



*Behavioral Health Services (BHS)*

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Adult and Older Adult Behavioral Health  
Physicians Manual and Practice Guidelines

Quick Guide: Parameters for General Health-  
Related Monitoring, Consultation and  
Interventions

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2021



## Quick Guide

### I. Parameters for General Health-Related Monitoring, Consultation and Interventions

#### A. Purpose

These parameters are established to identify specific risk factors and general medical conditions in beneficiaries/clients that may require specific educational and behavioral interventions, medication changes, consultation and referral arrangements with general medical systems, or co-management of selected physical health issues.

#### B. Introduction

1. Individuals with schizophrenia and other serious mental disorders are at a significantly higher risk for a variety of health problems, including:
  - a) Diabetes
  - b) Coronary artery disease
  - c) Hypertension
  - d) Untoward effects of antipsychotic medications
2. The causes for an increased health risk include:
  - a) Lifestyle, which is often associated with poor diet, obesity, smoking, substance use, and decreased activity.
  - b) Social determinants such as poverty, homelessness and social isolation
  - c) Relatively less access to healthcare
  - d) Effects of antipsychotic medications
  - e) Possible genetic predispositions
3. Some psychotropic medications, most notably antipsychotic medications, may increase the vulnerability to several general medical conditions.
4. Relevant laboratory studies should be obtained at appropriate intervals for beneficiaries/clients in ongoing treatment who have concurrent general medical conditions, health risk factors, or who are receiving medications that require



physiologic monitoring by treating mental health professionals. Findings should be documented and addressed in the mental health clinical record.

5. Consultation with appropriate primary care physicians (PCPs), including referral when necessary, should be routine.
6. In some cases, co-management of selected physical health issues in mental health programs may be indicated.

## II. Monitoring for Individuals Prescribed Psychotropic Medications (Reference A)

### A. Weight gain and obesity

1. Problem: Individuals with serious mental disorders are at greater risk for metabolic abnormalities due to poor healthcare, substance use, and the exposure to untoward effects of medication.
2. Monitor:
  - a) For beneficiaries/clients receiving psychotropic medications, measure and record height, weight, and calculated Body Mass Index (BMI) yearly. (Height need only be measured every 5 years, but should be recorded with each BMI calculation).
    - i. If normal range, screen annually.
    - ii. If abnormal range, screen as clinically indicated but, no less frequently than every 6 months (while in the abnormal range).
    - iii. If BMI > 25 obtain weight and calculate a BMI at each visit.
2. Interventions:
  - a) Choose psychotropic medications with less associated weight gain if the BMI is >25 unless the reasons for using the medications associated with weight gain despite current obesity are clearly documented in the clinical record.
  - b) If the BMI is >25 or the baseline BMI increases by 1 or more over the initial value, counsel about modifiable risk factors and refer to healthy living groups.



B. Hypertension

1. Problem: Metabolic risk factors place people at greater likelihood for developing cardiovascular disease and diabetes (Reference B).
2. Monitor:
  - a) Measure blood pressure.
    - i. If normal range, screen annually (Reference B).
    - ii. If abnormal range, screen as clinically indicated but, no less frequently than every 6 months (while in the abnormal range).

**III. Monitoring for Individuals Taking Antipsychotic Medication (Reference C)**

A. General Physiologic Status

1. Problem: Individuals with serious mental disorders are at greater risk for a variety of health problems due to inadequate healthcare, substance use, and the exposure to untoward effects of antipsychotic medication.
2. Monitor: At minimum, obtain the following laboratory studies on a yearly basis for all beneficiaries/clients in ongoing treatment who are receiving antipsychotic medications from BHS:
  - a) Complete Blood Count (CBC)
  - b) Electrolytes
  - c) Fasting Blood Sugar (FBS) Level / Hemoglobin A1c (HBA1c)
  - d) Blood Urea Nitrogen (BUN)
  - e) Creatinine
  - f) Liver Function Tests
  - g) Lipid Panel



3. Interventions:

- a) For beneficiaries/clients with clinically significant abnormal laboratory values: initiate consultation with primary care physician (PCP) as indicated, document the notification of the PCP, and document the consideration of the impact on the mental health service interventions.
- b) For beneficiaries/clients who refuse laboratory studies, document, the refusal and the reasons the consideration of the risks of further medication services in absence of adequate laboratory monitoring, and the notification of the PCP, if known.

B. Diabetes

1. Problem: Obesity, newer antipsychotic medications, poor diet, and inactivity associated with schizophrenia increase the risk for diabetes mellitus type II.

2. Monitor:

- a) Obtain a baseline and yearly fasting blood sugar (FBS) or hemoglobin A1C (HbA1C) for all beneficiaries/clients taking an antipsychotic medication.
- b) For BMI >25, obtain an HbA1C or FBS 4 months after the initiation of an antipsychotic medication, and repeat at least yearly.
- c) Ask about diabetes symptoms at least every 6 months, i.e., weight change, polyuria and polydipsia and record the client's responses in the clinical record.
- d) For beneficiaries/clients who have a FBS >126 or a random BS>200 or HbA1C > 7%, refer to the PCP and obtain follow up lab studies at 3-month intervals if findings remain elevated.

3. Interventions:

- a) For beneficiaries/clients who report symptoms of diabetes, obtain a FBS or an HbA1C. Refer to the PCP for a FBS >126, a random BS>200 or an HbA1C > 7%.
- b) Urge beneficiaries/clients with symptoms of diabetes to seek general health care services, counsel about modifiable risk factors, and refer to healthy living groups.



- c) For beneficiaries/clients who are taking an antipsychotic medication and have a FBS >126, a random blood sugar >200 or an HbA1C > 7.0%, change to a different antipsychotic medication to decrease the likelihood that the laboratory findings are medication- induced, if clinically indicated. If not clinically indicated, document the reason. Monitor every three months as necessary.
- d) Metformin should be used when no contraindication to its use exists. When contraindication exists, the consideration and contraindication should be clearly documented in the client record.

C. Hyperlipidemia

- 1. Problem: Antipsychotic medications are associated with hyperlipidemia and hypercholesterolemia, which increases the risk for cardiovascular disease.
- 2. Monitor:
  - a) Obtain a baseline and yearly lipid panel (total and HDL and LDL cholesterol, triglycerides) for beneficiaries/clients with a diagnosis of schizophrenia or who are taking an antipsychotic medication.
  - b) Obtain a repeat lipid panel every 6 months for an LDL cholesterol level >130, a total cholesterol level >200, or a triglycerides level >150.
- 3. Interventions:
  - a) Refer beneficiaries/clients to their PCP for an LDL cholesterol >130 for consideration of cholesterol-lowering drugs.
  - b) Initiate lifestyle counseling for weight loss, diet change, and exercise if the LDL cholesterol is > 130.

D. Cardiac History

- 1. Problem: Some antipsychotic medications cause EKG changes (QTc interval prolongation) that increase the risk of fatal arrhythmias, and clozapine is associated with rare incidence of hypersensitivity myocarditis.
- 2. Interventions:
  - a) Obtain a cardiac history, including a history of:
    - i. Heart disease



- ii. Syncope
  - iii. A family history of sudden death or prolonged QTc.
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- b) Consider the effect of any QTc prolonging medications (e.g.) tricyclic antidepressants or possible medication interactions when prescribing an antipsychotic medication known to cause EKG changes.
  - c) Refer beneficiaries/clients with a positive cardiac history for a baseline EKG prior to initiating ziprasidone. If there is evidence of syncope or other signs of QTc prolongation after the initiation of ziprasidone, an EKG should be repeated.
  - d) Monitor beneficiaries/clients started on clozapine for onset of tachycardia or fever, especially in first eight weeks of treatment.
  - e) Do not prescribe thioridazine, mesoridazine or pimozone for beneficiaries/clients with a positive cardiac history.
- E. Prolactin and Sexual Side Effects
1. Problem: Some antipsychotic medications (especially 1st generation antipsychotics and risperidone) raise prolactin levels (75% women, 34% men), which may cause galactorrhea, menstrual irregularities, sexual dysfunction, and osteoporosis.
  2. Monitor: For beneficiaries/clients taking an antipsychotic medication, take a yearly sexual history, which includes asking about:
    - a) Changes in menstruation
    - b) Changes in libido
    - c) Galactorrhea
    - d) Erectile and ejaculatory dysfunction
  3. Interventions:
    - a) When the history suggests sexual dysfunction, obtain a prolactin level.



- b) Switch to a prolactin-sparing antipsychotic medication (e.g., olanzapine, clozapine, quetiapine, aripiprazole, or ziprasidone) if there is a history of sexual dysfunction and the prolactin level is elevated.
- c) Refer to a general medical resource for an endocrine workup if a sexual dysfunction and elevated prolactin level persists after the switch to a prolactin- sparing antipsychotic medication.

#### **IV. Monitoring for Individuals Taking Mood-Stabilizing Medications**

- A. General Testing: The general laboratory monitoring of individuals taking mood-stabilizing medications should be determined by the clinical situation, including the type of medication, health risk factors, and duration of treatment, concurrent general medical conditions and concurrent medications.
- B. Specific Medication Monitoring:
  - 1. Lithium
    - a) Prior to the initiation of lithium treatment, the following baseline laboratory data should be obtained:
      - i. Electrolytes
      - ii. Creatinine
      - iii. Pregnancy status
      - iv. Thyroid Function (e.g., TSH)
      - v. Urinalysis
    - b) An EKG should be obtained in individuals with a history of cardiac abnormalities or syncope, or who are over age 40.
    - c) A plasma lithium level should be closely monitored during the initiation of lithium to ensure therapeutic levels and avoid dose-related toxicity.
    - d) A plasma lithium level should be monitored at least every 6 months in individuals stabilized on lithium.
    - e) A creatinine level and TSH level should be monitored at least every six months to one year in individuals stabilized on lithium.





2. Divalproex

- a) Prior to the initiation of divalproex, a CBC, liver enzymes and a pregnancy status should be obtained.
- b) Liver function tests should be obtained at one and two months following the initiation of divalproex and at least every 6 months in individuals stabilized on divalproex, in order to avoid dose-related toxicity and ensure therapeutic levels.

3. Carbamazepine

- a) Prior to the initiation of carbamazepine, a CBC and liver enzymes should be obtained.
- b) Liver function tests, electrolytes and a CBC should be obtained at one and two months following the initiation of carbamazepine and at least every six months in individuals stabilized on carbamazepine in order to avoid dose-related toxicity and to ensure therapeutic levels.

**V. Monitoring for Individuals Taking Antidepressant Medications**

- A. The laboratory monitoring of individuals taking antidepressant medications should be determined by the clinical situation, including the type of medication, health risk factors, and the duration of treatment, concurrent general medical conditions and concurrent medications.
- B. A baseline EKG should be obtained prior to treatment with tricyclic antidepressants in individuals with cardiac disease or who are over age 55.

**VI. Consultation with Primary Care Physicians (PCPs)**

- A. Consultation with a PCP should be requested for purposes of:
  - 1. Determination of the advisability of co-management of the following specific disease conditions and general health maintenance under circumstances in which such co- management may represent best care:
    - a) Hypertension
    - b) Diabetes
    - c) Hypercholesterolemia



- d) Tobacco Use Related Disorders
  - e) Preventative Care
  - f) Sexually Transmitted Diseases (STDs)
  - g) Tuberculosis
  - h) HIV
2. Assessment of physical complaints/findings that may represent general medical conditions requiring intervention
- a) Facilitating access to advanced diagnostic services and interpretation necessary for proper treatment of mental health or general medical conditions.
- B. The following information should be included in consultation requests
- 1. Clear description of the reason for consultation
  - 2. Summary of existing assessment of mental health and general medical conditions
  - 3. Summary of treatment history
  - 4. Summary of current treatment, including medications
  - 5. Relevant laboratory findings
  - 6. Relevant clinical record
  - 7. Demographic information
- C. Responding to consultant recommendations
- 1. Documentation of the consultation recommendations within the clinical record, and the manner in which the response has affected treatment.
  - 2. Documentation of which recommendations have been implemented
  - 3. Documentation of which recommendations have not been implemented, including the reason(s) why.



- D. Expedited consultation and referral
  - 1. Client or guardian should be informed when a general medical condition or symptom that appears to potentially represent an urgent need for further general medical assessment or interventions.
  - 2. Depending on resource availability and degree of urgency, the client should be referred to a general medical Urgent Care Center (UCC) or emergency department, and appropriate arrangement for transportation should be made.
- E. Procedures for consultation with an assigned PCP
  - 1. When consultation is indicated, the program should, in collaboration with the client, determine the presence of a PCP and associated contact information.
  - 2. A consultation request should be completed, containing the required information and associated materials.
  - 3. By default, the PCP Linkage Form should be used to convey the consultation request.
  - 4. The consultation request should be documented in the clinical record.
  - 5. If BHS determines the presence of a specific PCP, the consultation request should be forwarded to that provider.
- F. If it is determined that there is an absence of a specific assigned PCP, the client will be helped with a referral.

## **VII. References**

- A. National Heart and Lung and Blood Institute:  
<http://www.nhlbi.nih.gov/guidelines/obesity/BMI/bmicalc.htm>
- B. American Heart Association
- C. Marder SJ, Essock SM, Miller AL, Buchanan RW, Casey DE, Davis JM, Kane JM, Lieberman JA: Physical health monitoring of patients with schizophrenia. *Am J Psychiatry* 2004; 161:1334-49