Practice Guideline
Monitoring for Metabolic Syndrome in Persons taking New Generation/Second Generation Antipsychotic Agents

Purpose
To assure that members who are taking New Generation/Second Generation Antipsychotic Medications (SGAs) are appropriately monitored prior to and during use of the medication(s), specifically second generation antipsychotic agents, which may increase the risk and presence of metabolic syndrome.

Population
All persons for whom the specified drug class is prescribed for the treatment of a behavioral health disorder

Guideline for all members treated with SGAs
Persons receiving SGAs are at increased risk for the development of metabolic syndrome. Some studies suggest that the incidence of obesity and diabetes in persons with schizophrenia and mood disorders is 1-2 times the incidence in the general population. Additionally, even though SGAs vary in their ability to promote weight gain and glucose intolerance, all carry an FDA warning for weight gain, type II diabetes, and lipid abnormalities. Metabolic syndrome has been determined to be a cause of coronary heart disease (CHD) and cardiovascular disease. Thus, persons receiving SGAs deserve the attention of the treatment team regarding the risk of developing or the detection of the presence of metabolic syndrome prior to and during the treatment period.

According to the Adult Treatment Panel (ATP) III Criteria for Clinical Identification of the Metabolic Syndrome, at least 3 of the following 5 features must be present:

- Abdominal obesity as indicated by increased waist circumference (>35 inches for women or >40 inches for men)
- Elevated triglyceride levels (>150 mg/dL or being on medicine for hypertriglyceridemia)
- Low HDL level (<50 mg/dL for women or <40 mg/dL for men or being on medication for treatment of hypercholesterolemia)
- Hypertension (>130/85 or being on medication for treatment of hypertension)
- Elevated fasting glucose (FBS>100 mg/dL)

The CPSA Provider Manual Section 3.15.3-D Psychotropic Medication Monitoring includes the requirements and minimum frequencies with which blood pressure, weight, abdominal girth (and BMI), fasting glucose, and lipid profile are required. The following table represents the required parameters.
and the minimum frequency for monitoring and recording of the findings in the clinical record. Time frames begin with the institution of pharmacotheraphy with a SGA:

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<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>4 weeks</th>
<th>8 weeks</th>
<th>12 weeks</th>
<th>Quarterly</th>
<th>Annually</th>
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</thead>
<tbody>
<tr>
<td>Personal/family history</td>
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<td></td>
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<td>X</td>
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<tr>
<td>Weight and BMI</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Waist circumference</td>
<td>X</td>
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<td></td>
<td>X</td>
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<tr>
<td>Blood Pressure</td>
<td>X</td>
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<td>X</td>
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<td>X</td>
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<tr>
<td>Fasting glucose</td>
<td>X</td>
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<td></td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Fasting lipid profile</td>
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</tbody>
</table>

In addition to monitoring the above, certain individual medications may have unique monitoring requirements such as prolactin levels in persons taking risperidone or a SGA in combination with a first generation antipsychotic (FGA) agent. When clinically indicated, consultation with a registered dietician should be obtained in coordination with the member’s Primary Care Provider. Furthermore, healthy nutrition, movement and exercise should be part of the overall service plan and supported through health and wellness initiatives and if necessary, disease management interventions.

**Persons with Cognitive Impairment (CI)/Developmental Disabilities (DD)**

DES/DDD has established a new quality measure to reduce the number of individuals enrolled with the Division who are being treated with antipsychotic medications and to reduce the morbidity secondary to the metabolic syndrome associated with the use of these medications including the increased risk of Type II diabetes.

Persons with cognitive impairment/developmental disabilities and SMI are at higher risk for development of diabetes. Newer evidence suggests that rates of diabetes are higher in persons with CI/DD/SMI than in other groups of persons with CI/DD or groups of persons with SMI. The use of SGAs is high in persons with both CI/DD and SMI, thus placing them at greater risk for development of Type II diabetes. Additionally, the rate of obesity is higher in persons with CI/DD than in the general population as well, again adding to the risk for this population.

Thus for persons with CI/DD and SMI, extra vigilance should be directed at monitoring and following symptoms, identification, monitoring, and follow up for metabolic syndrome. DES/DDD will monitor through data and record review the following:

- Whether the BHMP is following the guidelines on appropriate monitoring for persons treated with SGAs
- Whether the BHMP has noted a new diagnosis of Type II diabetes in the clinical record
- Whether the BHMP has changed the member’s medication based on a new diagnosis of Type II DM
Whether the BHMP has reduced the member’s dose of the SGA based on the new diagnosis of Type II diabetes

Following its review, the Division may make recommendations regarding an individual member’s specific medication regimen to reduce the risks associated with use of SGAs in this population.

**Oversight and Monitoring**

To monitor performance and identify any opportunities for improvement for provider agencies and individual BHMPs in following these guidelines and documenting accordingly current evidence-based practices for using SGAs, CPSA will incorporate indicators into its current chart review tool and may conduct a focus review at its discretion. Results will be shared with each provider agency with the expectation that improvement efforts will ensue and be measurable at the time of the next review.

As with all guidelines, there may be times when it is necessary to deviate from the guideline. In such instances, documentation of the reason(s), rationale, and expected outcomes must be clearly and thoroughly documented.

**References**