Preventive Screening in Adults

Policy Number: AHS – G2009 – Preventive Screening in Adults

Prior Policy Name and Number, as applicable:

Initial Presentation Date: 5/15/2022
Revision Date: 3/10/2023-8/31/2023

POLICY DESCRIPTION | INDICATIONS AND/OR LIMITATIONS OF COVERAGE | TABLE OF TERMINOLOGY | SCIENTIFIC BACKGROUND | GUIDELINES AND RECOMMENDATIONS | APPLICABLE STATE AND FEDERAL REGULATIONS | APPLICABLE CPT/HCPCS PROCEDURE CODES | EVIDENCE-BASED SCIENTIFIC REFERENCES | REVIEW/REVISION HISTORY

I. Policy Description

Preventive screening is a healthcare service with the goal of illness prevention and health management. According to the American College of Preventive Medicine (ACPM, 2021), “preventive medicine focuses on the health of individuals, communities, and defined populations. Its goal is to protect, promote, and maintain health and well-being and to prevent disease, disability, and death.”

Terms such as male and female are used when necessary to refer to sex assigned at birth.

This policy is limited to testing for which there is not a complete policy already in place. This includes the following policies:

- **BRCA** screening: AHS-M2003-BRCA
- Cervical cancer screening: AHS-G2002
- Chlamydia, gonorrhea, and syphilis screening: AHS-2157-Diagnostic Testing of Sexually Transmitted Infections
- Screening for diabetes mellitus utilizing HbA1c testing: AHS-G2006-Hemoglobin A1c
- Hepatitis C: AHS- G2036
- Latent tuberculosis screening: AHS-G2063-Testing for Diagnosis of Active or Latent Tuberculosis
- Lipid testing: AHS-G2050-Cardiovascular Disease Risk Assessment
II. Indications and/or Limitations of Coverage

Application of coverage criteria is dependent upon an individual’s benefit coverage at the time of the request. Specifications pertaining to Medicare and Medicaid can be found in Section Applicable State and Federal Regulations of this policy document.

The medical necessity criteria below apply to individuals who do not have a pre-existing diagnosis for the disorders listed, and who do not have an increased risk due to other disease diagnoses, other conditions (such as pregnancy), or family history. See individual policies related to the specific disease or condition for further guidance.

1) For asymptomatic individuals, annual screening for Hepatitis B virus infection MEETS COVERAGE CRITERIA when one of the following high-risk situations is met:
   a) For individuals born in geographic regions with HBsAg prevalence greater than 2%.
   b) For U.S.-born individuals not vaccinated as infants whose parents were born in geographic regions with HBsAg prevalence greater than 8%.
   c) For injection-drug users.
   d) For men who have sex with men.
   e) For individuals with elevated ALT/AST of unknown etiology.
   f) For individuals with select medical conditions who require cytotoxic or immunosuppressive therapy.
   g) For pregnant individuals.
   h) For infants born from an HBsAg- positive individual.
   i) For household contacts and sex partners of HBV-infected individuals.
   j) For healthcare and public safety workers exposed to blood or body fluids.
   k) For individuals infected with HIV.
   l) For individuals with multiple sex partners.
   m) For individuals who are on long-term hemodialysis treatment.

2) For individuals 11 to 65 years of age, as well as in all pregnant individuals, including those who present in labor who are untested and whose HIV status is unknown, screening for HIV infection MEETS COVERAGE CRITERIA.

3) Once every three years, a fasting plasma glucose test or an oral glucose tolerance test to screen for type 2 diabetes mellitus MEETS COVERAGE CRITERIA when one of the following conditions is met:
   a) For asymptomatic individuals aged 35 to 70 years who are overweight or obese as defined by the ADA.
b) For individuals who have a family history of diabetes, gestational diabetes or polycystic ovarian syndrome, or belong to certain ethnic groups (African Americans, American Indians or Alaskan Natives, Asian Americans, Hispanics or Latinos, or Native Hawaiians or Pacific Islanders).

c) When screening for type 2 diabetes mellitus within the first year postpartum for individuals with a history of gestational diabetes mellitus who are not currently pregnant and who have not been previously diagnosed with type 2 diabetes mellitus. For these individuals, the repeat testing is also allowed in the following situations:
   i) For individuals with a positive initial postpartum screening result, repeat testing to confirm diagnosis (regardless of the type of test used for initial screening).
   ii) Individuals with a negative initial postpartum screening result should be rescreened at least every 3 years for a minimum of 10 years after pregnancy.

4) For asymptomatic individuals 45 to 75 years of age, screening for colorectal cancer MEETS COVERAGE CRITERIA using any of the following screening strategies:
   a) A stool-based test (every year):
      i) Guaiac fecal occult blood test (gFOBT).
      ii) Fecal immunochemical test (FIT).
   b) Direct visualization tests:
      i) Colonoscopy every 10 years.
      ii) Computerized tomography (CT) colonography every 5 years.
      iii) Flexible sigmoidoscopy every 5 years.
      iv) Flexible sigmoidoscopy every 10 years with FIT every year.

5) The use of methylated Septin 9 (ColoVantage) or FIT-DNA (Cologuard) for colorectal cancer screening DOES NOT MEET COVERAGE CRITERIA.

6) Screening in the following situations DOES NOT MEET COVERAGE CRITERIA:
   a) Screening for colorectal cancer in asymptomatic, average risk individuals over 75 years of age.
   b) Screening of asymptomatic, non-pregnant individuals for thyroid disease.
   c) Screening of asymptomatic, non-pregnant individuals for anemia.
   d) Screening for herpes simplex virus infection in asymptomatic individuals.
   e) The use of culture for detection of Chlamydia infection.
The following does not meet coverage criteria due to a lack of available published scientific literature confirming that the test(s) is/are required and beneficial for the diagnosis and treatment of a patient’s illness.

7) Due to a lack of evidence that such screening improves clinical outcomes, colorectal cancer screening using either of the following techniques DOES NOT MEET COVERAGE CRITERIA:

   a) Screening for anal cytological abnormalities (anal pap smear).
   b) Screening for anal HPV infection.

III. Table of Terminology

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1c</td>
<td>Glycated hemoglobin</td>
</tr>
<tr>
<td>AA</td>
<td>Advanced adenoma</td>
</tr>
<tr>
<td>AACE</td>
<td>American Association of Clinical Endocrinologists</td>
</tr>
<tr>
<td>ACA</td>
<td>The Patient Protection and Affordable Care Act</td>
</tr>
<tr>
<td>ACIP</td>
<td>Advisory Committee on Immunization Practices</td>
</tr>
<tr>
<td>ACPM</td>
<td>American College of Preventive Medicine</td>
</tr>
<tr>
<td>ACS</td>
<td>American Cancer Society</td>
</tr>
<tr>
<td>ALT</td>
<td>Alanine aminotransferase</td>
</tr>
<tr>
<td>anti-HBc</td>
<td>Total hepatitis B core antibody</td>
</tr>
<tr>
<td>anti-HBs</td>
<td>Hepatitis B surface antibody</td>
</tr>
<tr>
<td>AST</td>
<td>Aspartate aminotransferase</td>
</tr>
<tr>
<td>BMI</td>
<td>Body mass index</td>
</tr>
<tr>
<td>BRCA1/2</td>
<td>Breast cancer gene 1/2</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CLIA ’88</td>
<td>Clinical Laboratory Improvement Amendments of 1988</td>
</tr>
<tr>
<td>CMS</td>
<td>Centers for Medicare and Medicaid Services</td>
</tr>
<tr>
<td>CRC</td>
<td>Colorectal Cancer</td>
</tr>
<tr>
<td>CT</td>
<td>Computerized tomography</td>
</tr>
<tr>
<td>CUC</td>
<td>Chronic ulcerative colitis</td>
</tr>
<tr>
<td>CVD</td>
<td>Cardiovascular risk</td>
</tr>
<tr>
<td>DNA</td>
<td>Deoxyribonucleic acid</td>
</tr>
<tr>
<td>EDTA</td>
<td>Ethylenediaminetetraacetic acid</td>
</tr>
<tr>
<td>EIA</td>
<td>Enzyme immunoassay</td>
</tr>
<tr>
<td>ELISA</td>
<td>Enzyme-linked immunosorbent assay</td>
</tr>
<tr>
<td>FAP</td>
<td>Familial adenomatous polyposis</td>
</tr>
<tr>
<td>FDA</td>
<td>Food and Drug Administration</td>
</tr>
<tr>
<td>FIT</td>
<td>Fecal immunochemical test</td>
</tr>
<tr>
<td>GDM</td>
<td>Gestational diabetes mellitus</td>
</tr>
</tbody>
</table>

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>gFOBT</td>
<td>Guaiac fecal occult blood test</td>
</tr>
<tr>
<td>HbA1c</td>
<td>Hemoglobin A1c</td>
</tr>
<tr>
<td>HBsAg</td>
<td>Hepatitis B surface antigen</td>
</tr>
<tr>
<td>HBV</td>
<td>Hepatitis B virus</td>
</tr>
<tr>
<td>HCP</td>
<td>Healthcare professionals</td>
</tr>
<tr>
<td>HCV</td>
<td>Hepatitis C Virus</td>
</tr>
<tr>
<td>HDL-C</td>
<td>High-density lipoprotein cholesterol</td>
</tr>
<tr>
<td>HIV</td>
<td>Human immunodeficiency virus</td>
</tr>
<tr>
<td>HNPCCC</td>
<td>Hereditary non-polyposis colorectal cancer syndrome</td>
</tr>
<tr>
<td>HPV</td>
<td>Human papillomavirus</td>
</tr>
<tr>
<td>hrHPV</td>
<td>High-risk human papillomavirus</td>
</tr>
<tr>
<td>HRS A</td>
<td>Health Resources and Services Administration</td>
</tr>
<tr>
<td>IBD</td>
<td>Inflammatory bowel disease</td>
</tr>
<tr>
<td>IFG</td>
<td>Impaired fasting glucose</td>
</tr>
<tr>
<td>IGRA</td>
<td>Interferon-gamma release assays</td>
</tr>
<tr>
<td>IGT</td>
<td>Impaired glucose tolerance</td>
</tr>
<tr>
<td>IMCA</td>
<td>Immunochemiluminometric assay</td>
</tr>
<tr>
<td>IOM</td>
<td>Institute of Medicine</td>
</tr>
<tr>
<td>LCDT</td>
<td>Lung cancer diagnostic test</td>
</tr>
<tr>
<td>LDTS</td>
<td>Laboratory developed tests</td>
</tr>
<tr>
<td>LTBI</td>
<td>Latent tuberculosis infection</td>
</tr>
<tr>
<td>MAP</td>
<td>MYH-associated polyposis</td>
</tr>
<tr>
<td>MSM</td>
<td>Men who have sex with men</td>
</tr>
<tr>
<td>NAFLD</td>
<td>Non-alcoholic fatty liver disease</td>
</tr>
<tr>
<td>OSA</td>
<td>Obstructive sleep apnea</td>
</tr>
<tr>
<td>PCOS</td>
<td>Polycystic ovary syndrome</td>
</tr>
<tr>
<td>PCR</td>
<td>Polymerase chain reaction</td>
</tr>
<tr>
<td>PrEP</td>
<td>Pre-exposure prophylaxis</td>
</tr>
<tr>
<td>PSA</td>
<td>Prostate-specific antigen</td>
</tr>
<tr>
<td>Rh(D)</td>
<td>Rhesus D</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually transmitted infection</td>
</tr>
<tr>
<td>T2D</td>
<td>Type 2 diabetes</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>TSH</td>
<td>Thyroid stimulating hormone</td>
</tr>
<tr>
<td>TST</td>
<td>Tuberculin skin test</td>
</tr>
<tr>
<td>USPSTF</td>
<td>U.S. Preventive Services Task Force</td>
</tr>
<tr>
<td>WPSI</td>
<td>Women's Preventive Services Initiative</td>
</tr>
</tbody>
</table>
IV. Scientific Background

The annual “wellness visit” or checkup visit to a primary care provider has been a common part of routine health care for several decades. Providers typically review an individual’s personal history and family history, perform a physical examination, and run a battery of tests during the annual checkup. Screening examinations among higher risk populations are less frequent but equally critical for early diagnosis of potential malignancy. The types and number of tests performed can vary widely among providers.

V. Guidelines and Recommendations

The Patient Protection and Affordable Care Act (ACA) established coverage requirements for clinical preventive services for most types of public and private health insurance, with the goal of improving access to a wide range of preventive health services for children and adults (Seiler et al., 2014). Recommendations for screening coverage are derived from the following medical and scientific bodies:

- U.S. Preventive Services Task Force (USPSTF)
- Advisory Committee on Immunization Practices (ACIP)
- Health Resources and Services Administration’s (HRSA’s) Bright Futures Project
- HRSA and the Institute of Medicine (IOM) Committee on Women’s Clinical Preventive Services
- American Cancer Society

The USPSTF provides recommendations regarding clinical preventive services such as screening and counseling. The task force is comprised of an independent panel of experts in primary care and prevention that further specialize in numerous fields. Recommendations are segmented primarily based on factors such as age, gender, and pregnancy status. The USPSTF assigns one of five letter grades to a recommendation (A, B, C, D, or I). Costs are not considered when grading a practice. Furthermore, the recommendations only apply to people who are asymptomatic for a given condition (USPSTF, 2017).

The below chart represents screening recommendations from the USPSTF for adults.

**USPSTF Recommendations:**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Date</th>
<th>Grade</th>
<th>Recommendation</th>
<th>Do not Recommend (D grade)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteriuria screening</td>
<td>September 2019</td>
<td>B</td>
<td>Recommends screening for asymptomatic bacteriuria with urine culture in pregnant</td>
<td>Screening for asymptomatic bacteriuria in men and nonpregnant women.</td>
</tr>
</tbody>
</table>

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.
Barry, Cabana, Caughey, Doubeni, Epling, et al., 2019b; USPSTF, 2008) women at 12 to 16 weeks' gestation or at the first prenatal visit, if later.

| BRCA risk assessment and genetic counseling/testing (Moyer, 2014a; Owens, Davidson, Krist, Barry, Cabana, Caughey, Doubeni, Epling, et al., 2019a) | August 2019 | B | Recommends that primary care providers screen women with a personal or family history of breast, ovarian, tubal, or peritoneal cancer, as well as a family history associated with a BRCA1 or BRCA2 gene mutation with an appropriate screening tool. Women with positive screening results should receive genetic counseling and, if indicated after counseling, genetic testing. | Routine genetic counseling or BRCA testing for women whose family history is not associated with an increased risk for potentially harmful mutations in the BRCA1 or BRCA2 genes. |
| Asymptomatic Carotid Artery Stenosis: Screening (USPSTF, 2021a) | February 2021 | D | n/a | Screening for asymptomatic carotid artery stenosis in the general adult population (without a history of stroke or neurologic signs). |
| Celiac disease screening (Bibbings-Domingo et al., 2017) | March 2017 | I | Concludes that current evidence is insufficient to assess the balance of benefits and harms of screening for celiac disease in asymptomatic persons. | n/a |
| Cervical cancer screening (USPSTF, 2018a) | August 2018 | A | Recommends screening for cervical cancer every 3 years with cervical cytology alone in women | Screening for women older than 65 who have received adequate prior |
Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.

G2009 Preventive Screening in Adults

<table>
<thead>
<tr>
<th>Chlamydia screening: Sexually active men (LeFevre, 2014a; USPSTF, 2021b)</th>
<th>September 2021</th>
<th>I</th>
<th>Current evidence is insufficient to assess the balance of benefits and harms of screening for chlamydia and gonorrhea in men.</th>
<th>n/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia screening: Sexually active women, including pregnant persons (LeFevre, 2014a; USPSTF, 2021b)</td>
<td>September 2021</td>
<td>B</td>
<td>Recommends screening for chlamydia in all sexually active women 24 years or younger and in women 25 years or older who are at increased risk for infection.</td>
<td>n/a</td>
</tr>
<tr>
<td>Colorectal cancer screening: Adults 45-49 years old (USPSTF, 2021c)</td>
<td>May 2021</td>
<td>B</td>
<td>Recommends screening for colorectal cancer in adults aged 45 to 49 years.</td>
<td>n/a</td>
</tr>
<tr>
<td>Colorectal cancer screening: Adults 50-75 years old</td>
<td>May 2021</td>
<td>A</td>
<td>Recommends screening for colorectal cancer in all adults aged 50 to 75 years.</td>
<td>n/a</td>
</tr>
</tbody>
</table>
### Colorectal cancer screening: Adults 76-85 years old

<table>
<thead>
<tr>
<th>Date</th>
<th>Grade</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2021</td>
<td>C</td>
<td>Recommends offering screening selectively for colorectal cancer in adults aged 76 to 85 years. Evidence indicates that the benefit of such screening in this age group is small. Clinicians should consider the patient’s overall health, prior screening history, and preferences.</td>
</tr>
</tbody>
</table>

### Gestational diabetes screening for asymptomatic pregnant persons at 24 weeks of gestation or after

<table>
<thead>
<tr>
<th>Date</th>
<th>Grade</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2021</td>
<td>B</td>
<td>Recommends screening for gestational diabetes in asymptomatic pregnant persons at 24 weeks of gestation or after.</td>
</tr>
</tbody>
</table>

### Gestational diabetes screening for asymptomatic pregnant persons before 24 weeks of gestation

<table>
<thead>
<tr>
<th>Date</th>
<th>Grade</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2021</td>
<td>I</td>
<td>Concludes that current evidence is insufficient to assess the balance of benefits and harms of screening for gestational diabetes in asymptomatic pregnant persons before 24 weeks of gestation.</td>
</tr>
</tbody>
</table>

### Gonorrhea screening for sexually active women, including

<table>
<thead>
<tr>
<th>Date</th>
<th>Grade</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2021</td>
<td>B</td>
<td>Recommends screening for gonorrhea in all sexually active women 24 years or younger and in women 25 years or older</td>
</tr>
</tbody>
</table>

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.
<table>
<thead>
<tr>
<th>Screening</th>
<th>Date</th>
<th>Rating</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gonorrhea screening for sexually active men</td>
<td>September 2021</td>
<td>I</td>
<td>Concludes that current evidence is insufficient to assess the balance of benefits and harms of screening for chlamydia and gonorrhea in men.</td>
</tr>
<tr>
<td>Hearing loss screening in asymptomatic adults 50 years or older</td>
<td>March 2021</td>
<td>I</td>
<td>Concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for hearing loss in older adults.</td>
</tr>
<tr>
<td>Hepatitis B screening</td>
<td>December 2020</td>
<td>B</td>
<td>Recommends screening for hepatitis B virus infection in adolescents and adults at increased risk for infection.</td>
</tr>
<tr>
<td>Hepatitis B screening: Pregnant women</td>
<td>July 2019</td>
<td>A</td>
<td>Recommends screening for hepatitis B virus infection in pregnant women at their first prenatal visit.</td>
</tr>
<tr>
<td>Hepatitis C screening</td>
<td>March 2020</td>
<td>B</td>
<td>Recommends one-time screening for hepatitis C virus (HCV) infection in “asymptomatic adults aged 18 to 79 years without known liver disease”. The USPSTF</td>
</tr>
</tbody>
</table>

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.
Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.

<table>
<thead>
<tr>
<th>Screening</th>
<th>Date</th>
<th>Grade</th>
<th>Recommendation</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV screening: Adolescents and adults 15-65 years old</td>
<td>June 2019</td>
<td>A</td>
<td>Recommends that clinicians screen for HIV infection in adolescents and adults ages 15 to 65 years. Younger adolescents and older adults who are at increased risk should also be screened.</td>
<td>n/a</td>
</tr>
<tr>
<td>HIV screening: Pregnant women</td>
<td>June 2019</td>
<td>A</td>
<td>Recommends that clinicians screen all pregnant women for HIV, including those who present in labor who are untested and whose HIV status is unknown.</td>
<td>n/a</td>
</tr>
<tr>
<td>Hypertension screening in adults  (USPSTF, 2021f)</td>
<td>April 2021</td>
<td>A</td>
<td>Recommends screening for hypertension in adults 18 years or older with office blood pressure measurement (OBPM). The USPSTF recommends obtaining blood pressure measurements outside of the clinical setting for diagnostic confirmation before starting treatment.</td>
<td>n/a</td>
</tr>
<tr>
<td>Lung cancer screening (USPSTF, 2021g)</td>
<td>March 2021</td>
<td>B</td>
<td>Adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within</td>
<td></td>
</tr>
</tbody>
</table>
the past 15 years:

- Screen for lung cancer with low-dose computed tomography (CT) every year.
- Stop screening once a person has not smoked for 15 years or has a health problem that limits life expectancy or the ability to have lung surgery.

<table>
<thead>
<tr>
<th>Prediabetes and type 2 diabetes screening: Asymptomatic adults aged 35-70 years old who are overweight or obese (USPSTF, 2021h)</th>
<th>August 2021</th>
<th>B</th>
<th>Recommends screening n/a for prediabetes and type 2 diabetes in adults aged 35 to 70 years who have overweight or obesity. Clinicians should offer or refer patients with prediabetes to effective preventive interventions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rh(D) incompatibility screening: First pregnancy-related care visit (USPSTF, 2005)</td>
<td>February 2004</td>
<td>A</td>
<td>Strongly recommends Rh n/a (D) blood typing and antibody testing for all pregnant women during their first visit for pregnancy-related care.</td>
</tr>
</tbody>
</table>

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.
<table>
<thead>
<tr>
<th><strong>Rh(D) incompatibility screening:</strong> Unsensitized Rh(D)-negative pregnant women (USPSTF, 2005)</th>
<th>February 2004</th>
<th>B</th>
<th>Recommends repeated Rh (D) antibody testing for all unsensitized Rh (D)-negative women at 24 to 28 weeks’ gestation, unless the biological father is known to be Rh (D)-negative.</th>
<th>n/a</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Syphilis screening:</strong> Asymptomatic, nonpregnant adults and adolescents who are at increased risk for syphilis infection (USPSTF, 2016b)</td>
<td>June 2016</td>
<td>A</td>
<td>Recommends screening for syphilis infection in persons who are at increased risk for infection.</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Syphilis screening:</strong> Pregnant women (USPSTF, 2018b)</td>
<td>September 2018</td>
<td>A</td>
<td>Recommends early screening for syphilis infection in all pregnant women.</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Tuberculosis (TB) screening</strong> (Bibbins-Domingo et al., 2016; USPSTF, 2016a)</td>
<td>September 2016</td>
<td>B</td>
<td>Recommends screening for latent tuberculosis infection (LTBI) in populations at increased risk.</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Vitamin D Deficiency screening:</strong> Community-dwelling, nonpregnant, asymptomatic adults age 18 years and older (USPSTF, 2021i)</td>
<td>April 2021</td>
<td>I</td>
<td>Concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for vitamin D deficiency in asymptomatic adults.</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.
American Cancer Society (ACS)

The ACS has published guidance for the “early detection of cancer.”

For breast cancer, ACS states that women “should have the choice to start annual breast cancer screening with mammograms (x-rays of the breast)” starting from ages 40-44. Women ages 45-54 should receive annual mammograms, and women 55 and older may have mammograms every 2 years or continue annual mammograms. The ACS notes that screenings should continue “as long as a woman is in good health and is expected to live 10 more years or longer.” (ACS, 2022)

For colorectal cancer (CRC), the ACS recommends screening people at average risk starting at age 45. The ACS notes that a stool test is usable for screening. The ACS states that regular screening should continue at least through age 75. From ages 76-85, the ACS writes that the decision to continue screening should be discussed between patient and provider. From age 85 onward, a patient should no longer receive colorectal cancer screening (ACS, 2022).

The ACS notes the following options for CRC screening using stool: “Fecal immunochemical test every y[ear], High-sensitivity, guaiac-based fecal occult blood test every y[ear] or a Multitarget stool DNA test every 3 y[ears]” For structural examination, the ACS notes the following options: “colonoscopy every 10 y[ears], CT colonography every 5 y[ears], or flexible sigmoidoscopy every 5 y[ears]” (Wolf et al., 2018).

For cervical cancer, the ACS recommends starting screening at age 25. From ages 25 to 65, the ACS recommends getting a “primary HPV (human papillomavirus) test* done every 5 years.” A Pap test every 3 years, or a “co-test” (HPV test plus Pap test) every 5 years are acceptable alternatives. The ACS notes that patients over 65 “who have had regular cervical cancer testing in the past 10 years with normal results should not be tested for cervical cancer.” Patients whose cervix has been surgically removed do not need cervical cancer screening, and people who have been vaccinated against HPV should still follow the screening recommendations for their age groups (ACS, 2022; Fontham et al., 2020).

The ACS reports that their 2018 guidelines on lung cancer screening have been taken down as they are being updated; as such, the ACS defers to the US Preventive Services Task Force (USPSTF), the American Academy of Family Physicians (AAFP), or the American College of Chest Physicians for their recommendations on annual lung cancer screening (ACS, 2022). These societies recommend yearly lung cancer screening with LCDT for individuals who

- “are 50 to 80 years old and in fairly good health, and
- currently smoke or have quit in the past 15 years, and
- have at least a 20 pack-year smoking history. (This is the number of packs of cigarettes per day multiplied by the number of years smoked. For example, someone who smoked 2 packs a day for 10 years [2 x 10 = 20] has 20 pack-years of smoking, as does a person who smoked 1 pack a day for 20 years [1 x 20 = 20].)"
For prostate cancer, the ACS recommends that men “make an informed decision with a health care provider about whether to be tested for prostate cancer.” However, they remark that men should have this discussion at different ages; for “African American or have a father or brother who had prostate cancer before age 65”, this discussion should start at age 45; for other men, this discussion should start at 50. The appropriate test is a PSA blood test – a rectal exam as part of testing is optional (ACS, 2022).

Centers for Disease Control and Prevention (CDC)

The CDC provides the below recommendations for sexually transmitted diseases (CDC, 2021a):

- Annual chlamydia screening of all sexually active women younger than 25 years and all pregnant women under 25 years is recommended, as well as in older women with risk factors such as new or multiple sex partners. In women, when treatment is extended, it is appropriate to retest 3 months post-treatment. For men who have sex with men (MSM), annual screening is recommended at sites of contact. For MSM, screening every 3 to 6 months should occur if at increased risk. Further, persons who are first screened for HIV should also be tested for chlamydia, and at least annually thereafter. For transgender and gender diverse persons, screening should be adapted based on anatomy, that is, annual and routine screening for women under 25 years old should be extended to transgender men and gender diverse persons with a cervix. If over 25, transgender and gender diverse persons should be screened if at an increased risk.

- Annual gonorrhea screening for all sexually active women younger than 25 years, all pregnant women under 25 years of age, as well as older women with risk factors such as new or multiple sex partners is recommended. For women, if treatment is extended, it is appropriate to retest 3 months post-treatment. Annual gonorrhea screening for sexually active MSM is recommended at sites of contact and those who have increased risk factors may be screened every 3 to 6 months. In the case of transgender and gender diverse persons, screening should be adapted from recommendations based on anatomy (that is, annual, routine screening for gonorrhea for women under 25 would apply with the same age demographic to transgender and gender diverse persons with a cervix. If over 25, screening would occur for those at increased risk). Further, persons who are first screened for HIV should also be tested for gonorrhea, and at least annually thereafter (additional screenings dependent on risk factors).

- Syphilis screening is recommended for asymptomatic women and men who have sex with women at an increased risk, all pregnant women at the first prenatal visit (retest at 28 weeks and at delivery if high risk), MSM (annually and every 3 to 6 months if high risk), transgender and gender diverse persons (consider annually) and persons with HIV (at the first evaluation and at least annually thereafter).

- Type-specific herpes serologic screening is recommended for women and men presenting for an STI evaluation, MSM (if infection status is unknown with a previously undiagnosed genital tract infection), and persons with HIV.

- Trichomonas screening is recommended for women receiving care in high-prevalence
settings, asymptomatic women at a high risk of infection, and sexually active women with HIV (at first evaluation and annually thereafter) (CDC, 2021a).

**Hepatitis C (HCV)**

The CDC recommends the following screening guidelines for hepatitis C (HCV) (CDC, 2021a; Schillie et al., 2020):

- Adults born from 1945 through 1965 should be tested once (without prior ascertainment of HCV risk factors)
- HCV testing is recommended for those who:
  - Currently injecting drugs
  - Ever injected drugs and shared needles, syringes, or other drug preparation equipment, including those who injected once or a few times many years ago
  - Have certain medical conditions, including persons:
    - Who were ever on maintenance hemodialysis
    - With persistently abnormal alanine aminotransferase (ALT) levels
    - Who have HIV infection
  - Were prior recipients of transfusions or organ transplants, including persons who:
    - Who received clotting factor concentrates produced before 1987
    - Were notified that they received blood from a donor who later tested positive for HCV infection
    - Received a transfusion of blood, blood components, or an organ transplant before July 1992
  - HCV- testing based on a recognized exposure is recommended for:
    - Healthcare, emergency medical, and public safety workers after needle sticks, sharps, or mucosal exposures to HCV-positive blood
    - Children born to HCV-positive women

In 2021, the CDC published updated STI guidelines that consolidated and augmented existing recommendations for HCV. They note previous recommendations remain in effect, but universal screening guidelines and new recommendations can be summarized by the following: (CDC, 2021a, 2021b; Schillie et al., 2020):

- “Hepatitis C screening at least once in a lifetime for all adults aged ≥18 years, except in settings where the prevalence of HCV infection (HCV RNA-positivity) is <0.1%
- Hepatitis C screening for all pregnant women during each pregnancy, except in settings where the prevalence of HCV infection (HCV RNA-positivity) is <0.1% (Schillie et al., 2020)”

**Hepatitis B**

The CDC recommends the following populations for chronic hepatitis B screening (CDC, 2021a; Weinbaum et al., 2009):

**Blue Cross and Blue Shield of Louisiana** is an independent licensee of the Blue Cross Blue Shield.

**Avalon** is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.
• Persons born in regions with HBV prevalence of ≥2%
• US-born persons not vaccinated as infants whose parents were born in geographic regions with high rates of HBV (≥8%)
• Injection-drug users
• Men who have sex with men (MSM) should be tested for HBsAg
• Persons with liver disease of unknown etiology or with elevated ALT or AST levels of unknown etiology
• Persons with certain medical conditions who require immunosuppressive or cytotoxic therapy
• Pregnant women (antiviral therapy may be considered if a positive test occurs)
  o Test at first prenatal visit of each pregnancy regardless of prior testing and retest at delivery if high-risk
• Infants born to HBsAg-positive mothers (HBsAg is the distinctive surface antigen of a hepatitis B infection)
• Household contacts and sex partners of HBV-infected persons
• Persons who are the source of blood or body fluid exposures that might warrant post-exposure prophylaxis (such as needlestick injury to a health care worker)
• Persons infected with HIV should be tested for HBsAg and anti-HBc and/or anti-HBs (Weinbaum et al., 2009).

In 2021, the CDC published updated STI guidelines. In the update, the CDC recommends screening for hepatitis B in women at increased risk, testing for HBsAg at the first prenatal visit for pregnant women (with a retest at delivery if at high risk). For heterosexual men, the recommendation is to screen men at increased risk. For MSM, testing should be ordered for HBsAg, HBV core antibody, and HBV surface antibody. Persons with HIV are recommended to test for HBsAg and anti-HBc and/or anti-HBs (CDC, 2021a).

**HIV**

The CDC recommends the following guidelines for **HIV** (Branson et al., 2006; CDC, 2021a):
• All persons aged 13–64 years should be screened for HIV at least once unless the patient declines (opt-out screening).
• Patients initiating treatment for TB should be screened routinely for HIV infection.
• Persons at high risk should be screened for HIV at least annually.
• High risk populations (such as injection drug users, MSM, or partners of HIV-infected persons) should be screened at least annually. Consider the benefits of offering more frequent screenings for MSM (e.g., every 3-6 months screening when at increased risk).
• For transgender persons, HIV screening should be discussed and offered. Repeat screening should be considered based on level of risk.
• All pregnant women should be screened for HIV as early as possible in the pregnancy (Branson et al., 2006) and should be retested in the third trimester if they are considered high risk. Pregnant women should receive a rapid test at delivery if they were not previously screened for HIV (CDC, 2021a).
Tuberculosis (TB) and Latent TB Infection (LTBI)

The CDC recommends the following guidelines for **tuberculosis (TB) and latent TB infection (LTBI)** screening and testing of health care professionals (HCP) (Bloch, 1995; Sosa et al., 2019):

- Screening high risk populations such as patients with HIV, is of the highest priority. The high-risk populations include, but are not limited to:
  - People who have spent time with someone (“close contact”) who has TB
  - People from a country where TB is more prevalent (most countries in Latin America, Africa, Asia)
  - People who live or work in high-risk settings such as correctional facilities or long-term care facilities (Bloch, 1995)
- “All U.S. health care personnel should have baseline TB screening, including an individual risk assessment
- After known exposure to a person with potentially infectious TB disease without use of adequate personal protection, health care personnel should have a timely symptom evaluation and additional testing, if indicated. Those without documented evidence of prior LTBI or TB disease should have an IGRA or a TST performed. Those with an initial negative test should be retested 8–10 weeks after the last exposure, preferably by using the same test type as was used for the prior negative test.
- In the absence of known exposure or evidence of ongoing TB transmission, U.S. health care personnel (as identified in the 2005 guidelines) without LTBI should not undergo routine serial TB screening or testing at any interval after baseline (e.g., annually). Health care facilities might consider using serial TB screening of certain groups who might be at increased occupational risk for TB exposure (e.g., pulmonologists or respiratory therapists) or in certain settings if transmission has occurred in the past (e.g., emergency departments)
- Health care personnel with a newly positive test result (with confirmation for those persons at low risk as described previously) should undergo a symptom evaluation and chest radiograph to assess for TB disease” (Sosa et al., 2019)
  - Screening low-risk populations (including young children) is typically not recommended, as the false positive rate is high. This is usually due to the tuberculin reacting with a non-infectious species of bacteria (Bloch, 1995).

**American Association of Clinical Endocrinologists (AACE)**

The AACE provides the following inclusion criteria for individuals who should be screened for prediabetes or type 2 diabetes:

- Age ≥45 years without other risk factors
- CVD or family history of T2D
- Overweight or obese
- Sedentary lifestyle
- Member of an at-risk racial or ethnic group:
  - Asian
  - African American

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.
Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.

G2009 Preventive Screening in Adults

The AACE recommends repeat testing at least every 3 years for individuals with normal results. Consider annual screening for patients with 2 or more risk factors (Handelsman et al., 2015).

In a 2022 update focusing on developing a diabetes mellitus comprehensive care plan, the AACE expounds on how the diagnosis of diabetes mellitus should be made. According to the authors, the ELs refer to evidence levels established by AACE evidence ratings, where “descriptors of “must,” “should,” and “may” generally but not strictly correlate with Grade A (strong), Grade B (intermediate), and Grade C (weak) recommendations, respectively” (Blonde et al., 2022). The relevant recommendations are captured below.

**Recommendation 1.1**

The diagnosis of DM is based on the following criteria…:

- FPG concentration ≥126 mg/dL (after ≥8 hours of an overnight fast), or
- Plasma glucose (PG) concentration ≥200 mg/dL 2 hours after ingesting a 75-g oral glucose load after an overnight fast of at least 8 hours, or
- Symptoms of hyperglycemia (eg, polyuria, polydipsia, polyphagia) and a random (nonfasting) PG concentration ≥200 mg/dL, or
- A1C level ≥6.5%

Diagnosis of DM requires 2 abnormal test results, either from the same sample or 2 abnormal results on samples drawn on different days. However, a glucose level ≥200 mg/dL in the presence of symptoms for DM confirms the diagnosis of DM.
Grade A; BEL 2 and expert opinion of task force

Recommendation 1.2

Prediabetes is identified by the presence of impaired fasting glucose (IFG) (100 to 125 mg/dL), impaired glucose tolerance (IGT), which is a PG value of 140 to 199 mg/dL 2 hours after ingesting 75 g of glucose, and/or A1C value between 5.7% and 6.4% (Table 4). A1C should be used only for screening for prediabetes. The diagnosis of prediabetes, which may manifest as either IFG or IGT, should be confirmed with glucose testing.

Grade B; BEL 2

Recommendation 1.3

T1D is characterized by marked insulin deficiency in the presence of hyperglycemia and positive autoantibody tests to glutamic acid decarboxylase (GAD65), pancreatic islet β cells (tyrosine phosphatase IA-2), and IA-2b zinc transporter (ZnT8), and/or insulin. The presence of immune markers and clinical presentation are needed to establish the correct diagnosis and to distinguish between T1D and T2D in children or adults, as well as to determine appropriate treatment.

Grade A; BEL 2

Recommendation 1.4

T2D is characterized by progressive loss of β-cell insulin secretion and variable defects in insulin sensitivity. T2D is often asymptomatic and can remain undiagnosed for many years; therefore, all adults ≥35 years of age with risk factors should be screened for DM (Table 5).

Grade A; BEL 1

Recommendation 1.5

GDM is defined as carbohydrate intolerance that begins or is first recognized during pregnancy and resolves postpartum. Pregnant women with risk factors for DM should be screened at the first prenatal visit for undiagnosed T2D using standard criteria (Table 4).

Grade B; BEL 1

Recommendation 1.6

Screen all pregnant women for GDM at 24 to 28 weeks’ gestation. Diagnose GDM with either the one-step or the two-step approach.
• The one-step approach uses a 2-hour 75-g oral glucose tolerance test (OGTT) after ≥8 hours of fasting with diagnostic cutoffs of one or more FPG ≥92 mg/dL, 1-hour PG ≥180 mg/dL, or 2-hour PG ≥153 mg/dL.

• The two-step approach uses a nonfasting 1-hour 50-g glucose challenge test with 1-hour PG screening threshold of 130 or 140 mg/dL. For women with a positive screening test, the 3-hour 100-g OGTT is used for diagnosis with 2 or more PG tests that meet the following thresholds: FPG ≥95 mg/dL, 1-hour ≥180 mg/dL, 2-hour ≥155 mg/dL, 3-hour ≥140 mg/dL.

Grade A; BEL 1

Recommendation 1.7

Clinicians should consider evaluation for monogenic DM in any child or young adult with an atypical presentation, clinical course, or response to therapy. Monogenic DM includes neonatal diabetes and nonautoimmune diabetes of multiple genetic causes, also known as maturity-onset diabetes of the young (MODY). Most children with DM occurring under age 6 months of age have a monogenic cause as autoimmune T1D rarely occurs before 6 months of age. Other monogenic forms of diabetes are characterized by mutation of genes of transcription factors, genes regulating pancreatic development or atrophy, abnormal insulin genes, genes related to endoplasmic reticulum stress that impair insulin secretion, or abnormal glucokinase genes that cause impaired insulin signaling.

Grade B; BEL 2” (Blonde et al., 2022).

Although not expressly listed as recommendations for diabetes screening, some additional information of note is that:

“A glucose level ≥200 mg/dL in the presence of hyperglycemia symptoms such as polyuria and polydipsia confirm the diagnosis of DM. In individuals with discordant results from 2 different tests, the test result that is above the diagnostic cut point should be repeated on a different day.”

“In view of physiological changes in pregnancy that could affect glycated hemoglobin levels, A1C should not be used for GDM screening or diagnosis of DM.”

“All pregnant women should be screened for GDM at 24 to 28 weeks’ gestation. Universal screening is recommended, as selective screening (only in women with risk factors) would miss a significant number of women with GDM and universal screening has been shown to be cost-effective compared with selective screening” (Blonde et al., 2022).
Women's Preventive Services Initiative (WPSI), Health Resources and Services Administration (HRSA)

The list of research recommendations of the Women’s Preventive Services Initiative (WPSI) in association with ACOG are as follows (Nelson, 2017):

1. “Determine the optimal timing of diabetes mellitus testing after pregnancy
2. Establish when hemoglobin A1c becomes a reliable screening test after pregnancy
3. Develop methods for improving compliance with postpartum testing for both patients and providers
4. Measure the impact of weight changes, anemia correction, and lactation on screening test results
5. Identify tests or protocols that improve accuracy for detecting diabetes mellitus in the immediate postpartum period
6. Establish time frame for continuing screening women with initial negative screening test results
7. Identify appropriate counseling strategies for women with negative screening test results
8. Determine what predictors lead to the development of diabetes mellitus in women with initial negative screening test results
9. Develop GDM prevention strategies and programs”

The WPSI has published the following relevant recommendations with the support of the HRSA:

Regarding screening for breast cancer in average-risk women, “The Women's Preventive Services Initiative recommends that average-risk women initiate mammography screening no earlier than age 40 and no later than age 50. Screening mammography should occur at least biennially and as frequently as annually. Screening should continue through at least age 74 and age alone should not be the basis to discontinue screening.” As a reminder, “These screening recommendations are for women at average risk of breast cancer. Women at increased risk should also undergo periodic mammography screening, however, recommendations for additional services are beyond the scope of this recommendation” (WPSI, 2020).

Regarding screening for cervical cancer, WPSI recommends “cervical cancer screening for average-risk women aged 21 to 65 years. For women aged 21 to 29 years, the Women's Preventive Services Initiative recommends cervical cancer screening using cervical cytology (Pap test) every 3 years. Cotesting with cytology and human papillomavirus testing is not recommended for women younger than 30 years. Women aged 30 to 65 years should be screened with cytology and human papillomavirus testing every 5 years or cytology alone every 3 years. Women who are at average risk should not be screened more than once every 3 years” (WPSI, 2020).

Regarding screening for gestational diabetes mellitus, WPSI recommends “screening pregnant women for gestational diabetes mellitus after 24 weeks of gestation (preferably between 24 and 28 weeks of gestation) to prevent adverse birth outcomes. Screening with a 50-g oral glucose challenge test (followed by a 3-hour 100-g oral glucose tolerance test if results on the initial oral
glucose challenge test are abnormal) is preferred because of its high sensitivity and specificity,” further “suggesting that women with risk factors for diabetes mellitus be screened for preexisting diabetes before 24 weeks of gestation—ideally at the first prenatal visit, based on current clinical best practices” (WPSI, 2020).

WPSI also recommends testing all women for HIV at least once in their lifetime and recommends screening for HIV “for all pregnant women upon initiation of prenatal care with retesting during pregnancy based on risk factors. Rapid HIV testing is recommended for pregnant women who present in active labor with an undocumented HIV status” (WPSI, 2020).

The WPSI “recommends women with a history of gestational diabetes mellitus (GDM) who are not currently pregnant and who have not previously been diagnosed with type 2 diabetes mellitus should be screened for diabetes mellitus. Initial testing should ideally occur within the first year postpartum and can be conducted as early as 4-6 weeks postpartum. Women with a negative initial postpartum screening test result should be rescreened at least every 3 years for a minimum of 10 years after pregnancy. For women with a positive postpartum screening test result, testing to confirm the diagnosis of diabetes is indicated regardless of the initial test (eg, oral glucose tolerance test, fasting plasma glucose, or hemoglobin A1c). Repeat testing is indicated in women who were screened with hemoglobin A1c in the first 6 months postpartum regardless of the result” (WPSI, 2020).

**Preventive Services Under the Affordable Care Act**

Preventive services codified at §2713 of the Public Health Service Act, referred to as “§2713 services,” are listed in the table below (taken from (Seiler et al., 2014)):
### Demographic Preventive services provided

**Adults**
- Abdominal aortic aneurysm one-time screening for men of specified ages who have ever smoked
- Alcohol misuse screening and counseling
- Aspirin use to prevent cardiovascular disease for men and women of certain ages
- Blood pressure screening for all adults
- Cholesterol screening for adults of certain ages or at higher risk
- Colorectal cancer screening for adults > 50 years of age
- Depression screening for adults
- Diabetes (Type 2) screening for adults with high blood pressure
- Diet counseling for adults at higher risk for chronic disease
- HIV screening for those aged 13-65 years and other ages at increased risk
- Immunization vaccines for adults: doses, recommended ages, and recommended populations vary
- Obesity screening and counseling for all adults
- STI prevention counseling for adults at higher risk
- Syphilis screening for all adults at higher risk
- Tobacco use screening for all adults and cessation interventions for tobacco users

**Women**
- Anemia screening on a routine basis for pregnant women
- Breast cancer genetic test counseling for women at higher risk for breast cancer
- Breast cancer mammography screenings every 1-2 years for women > 40 years of age
- Breast cancer chemoprevention counseling for women at higher risk
- Breastfeeding comprehensive support and counseling and access to breastfeeding supplies
- Cervical cancer screening for sexually active women
- Chlamydia infection screening for younger women and other women at higher risk
- Contraception: Food and Drug Administration-approved contraceptive methods, sterilization, and counseling
- Domestic and interpersonal violence screening and counseling for all women
- Folic acid supplements for women who may become pregnant
- Gestational diabetes screening for women who are 24-28 weeks pregnant and those at high risk
- Gonorrhea screening for all women at higher risk
- Hepatitis B screening for pregnant women at their first prenatal visit
- HIV screening and counseling for sexually active women
- Human papillomavirus (HPV) test every three years for women > 30 years of age with normal cytology
- Osteoporosis screening for women > 60 years of age depending on risk factors
- Rh incompatibility screening for pregnant women and follow-up testing for women at higher risk
- STI counseling for sexually active women
- Syphilis screening for all pregnant women or other women at increased risk
- Tobacco use screening and interventions for all women and expanded counseling for pregnant women
- Urinary tract or other infection screening for pregnant women
- Well-woman visits to get recommended services for women < 65 years of age

**Children**
- Autism screening
- Behavioral assessments
- Blood pressure screening
- Cervical dysplasia screening
- Depression screening
- Developmental screening
- Dyselectromy screening
- Fluoride chimprenvention supplements
- Gonorrhea preventive medications
- Hearing screening
- Height, weight, and body mass index measurements
- Hematocrit or hemoglobin screening
- Hemoglobinopathies or sickle cell screening
- HIV screening
- Hypothyroidism screening
- Immunization vaccines
- Iron supplements
- Lead screening
- Medical history
- Obesity screening and counseling
- Oral health risk assessment
- Phrenic nerve stimulation
- STI prevention counseling and screening
- Tuberculosis testing
- Vision screening

### VI. Applicable State and Federal Regulations

**DISCLAIMER:** If there is a conflict between this Policy and any relevant, applicable government policy for a particular member [e.g., Local Coverage Determinations (LCDs) or National Coverage Determinations (NCDs) for Medicare and/or state coverage for Medicaid], then the government policy will be used to make the determination. For the most up-to-date Medicare

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

**Avalon** is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.
policies and coverage, please visit the Medicare search website: https://www.cms.gov/medicare-coverage-database/search.aspx. For the most up-to-date Medicaid policies and coverage, visit the applicable state Medicaid website.

**Food and Drug Administration (FDA)**

The FDA approved the Epi proColon by Epigenomics AG on 04/12/2016.

“The Epi proColon test is a qualitative in vitro diagnostic test for the detection of methylated Septin 9 DNA in EDTA plasma derived from patient whole blood specimens. Methylation of the target DNA sequence in the promoter region of the SEPT9_v2 transcript has been associated with the occurrence of colorectal cancer (CRC). The test uses a real-time polymerase chain reaction (PCR) with a fluorescent hydrolysis probe for the methylation specific detection of the Septin 9 DNA target. The Epi proColon test is indicated to screen adults of either sex, 50 years or older, defined as average risk for CRC, who have been offered and have a history of not completing CRC screening. Tests that are available and recommended in the USPSTF 2008 CRC screening guidelines should be offered and declined prior to offering the Epi proColon test. Patients with a positive Epi proColon test result should be referred for diagnostic colonoscopy. The Epi proColon test results should be used in combination with physician's assessment and individual risk factors in guiding patient management” (FDA, 2016).

The FDA has also approved Cologuard™ by Exact Sciences Corporation on 08/11/2014.

“Cologuard is intended for the qualitative detection of colorectal neoplasia associated DNA markers and for the presence of occult hemoglobin in human stool. A positive result may indicate the presence of colorectal cancer (CRC) or advanced adenoma (AA) and should be followed by diagnostic colonoscopy. Cologuard is indicated to screen adults of either sex, 50 years or older, who are at typical average-risk for CRC. Cologuard is not a replacement for diagnostic colonoscopy or surveillance colonoscopy in high risk individuals” (FDA, 2014).

The FDA also lists contraindications for Cologuard, noting that certain populations were not clinically evaluated for Cologuard use. These populations include:

- “Patients with a history of colorectal cancer, adenomas, or other related cancers.
- Patients who have had a positive result from another colorectal cancer screening method within the last 6 months.
- Patients who have been diagnosed with a condition that is associated with high risk for colorectal cancer. These include but are not limited to:
  - Inflammatory Bowel Disease (IBD)
  - Chronic ulcerative colitis (CUC)
  - Crohn’s disease
  - Familial adenomatous polyposis (FAP)
  - Family history of colorectal cancer
- Patients who have been diagnosed with a relevant familial (hereditary) cancer syndrome, such as Hereditary non-polyposis colorectal cancer syndrome (HNPCCC or Lynch

*Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.*

*Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.*
Syndrome), Peutz-Jeghers Syndrome, MYH-Associated Polyposis (MAP), Gardner’s syndrome, Turcot’s (or Crail’s) syndrome, Cowden’s syndrome, Juvenile Polyposis, Cronkhite-Canada syndrome, Neurofibromatosis, or Familial Hyperplastic Polyposis.” (FDA, 2014)

Many labs have developed specific tests that they must validate and perform in house. These laboratory-developed tests (LDTs) are regulated by the Centers for Medicare and Medicaid (CMS) as high-complexity tests under the Clinical Laboratory Improvement Amendments of 1988 (CLIA ’88). LDTs are not approved or cleared by the U. S. Food and Drug Administration; however, FDA clearance or approval is not currently required for clinical use.

VII. Applicable CPT/HCPCS Procedure Codes

<table>
<thead>
<tr>
<th>CPT</th>
<th>Code Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>81327</td>
<td>SEPT9 (Septin9) (eg, colorectal cancer) promoter methylation analysis</td>
</tr>
<tr>
<td>81528</td>
<td>Oncology (colorectal) screening, quantitative real-time target and signal amplification of 10 DNA markers (KRAS mutations, promoter methylation of NDRG4 and BMP3) and fecal hemoglobin, utilizing stool, algorithm reported as a positive or negative result</td>
</tr>
<tr>
<td></td>
<td>Proprietary test: Cologuard™</td>
</tr>
<tr>
<td></td>
<td>Lab/Manufacturer: Exact Sciences, Inc.</td>
</tr>
<tr>
<td>82270</td>
<td>Blood, occult, by peroxidase activity (eg, guaiac), qualitative; feces, consecutive collected specimens with single determination, for colorectal neoplasm screening (ie, patient was provided 3 cards or single triple card for consecutive collection)</td>
</tr>
<tr>
<td>82274</td>
<td>Blood, occult, by fecal hemoglobin determination by immunoassay, qualitative, feces, 1-3 simultaneous determinations</td>
</tr>
<tr>
<td>82947</td>
<td>Glucose; quantitative, blood (except reagent strip)</td>
</tr>
<tr>
<td>82950</td>
<td>Glucose; post glucose dose (includes glucose)</td>
</tr>
<tr>
<td>82951</td>
<td>Glucose; tolerance test (GTT), 3 specimens (includes glucose)</td>
</tr>
<tr>
<td>82952</td>
<td>Glucose; tolerance test, each additional beyond 3 specimens (List separately in addition to code for primary procedure)</td>
</tr>
<tr>
<td>86689</td>
<td>Antibody; HTLV or HIV antibody, confirmatory test (eg, Western Blot)</td>
</tr>
<tr>
<td>86703</td>
<td>Antibody; HIV-1 and HIV-2, single result</td>
</tr>
<tr>
<td>87340</td>
<td>Infectious agent antigen detection by immunoassay technique, (eg, enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], fluorescence immunoassay [FIA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative; hepatitis B surface antigen (HBsAg)</td>
</tr>
<tr>
<td>87341</td>
<td>Infectious agent antigen detection by immunoassay technique, (eg, enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], fluorescence immunoassay [FIA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative; hepatitis B surface antigen (HBsAg) neutralization</td>
</tr>
<tr>
<td>87389</td>
<td>Infectious agent antigen detection by immunoassay technique, (eg, enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], fluorescence immunoassay [FIA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative; hepatitis B surface antigen (HBsAg) neutralization</td>
</tr>
<tr>
<td>CPT</td>
<td>Code Description</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>87806</td>
<td>Infectious agent antigen detection by immunoassay with direct optical (ie, visual) observation; HIV-1 antigen(s), with HIV-1 and HIV-2 antibodies</td>
</tr>
<tr>
<td>G0328</td>
<td>Colorectal cancer screening; fecal occult blood test, immunoassay, 1-3 simultaneous</td>
</tr>
<tr>
<td>G0432</td>
<td>Infectious agent antibody detection by enzyme immunoassay (EIA) technique, HIV-1 and/or HIV-2, screening</td>
</tr>
<tr>
<td>G0433</td>
<td>Infectious agent antibody detection by enzyme-linked immunosorbent assay (ELISA) technique, HIV-1 and/or HIV-2, screening</td>
</tr>
<tr>
<td>G0435</td>
<td>Infectious agent antibody detection by rapid antibody test, HIV-1 and/or HIV-2, screening</td>
</tr>
<tr>
<td>G0475</td>
<td>Hiv antigen/antibody, combination assay, screening</td>
</tr>
<tr>
<td>G0499</td>
<td>Hepatitis b screening in non-pregnant, high risk individual includes hepatitis b surface antigen (HBSAG) followed by a neutralizing confirmatory test for initially reactive results, and antibodies to HBSAG (anti-HBs) and Hepatitis B core antigen (anti-HBc)</td>
</tr>
<tr>
<td>S3645</td>
<td>HIV-1 antibody testing of oral mucosal transudate</td>
</tr>
</tbody>
</table>


*Procedure codes appearing in Medical Policy documents are included only as a general reference tool for each policy. They may not be all-inclusive.*

### VIII. Evidence-based Scientific References


Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

*Avalon* is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.


Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.


Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.


Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.
IX. Review/Revision History

<table>
<thead>
<tr>
<th>Effective Date</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/31/2023</td>
<td>Proposed for archival.</td>
</tr>
<tr>
<td></td>
<td>Pertinent background information, guidelines and coverage criteria incorporated</td>
</tr>
<tr>
<td></td>
<td>into other policies (G2181 Colorectal Cancer Screening, G2036 Hepatitis Testing,</td>
</tr>
<tr>
<td></td>
<td>M2116 Human Immunodeficiency Virus, G2006 Diabetes Mellitus Testing)</td>
</tr>
<tr>
<td>03/10/2023</td>
<td>Updated the background, guidelines and recommendations, and evidence-based scientific</td>
</tr>
<tr>
<td></td>
<td>references. Literature review did not necessitate any modifications to coverage</td>
</tr>
<tr>
<td></td>
<td>criteria. The following edits were made for clarity: Blue Cross and Blue Shield</td>
</tr>
<tr>
<td></td>
<td>of Louisiana is an independent licensee of the Blue Cross Blue Shield.</td>
</tr>
</tbody>
</table>

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross Blue Shield.

Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc.
Avalon is an independent company that serves as a laboratory insights advisor for Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc. G2009 Preventive Screening in Adults Page 32 of 32 Effective Date Summary CC1, CC2, CC5, CC6, CC7, CC9, and CC10, which all reference coverage in another policy, were removed and a note was added to the policy description. HbA1c testing is covered in AHS-G2006 and thus references to coverage within CC3 were removed. Other coverage for screening for diabetes mellitus remains. All remaining CC edited for clarity and consistency. Removed CPT codes 83540 and 84443.

<table>
<thead>
<tr>
<th>Effective Date</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/15/2022</td>
<td>Initial Policy Implementation</td>
</tr>
</tbody>
</table>