional people working with him. Over time we know we will all gain more confidence and be able to meet each challenge.

(B.M.) Mother of PEPP patient

Prevention & Early Intervention Program for Psychoses (PEPP)
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| PEPP Assessment Protocol | I-12 |

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A 1. INTRODUCTION

Outcome in schizophrenia and related psychotic disorders remains relatively poor despite availability of antipsychotic medication and several highly efficacious psychological treatments. While outcome can be improved significantly through provision of integrated medical and psychosocial treatments in later stages of the illness, it is doubtful if the negative effect associated with delay in initial treatment can be eradicated entirely. At the very least the social consequences of delay in treatment for the patient and the family may be difficult to reverse. Unfortunately a substantial proportion of patients experience long delays not uncommonly stretching to one to two years. However, a new optimism is beginning to emerge through provision of optimum treatment at a very early stage of the development of a psychotic illness.

Here we will provide the reader with a detailed description of a new early intervention program (PEPP). We have attempted to provide practical guidelines for setting up an early intervention program/service for psychotic disorders with special emphasis on assessment procedures and integrated phase specific treatment. While we have attempted to provide sufficient detail these modules cannot be considered training manuals. The latter may be obtained from the program on direct request. It must be emphasized that in order to provide optimum assessment and treatment as outlined in this package clinicians are advised to obtain specific training possibly through preceptorship programs. Details of these can be obtained by writing to our program.

A.2. PROGRAM PRINCIPLES

The following were adopted as guiding principles for PEPP:

1. A valid conceptual model: The program is based on a stress-vulnerability model for understanding the development and progression of psychotic disorders.

2. Integrated medical and psychosocial treatment: Emphasis is placed on integration of various biological and psychosocial modalities of treatment, which have proven efficacy, for each individual according to his/her needs.

3. A modified assertive community treatment model for delivery of care: Based on empirical evidence and experience, including our own, we adopted a model of delivery in which assertive case management is provided to each individual according to his/her needs.

4. Assessment and treatment to be provided in the least restrictive environment and preferably in the patient’s choice of environment: This is to avoid unnecessary trauma resulting from hospitalization of young individuals who have had no previous experience with mental health services and to promote early integration of the individual with his/her family and the community.

5. Promotion of early case detection and early intervention: It was considered necessary to promote strategies likely to improve early recognition of psychosis in the community so that individuals receive prompt assessment and treatment.
A.3. PROGRAM GOALS

We set the following goals for the program to be achieved within the first five years of its operation:

1. To provide optimum, safe and integrated medical and psychosocial treatment to individuals with a first episode of psychosis living in our catchment area in accordance with each patient and her/his family’s needs.
2. To promote early integration of persons presenting with a first episode of psychosis into their respective roles and responsibilities.
3. To reduce delay in initiating treatment for psychosis through early case detection strategies for the whole community.
4. To conduct research in early phases of psychosis.
5. To conduct studies on prevention of syndromal level of psychotic disorders.

CASE FINDING, SCREENING AND ASSESSMENT

In most jurisdictions individuals presenting with a first episode of psychosis are usually assessed through hospital emergency departments. If they are assessed by an emergency physician who recognizes the nature of their presenting problem, they may receive a psychiatric assessment either in the emergency department or following admission to hospital. Such decisions are likely to depend on the physician’s perception of risk to the person or others, the patient’s acuity of presentation and willingness to be admitted to hospital. Not uncommonly they may go untreated on the first few occasions following presentation to a clinician or they may discharge themselves from the hospital or the emergency department. If they are treated, this treatment is often provided on an inpatient unit where patients with a variety of chronic illnesses are being treated without consideration of the young person’s special needs.

It is now well recognized that there are significant systemic delays in engaging a person with a first episode of psychosis in treatment. In order to reduce these delays and create a climate of quick access to assessment and treatment a stepwise approach has been taken in our program. This has involved a number of systemic changes, some of which are listed as follows:

1. We have set up an adequate assessment procedure (to be described in detail later).
2. The referral system has been opened to all possible sources including prospective patients, their families and educational institutions.
3. We have made assertive connection with family physicians, guidance counsellors and teachers in schools, counselling and health services at all post-secondary educational institutions and all community agencies likely to come into contact with the youth.
4. Information has been provided to all potential sources of referral regarding the availability of
   our service and basic information about the nature of psychosis and its treatment. This
   information is provided with a sense of optimism concerning treatment outcome.
5. A screening procedure has been instituted for all incoming referrals in order to provide an
   immediate response.
6. Finally, an active early case detection program has now been started in the community, using
   posters and pamphlets available in all public places, television and radio, advertising on
   public transit, etc. Details can be obtained from the program.

B. 1. SCREENING FOR PSYCHOSIS

A formal screening procedure is conducted by an experienced clinician (a nurse case manager)
when a young adult is identified with early signs of psychosis. An early intervention approach
means responding within 24-48 hours with no waiting list.

B. 2. REFERRAL

A referral can be initiated by anyone. Common sources of referral include: self-referral, parents,
teachers, secondary and post-secondary educational counselling centres, family doctors,
traditional mental health services (including psychiatrists and psychologists in private practice),
emergency departments, etc. The clinician receiving the referral asks questions relevant to basic
criteria regarding eligibility for PEPP (see below). If there is any indication that the person may
have psychotic symptoms or be at high or imminent risk for psychosis, a screening interview is
offered. If the clinician is in doubt, the person is offered a screening assessment.

The assessment clinician will initiate contact with the client or referral source and arrange an
immediate appointment. The initial contact with the client and family is of utmost significance and
must be responded to with sensitivity as successful engagement of the young adult is often dependent
upon a good first impression being made by the clinician. It is important to avoid alarming the client
and family with labels and other medical jargon. It is better to concentrate on initiating and forming a
therapeutic relationship with the client and family. A friendly and helpful attitude combined with a
general interest in the family is often an effective means to successful engagement. Every effort is made
to involve family in the screening procedure. This may be the most crucial time to connect with the
family while also obtaining valuable information regarding the client and his/her presenting problems.

B. 3. PROCEDURE

The screening procedure may require more than one interview. It may need to be conducted in the
home when parents or other relevant family member are unable to persuade the individual to come
to the clinic. When appropriate and necessary, the clinician may go to the high school/college to talk
with a student. The majority of interviews are conducted in the clinic over one to two sessions. The
screening inventories include:

- a set of screening questions regarding general psychiatric symptoms, (available from PEPP),
- Personal Experiences and Preference Questionnaire,
- Zung Anxiety Inventory,
- Zung Depression Inventory, and
- the Formal Criteria for “At Risk for Psychosis”, (see later for details).

Most of the inventories are self-report questionnaires. The clinician should provide a quiet place
for the client to complete the inventories. H/she should establish the client’s level of literacy and ensure the client understands the directions. These instruments are used to collect important information regarding patient’s internal experience.

B. 4. STEPS

- Need for screening to be confirmed on the telephone. There should be reason to believe that the presenting problems may be indicative of psychosis.
- Some basic demographic identification of the prospective patient, source of referral and reason for referral is to be recorded even if the referral is not accepted for screening.
- Patient, if accepted for screening, should be assessed within two working days if no immediate risk to patient or others is conveyed by the referral source. If there is presumed risk of harm to patient or others, a referral to Emergency Department is advised.
- Screening assessment should consist of an interview with a clinician:
  - for all outpatients - the designated assessment clinician (nurse case manager)
  - for inpatients - program psychiatrist/resident or nurse case manager from PEPP

If an outpatient refuses to come for the screening assessment to the clinic, offer home assessment or assessment in any other setting of client’s choice.

- A screening protocol is to be completed. If patient obviously suffers from psychosis, some parts of this protocol may not be possible to be completed at this stage, and should be completed later on (within one month, preferably). Reasons for not completing screening should be documented.
- Each case is to be discussed with a Program Psychiatrist.
- A standard intake sheet to be completed on all patients. All information for screening should be passed to Program Research Assistant managing the data base.

B. 5. NEED FOR HOSPITALIZATION

In some cases it will be obvious that the person needs immediate hospitalization, and in this instance, the screening clinician will make arrangements for hospital admission with a PEPP psychiatrist and the First Episode Unit. The clinician will accompany the client to the hospital ward and provide the family with information and support as necessary.

In typical screening circumstances, the receiving clinician reviews screening data gathered from the client and family interviews and screening instruments with a consultant psychiatrist in the program within twenty-four hours to make a decision regarding disposition of the case. A client, who does not meet the criteria for proceeding with a full assessment, is provided with information and/or a referral to other appropriate resources. If the client meets the criteria for possible admission to PEPP (please see PEPP criteria), or is believed to be showing early signs of psychosis, a two-hour consultation time is scheduled to begin the assessment procedure. The referral source is informed as to the outcome of the screening by telephone or fax, and a letter summarizing the findings is prepared by the case manager and sent to the referral source (if a professional or agency).

In certain circumstances, the client may be identified as possibly experiencing a first episode of psychosis through hospital admission, the full assessment and treatment will proceed according to protocol (see below). The program social worker will make contact with the family during the client’s hospitalization, preferably through a home visit if acceptable to the family and the patient.
B. 6. **ACTIVE COMMUNITY CASE DETECTION**

Once the early intervention program had been established with procedures for assessment and treatment, a community wide case detection program was undertaken as an extension of the procedures already in place. Such an endeavour has involved additional resources. The procedure ranges from providing information regarding identification of psychotic symptoms and behaviour to potential sources of referral to providing basic information regarding psychosis to all members of the community. The latter generally involved community-wide campaigns using written materials, TV and radio, setting up specific education programs in all secondary schools and post-secondary institutions and providing public forums for education. The impact of such programs on early case detection and reducing delay in initiation of treatment has yet to be fully assessed and/or realized. While such an endeavour may appear foreboding and be potentially expensive, it is possible to achieve some of the objectives of community case detection inexpensively if certain strategies are used. PEPP has utilized the following strategies in this regard:

1. Providing information in an attractive format in different media (posters, pamphlets, film, etc.) to be disseminated to potential referral sources and clients and to the general public. The posters consist of a brief description of key symptoms of psychosis and the brochures provide a detailed description of the nature of psychosis, its early signs and the advantages of early intervention (see enclosures).

2. Involving consumers (patients and their families): consumers have been involved from planning stage of the case detection campaign, in fundraising activities and finally in the wider dissemination of the material to the community at large.

3. Posters have been placed in key situations such as shopping malls, pharmacies and public transit system.

4. Information is disseminated to key potential sources of referral such as family physicians, other health practitioners and high schools and other educational institutions. This involves direct contact with each institution, followed by presentations, seminars and workshops with teachers and guidance counselors.

5. By working closely with consumers (parents and families of patients) the program has become involved in major community events as a means to expose people in the community to the idea of psychosis in general and early intervention in particular, Examples: service club community breakfasts.
C. 1. GENERAL

If through screening a patient is identified as very likely suffering from a psychotic disorder, a two-hour assessment interview is arranged in collaboration with a case manager who will take primary responsibility for the patient through the patient’s tenure in the program. The psychiatric assessment is completed by a Program Psychiatrist. Each one of five program psychiatrists has at least one assigned time slot per week for such assessments. Families are invited and expected to attend the assessment appointment. The psychiatrist and case manager have well defined roles during the assessment interview. The psychiatrist conducts a psychiatric consultation with the client while the case manager interviews the family to gather data relevant to the client’s birth history, childhood milestones, trauma, school adjustment and achievement and history of the presenting problem. It is important for the case manager to give each family member an opportunity to give his or her perspective on the client’s problem if this has not been achieved during the screening process. All family members are encouraged to attend this appointment as each member will have a different relationship with the client and a different understanding of the problem. These differences become important in the various stages of illness and its treatment. Families are given the Wisconsin Quality of Life Questionnaire (Family Version) at the end of the first session and asked to return the questionnaire as soon as possible. This allows the family to express their version of the patient’s circumstances and to identify their goals for the patient and themselves.

Some families present with definite illness related questions while others hold other explanations for symptoms and behaviours. Some families deny or minimize the client’s difficulties. It is to be expected that families may resist or reject the help offered, and this is viewed as a normal coping style when dealing with serious illness. Case managers can ease the burden by attending to whatever family stresses are present, in hopes of alleviating the situation through reassurance and support or by making a referral to an appropriate community service if the stress is unrelated to the primary problem of psychosis. In general, family strengths need to be identified and capitalized upon, especially during the early stage of engagement. It is important for families to assume a role as partners in care. The client, family and interdisciplinary team working in collaboration with one another helps the client attain the highest level of functioning possible.

The social worker completes the initial family assessment when the client enters PEPP through the inpatient service and provides the necessary support to the family according to the same principles as stated above. In order to facilitate the transfer of care for outpatient follow-up and longer term management, a program case manager, allocated to the newly admitted patient, will liaise closely with the social worker.

For patients assessed as outpatients, the family assessment is conducted by the case manager. The initial assessment concludes with the patient, family, case manager and psychiatrist meeting together to discuss a plan of action.
C. 2. CONSENT FOR INVESTIGATIONS AND TREATMENT

As a final step in the first assessment interview, the case manager obtains consent from the patient and if necessary, the family to begin the comprehensive tests and laboratory investigations. The consent includes a letter of information to the client and family about the various medical and psychosocial interventions, as well as the expectation for participation in their assessment and treatment and in the evaluation of the treatment program. The consent to treatment informs the patient and family that PEPP is constantly evaluating the effectiveness of treatment through frequent rating scales and other means to monitor symptoms, side effects, personal and family goals, etc. The case manager will secure appointments for investigations such as CT scan, EEG, ECG, blood tests (thyroid functions, CBC, LFT, drug screening, etc.) through the Program secretary. When all the investigations are completed, the case manager will arrange and attend appointment(s) with the treating psychiatrist to provide the patient and family with the results.

C. 3. STEPS (SUMMARY)

- Patient has already received a screening assessment unless the patient is an inpatient and is regarded by the treating psychiatrist to meet criteria for a psychotic disorder.
- Consent for participation in assessment, treatment and program evaluation is signed by patient and family. This is arranged by the case manager at the time of the initial assessment. If another clinician is the initial contact for assessment, he/she ensures consent is signed.
- Procedure: patient and family are instructed to come for a 2-3 hour period if outpatient. Similar procedure is followed with inpatient but perhaps over a longer period.

Case manager sees patient and family together and then family alone. Psychiatrist sees patient alone for a full assessment; psychiatrist and case manager discuss their respective findings briefly before meeting patient and family for feedback.

- All protocols related to patient’s symptoms are completed by the psychiatrist. The rest of the protocol is initiated by the case manager including the family assessment. This involves completion of the three versions of the Wisconsin Quality of Life Index. For families of inpatients, completion of the Wisconsin Quality of Life Index will be the responsibility of the social worker. For details of what is contained in the protocol, refer to the protocol itself (see below).
- A referral request is confirmed with the family doctor before patient is seen by a Program psychiatrist irrespective of the initial source of the referral. A consultation note is sent to the patient’s family physician prepared by the psychiatrist and case manager jointly or includes reports from both. Form 14 (Consent to Release/Share Information with Family Physician) is signed by the patient.
- The patient is presented in detail at the following Monday morning program meeting before he/she can be admitted to the PEPP for treatment. The presentation includes findings from instruments (symptom scales) completed as part of baseline assessment. This allows confirmation of diagnosis of a psychotic disorder.
- Research staff are informed as soon as the assessment time is booked.
- All future appointments with the psychiatrist are booked by the case manager.

C. 4. DIAGNOSIS

Only diagnosis of a psychotic disorder (DSM-IV) 1 is given at this point.

- Issues regarding differential diagnosis are addressed and efforts at engaging the patient in treatment are initiated.
- Diagnosis is reviewed at the end of one year unless the treating psychiatrist has reason to review it earlier or the patient/family seek more specific explanations regarding diagnosis.
C. 5. INVESTIGATIONS

- Investigations are ordered at the time of assessment as per protocol: CT scan, EEG, ECG, CBC, liver functions, prolactin, electrolytes, urea, TSH and urine drug screen. Weight is also recorded.
- In addition, cognitive testing is arranged as soon as possible.
- Use of prescription and other order sheets is initiated.

C. 6. CRITERIA FOR ADMISSION

- Any psychotic disorder (DSM-IV): presence of delusions, hallucinations and/or thought disorder for greater than one week.¹ (see page 1-10)
- Symptoms not clearly explained by an organic brain syndrome or other medical disorders.
- Not having received antipsychotic treatment for longer than one month.

C. 7. DRUG TREATMENT

See under separate section.

C. 8. PSYCHOSOCIAL TREATMENT

See under separate section.

C. 9. TIERS OF INVOLVEMENT IN THE PROGRAM

All dispositions are conveyed to the referral source.
All patients and their families are informed of an initial two year involvement, if admitted to the program.

Tier I: Referral but not screened (basic demographic information to be collected)

Tier II: Screening only
- Patient screened for disposition. See attached chart

Tier III: Screening and Assessment only
- Psychiatric consultation
- Investigation (see C. 5 above)
- Treatment recommendations
- Patient may be offered periodic consultation if primary aspects of care are to be provided elsewhere

Tier IV: Assessment and medical treatment without involvement of case manager or other disciplines:
- All of the above (iii) + medical treatment as per attached protocol
- This may vary from a single consultation/assessment to multiple periodic assessments with or without medical management provided by the program psychiatrist.

Tier III and IV apply mostly to individuals outside the epidemiological catchment area.
**Tier V:**

Full program participation with involvement of case managers and other disciplines (psychology, occupational therapy) for two years is available only to individuals living within the catchment area (London and Middlesex, pop. 390,000). Patients complete the assessment and treatment protocol. Patients are seen by the case manager at least weekly and by the treating psychiatrist biweekly until clinical stability is achieved.

Patients are reviewed regularly with the attending psychiatrist for medical management and with clinical/education leader for psychosocial management. Patients not responding to treatment within three months are reviewed in a formal team discussion.

C. 10. **AT THE END OF TWO YEARS**

All patients are reviewed using data compiled over that period on symptoms, quality of life, cognition (assessment and reassessments); detailed feedback from case managers and psychiatrists. The majority of patients are in remission at this stage and doing well on several dimensions of outcome. They are transferred to “medical management”, continue to be assessed and treated by their respective psychiatrists and are discharged from the case management part of the Program. A small proportion (approximately 15%) following the two year review are deemed to be in further need of intensive and comprehensive treatment in the case management program. They are continued in the full program with the same case manager as during the first two years. In addition, these patients are offered a combined social skills training and stress management program along with clozapine therapy if they have not already received it (provided they have failed to respond to other antipsychotics).

C. 11. **PATIENTS CONSIDERED AT RISK FOR PSYCHOSIS**

Patients who, following initial screening and full assessment, do not meet criteria for diagnosis of a psychotic disorder but who do meet criteria for “at risk for psychosis* (see below) should be treated as follows:

- Discuss patient with Program Director or Research Coordinator prior to any further disposition
- Do not admit to PEPP
- Complete assessment protocol as for regular admissions
- Create a separate file (blue file) and pass onto research assistant for entry into the data base
- Follow up with a psychiatrist and another clinician as per the following protocol:
  - assess monthly for three months
  - every three months for one year unless psychosis develops. If psychosis develops, patient should be re-assessed for admission to PEPP - Tier IV or V
  - at each assessment point complete all rating scales

C. 12. **CRITERIA FOR CONSIDERING INDIVIDUALS “AT RISK FOR DEVELOPMENT OF A SCHIZOPHRENIC PSYCHOSIS”**

- Family history of schizophrenia or related psychosis in first degree relative and reduction in GAF of 30 or > lasting one month
- Attenuated (sub-threshold) symptoms on BPRS on any of the following categories: unusual thought content, suspiciousness, hallucinations, conceptual disorganization
- Same as above, but at threshold lasting less than one week

The above criteria are adapted from the EPPIC, Melbourne, Australia. For Assessment Protocol Details (Figure 1) - please see next page.
### Figure 1  
**PEPP ASSESSMENT PROTOCOL**

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<th>Screening</th>
<th>1 week window</th>
<th>(+/-) 1 month window</th>
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<td>Mth 2</td>
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<tr>
<td>Informed Consent</td>
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<td>Screening Interview Note</td>
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<tr>
<td>Definition and Criteria for &quot;At risk / Imminent Psychosis&quot;</td>
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<td>Screening Questions</td>
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<td>Personal Experiences and Preferences (scored)</td>
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<td>Zung Depression Scale (ZDS)</td>
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<tr>
<td>Zung Anxiety Scale (ZAS)</td>
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#### Diagnosis

| SCID | | | | X |

#### Standardized Assessment

| Psychiatric Consultation Note | x | | | | | |
| Assessment Note | x | | | | | |
| CORS* | x | | | | | |
| Premorbid Adjustment Scale (PAS) | x | | | | | |
| Scale for the Assessment of Positive Symptoms (SAPS)** | x | x | x | x | X | X | X |
| Scale for the Assessment of Negative Symptoms (SANS)** | x | x | x | X | X | X | X |
| ESRS** | x | x | X | X | | | |
| Simpson Angus** | x | x | X | X | | | |
| Calgary Depression Scale (CDS)** | x | x | X | X | | | |
| Hamilton Anxiety Scale (HAS)** | x | x | X | X | | | |
| Sexual Dysfunction Scale | x | x | X | X | | | |
| Wisconsin Quality of Life - Client Version | | | | | | | |
| Family Version | | | | | | | |
| Provider Version | | | | | | | |
| AUDIT | x | | | | | | |
| DAST | x | x | X | X | | | |
| CAGE | | | X | | | | |

#### Biological Indices

| EEG | x | | | | | |
| ECG | | | X | | X | |
| CT Scan | x | | | | | | |
| Lab Protocol | x | | | X | X | X | |

#### Cognitive Testing

| Psychological Assessment | x | | | X |

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1. Psychotic disorder irrespective of etiology. In cases where there is clear evidence of previous affective disorder and the presenting symptoms are clearly a recurrence of an affective disorder with psychotic symptoms, such cases may be brought for discussion and not directly accepted into PEPP.
COGNITIVE ASSESSMENT

D. 1. RATIONALE

Cognitive difficulties have been recognized as a component of psychotic disorders since the early twentieth century. Deficits in the areas of verbal learning and memory, attention/concentration, speed of thinking and executive functions (e.g., concept formation and abstraction) have been reported. The demonstrated prevalence of these cognitive problems among persons with psychosis and the recent relationships reported between level of cognitive functioning and prognosis or outcome, both provide a rationale for assessment of this area as an important part of our PEPP protocol.

Recent research has found strong evidence that such cognitive deficits have important implications for the community functioning of those with psychotic disorders, independently of clinical symptoms. Recognition of the importance of cognitive deficits has also resulted in increased focus on reduction of such deficits as an important clinical outcome. Given the age of the patient population in this program (late adolescent/early adulthood), many of the functional issues arising at the time of initial treatment also relate to reintegration into and completion of high school or college/university studies. Assessment of cognitive functioning is an important and necessary part of addressing these issues.

D. 2. OBJECTIVES

The data gathered by our baseline and follow-up cognitive assessments are used to address a number of concerns and/or objectives for patients in the program.

**Immediate Functional Issues:** the baseline results are typically utilized to answer questions related to activities of daily living, educational, and vocational concerns (e.g., what does the patient’s level of functioning dictate regarding an appropriate vocational setting, course load, academic modifications or accommodations, etc.).

**Long-Term Issues:** the follow-up assessment results are often utilized to answer questions related to the possibility of change in cognitive functioning over time and the course of such change among our patients; after one year of treatment patients are often making important decisions regarding their future and cognitive data can be an important component of this (i.e., have they improved over the past year and in what areas, and whether these changes now dictate commencement of new academic or vocational activities, e.g., full-time versus part-time work or school).

**Applied Research Issues:** last, but not least, the results of these assessments can be used to address research questions related to the relationship between cognitive functioning and prognosis, patterns of functioning in persons with psychosis, gender differences in cognitive functioning, etc.; the answers to these questions can then be used to inform clinical practices with our patients.
**D. 3. DESCRIPTION OF COGNITIVE BATTERY**

Cognitive testing primarily involves the use of pencil and paper tasks to assess a wide range of abilities, including attention, memory, problem-solving, language skills and intellectual functioning. It is the process of determining a patient’s cognitive strengths and weaknesses through qualitative (approach to tasks and observed behaviour) and quantitative (standardized and scaled measures) approaches. Test scores are interpreted on the basis of normative data and expected level of performance for a given individual based upon their educational/occupational level and premorbid estimates of their intellectual functioning.

There are five main areas of functioning addressed by the PEPP cognitive assessments:

**i) Intellectual Functioning**
- premorbid
- current

**ii) Executive Functioning**

**iii) Attention/Concentration, Working Memory, and Speed of Processing**

**iv) Learning and Memory**
- short-term and long-term
- auditory and visual
- recall and recognition

**v) Self-Reported Cognition and Emotional Functioning**

The list of tests administered to each patient includes the following:

- National Adult Reading Test (NART): estimate of premorbid IQ
- Wechsler Adult Intelligence Scale - Third Edition (WAIS-III) provides Verbal and Performance IQ scores and a Processing Speed Index
- Wechsler Memory Scale - Third Edition (WMS-III): provides indexes of immediate and delayed auditory and visual memory, and working memory
- Wisconsin Card Sorting Test (WCST): measure of executive functioning
- Stroop Test: measure of divided attention, mental flexibility, processing speed
- Trail Making Test (Parts A and B): measure of attention and visual-motor sequencing
- Oral and Written Word Fluency: measures of executive functioning
- Prospective Memory Screening Test: measure of planning and recall for future tasks
- Paced Auditory Serial Addition Task: measure of sustained and speeded processing
- Continuous Performance Task: measure of sustained attention/concentration and processing speed
- Neo Personality Inventory: brief measure of personality traits
- Cognitive Failures Questionnaire: self-report measure of cognitive complaints
D. 4. WHEN SHOULD COGNITIVE ASSESSMENTS BE UNDERTAKEN

Once a patient’s acute psychotic symptoms have stabilized enough to be able to complete the tests, they will be scheduled to complete their baseline cognitive assessment. If a patient is stable enough to be able to complete the tasks prior to intervention with antipsychotic therapy, this is preferable, however, in a large proportion of individuals, this is not possible.

Testing Process:

Testing is usually undertaken over two half-days (approximately 2.5-3.0 hours each in duration) and each patient meets the psychologist prior to commencement of testing to complete an interview, review the testing process, and have their concerns or questions directly addressed. Testing is then administered by a Bachelor’s degree level research assistant trained to conduct cognitive assessments. One to two weeks following completion of their assessment, most patients can expect to again meet with the psychologist and their case manager to receive feedback and recommendations relating to the results of their assessment. Again, they will have an opportunity to have their concerns or questions addressed and family members are welcome to attend this appointment with them (provided the patient has consented to this). A copy of the assessment report (written by the psychologist) is then placed in the PEPP chart. Patients will typically be followed up after one year to complete a re-assessment of cognitive functioning at that time.
OCCUPATIONAL THERAPY ASSESSMENT

The purpose of Occupational Therapy is to enable patients to perform those daily occupations they find useful or meaningful in their environment.

E. 1. INITIAL ASSESSMENT

Through a semi-structured interview with the patient, all areas of function are assessed:

- Self care: dressing, grooming, hygiene, sleeping, eating, homemaking, transportation, money management, etc.
- Productivity: schooling, employment, volunteer work, etc.
- Leisure: areas of interest and participation, etc.

Components of the patient’s mental, physical and psychosocial performance are also assessed at this time.

The initial assessment assists in planning inclusion of the patient in the RAP group intervention (see under Psychosocial Interventions).

E. 2. FURTHER ASSESSMENT

Following the initial interview, depending on the patient’s needs, a number of options are utilized in terms of individual intervention.

- Functional assessment: to identify the performance components contributing to the patient’s dysfunction through activity analysis, eg., making a meal, taking a bus, etc.
- Home assessment: to determine how the patient’s home environment contributes to his/her function and/or dysfunction.
- Standardized assessment: to gain qualitative and quantitative data regarding the patient’s current level of function, eg., Canadian Occupational Performance Measure (COPM), Cognitive Competency Test (CCT).

E. 3. COLLABORATION

In addition, the occupational therapist assists in the following areas in collaboration with the patient’s case manager.

- Community resources: to facilitate access to resources in the community, eg., Employment agencies, support groups, recreational facilities, etc.
- Skill building: to aid in the development of skills relating to daily functioning, eg., social skills, money management, homemaking, interview skills, etc.
- Psycho-education: to address relevant issues with the patient, eg., stress management, self-esteem, nutrition, etc.