TREATING SCHIZOPHRENIA

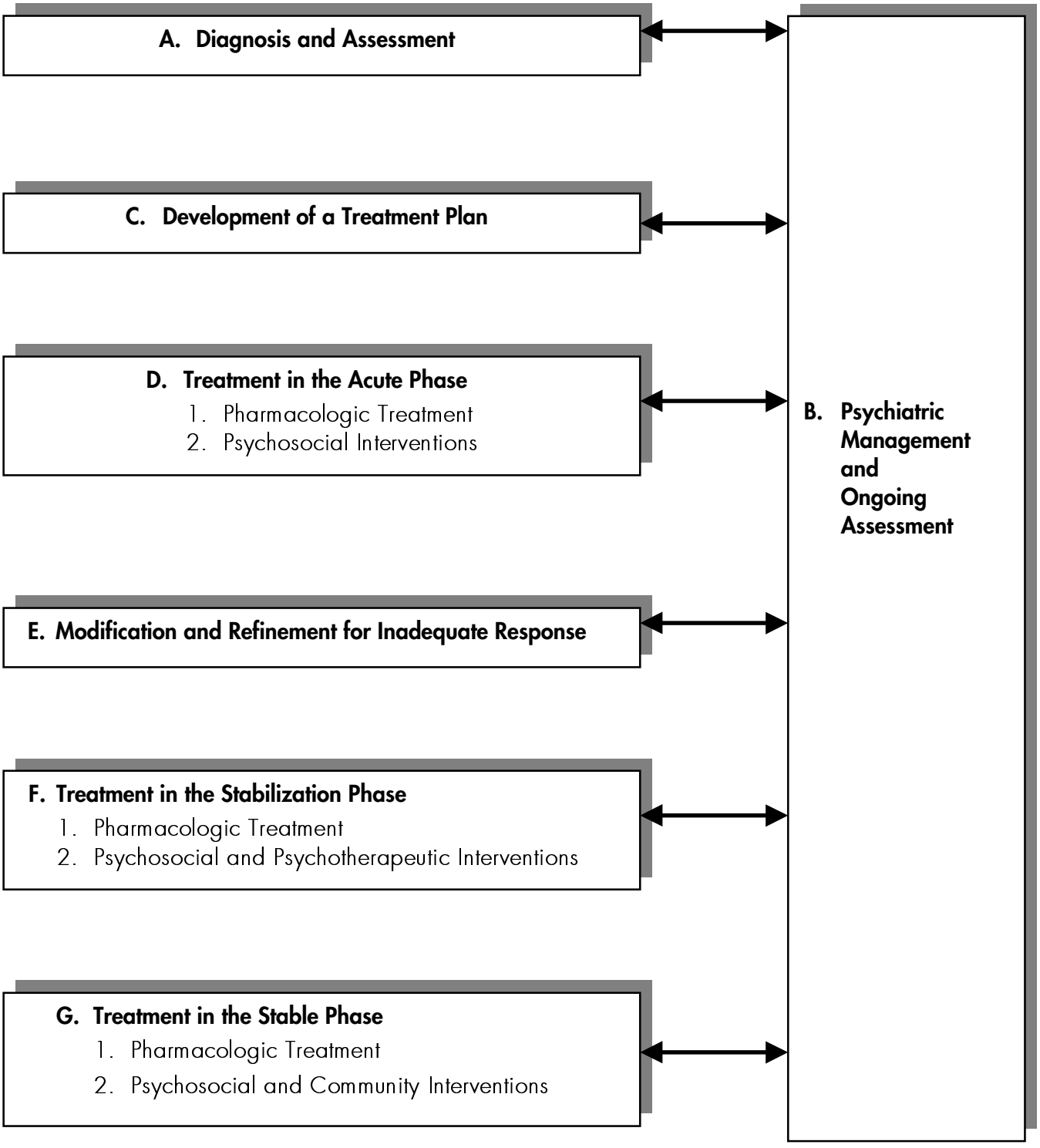
A QUICK REFERENCE GUIDE FOR PSYCHIATRISTS

The Quick Reference Guide for the treatment of schizophrenia is a summary and synopsis of the American Psychiatric Association's *Practice Guideline for the Treatment of Patients With Schizophrenia,* which was originally published in *The American Journal of Psychiatry* (April 1997). The Quick Reference Guide is not designed to stand on its own and should be used in conjunction with the full text of the Practice Guideline. Graphical algorithms illustrating the treatment of schizophrenia are included.

Statement of Intent

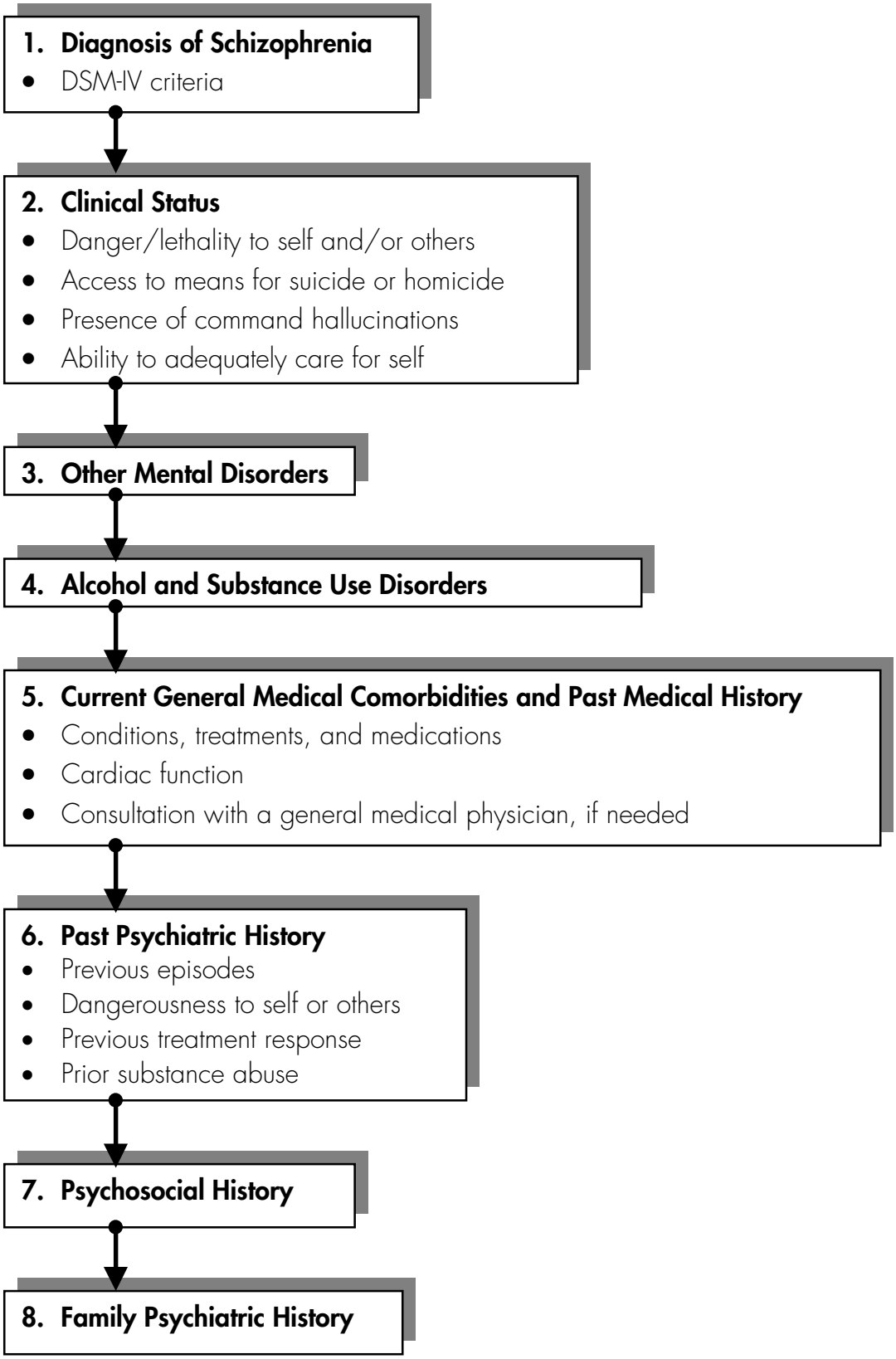
The Practice Guideline is not intended to be construed or to serve as a standard of medical care. Standards of medical care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns evolve. These parameters of practice should be considered guidelines only. Adherence to them will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgment regarding a particular clinical procedure or treatment plan must be made by the psychiatrist in light of the clinical data presented by the patient and the diagnostic and treatment options available.

General Outline



SYNOPSIS OF RECOMMENDATIONS

A. Diagnosis and Assessment



A. Diagnosis and Assessment

1. Diagnosis. A thorough assessment of the patient's symptoms should be conducted, including all DSM-IV criteria for schizophrenia.

2. Clinical status. A thorough assessment of the patient's clinical status should be conducted, including the patient's potential for harm to self or others, particularly the presence of suicidal or homicidal ideation; access to means for suicide or homicide and the lethality of those means; the presence of command hallucinations; and the ability of the patient to adequately care for himself or herself.

3. Other mental disorders. A thorough assessment should be conducted of other psychiatric symptoms and whether other possible mental disorders are present.

4. Alcohol and substance use disorders. A thorough assessment should be conducted of possible alcohol or other substance abuse and dependence.

5. Current general medical comorbidities and past medical history. A thorough assessment should be conducted of the patient's current and past medical conditions, treatments, and medications, with special consideration given to any conditions that may have contributed to the patient's psychotic symptoms. An assessment of the patient's cardiac function should be made, especially if the patient has existing or recent cardiac pathology (e.g., myocardial infarction or conduction abnormalities). If needed, a consultation with the patient's general medical physician should be obtained.

6. Past psychiatric history. A thorough assessment of the patient's past psychiatric history should be conducted, including but not limited to previous episodes of psychotic symptoms, dangerousness to self or others, compliance with treatment, previous treatment responses, and prior substance abuse.

7. Psychosocial history. A thorough assessment of the patient's psychosocial history should be conducted, including but not limited to the patient's family and interpersonal relationships; his or her psychosocial, work, living, and cultural environment; the presence of psychosocial stressors; the adequacy and availability of social supports and mental health and other service systems; and the emotional, social, familial, medical, living, academic, occupational, and financial issues that require assistance.

8. Family psychiatric history. A thorough assessment of the patient's family psychiatric history should be conducted.

B. Psychiatric Management and Ongoing Assessment

1. Components of Psychiatric Management

- Establish a therapeutic alliance
- Provide patient with education regarding schizophrenia and its treatments
- Enhance compliance
- Increase understanding of and adaptation to psychosocial effects
- Identify factors that precipitate or exacerbate episodes and promote early intervention to prevent relapse
- Provide family psychoeducation and support
- Assist with access to needed services

2. Ongoing Assessment and Monitoring

- Psychiatric symptoms
- Danger to self or others
- Functional status, including ability to care for himself/herself

B. Psychiatric Management and Ongoing Assessment

1. Components of psychiatric management. Psychiatric management consists of a set of clinical management and supportive psychotherapy interventions that the psychiatrist should provide to all patients in each phase of treatment. Specific components of psychiatric management include establishing a therapeutic alliance with patients; providing support and education to patients regarding schizophrenia and its treatments; providing family members with psychoeducation and support when appropriate; providing supportive assistance or facilitating access to services for patients coping with problems in interpersonal relationships, work, living or financial issues, and medical or health-related needs; enhancing adherence to treatment plans; identifying factors that precipitate, exacerbate, or prolong episodes; and promoting the early recognition and treatment of relapse.

2. Ongoing assessment and monitoring. During each phase of treatment, the psychiatrist should carefully monitor the patient, including the patient's degree of danger to self or others; changes in the patient's symptomatic status; and changes in the patient's functional status, including the patient's ability to care for himself or herself.

C. Development of a Treatment Plan

1. Involvement of Patient, Family, and Other Treaters

2. Choice of Treatment Setting

a) Types of treatment settings

- Options may include from acute hospitalization, long-term hospitalization, day hospitalization, day treatment, supportive housing, crisis community residences, foster or family care, board-and-care homes, or nursing homes

b) Factors to consider

- Threat of harm to self or others
- Ability to care for self
- Need for particular types of treatment
- Availability of social supports and resources in the community
- Preferences of patient and family
- Need for involuntary hospitalization for patients who refuse but meet requirements of the local jurisdiction

3. Plan for Specific Pharmacologic Treatments

- Conventional antipsychotic medications
- Risperidone
- Newer antipsychotic medications—olanzapine, quetiapine, ziprasidone*
- Clozapine
- Adjunctive medications
- ECT

4. Plan for Specific Psychosocial Interventions

- Individual therapy
- Family interventions
- Group therapy
- Early intervention programs
- Coordinating and supportive community interventions
- Rehabilitation
- Self-help groups

*Ziprasidone is soon to be released in a short-acting, injectable form.

C. Development of a Treatment Plan

1. Involvement of patient, family, and other treaters in treatment planning. Whenever feasible, the psychiatrist should attempt to involve the patient and family in treatment planning. The psychiatrist should also coordinate, consult with, and/or supervise other mental health professionals using a team approach.

2. Choice of treatment setting. The psychiatrist should weigh the risks and benefits of different settings, such as acute hospitalization, long-term hospitalization, day hospitalization, day treatment, supportive housing, crisis community residences, foster or family care, board-and-care homes, or nursing homes. Factors that should be taken into account when selecting a treatment setting include, but are not limited to, the threat of harm to self or others, inability of the patient to care for himself or herself, use of the least restrictive environment that is clinically effective, the need for particular treatments and ability of the patient to comply with these treatments, and the availability of social supports and treatment resources in the community. Involuntary hospitalization should be considered for patients who refuse but meet requirements of the local jurisdiction.

3. Plan for specific pharmacologic treatments. Conventional antipsychotic medications are generally equally effective but differ in their potency, side effects, and available routes of administration. Risperidone, olanzapine, quetiapine, and ziprasidone* have all been shown to be effective and may cause fewer extrapyramidal side effects; however, they are currently only available in oral forms. Clozapine has been found to be effective in refractory patients and those unable to tolerate other antipsychotic medications; however, it can cause agranulocytosis and requires white blood cell (WBC) monitoring. Other medications such as lithium, carbamazepine, valproic acid, benzodiazepines, or antidepressants are sometimes added as adjunctive agents to antipsychotic medication regimens. Catatonic and treatment-resistant patients may be candidates for electroconvulsive therapy (ECT) when pharmacologic treatments are not effective or contraindicated. (See Section D.1.a. describing selection among these choices.)

4. Plan for specific psychosocial interventions

a) **Individual therapy.** Individual therapies generally involve supportive, problem-solving approaches. Intensive exploratory techniques, particularly in the acute phase, should be avoided.

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b) **Family interventions.** Participation in treatment by families and nonfamily caregivers should be indicated when appropriate and can involve psychoeducation, enhancement of coping and problem solving, improving communication, stress reduction, and family support. Approaches that view the family as the cause of schizophrenia should be avoided.

c) **Group therapy.** Group therapies for patients can involve psychoeducation, enhancement of problem solving, goal planning, social interactions, and management of medications and side effects. Excessive stress and overstimulation should be avoided through limit setting and structure.

d) **Early intervention programs.** Early intervention programs are designed to educate patients and families about prodromal symptoms and encourage them to seek early intervention. When patients are experiencing prodromal symptoms, more frequent monitoring may be required.

e) **Coordinating and supportive community interventions.** Interventions designed to be supportive and to coordinate care in the community can include the following: *case management programs* are frequently used to ensure that patients receive coordinated, continuous, and comprehensive services; *Programs for Assertive Community Treatment* (PACT) are individually tailored based on a patient's deficits and requirements and consist of both case management and active intervention by a treatment team based in the community; *Fairweather Lodge programs* are designed to help transition patients from the hospital to a supervised community residence and ultimately to autonomy; and *psychosocial clubhouses* are therapeutic communities that provide patients with recreational, vocational, and residential resources.

f) **Rehabilitation.** Several interventions are designed to improve the social, vocational, educational, and familial functioning of patients. *Social skills training programs* employ behavioral techniques or learning activities that enable patients to acquire interpersonal, self-care, and coping skills. *Vocational rehabilitation* may consist of prevocational training, vocational counseling and education, sheltered workshops, supported employment, or transitional supported employment; vocational rehabilitation efforts should focus mainly on stable patients living in the community and should be tailored to avoid both under- and overexpectations.

g) **Self-help groups.** Patients and families should be informed about the existence of consumer organizations, including patient organizations, self-help treatment organizations, and relative organizations.

D. Treatment in the Acute Phase

1. Pharmacologic Treatment

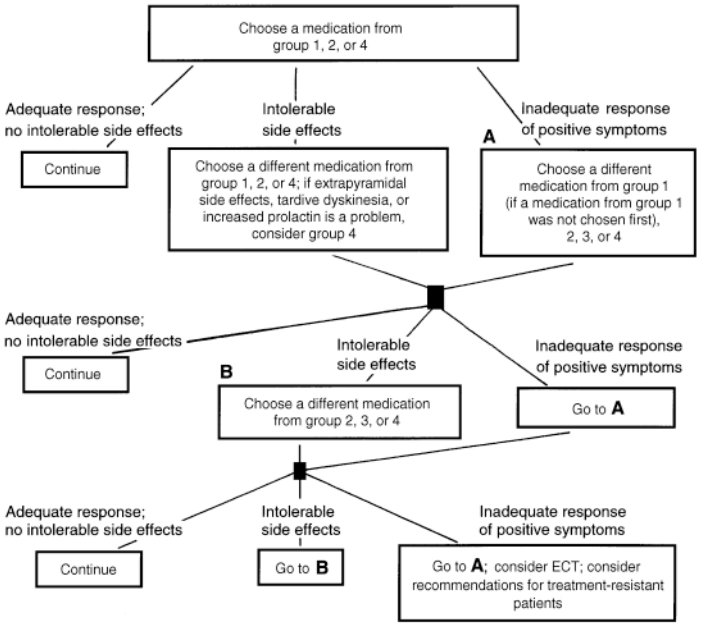
a. Selection of an Antipsychotic Medication

If a patient has a specific contraindication to any medication, remove that medication from the possibilities for that patient.

At each point in the algorithm, medications are chosen on the basis of

- **Past response**
- **Side effects**
- **Patient preference**
- **Planned route of administration**

GROUP 1: Conventional antipsychotic medications
GROUP 2: Risperidone
GROUP 3: Clozapine
GROUP 4: New antipsychotic medications–olanzapine, quetiapine



b. Antipsychotic Medication Dosage

- Antipsychotic medication dosage of 300–1000 CPZ equiv mg/day

c. Treatment for Comorbid Conditions

- Other psychiatric conditions
- Alcohol and substance use disorders
- General medical conditions

d. Consideration of Prophylactic Treatment of Side Effects

D. Treatment in the Acute Phase

1. Pharmacologic Treatment

a. Selection of an antipsychotic medication. An antipsychotic medication is indicated for nearly all acute psychotic episodes in patients with schizophrenia. The choice of an antipsychotic medication can be made according to factors such as the adequacy of response, side effects, past history of response, and patient preferences (see Algorithm on preceding page). The oral form of a depot antipsychotic medication may be preferred for patients who are candidates for the depot medication in the stable phase. A high-potency agent that is available as short-acting intramuscular injections may be preferred for agitated patients along with an injectable benzodiazepine.

b. Antipsychotic medication dosage. Antipsychotic medication dosages in the range of 300–1000 mg/day of chlorpromazine or the equivalent (CPZ equiv mg/day) should be used. "Rapid neuroleptization" involving the use of massive loading doses should not be used.

c. Treatment for comorbid conditions. Comorbid conditions that should be addressed during the acute phase of treatment include comorbid psychiatric disorders, alcohol and/or substance use, and general medical conditions.

d. Consideration of prophylactic treatment of side effects. The prophylactic use of antiparkinsonian medications should be considered for patients who can tolerate them, have a history or high risk of problematic extrapyramidal symptoms (this is especially true for young males), or prefer prophylactic treatment.

D. Treatment in the Acute Phase

2. Psychosocial Interventions

- Determine treatment setting
- Reduce overstimulation and stress
- Provide support and structure
- Have simple and clear communications and expectations
- Provide patient and family with information on the nature and management of the illness when appropriate
- Encourage patient and families to collaborate in treatment planning and implementation when appropriate
- Care for in safe, secure environment—least restrictive

D. Treatment in the Acute Phase

2. Psychosocial Interventions

In the acute phase, the goals of psychosocial interventions are to reduce overstimulating and stressful situations, environments, or life events. The psychiatrist and other members of the treatment team generally provide support and structure. Communications with and expectations of patients should be simple, clear, and coherent. Both patients and family members should be provided with information on the nature and management of the illness when appropriate. Patients and families should also be encouraged to collaborate in treatment planning and implementation when appropriate.

E. Modification and Refinement for Inadequate Response

1. Identify and Correct Reasons for Inadequate Response

- Assess compliance
- Consider checking serum medication levels
- Assess side effects
- Consider initiating side-effect–specific treatments

2. Consider Specific Alterations to Treatment Plans

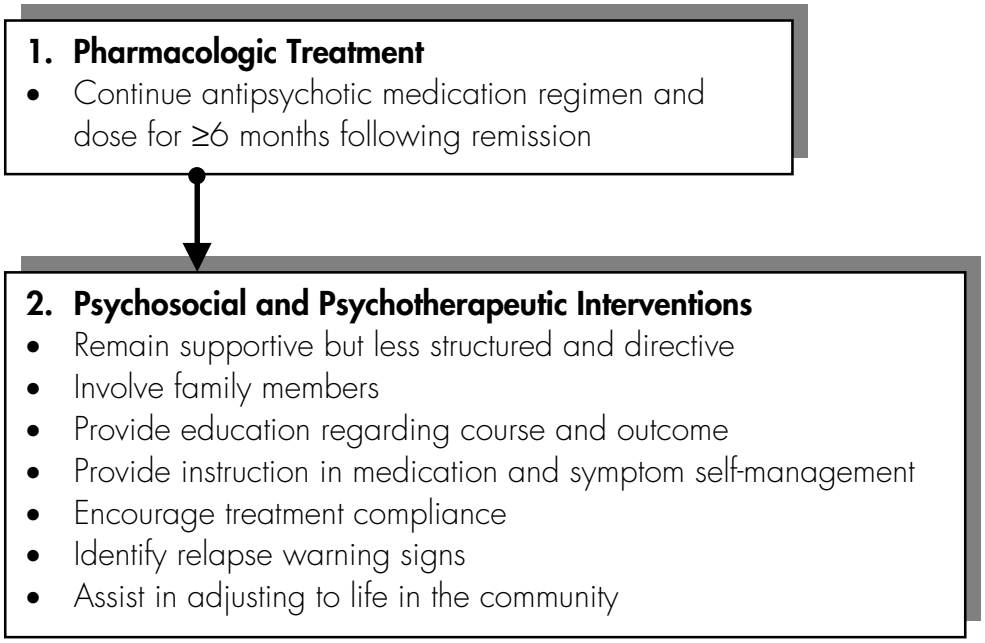
- Consider changing the antipsychotic medication dose or class (see Algorithm on page 12)
- Consider clozapine for patients with inadequate response to ≥1 antipsychotic medication or intolerable side effects to ≥2 antipsychotic medications from different classes (see Algorithm on page 12)
- Consider ECT (see Algorithm on page 12)

E. Modification and Refinement for Inadequate Response

1. Identify and correct reasons for inadequate response. If the patient is not improving, the psychiatrist should address whether noncompliance is a contributing factor. It may be helpful to establish whether abnormal absorption or metabolism are contributing factors by checking serum medication levels. A careful assessment of clinically significant medication side effects should be made. Consideration should be given to initiating side-effect–specific treatments, such as an antiparkinsonian medication. The psychiatrist may simply monitor side effects in patients who are able to tolerate them safely.

2. Consider specific alterations to treatment plans. The psychiatrist should consider several treatment plan alterations for patients who have not improved and for whom an identifiable and correctable reason has not been found. The patient's antipsychotic medication dose, schedule, or class can be changed (see Algorithm on page 12). A clozapine trial should be considered for patients who do not fully respond or who have intolerable side effects on at least two antipsychotic medications from different classes. ECT can be considered for patients with treatment resistance.

F. Treatment in the Stabilization Phase



F. Treatment in the Stabilization Phase

1. Pharmacologic treatment. Patients who have improved on a particular antipsychotic medication should remain on that medication and dose for at least 6 months following remission.

2. Psychosocial and psychotherapeutic interventions. In the stabilization phase, psychosocial and psychotherapeutic interventions generally remain supportive but are less structured and directive than in the acute phase. The involvement of family members is encouraged when appropriate. Interventions are designed to provide patients and family with education regarding the course and outcome of illness. Patients are instructed in medication self-management and symptom self-management, and treatment compliance is encouraged. Patients and families are instructed to identify relapse warning signs. Patients should be helped to adjust to life in the community.

G. Treatment in the Stable Phase

1. Pharmacologic Treatment

- Maintain conventional antipsychotic medication dosage between 300 and 600 CPZ equiv mg/day
- Consider depot antipsychotic medications for poor compliance
- Consider early intervention with higher antipsychotic medication doses for prodromal symptoms
- Prior to antipsychotic medication discontinuation, require:
  - ≥1 yr of no symptoms following a single episode
  - ≥5 yr of no symptoms following multiple episodes
- Minimize the risk of relapse during antipsychotic medication discontinuation by gradual reduction, more frequent visits, and early intervention strategies

2. Psychosocial and Community Interventions

- Tailor therapies to patient's clinical status and level of functioning
- Involve family on an ongoing basis
- Consider re-education in basic living skills, social skills training, cognitive rehabilitation, and vocational rehabilitation
- Train patient and family to monitor for prodromal symptoms
- Promote early intervention and increased treatment intensity for prodromal symptoms

G. Treatment in the Stable Phase

1. Pharmacologic treatment. Maintaining a patient on a conventional antipsychotic medication dose of 300–600 mg/day of chlorpromazine or the equivalent may provide the best balance between minimizing side effects, improving compliance, and decreasing the risk of relapse. Long-acting depot medications may be preferable for patients with a history of poor compliance. Early intervention strategies with higher antipsychotic medication doses may be helpful for prodromal symptoms. Patients with only one episode of positive symptoms may be considered candidates for medication discontinuation if they have had at least 1 year of maintenance treatment with no symptoms. Patients with multiple prior episodes should be considered for medication discontinuation only after 5 years of maintenance treatment with no symptoms. If the decision to discontinue antipsychotic medication treatment is made, additional precautions should be taken to minimize the risk of relapse, including gradual dose reduction, more frequent visits, and/or developing early intervention strategies for the patient, family, and other supports.

2. Psychosocial and community interventions. The psychosocial treatments used for individual patients in the stable phase vary and should be tailored to the patient's clinical and functional status. The goals for individual or group therapies may become more complex and ambitious for patients with few symptoms and greater stress tolerance. Specific psychosocial treatments that can provide living and social skills training, cognitive rehabilitation, and vocational rehabilitation should be considered for appropriate patients. The ongoing involvement of families should be encouraged when appropriate. Patients and families should be trained to monitor for prodromal symptoms. During prodromal episodes, early intervention and increased intensity of treatment may be required.