TO: ALL CHILD HEALTH AND DISABILITY PREVENTION (CHDP) PROGRAM PROVIDERS AND MEDI-CAL MANAGED CARE PLANS

SUBJECT: ADDITION OF FASTING BLOOD GLUCOSE AND CHOLESTEROL SCREENING TESTS AS CHDP BENEFITS, REPORTING CODES, AND REIMBURSEMENT

The purpose of this Provider Information Notice (PIN) is to inform you that effective October 1, 2005, two screening tests, fasting blood glucose and cholesterol, have been added to CHDP health assessments for children who are at risk for having abnormal screening tests.

This Information Notice provides background information on pediatric overweight and obesity, the new CHDP billing codes, the provider reimbursement rates for the codes, and information on referral and care management of borderline abnormal and abnormal screening tests.

I. Background Information

The prevalence of childhood overweight and obesity is increasing at an alarming rate in California as evidenced by California’s rank of fifth highest prevalence of pediatric overweight for 2-5 year olds according to the Pediatric Nutrition Surveillance System (PedNSS). According to the National Health and Nutrition Examination Surveys, the prevalence of overweight preschool children and adolescents has doubled between 1976-1980 and 1999-2002 and more than tripled for school age children aged 6-11 years. In general, overweight has increased among both sexes and among all racial, ethnic and socioeconomic groups. However, the prevalence of overweight among blacks, Mexican Americans, and Native Americans exceeds that of other ethnic groups thereby creating greater health disparities for these populations.
Childhood overweight has significant adverse effects on the present and future health of children. Among the most common medical conditions associated with primary childhood overweight are type 2 diabetes, dyslipidemia, hypertension, pulmonary complications (e.g., asthma, sleep apnea), growth acceleration, musculoskeletal problems, and psychosocial problems. Furthermore, one-third of overweight preschool children and about half of overweight school-age children become overweight adults.¹

Until recently, type 2 diabetes was considered rare in the pediatric population. Type 2 diabetes has increased and now is estimated to have an incidence of 4.1 per 1000. Diabetes is associated with significant morbidity and premature death and is presently the ⁷th leading cause of death in the U.S. Because the severity of complications of diabetes is linked to duration, onset at an early age portends increasing health problems and mortality among those affected. When there is early onset of type 2 diabetes, children are at greater risk for developing cardiovascular disease at a younger age.

Many overweight children/adolescents have high cholesterol and/or blood pressure values which are risk factors for heart disease and stroke. In the Bogalusa Heart Study, overweight school children were 2.4 to 7.1 times more likely to have elevated total cholesterol, LDL cholesterol, and triglycerides².

In addition, children/adolescents who may not be overweight but instead have a family history of premature cardiovascular disease or have at least one parent with high blood cholesterol are at increased risk of having high blood cholesterol and accelerated atherosclerotic processes. Pathology studies have shown that atherosclerosis begins in childhood and that the extent of atherosclerotic change in children and young adults can be correlated with the presence of the same risk factors identified in adults.³

Screening for elevated fasting blood glucose and cholesterol in overweight at-risk children/adolescents will help to identify children/adolescents with pre-diabetes (also referred to as impaired glucose tolerance), type 2 diabetes and those at highest risk for developing early cardiovascular disease. In addition, screening for elevated cholesterol in at-risk children/adolescents who may NOT be overweight will help to identify children/adolescents at highest risk for developing early cardiovascular disease.

II. Fasting Blood Glucose and Cholesterol as CHDP Program Benefits

A. Effective October 1, 2005, CHDP is reimbursing providers for the collection and analysis or collection and handling of blood for fasting blood glucose and cholesterol testing. All CHDP provider types can bill and be
reimbursed for these codes. For CHDP laboratory providers, reimbursement is for the blood draw and analysis of the sample. For CHDP health assessment providers, reimbursement is for the collection and handling of the blood sample, or collection and analysis in the office.

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
<th>Age</th>
<th>Reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood glucose – collection and analysis, or collection and handling</td>
<td>25</td>
<td>5 years through 20 years 11 months</td>
<td>$4.34</td>
</tr>
<tr>
<td>Blood/serum cholesterol – collection and analysis, or collection and handling</td>
<td>26</td>
<td>5 years through 20 years 11 months</td>
<td>$4.03</td>
</tr>
</tbody>
</table>

B.

It is recommended that all children five years of age and older receiving CHDP health assessments be assessed for risks of complications of overweight or a family history of heart disease and the following tests ordered if the individual meets the identified risk factors.

1. Screen for both glucose* and cholesterol if Body Mass Index (BMI) ≥ 85th percentile **AND** two of the following risk factors are present:
   a. BMI also ≥ 95th percentile
   b. Family history of diabetes
   c. Race/ethnicity: Black, Hispanic, American Indian, Asian, Pacific Islander, Native Alaskan
   d. One of the following signs of insulin resistance: acanthosis nigricans (hyperpigmentation and thickening of the skin into velvety irregular folds in the neck and flexural areas), hypertension, dyslipidemia (e.g., elevated cholesterol, abnormal lipid profile, subcutaneous fat deposits), polycystic ovary disease (e.g., irregular or absent menses, striae, hirsuitism, acne).
   e. Less than 30 minutes activity per day and/or a consistently unbalanced diet.

*Both glucose and cholesterol tests should be obtained fasting if they are obtained at the same time. Fasting is defined as no consumption of food or beverage other than water for at least 8 hours before testing.
2. Screen for cholesterol if one of the following risk factors is present:

   a. One parent or grandparent had heart/vascular disease, heart attack, heart death, heart surgery or stroke at ≤ 55 years.
   b. One parent has a cholesterol level ≥ 240 mg/dL.

Note: While at risk-children identified above who are 5 years and above need to be screened, if there is concern about a child under 5 years of age needing glucose and/or cholesterol screening, these tests can be ordered at any age and be reimbursed.

Note: Currently payment of these tests are limited to once per year. Changes to the payment system will be made in recognition that an elevated test result may need to be repeated to confirm an abnormality, or some children/adolescents may need testing more than annually. A future PIN will notify you of these changes.

III. **Billing Instructions for Blood Glucose and Cholesterol**

Please use the following instructions for billing for blood glucose and cholesterol. Refer to the CHDP Provider Manual for additional information.

- In the “Other Tests” section of the PM 160 Confidential Screening/Billing Report, enter the appropriate code 25 and/or code 26.
- Enter the correct fee in the Fees Column (Note: fees do not apply on the “Information Only” PM 160).
- In the adjoining column, on the same line as the code, indicate that this is a glucose test (code 25) or a cholesterol test (code 26)

IV. **Referral and Care Management of Borderline Abnormal and Abnormal Screening Tests**

A. If the fasting glucose is ≥ 126 mg/dL, the individual should be referred to the CCS program for a diagnostic evaluation.

- If the two hour glucose level on an Oral Glucose Tolerance Test result is ≥ 200 mg/dL, the child/adolescent is diagnosed with type 2 diabetes and is medically eligible for CCS for treatment and follow-up at a CCS approved Endocrine Special Care Center.
• If the 2 hour glucose level on a OGTT is < 200 mg/dL, you will receive recommendations for treatment/follow-up from a CCS Endocrine SCC.

B. If the cholesterol is >170 and < 200 mg/dL, the child/adolescent and the family should be informed of the borderline high cholesterol and counseled about activity, diet, and adverse cardiac/vascular consequences if the level remains elevated or increases. Repeat testing should be done in one year.

C. If the cholesterol is ≥ 200 mg/dL, the result is abnormal and the child/adolescent should be referred to CCS for a diagnostic cardiac evaluation involving further testing for possible familial hyperlipidemia.

D. When both glucose and cholesterol levels are done:

• If the fasting glucose is ≤ 100 mg/dL (normal) or > 100 mg/dL and < 126 mg/dL (diagnostic of pre-diabetes), and:

  • If the cholesterol is ≤ 170 mg/dL, the child/adolescent should have laboratory testing repeated in one year. The child/adolescent should have counseling about increasing activity, improving diet, and losing weight.

  • If the cholesterol is >170 and < 200 mg/dL, the child/adolescent and the family should be informed of the borderline high cholesterol and counseled about activity, diet, and adverse cardiac/vascular consequences if the level remains elevated or increases. Repeat testing should be done in one year.

  • If the cholesterol is ≥ 200 mg/dL, the result is abnormal and the child/adolescent and family should be informed of the abnormally high cholesterol and counseled about activity, diet, and adverse cardiac/vascular consequences if the level remains elevated or increases. Repeat testing should be done in six months to one year. If there is a history of one parent or grandparent with heart/vascular disease, heart attack, heart death, heart surgery or stroke at ≤ 55 years, the child/adolescent should be referred to California Children's Services (CCS) for a diagnostic cardiac evaluation involving further testing for possible familial hyperlipidemia.
Your continuing participation in the CHDP Program is greatly appreciated. If you have any questions about this Provider Information Notice or other CHDP issues, please contact your local CHDP Program office.

Original signed by Marian Dalsey, M.D., M.P.H.

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Quoted References


General References


Ludwig, DS. Ebbeling C. Type 2 Diabetes Mellitus in Children- Primary Care and Public Health Considerations. JAMA. September 26, 2001: 286 (12).
