

# VA/DoD CLINICAL PRACTICE GUIDELINE FOR THE MANAGEMENT OF PSYCHOSES

## Modules A & J Summary

**RECOMMENDATIONS WITH THE HIGHEST EVIDENCE: The highest evidence for recommendations is A, defined as “a strong recommendation based on randomized controlled trials that the intervention is always indicated and acceptable.”**

The following practices are strongly recommended based on evidence reviews:

1. Evaluate for serious immediate needs. Dangerousness, unsafe living situation, untreated medical condition, substance abuse - handle as needed before continuing assessment and treatment [R=A]
2. Antipsychotic agents are effective in preventing psychotic relapse in stabilized persons. [R=A]
3. Second generation agents are preferred to first generation agents for initial treatment due to the difference in side effect profiles. [R=A]
4. Persons with a history of poor adherence to medication regimens should be considered candidates for long-acting depot medications. [R=A]
5. Persons with comorbid depression will benefit from adjunctive antidepressant medication. [R=A]
6. A person should not be considered non-responsive or partially responsive to medication until he/she has received a trial of clozapine. [R=A]

## INITIAL SCREENING FOR PSYCHOSES

### KEY ELEMENTS

- **Evaluate for serious immediate needs**

Dangerousness, unsafe living situation, untreated medical condition, substance abuse - handle as needed before continuing assessment and treatment

- **Schizophrenia and other Psychotic Disorders**

Use DSM-IV criteria for diagnosis

Treatment principles:

1. Antipsychotic agents are effective in preventing psychotic relapse in stabilized persons.
2. Second generation agents are preferred to first generation agents for initial treatment due to the difference in side effect profiles.
3. Newer antipsychotic agents may be used together with psychosocial treatments to promote recovery and rehabilitation.
4. Persons with a history of poor adherence to medication regimens should be considered candidates for long-acting depot medications.
5. Persons with comorbid depression will benefit from adjunctive antidepressant medication.
6. A person should not be considered non-responsive or partially responsive to medication until he/she has received a trial of clozapine.

Provide Psychosocial Rehabilitation based on identified needs

- **Clinical assessment (q 6-12 months) during long-term therapy:**

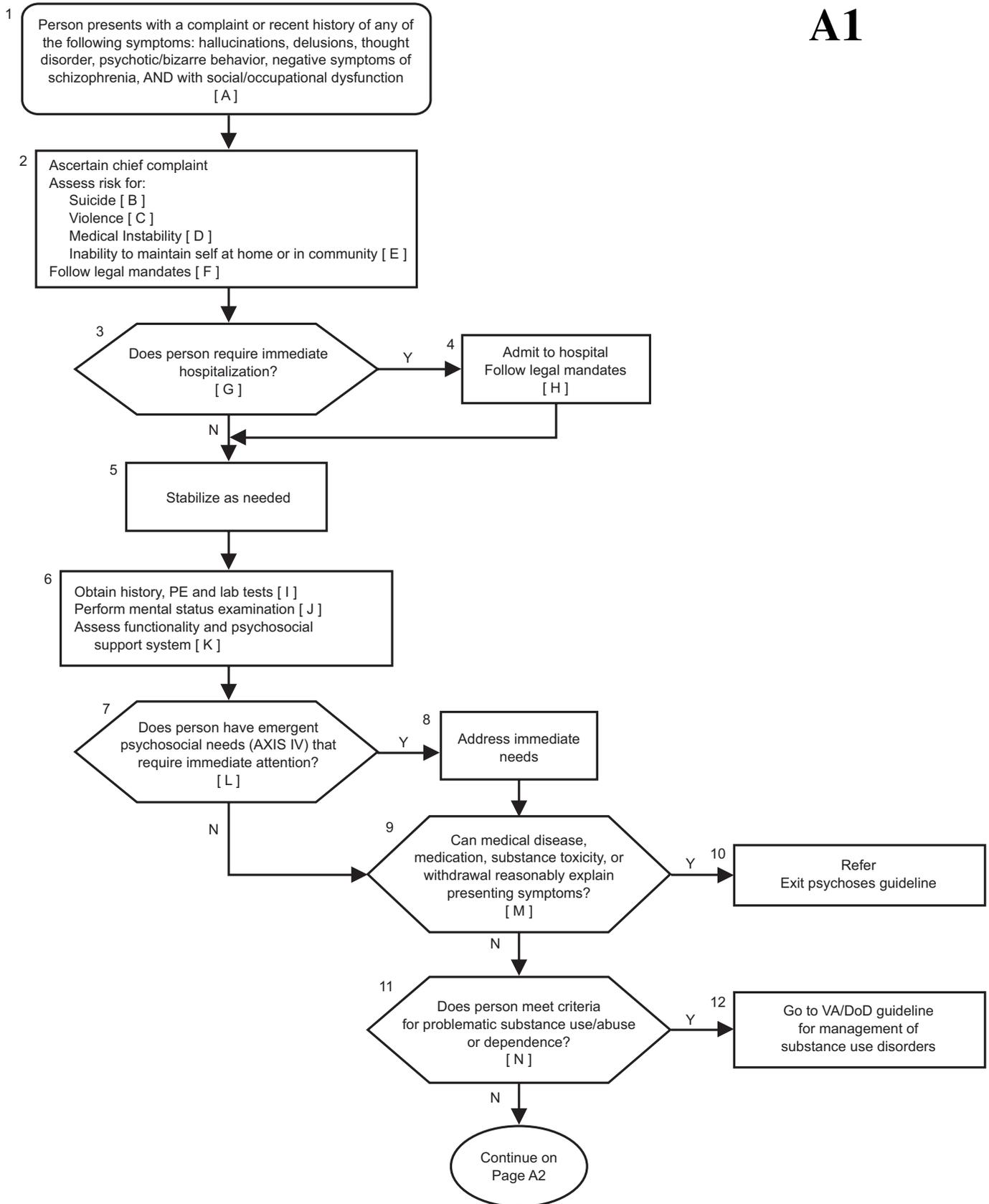
1. Weight
2. Lipids
3. Tardive dyskinesia
4. Continued stability
5. Extra-pyramidal side effects
6. Glycemic control

- **Each person has the potential to recover from his or her illness**

# MANAGEMENT OF PERSONS WITH PSYCHOSES

## INITIAL SCREENING FOR PSYCHOSES

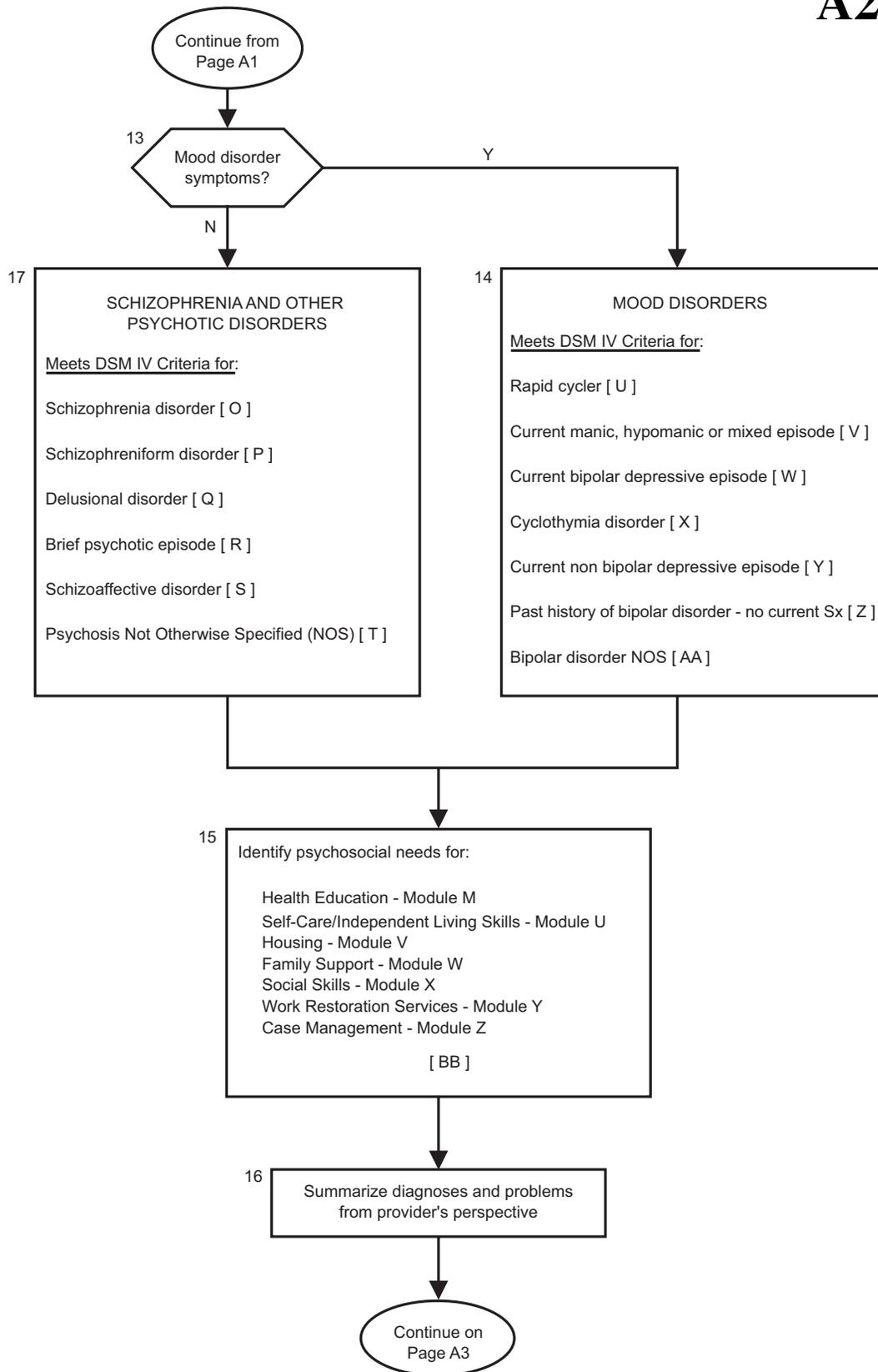
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# MANAGEMENT OF PERSONS WITH PSYCHOSES

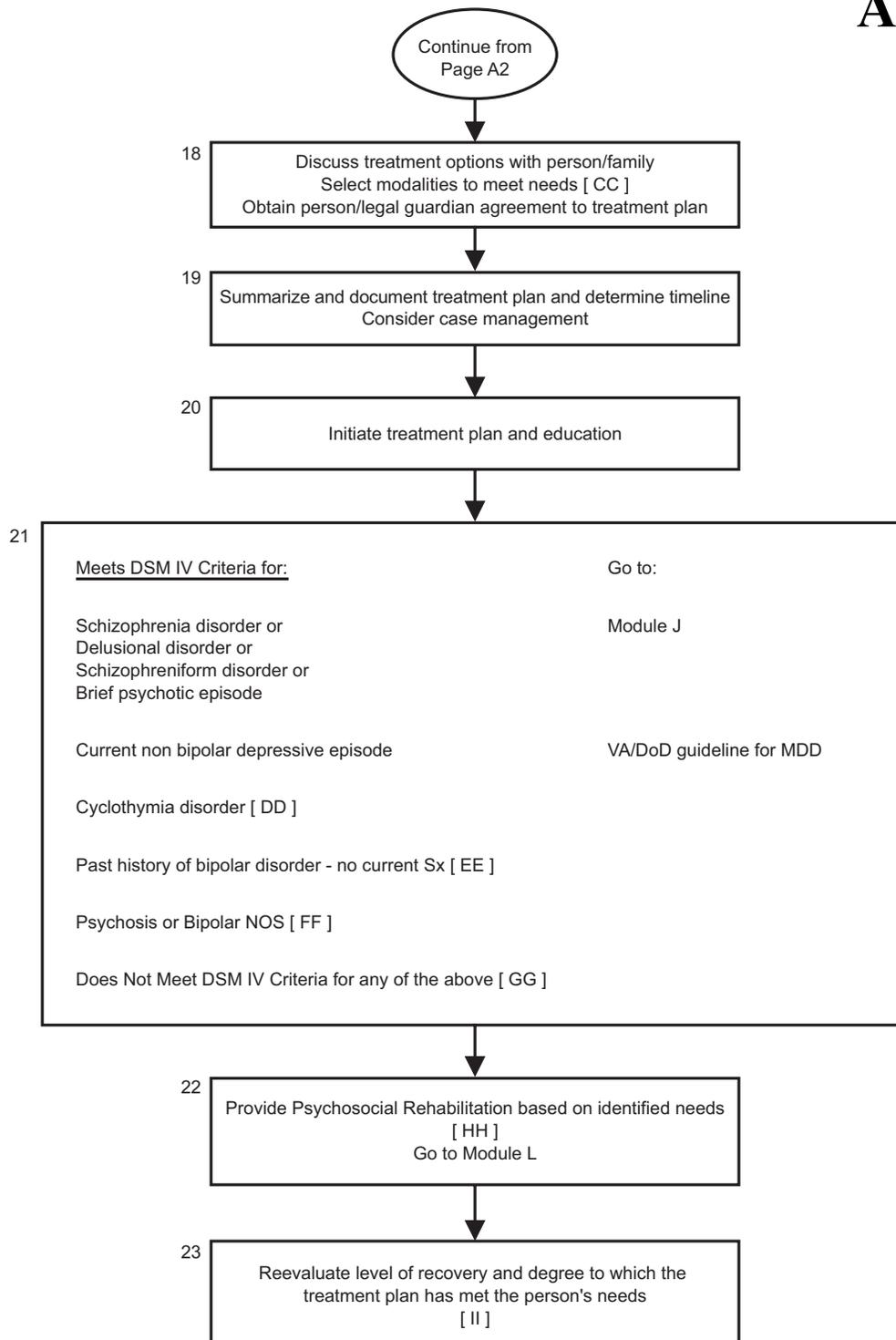
## INITIAL SCREENING FOR PSYCHOSES

A2



**MANAGEMENT OF PERSONS WITH PSYCHOSES  
INITIAL SCREENING FOR PSYCHOSES**

**A3**



## MODULE A: INITIAL SCREENING FOR PSYCHOSIS

**Person presents at mental health clinic or emergency room with a complaint or recent history of any of the following symptoms: hallucinations, delusions, thought disorder, psychotic/bizarre behavior, negative symptoms of schizophrenia AND with social/occupational dysfunction.**

The common feature is that the person has reported signs or symptoms of psychotic illness, or has been identified as demonstrating behavior consonant with such symptoms in an interview or living situation. Entry points include the following:

- Primary care, with diversion to outpatient specialty care
- Mental health walk-in clinic
- Mental health setting, with a new emergence of complaint of psychotic symptoms
- Emergency Room (ER) setting
- Referral by family, mental health intensive case managers, community residential personnel, or representatives of community agencies
- Outreach after discharge from inpatient care

For definitions of the specific symptoms, please refer to the introduction for DSM-IV, which contains a basic glossary and discussion of these behaviors.

### **Ascertain Chief Complaint: Assess Risk for Suicide**

Ask whether the person is alone and is able to take care of himself or herself. Make sure the mental status exam includes specific screens for suicide, homicide, and grave disability. The history should be annotated to distinguish new onset or atypical behavior from recurrent presentation. The history should also include availability of medications, weapons for dangerous behavior, and nutritional status poor enough to pose a health risk.

Of special concern is the person who, because of significant cognitive impairment (either new or pre-existing), is oblivious to personal safety issues. An example is the person with delirium who may inadvertently harm himself or herself trying to escape from a frightening hallucination or the person with dementia who has poor judgment and may leave the hospital to go home even though unable to successfully cross the street.

The clinician should perform a screening to ascertain the

likelihood of the person becoming suicidal or becoming violent toward others. Suicidal behavior is best assessed with the following criteria: current suicidal ideas or plans, past history of suicidal acts, presence of active mental illness (depression or psychosis), hopelessness, impulsivity, presence of substance use disorder, availability of means for suicide (firearms, pills, etc.), formulation of plan, disruption of important personal relationship, or failure at important personal endeavors. If some or all of these criteria are present, a referral or consultation with a mental health professional is indicated.

### **Ascertain Chief Complaint: Assess Risk for Violence**

A person at high risk for violence is someone who has expressed thoughts of potential harm to self or others, has demonstrated violent acts or feelings, has thought control override symptoms, or has expressed great hostility toward political or prominent figures. Impulsivity and a previous history of violence increase the risk of current violence. Persons with definite intent (suicidal/homicidal ideation, intent, and/or plan) to harm self or others require voluntary or involuntary emergency psychiatric treatment.

### **Ascertain Chief Complaint: Assess Risk for Medical Instability**

At this stage the clinician should be concerned with immediate safety and should review the person's vital signs. Vital signs can signal the presence of a medical or surgical illness presenting with mental status changes. The person's level of consciousness and acute pain status should also be assessed. If needed, the person should be stabilized by means normally used in an intensive care or emergency medicine setting.

### **Ascertain Chief Complaint: Assess Risk for Inability to Maintain Self at Home or in Community**

The person may not be able to provide for the basic needs of food, shelter or medical care as the result of mental illness, e.g., an insulin-dependant diabetic who is unable to care for the diabetes because of psychiatric symptomatology. Non-adherence, in itself, is generally not a reason for hospitalization, unless it places a person in one of the imminent risk categories.

### **Follow Legal Mandates if the Person Refuses Help or**

## **Disengages**

Build a treatment alliance to allow the person to obtain needed care.

If the clinician has encountered resistance from the person in accepting his or her recommended treatment plan, the following actions may be helpful:

- Attempt to understand the person's view of his or her problem
- Attempt to discover why the person is refusing treatment
- Try to explain the treatment and its expected outcomes to the person in clear, simple language
- Address treatment to meet person's own complaints
- Display compassion, empathy, and patience
- If possible, bring in the person's significant others in a cooperative role
- Wherever necessary, obtain the person's consent to procedures
- Apply legal mandates as appropriate

## **Does Person Require Immediate Hospitalization?**

Identify persons in immediate need of hospitalization.

Persons with acute or chronic psychotic conditions can be managed in a number of settings including an inpatient psychiatric unit, a partial hospital setting, or in their current residence. For the most part, decisions regarding the setting of care are based on safety considerations. Individuals at risk for suicide or violence, those with command hallucinations or who are unable to care for themselves in the community often require stabilization in an inpatient setting. Hospitalization may also be appropriate for persons with medical problems that require monitoring.

## **Admit to Hospital; Follow Legal Mandates**

Apply legal mandates as appropriate. Local policies and procedures with regard to threats to self or others should be in place, reflecting local and state laws and the opinion of the VA Regional Counsel. Primary care, mental health, and administrative staff must be familiar with these policies and derived procedures. Implementation should also reflect local resources.

## **Obtain History (Psychiatric, Marital, Family,**

## **Military, Past Physical or Sexual Abuse, Medication or Substance Use Including Over the Counter (OTC), Physical Examination and Laboratory Tests**

At this stage the clinician begins the process of reaching a diagnosis by ruling out non-relevant psychiatric, social, and medical conditions. The first step in this process is to obtain a thorough history, including psychiatric, psychosocial, and medical problems that the person has experienced in the past. Identifying physiological abnormalities is especially important, as an underlying physiological abnormality or disease process may be the cause of psychiatric symptoms. If standard medical tests fail to reveal the cause of the difficulties, the diagnostic evaluation should be continued. More advanced studies, such as assessment, functional neuroimaging, electrophysiological studies, and specialized laboratory tests, may also be included.

## **Perform Mental Status Examination**

A mental status examination consists of:

- A description of the person, and the person's manner of dress, alertness in the interview situation, remarkable or characteristic behaviors, and cooperation with the interview
- Speech—Rate, rhythm, fluency, presence of stutters, stammers, dysarthria, aphasia
- Perceptual disorder—Illusions or hallucinations (commenting, critical, command auditory hallucinations, visual hallucinations, olfactory, tactile or gustatory, hypnopompic or hypnagogic)
- Thought process—The goal directedness of the person's discourse as opposed to varieties of derailment: circumstantiality, tangentiality, flight of ideas, loosening of associations, formal thought disorder, word salad, clang associations, neologisms, etc.
- Thought content—Overvalued ideas, delusions, obsessions, ruminations, paranoid ideas, suicidal or homicidal ideation, intent, and/or plan, depersonalization or derealization
- Neurocognitive exam (e.g. the Mini-Mental State Exam)
- Insight
- Judgment

## **Assess Functionality and Psychosocial Support System**

This assessment has to do with immediate needs for housing, transportation and access, life skills, work and/or employment, education, financial, social skills, health awareness, family, legal, cultural and/or spiritual help. Essentially this is a full evaluation of the issues relevant to Axes IV and V of DSM-IV.

### **Does Person Have Emergent Psychosocial Needs (Axis IV) that Require Immediate Attention?**

The issues that most frequently require immediate attention are housing, family crisis, and or economic.

Making choices is essential to the successful treatment of persons with severe mental disorders. As a consequence, clinicians are encouraged to collaborate in the process of identifying the domains, as well as in selecting services.

### **Can Medical Disease, Medication, Substance Toxicity, or Withdrawal Reasonably Explain Presenting Symptoms?**

Secondary mental disorders are a group of behavioral mental disorders whose symptoms of brain dysfunction are due to an underlying medical condition (e.g. lupus, Huntington's disease, subdural hematoma, encephalopathy). Management of the medical disorder plays an important—if not essential—part.

Wise, et al., (1995) identified some of the important and urgent conditions, including withdrawal, to be considered as possible causes secondary mental disorders.

- Wernicke's; withdrawal from alcohol/drugs
- Hypoxemia
- Hypoglycemia
- Hypoperfusion
- Hypertensive encephalopathy
- Intracranial bleed; infection
- Meningitis/Encephalitis
- Poisons (medications, street drugs)

### **Does Person Meet Criteria for Problematic Substance Use/Abuse or Dependence?**

Determine whether the person uses any substance in a way that has a negative impact on daily functioning or prospects for recovery. Any substance can be misused, but the following should be of most concern:

- Alcohol

- Cigarettes
- Illegal drugs
- Legal prescription drugs
- Legal over-the-counter drugs

Although alcohol is just one of many substances that may present a problem for the person, because of the prevalence of alcohol use in the general population, special screening and treatment techniques have been developed for alcoholism.

A screen is considered positive for alcohol abuse/dependence, if a person:

- Scores eight or more on the Alcohol Use Disorders Identification Test (AUDIT).
- Scores 4 or more in men or 3 or more in women on the AUDIT – C instrument.

#### *Screening for Level of Use*

The clinician should determine not only which substances the person is using, but how much of each. The commonly defined stages of substance use are:

- Use
- Hazardous use
- Abuse
- Dependence
- Risk of relapse

Some clinicians consider abuse/dependence to represent a single level of substance abuse. DSM-IV, however, presents separate sets of criteria for substance abuse and substance dependence.

If the person needs treatment for alcohol or substance use, the clinician should refer to the VA/DoD Clinical Practice Guideline for Management of Substance Use Disorders.

*Note: For definitions of the specific symptoms of each disorder below, please refer to the introduction for DSM-IV, which contains a basic glossary and discussion of these behaviors.*

### **Person Meets DSM-IV Criteria for Schizophrenia Disorder**

### **Person Meets DSM-IV Criteria for Schizophreniform Disorder**

### **Person Meets DSM-IV Criteria for Delusional**

## **Disorder**

### **Person Meets DSM-IV Criteria for Brief Psychotic Episode**

### **Person Meets DSM-IV Criteria for Schizoaffective Disorder**

### **Person Meets DSM-IV Criteria for Psychotic Disorder, Not Otherwise Specified (Atypical Psychosis)**

### **Person Meets DSM-IV Criteria for Rapid Cyclers**

### **Person Meets DSM-IV Criteria for Current Manic, Hypomanic or Mixed Episode**

### **Person Meets DSM-IV Criteria for Current Bipolar Depressive Disorder**

### **Person Meets DSM IV Criteria for Cyclothymia Disorder**

### **Person Meets DSM IV Criteria for Current Non Bipolar Depressive Episode**

### **Person Meets DSM-IV Criteria for Past History of Bipolar Disorder—No Current Symptoms**

### **Person Meets DSM-IV Criteria for Bipolar Disorder, Not Otherwise Specified**

## **Identify Psychosocial Needs**

Determine the person's needs in major domains of psychosocial recovery—such areas as housing, life skills, employment, education, social skills, health awareness, and family.

After determining that the person accepts psychosocial rehabilitation, the next step is to determine which domain of rehabilitation is appropriate. A succinct checklist identifies seven domains for which psychosocial rehabilitation services are highly recommended, having demonstrated effectiveness based on controlled studies and expert consensus. This list is not restrictive, nor is it prescriptive. Clinicians should not restrict themselves to these seven domains, nor should they assume that each domain is equally appropriate for all persons. Rather, these seven domains of rehabilitation are commonly offered and available as services essential for recovery among persons with psychoses. See Module L, the Psychosocial Rehabilitation Core Module, for a further

overview of the seven domains:

- Health Education
- Self-Care/Independent Living Skills
- Housing
- Family Support
- Social Skills
- Work Restoration Services
- Case Management

## **Discuss Treatment Options with Person/Family; Select Modalities to Meet Needs; Obtain Person/Legal Guardian Agreement to Treatment Plan**

Treatment options should be presented and discussed with the person/Legal Guardian. See Module W, Family Support, for a discussion of the involvement of family members. Follow legal mandates.

## **Treat for Cyclothymia Disorder**

Cyclothymia is a mild form of bipolar disorder, which can represent the prodromal phase of bipolar illness. The hallmark of cyclothymia is its biphasic nature characterized by marked changes in mood and behavior, for example, from lethargy and low self-esteem to high physical activity and overconfidence. Often, persons with cyclothymia are incorrectly diagnosed with an Axis II condition, such as borderline personality disorder. Family history is often helpful as an external validator for the diagnosis of cyclothymia, and any person with significant “mood swings” who has a clear family history of bipolar disorder should be considered part of the “bipolar spectrum” with respect to diagnosis and treatment.

Treatment of cyclothymia should emphasize close clinical follow-up in order to determine possible patterns of the mood swings, such as seasonal worsening. Persons should be encouraged to keep a diary or calendar to assist in diagnosis and in documenting results of treatment. In cases in which a person is distressed by the symptoms and/or where functional impairment occurs, cyclothymia should be treated as a bipolar disorder, with mood stabilizers as the first line of treatment. Tricyclic antidepressants have the potential to worsen the status of persons with cyclothymia and should be avoided. For depressive episodes that persist more than two weeks, a serotonin reuptake inhibitor antidepressant or bupropion may be beneficial.

Care must be taken to not provoke mania, hypomania,

mixed states or rapid cycling by prescribing antidepressants without mood stabilizer coverage. Low doses of mood stabilizers may be effective in cyclothymia, and help to minimize adverse effects.

### **Past History of Bipolar Disorder, No Current Symptoms**

Institute prophylaxis and consider psychosocial rehabilitation to prevent recurrence of bipolar disorder and to assist the person in psychosocial adjustment.

Initiate prophylaxis and consider psychosocial rehabilitation for past history of bipolar disorder—no current symptoms.

### **Treat for Psychotic Disorder, Not Otherwise Specified (Atypical Psychosis)**

This category includes psychotic symptomatology, i.e., delusions, hallucinations, disorganized speech, or grossly disorganized or catatonic behavior, about which there is inadequate information to make a specific diagnosis or about which there is contradictory information and disorders with psychiatric symptoms that do not meet the criteria for any specific psychotic disorder. This is also a poorly understood and poorly described category in the literature. There is very low stability of these disorders over time, higher than expected rates of recovery, and associations with personality disorders.

If possible these persons should be closely observed and reassessed to ascertain the underlying pathology. If symptoms are of high severity, or create a dangerous situation, or person strongly insists, then active treatment based on predominant symptom picture is appropriate.

### **Does Not Meet DSM-IV Criteria for Any of the Above**

Reassess the symptom picture, reevaluate the etiology of the problem, the medical and psychosocial stressors, and reformulate the treatment plan. Make appropriate referral as indicated.

### **Provide Psychosocial Rehabilitation Based on Identified Needs**

#### *Identify Domains for Action*

Clinicians are encouraged to collaborate in the process of identifying the domains, as well as selecting services. The psychosocial rehabilitation modules (Modules L through Z) are designed to function as an interactive document,

assisting the clinician and the person in making choices and selecting needed rehabilitative services.

#### *Resources for Information about Rehabilitation Services*

- The International Association of Psychosocial Rehabilitation Services (IAPRS) is an important resource, as is the National (or State) Alliance for the Mentally Ill (NAMI).
- The Commission on Accreditation of Rehabilitation Facilities (CARF) ensures that standards of community-based and residential care are met by clinicians offering rehabilitation services. CARF standards for Behavioral Health (Alcohol and other Drugs, Mental Health, and Psychosocial Program), Employment and Community Support Services, and Early Childhood and Family Support Services, will provide valuable guidelines and program descriptions for rehabilitation services. For additional information, contact CARF, 4891 East Grant Road, Tucson, Arizona 85712, (520) 325-1044.

### **Reevaluate Level of Recovery and Degree to Which the Treatment Plan Has Met the Person's Needs**

Prevent relapse and promote recovery and rehabilitation of persons who have been stabilized following treatment for psychoses.

#### *Psychosis*

For persons with psychosis or schizophrenia, the following recommendations should be considered:

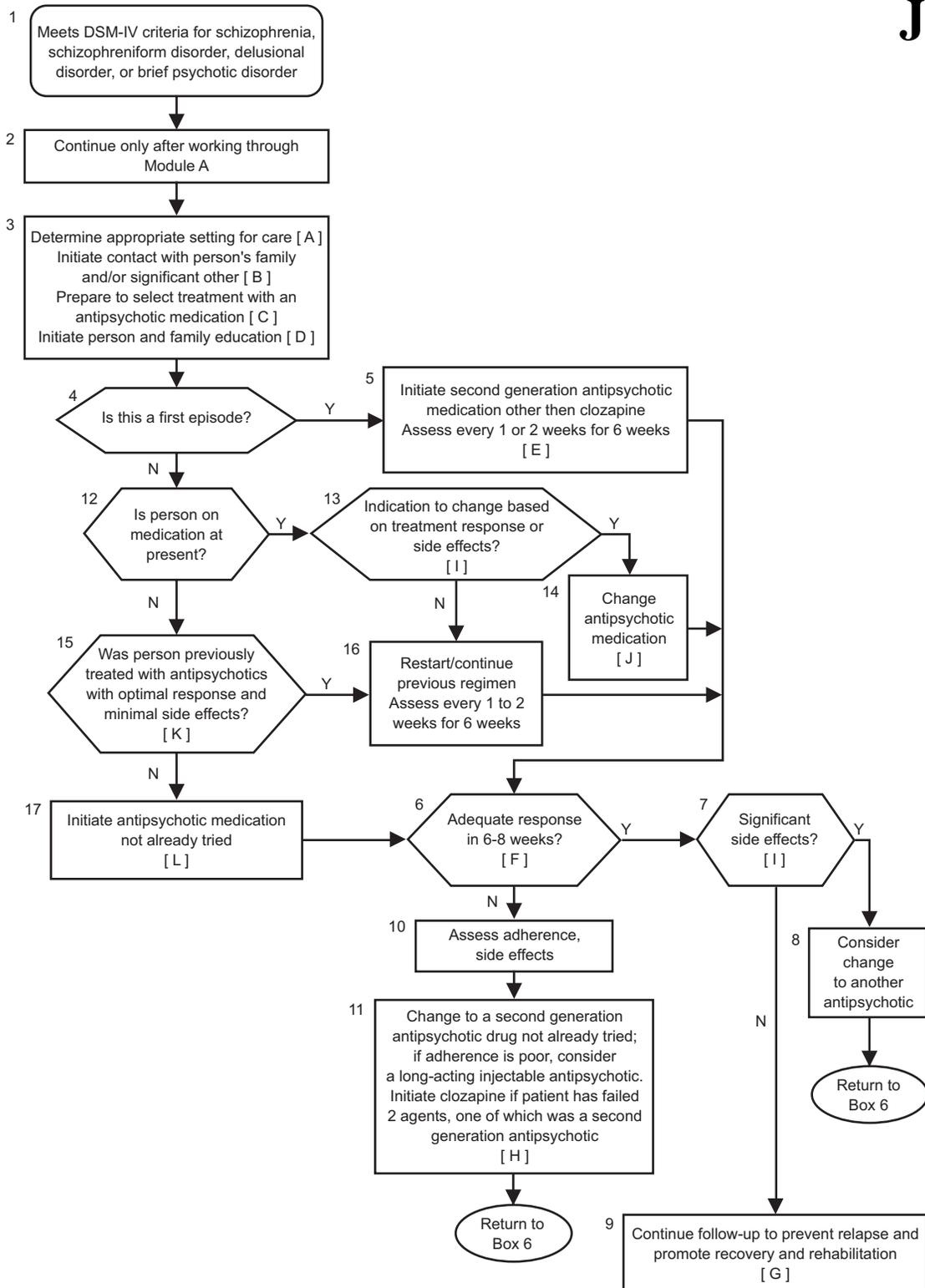
- Antipsychotic agents are effective in preventing psychotic relapse in stabilized persons.
- Newer antipsychotic agents may interact with psychosocial treatments to promote recovery and rehabilitation.
- Persons with a history of poor adherence to medication regimens should be considered candidates for long-acting depot medications.
- Persons with comorbid depression will benefit from adjunctive antidepressant medication.
- Persons who demonstrate aggressive or assaultive behavior, or who are treatment refractory, will benefit from clozapine.

See Module J for a detailed discussion of maintenance/prophylactic treatment for persons in recovery from psychosis or schizophrenia.

The clinician should never assume that the person would need medical treatment indefinitely.

# MANAGEMENT OF PERSONS WITH PSYCHOSES PSYCHOSES AND SCHIZOPHRENIA TREATMENT

J



## MODULE J: PSYCHOSIS AND SCHIZOPHRENIA TREATMENT

### Determine Appropriate Setting for Care

Determine the treatment setting that is most appropriate for a person with schizophrenia, schizophreniform disorder, delusional disorder, or brief psychotic disorder.

Persons with acute or chronic psychotic conditions can be managed in a number of settings including an inpatient psychiatric unit, a partial hospital setting, or in their current residence. For the most part, decisions regarding the setting of care are based on safety considerations. Individuals with histories of violent or self-destructive behaviors or those with command hallucinations may be at risk for dangerous behaviors. If persons are at risk for these behaviors, an inpatient setting is usually preferred. Hospitalization may also be appropriate for persons with medical problems that require monitoring.

Alternatives to hospitalization such as day hospitalization and assertive community treatment should be considered for persons who do not require the intensive monitoring of a psychiatric inpatient unit.

### Initiate Contact with Person's Family and/or Significant Other

Establish a working relationship – whenever feasible –

with important individuals in the person's support network. This relationship can improve treatment adherence, lead to the early detection of relapse, and decrease stress in the person's environment.

Family members and significant others can provide valuable information about the person's recent history including signs and symptoms of illness, adherence to treatment, substance use, etc. Furthermore, contact with family members may facilitate family education programs which are discussed in the *Initiate Person and Family Education* Annotation below.

Family members are often the first individuals to detect prodromal signs of psychotic relapse. Detection of prodromal symptoms may result in reducing the overall risk of psychotic relapse.

### Prepare to Select Treatment with an Antipsychotic Medication

Match pharmacotherapy to patient characteristics and needs.

Nearly every psychotic episode should be treated with an antipsychotic medication. See Table 1 below.

**Table 1. Antipsychotic Agents— Oral Dosages**

	Generic Name	Trade Name	Initial Dosage	Dosage Range
Conventional Antipsychotics	Chlorpromazine	Thorazine	10-25mg tid	200-800 mg
	Thioridazine*	Mellaril	50 mg tid	150-600 mg
	Mesoridazine*	Serentil	50 mg tid	75-300 mg
	Trifluoperamize	Stelazine	1-2 mg bid	5-20 mg
	Fluphenzine	Prolixin	0.5-1 mg bid	2-20 mg
	Perphenazine	Trilafon	2 mg bid	8-32 mg
	Thiothixene	Navane	2 mg tid	4-30 mg
	Loxapine	Loxitane	10 mg bid	60-100 mg
	Haloperidol	Haldol	0.5-1 mg bid	2-20 mg
	Molindone	Moban	10 mg bid	50-225 mg
Second Generation Antipsychotics	Clozapine**	Clozaril	12.5mg bid	150-600 mg
	Risperidone	Risperdal	1 mg bid	2-8 mg
	Olanzapine	Zyprexa	5-10 mg qd	5-25 mg***
	Quetiapine	Seroquel	25 mg bid	200-800 mg
	Ziprasidone	Geodon	20 mg bid	40-160 mg
	Aripiprazole	Abilify	10-15 mg qd	10-30 mg

\* Role in therapy should be rare. Please review warning prior to initiating treatment.

\*\* Not recommended for first-line treatment.

\*\*\* Based on anecdotal evidence, dosages at this upper level may be appropriate for some patients.

### **Initiate Person and Family Education**

Educate person and family members/significant others about the nature of schizophrenia and its treatments.

Prior to initiating treatment with medication or psychosocial treatments, the potential risks and benefits of the treatment should be discussed with the person.

Person and family psychoeducation has the potential for reducing vulnerability to psychotic relapse.

### **Initiate Second Generation Antipsychotic Medication Other than Clozapine in Persons Experiencing a First Episode; Assess Every 1 to 2 Weeks for 6 Weeks**

Select an antipsychotic drug for a first episode of schizophrenia and initiate treatment at the appropriate dose. Motor vs. metabolic side effect profiles of first vs. second generation antipsychotics are an important consideration. Second generation antipsychotics are the drugs of choice for first episode patients. Patients experiencing a first episode are more sensitive to neurological side effects of antipsychotics than multi-episode patients.

### **Adequate Response in 6-8 Weeks?**

Evaluate symptoms and side effects in persons who are receiving an antipsychotic.

Clinicians should evaluate positive, negative, neurocognitive, and mood symptoms in assessing response to an antipsychotic medication and consider a range of antipsychotic drug side effects in assessing clinical response.

### **Continue Follow-Up to Prevent Relapse and Promote Recovery and Rehabilitation**

Antipsychotic agents are effective in preventing psychotic relapse in stabilized persons.

Newer antipsychotic agents may interact with psychosocial treatments to promote recovery and rehabilitation.

Persons with a history of poor adherence to medication regimens should be considered candidates for long-acting depot medications.

Persons with comorbid depression will benefit from adjunctive antidepressant medication.

Persons who demonstrate suicidal behavior, aggressive or assaultive behavior, or who have problems with substance abuse will benefit from clozapine.

### **Change to a Second Generation Drug Not Already Tried; if Adherence is Poor, Consider a Long-acting Injectable antipsychotic. Initiate Clozapine if Person**

### **Has Inadequate Response to Trials of 2 Agents, One of Which Was a Second Generation Antipsychotic**

See *Change Antipsychotic Medication; Assess in 6-8 Weeks* Annotation below.

### **Indication to Change Based on Treatment Response or Side Effects?**

Assess treatment response and identify persons who are having a poor clinical response or unacceptable side effects.

An adequate trial of antipsychotic medication should consist of six to eight weeks at a dose that is well tolerated and sufficient for an antipsychotic response.

When persons fail to respond to a medication regimen after an adequate trial it may be helpful to assure they are receiving adequate amounts of the drug.

Persons who demonstrate some improvement during the first six to eight weeks should under certain circumstances continue on that medication for an additional three to six months before concluding that the trial is unsuccessful. Evaluation of antipsychotic response should include an assessment of side effects (see Table 2).

Antipsychotic medications, in particular the second generation antipsychotic medications, may be associated with weight gain and possible dysregulation of blood glucose and lipids. Baseline and periodic monitoring of blood glucose, serum lipids, blood pressure and BMI would be prudent particularly in those persons identified as having diabetes, or who are at increased risk for developing diabetes, or those with other known risk factors for cardiovascular disease. These measures may help guide initial selection of antipsychotic medications, improve early detection of the need for medical intervention, and enhance ongoing reevaluation of the appropriateness of psychiatric medications. (Marder et al., in press).

### **Change Antipsychotic Medication; Assess in 6-8 Weeks**

Persons who have an inadequate antipsychotic response due to lack of efficacy or poorly tolerated adverse effects should have a trial on another antipsychotic.

The selection of an antipsychotic medication should be based on medication history, sensitivity to side effects, route of administration, personal preferences, and other factors.

Persons who have failed to respond to a conventional antipsychotic after an adequate trial may improve if changed to a second generation antipsychotic.

Therapy with a single antipsychotic agent is preferred. The evidence for combination therapy is very limited. While other pharmacological augmentation strategies targeted at

psychotic symptoms (e.g., addition of lithium or divalproex) can be helpful in some cases, persons who have failed two antipsychotics - at least one of which is a second generation antipsychotic - should have a trial with clozapine.

Persons who experience EPS on effective doses of a conventional antipsychotic should be changed to a second generation antipsychotic.

**Table 2. Side Effects of Conventional and Second Generation Antipsychotics**

Drug	Oral Dosage Range in mg.	EPS	Anti-cholin-ergic	Otho Hypo	Prolactin	Sedation	Wt gain	Comments
<b>Conventional Antipsychotics</b>								
Chlorpromazine (Thorazine)	200-800	++	+++	+++	+++	+++	++	
Thioridazine (Mellaril)	150-600	+	++/+++	+++	+++	++/+++	++	Recommend very limited use - QT prolongation; retinal pigmentation at high doses
Mesoridazine (Serentil)	75-300	+	++	++/+++	+++	+++	?	Recommend very limited use - QT prolongation
Trifluoperamize (Stelazine)	5-20	+++	+	+	+++	+	?	
Fluphenzine (Prolixin)	2-20	+++	+	+	+++	+	0	
Perphenazine (Trilafon)	8-32	++	+ / ++	+	+++	+ / ++	?	
Thiothixene (Navane)	4-30	+++	+++	++	+++	+ / ++	?	
Loxapine (Loxitane)	60-100	++	++	+	+++	+	?	
Haloperidol (Haldol)	2-20	+++	+	+	+++	+	0/+	
Molindone (Moban)	50-225	++	++	+	+++	++	0	
<b>Second Generation Antipsychotics*</b>								
Clozapine (Clozaril)	150-600	+ / 0	+++	+++	0 / +	+++	+++	Blood monitoring for agranulocytosis; seizure risk
Risperidone (Risperdal)	2-8	+	+	++	+++	+	++	
Olanzapine** (Zyprexa)	5-25**	+	+ / ++	+	0 / +	+ / ++	+++	
Quetiapine (Seroquel)	200-800	+ / 0	+	++	0 / +	++	++	Observe for cataracts
Ziprasidone (Geodon)	40-160	+	+	+	0 / +	+	0 / +	Mild QT prolongation
Aripiprazole (Abilify)	10-30	0 / +	0 / +	0 / +	0 / +	0 / +	+	

[0 = none + = mild ++ = moderate +++ = severe]

\* Clinical reports suggest that some of the second generation antipsychotics may be associated with an increased risk of Type 2 Diabetes Mellitus as well as elevated lipids. Risk assignment of side effects for each second generation antipsychotic is not currently possible.

\*\* Based on anecdotal evidence, dosages at this upper level may be appropriate for some patients.

**Was Person Previously Treated with Antipsychotics with Optimal Response and Minimal Side Effects?**

Assure that persons who have a poor response to an antipsychotic due to lack of efficacy or poorly tolerated side effects have their medication histories reviewed.

Persons who responded well to an antipsychotic in the past are likely to have a similar response when the agent is administered again. See *Change Antipsychotic Medication; Assess in 6-8 Weeks* Annotation above.

**Initiate Antipsychotic Medication with an Agent Not Already Tried**

See *Change Antipsychotic Medication; Assess in 6-8 Weeks* Annotation above.

The selection of an antipsychotic medication should be based on medication history, sensitivity to side effects, route of administration, personal preferences and other factors. Recent evidence suggests little difference in efficacy and side effect incidence between one first (haloperidol) and one second (olanzapine) generation antipsychotics. (Rosenheck et.al., 2003) If these findings are replicated for other antipsychotics, there may be less clinical basis for preferring second generation agents for multi-episode persons.