MedStar Health
Ambulatory Best Practice Group
Recommended Screening Guidelines
2014

The Ambulatory Best Practice Group, chartered in 2001 by Dr. William Thomas is composed of experts in primary and family health care from across our system. This group of physicians and nurses meets on a regular basis to evaluate the quality of care delivered across the system while staying abreast of trends in healthcare that will impact ambulatory practice and care outcomes.

During the preparation of these screening guidelines, the Ambulatory Quality Best Practices Group reviews multiple sources of information including current literature, community practice standards, subject matter experts from within our system, national recommendations from clinical specialty organizations and information available regarding recommendations for health and prevention screening guidelines.

This document is a summary of our recommendations for the appropriate screening of patients in MedStar Health. These recommendations are for adult, pediatric and special populations across our system. The document is divided into a section for Adults and Pediatrics. In each of the sections the recommendations are alphabetized. This reference is intended for all providers who serve as primary care practitioners for ambulatory patients in the MedStar Health system.

Successful implementation of the screening guidelines is at least in part related to a successful education process for providers, patients and families. To that end, we have included information that is available free of charge through specific Internet sites. At times the information on the Internet sites discusses some recommendations that have not been put forward in this document so elimination of that information is an important consideration prior to printing and distribution of the information.

These recommendations are provided to assist physicians and other clinicians making decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's primary care provider. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but should be used with the clear understanding that continued research may result in new knowledge and recommendations.

Federal and state law, particularly laws and regulations relative to provision of care under governmental programs such as Medicare/Medicaid, may mandate the provision of certain screening and preventive care. Any questions regarding these requirements should be reviewed with legal counsel or a member of our committee. Member names and phone numbers are listed on the next page of this document.

The Ambulatory Best Practice Group will review these guidelines on an annual basis for additions, deletions or clarifications and distribute as appropriate.

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Adult Populations

Preventive Service	Guideline
Abdominal Aortic Aneurysm[17]	One-time screening for abdominal aortic aneurysm by ultrasonography in men age 65 to 75 years who have ever smoked.
Aspirin chemoprevention [22, 25, 37]	Discuss aspirin chemoprevention with adults who are at increased risk for Cardiovascular Disease. Encourage aspirin therapy for men 45 to 79 years when the potential benefit of a reduction in myocardial infarctions outweighs the potential harm of an increase in gastrointestinal hemorrhage and women age 55 to 79 years when the potential benefit of a reduction in ischemic strokes outweighs the potential harm of an increase in gastrointestinal hemorrhage.
Blood Pressure[9]	18 years and then at each visit. At least every 1-2 years.
Breast Cancer Screen ◦ Self Breast Exam (SBE)[9, 26]	Beginning in their 20's, women should be told about the benefits and limitations of BSE, it is acceptable for women to choose not to do BSE, or to do it occasionally. The importance of promptly reporting changes to a physician is emphasized.
◦ Clinical Breast Exam/Mammography[32.36]	A clinical breast exam (CBE) may be performed every 3 years for women between ages 20-39 *with average breast cancer risk*. Yearly CBE and Mammography for ≥ age 40. Women known to be at increased risk (Family history, Positive Gail risk screen[36]) may benefit from earlier initiation of early detection testing and/or referral to Breast Specialist. Screening Mammograms for women > 75 years of age should be discussed between patient and provider. (MedStar Breast Expert Workgroup, panel discussion recommendations, January 8, 2010)
Cervical Cancer Screening [35,15]	Cervical cancer screening should begin at age 21 years (regardless of sexual history*). Screening before age 21 should be avoided because women less than 21 years old are at very low risk of cancer. Screening these women may lead to unnecessary and harmful evaluation and treatment* (ACOG 2009). • Women from ages 21 to 30 should be screened every three years, using either the standard Pap or liquid-based cytology. • Women age 30 and older who have had three consecutive negative cervical cytology test results may be screened once every three years with either the Pap or liquid-based cytology. • Women with certain risk factors may need more frequent screening, including those who have HIV, are immunosuppressed, were exposed to diethylstilbestrol (DES) in utero, and have been treated for cervical intraepithelial neoplasia (CIN) 2, CIN 3, or cervical cancer.(ACOG- 2009) • (HPV co-test (cytology + HPV test administered together) should not be used for women aged <30 years; Age 30-65 years, HPV co-test is strongly recommended every five years) • May discontinue screening > 65years for women with 3 consecutive normal Paps (USPSTF, 2003). • May discontinue screening >65 years(with adequate screening history)
Chlamydia Infection[17]	Sexually active women aged 25 years and younger and other asymptomatic women at increased risk for infection.
Cholesterol Screening[23]	Screening of all adults should begin with fasting Lipoprotein panel every 5 years at age 20. Individuals with known risk factors of CHD or CHD should be tested earlier.
Colorectal Cancer Screening[34]	Beginning at age 50, both men and women at *average risk* for developing colorectal cancer should use one of the screening tests below. The tests that are designed to find both early cancer and polyps are preferred if these tests are available to you and you are willing to have one of these more invasive tests. Talk to your doctor about which test is best for you. (ACS 2009) **Tests that find polyps and cancer** ▪ flexible sigmoidoscopy every 5 years* ▪ colonoscopy every 10 years ▪ double contrast barium enema every 5 years* ▪ CT colonography (virtual colonoscopy) every 5 years* (consider community availability)

Preventive Service	Guideline
	Tests that mainly find cancer ▪ fecal occult blood test (FOBT) every year*,** ▪ fecal immunochemical test (FIT) every year*,** ▪ stool DNA test (sDNA), interval uncertain* consider community availability) *Colonoscopy should be done if test results are positive. **For FOBT or FIT used as a screening test, the take-home multiple sample method should be used. A FOBT or FIT done during a digital rectal exam in the doctor's office is not adequate for screening. Screening should be considered earlier and/or more often for individuals with any of the following colorectal cancer risk factors: personal Hx of colorectal cancer, a personal history of chronic inflammatory bowel disease (Crohns disease or ulcerative colitis), a strong family history of colorectal cancer or polyps (cancer or polyps in a first-degree relative [parent, sibling, or child] younger than 60 or in 2 or more first-degree relatives of any age), a known family history of hereditary colorectal cancer syndromes such as familial adenomatous polyposis (FAP) or hereditary non-polyposis colon cancer (HNPCC).
Counseling[15]	All adults, complete history using screening tools as specified. Alcohol & drug - use CAGE/Michigan assessment tool or similar tool. ▪ Birth control/sexual behavior ▪ Diet/nutrition ▪ Injury Prevention ▪ Violence detection/counseling ▪ Exercise ▪ Mental Health/Depression ▪ Dental health ▪ Testicular self exam ▪ Skin Protection ▪ Smoking
Diabetes Mellitus[12, 25, 38]	Screening by: fasting glucose test, impaired glucose test or A1C, individuals 45 years and older - screen, repeat every 3 years if normal. Consider testing in younger patients or perform more frequent testing in persons at increased risk for diabetes who meet the following criteria: • Obesity (body mass index ≥ 30kg/m2- (if normal repeat q3 years). • 1st degree relative with diabetes. • Habitually physically inactive. • High-risk ethnic group (African American, Latino, Native or Asian Americans, Pacific Islanders). • Delivery of a baby weighing > 9 lbs. or gestational DM. • Hypertension (≥140/90). • Have PCOS, (polycystic ovary syndrome). • Plasma high-density lipoprotein cholesterol level ≤35 mg/dl or triglyceride level ≥250 mg/dl. • History of impaired glucose tolerance (140-199) or impaired fasting glucose level (100-125 mg/dl), or an A1C range of 5.7–6.4%. • History of vascular disease.
Depression[33]	Screening for symptoms of depression should be at the initial visit for all new patients and then annually for existing patients. The patient may complete screening during the office visit with a patient self-reported questionnaire or using one of the various screening measures that have been specifically designed to detect depression. Physicians can choose the screening measures that are appropriate for their patients and practice setting, and for monitoring change in patients who are receiving treatment for depression.
Eye Disease Screening[28]	Baseline screening should start at age 40 for adults with no signs or risk factors for eye disease. Patients of any age with eye disease risk factors, such as high blood pressure, family history or diabetes, should consult with their ophthalmologist about frequency of eye exams.
Hearing[14, 27]	Providers should perform subjective hearing screening periodically with counseling on hearing aid devices and making referrals as appropriate.

Preventive Service	Guideline
Height and Weight[14], BMI	18 years and older - Baseline height, weight and BMI indicated. Height and BMI annually. Weight Reduction Counseling for all patients with BMI > 25kg/m2
Hepatitis C Screening	USPSTF & CDC recommend hepatitis C screening for all asymptomatic adults without known liver disease or functional abnormalities born between 1945-1965 (using code V73.89).
History & Physical	18 years and older - complete H&P at discretion of practitioner and patient. All Medicaid patients are required to have an annual health appraisal.
HIV Testing[24]	Testing for HIV infection should be performed routinely for all patients aged 13--64 years. All persons likely to be at high risk should be screened at least annually (high risk includes: *injection-drug users and their sex partners, persons who exchange sex for money or drugs, sex partners of HIV-infected persons, men having sex with men or heterosexual persons who themselves or whose sex partners have had more than one sex partner since their most recent HIV test)*. No written consent required however documentation in the medical record of informed consent is necessary. The patient should be offered an opportunity to ask questions and to decline testing (opt-out).
Osteoporosis Screening[21,40]	Women age 65 and older and men age 70 and older, regardless of clinical risk factors (NQF.2010) should be screened routinely for osteoporosis. Routine screening begin at age 60 for women at increased risk for osteoporotic fractures (USPSTF). Bone mineral density testing may be recommended for women who are postmenopausal and younger than 65 years who have at least one risk factor for osteoporosis. Finally, bone mineral density testing should be performed on all women who are postmenopausal with fractures to confirm the diagnosis of osteoporosis and determine the severity of disease (ACOG).
Prostate Cancer Screening [29,30,39]	Offer and discuss risks and benefits of a PSA-based screening and digital rectal examinations to detect prostate cancer in men age 50 who are at average risk of prostate cancer and are expected to live at least 10 more years. Discussion should begin at age 45 for men at high risk (African-American men and men with a strong family of one or more first-degree relatives [father, brothers] diagnosed before age 65. Men at even higher risk, due to multiple first-degree relatives affected at an early age, should be counseled at age 40 (ACS). The USPSTF recommends against screening for prostate cancer in men age 75 years or older. Men who choose to be tested who have a PSA of less than 2.5 ng/ml, may only need to be retested every 2 years. Screening should be done yearly for men whose PSA level is 2.5 ng/ml or higher. The American Urological Association recommends that PSA screening, in conjunction with a digital rectal examination, should be offered to asymptomatic men aged 40 years or older who wish to be screened, if estimated life expectancy is greater than 10 years (60). It is currently updating this guideline (61). Note - The American Cancer Society emphasizes informed decision making for prostate cancer screening: men at average risk should receive information beginning at age 50 years, and black men or men with a family history of prostate cancer should receive information at age 45 years (62). The American College of Preventive Medicine recommends that clinicians discuss the potential benefits and harms of PSA screening with men aged 50 years or older, consider their patients' preferences, and individualize screening decisions (63). The American Academy of Family Physicians is in the process of updating its guideline, and the American College of Physicians is currently developing a guidance statement on this topic.

Preventive Service	Guideline
IMMUNIZATIONS[11]	**For Complete CDC recommendations for Adult Immunizations go to: http://www.cdc.gov/vaccines/recs/schedules/default.htm)**

Footnotes:

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22. Report of the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus (2003) *Diabetes Care*, 26:S5-S20, retrieved January 7, 2004 from http://care.diabetesjournals.org.
23. Summary of Policy Recommendations for Periodic Health Examinations, American Academy of Family Physicians, April 2005, Revision 5.7.
24. Task Force Recommends Regular Cervical Cancer Screening but Supports Less Frequent Screening for Some Women. Press Release, January 22, 2003. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/news/press/pr2003/cervcanpr.htm
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Pediatric Populations

Preventive Service	GUIDELINE	
	1-18 MONTHS	18 MONTHS - 21 YEARS
Well Child Care Visit Schedule	Prenatal[1], 2-4 days[2], 2 wks[2],1 mo, 2 mo, 4 mo, 6 mo, 9 mo, 12 mo, 15 mo, 18 mo	2 yr, 30 month at discretion of provider, and annually from age 3 years to 21 years
Physical Exam	Every visit	Every visit
• Height/Weight with percentile	Every visit	Every visit.
• Head Circumference with percentile	Every visit until 24 months	Continue when abnormal results are obtained
• BMI with percentile[15, 16, 19]		24 months, 30 months and then annually [19]
• Blood Pressure Screening		Every visit beginning at 3 yr.
• Growth, development, behavior assessment[12]	Every visit Growth Parameters reviewed at every well visit Developmental screening should be administered regularly at the 9-, 18-, and 30-month well visits. *(Because the 30-month visit is not yet a part of the preventive care system and is often not reimbursable by third-party payers at this time, developmental screening can be performed at 24 months of age. In addition, because the frequency of regular pediatric visits decreases after 24 months of age, a pediatrician who expects that his or her patients will have difficulty attending a 30-month visit should conduct screening during the 24-month visit.) (AAP. 2006)*	
• Genital Exam		External genital exam: Annually.
• Cervical Cancer Screening[17]		Cervical cancer screening should begin at age 21 years (regardless of sexual history). *Screening before age 21 should be avoided because women less than 21 years old are at very low risk of cancer. Screening these women may lead to unnecessary and harmful evaluation and treatment* (ACOG 2009). For immunosuppressed patients screening may start earlier.
• Nutritional Status	Assess nutritional status; recommend appropriate counseling or programs for high-risk conditions (overweight: BMI between 85-94% for age and sex, Obesity: BMI≥ 95% for age and sex, or failure to thrive.	
• Vision & Hearing	**Subjective screening at visits:** newborn - 24 mo, 11 yr, 13 yr, 14 yr, 16 yr, 17 yr, 19 yr, 20 yr & 21 yr. **Objective Screening at visits:** Newborn, 4 yr, 5 yr, 6 yr, 8, 10, 12 yr, 15 yr, 18 yr.	
Dental Health[14]	Oral Health assessment should begin at birth and dental assessment begins at tooth eruption. Recommend dental provider assessment beginning at age 1 or earlier if dental concerns are present. Dentist evaluation should occur every 6 months. (AADP)	

Preventive Service	GUIDELINE		
	1-18 MONTHS		18 MONTHS - 21 YEARS
Counseling / Education / Screening for high-risk factors	One or more of age appropriate counseling should be discussed during periodic primary care physician visits. Additional screening and intervention may be necessary for individuals at high-risk. Anticipatory guidance, substance abuse, smoking, diet and exercise, injury prevention, domestic violence, dental health, sexual behavior, use of alternative and complementary medicines, depression, suicidal/homicidal ideation, high-risk of exposure to infectious diseases (HIV, Hep A, Hep B, Hep C). Parents and caregivers should be advised to place healthy infants on their backs when putting them to sleep. Side positioning is a reasonable alternative but carries a slightly higher risk of SIDS[7].		
Autism [13, 20]		Administer autism specific screening tool on all children at the 18 month preventive care visit (2007)	Administer autism specific screening tool on all children at the 2 year preventive care visit. If patient has not been screened in the past, consider screening. (MCHAT is an example of a validated tool).
Sexually Transmitted Diseases (STD) Screening	Infants born to mothers whose HIV status is unknown should be tested for HIV.		Screening for all sexually active adolescents and other asymptomatic persons at high-risk for STDs (includes gonorrhea, Chlamydia, syphilis and HIV).
Blood Lead Testing[4, 9, 10]	Blood lead test at between 9-12 months as required by state law		Repeat Blood testing on or after 2 yrs (24 months) as required by state law ° Screening is recommended for previously untested children aged <6 years to rule out subclinically elevated blood lead level. Any positive screen should have a follow up blood test.
Hereditary/Metabolic Screening	Newborn Metabolic screen (PKU) by age one month: should be performed according to state law		Sickle cell screen if not already completed, if status unknown or risk factors.
Tuberculosis Screening[5]	By age 12 months (Initial testing can begin as early as 3 months).		Assess annually for high-risk. Perform TB screening with tuberculin skin test if high-risk factors are present (i.e. medically underserved, immunocompromised, close contact with TB cases, medical risk factors, immigrants from high prevalence areas)
Hematocrit or Hemoglobin Screening[3]	Consider screening once in all infants between 9-12 months. Must screen high risk groups at 9-12mos and again 6-12 months later.**		Females should be screened at least once after regular menstruation.
Cholesterol Screening[6, 18]			2 to 21 years: Perform cholesterol screening for high-risk patients with blood fasting lipid profile. Risk factors for premature cardiovascular disease include obesity, high blood pressure, diabetes, family history of dyslipidemia and family history of premature cardiovascular disease (males <55yrs and female <65yrs). If hypercholesterolemia is identified then recommendations are to include nutritional guidance and/or referral to weight management program or nutritionist. Lipid lowering agents may be considered in children 8 yrs or older who have failed diet management and continue with hypercholesterolemia.
Diabetes Screening			Beginning at age 10 years or at onset of puberty, fasting glucose recommended for overweight individual (BMI> 85th percentile) every 2 years and should also be based on other risk factors such as lifestyle and/or family history and HbA1c should be peformed.

Preventive Service	GUIDELINE	
	1-18 MONTHS	18 MONTHS - 21 YEARS
Depression screening[11]		Screening of adolescents (12 and older-18 years of age) for major depressive disorder (MDD), suicidal/homicidal ideation, and recommend follow-up as appropriate to a mental health provider. Validated screening tools include: PHQ-9A, GAPS, and Teen Screen.
Urinalysis Screening		Routine urinalysis to screen for kidney disease is not required.
• Contraception Management		Screening pelvic exams are not recommended. Age appropriate contraceptive management should be offered as part of preventive health maintenance.
IMMUNIZATIONS[8]	**For Complete CDC recommendations for Pediatric Immunizations go to; http://www.cdc.gov/vaccines/recs/schedules/default.htm**	

**** High risk populations include children who are: in poverty, Black, Native American, Alaska native, immigrant, preterm and low birth weight infants, infants drinking cow's milk**

Footnotes:

[1]A prenatal visit is recommended for parents who are at high-risk, for first time parents, and or those who request a conference. The prenatal visit should include anticipatory guidance, pertinent medical history and a discussion of benefits of breastfeeding and planned method of feeding per AAP statement "The Prenatal Visit" (1996).

[2]Every infant should have a newborn evaluation after birth. Breastfeeding should be encouraged and instruction and support offered. Every breastfeeding infant should have an evaluation 48-72 hours after discharge from the hospital and again at 2 weeks of age if appropriate. Visit to include weight, bilirubin assessment, formal breastfeeding evaluations, encouragement, and instruction as recommended in the AAP statement "Breastfeeding and the Use of Human Milk" (1997).

[3] Recommendations to Prevent and Control Iron Deficiency in the United States. MMWR 1998;47 (RR-3):1-29)

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f. American Academy of Pediatrics. In: Pickering L.K., ed. Red Book, 2003 Report of Infectious Diseases. 26th ed.

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[13] Identification and Evaluation of Children with Autism Spectrum Disorders. Pediatrics, Volume 120, November 2007. (www.pediatrics.org/cgi/doi/10.1542/peds.2007-2361)

[14] Guideline on Infant Oral Health, Clinical Guidelines, American Academy of Pediatric Dentistry, V 31, No.6, 2009 (http://www.aapd.org)

[15] U.S. Preventive Services Task Force (USPSTF), January 2010. Screening for Obesity in Children and Adolescents (http://www.ahrq.gov/clinic/uspstf10/childobes/chobesrs.htm#copyright)

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Recommendations for Patient Education Resources

Immunizations:

1. Immunization Action Coalition, The Coalition is a non-profit organization that promotes appropriate immunization against vaccine-preventable diseases. The website offers a wealth of information including many educational pieces for parents/patients. http://www.immunize.org, admin@immunize.org

2. Vaccine Information for the Public and Health Professionals, http://www.vaccineinformation.org, admin@vaccineinformation.org

3. National Vaccine Program Office (NVPO) www.hhs.gov/nvpo
   NVPO is federal program which provides pertinent information about childhood, adolescent, and adult immunizations. Their site offers publications and reports on vaccine-preventable diseases, vaccine safety, vaccine coverage, immunization laws, and immunization registries

4. CDC's Immunization Information Hotline: (800) 232-2522 (English) (800) 232-0233 (Spanish)

Screening Recommendations:

1. American Academy of Family Physicians. (http://www.aafp.org/)
   a. Breast Cancer Screening Counseling Tools -- Access tools that may be used to facilitate shared decision-making regarding screening for breast cancer in women aged 40-49 years. (http://www.aafp.org/x19497.xml)
   b. Prostate Cancer Screening Counseling Tools -- Find tools that are intended to be used to facilitate shared decision-making regarding screening for prostate cancer in men aged 50-65 years. (http://www.aafp.org/x19497.xml)
2. AHRQ, (2013). Autism and developmental delays. Retrieved from http://effectivehealthcare.ahrq.gov/ehc/products/106/708/autism-clinicianfinal.pdf
3. AHRQ, (2013). Childhood obesity prevention programs: Comparative effectiveness. Retrieved from http://www.effectivehealthcare.ahrq.gov/ehc/products/330/1713/child-obesity-clinician-130917.pdf
4. AHRQ, (2012). Methods for insulin delivery and glucose monitoring: Comparative effectiveness. Retrieved from http://www.effectivehealthcare.ahrq.gov/ehc/products/242/749/CER57_Insulin-Delivery_FinalReport_20120703.pdf
5. AHRQ, (2013). Screening for Hepatitis C virus infection in adults. Retrieved from http://effectivehealthcare.ahrq.gov/ehc/products/285/1698/hepatitis-c-screening-clinician-130913.pdf
6. AHRQ, (2013). Pediatric Obesity: Keeping children at a healthy weight. Retrieved from http://effectivehealthcare.ahrq.gov/ehc/products/330/1714/child-obesity-130916.pdf
7. AHRQ, (2013). Otitis Media with Effusion: comparative effectiveness of treatments. Retrieved from http://effectivehealthcare.ahrq.gov/search-for-guides-reviews-and-reports/?pageaction=displayproduct&productid=1485
8. U.S. Preventive Services Task Force (USPSTF) Web site page that provides tools and resources to support public and private health care based on USPSTF recommendations (http://www.ahrq.gov/clinic/ppipix.htm).

9. Task Force on Community Preventive Services: (http://www.thecommunityguide.org/)
All material on this site is public domain and we encourage copying and disseminating freely. However, citation to source is appreciated.
10. U.S. Preventive Services Task Force (USPSTF). Screening for Breast Cancer Recommendation Statement. November 2009,Updated: December 2009 http://www.ahrq.gov
11. U.S. Preventive Services Task Force (USPSTF) Screening for Depression in Adults. Recommendation Statement Date: December 2009. http://www.ahrq.gov
12. Prevention the Focus of New Colon Cancer Screening Guidelines Retrieved ACS. 2009 from http://www.cancer.org/docroot/NWS/content/NWS_1_1x_Prevention_the_Focus_of_New_Colon_Cancer_Screening_Guidelines.asp
13. New ACOG Cervical Cancer Screening Recommendations .ACOG- 2009. Retrieved December 2009 from: http://www.acog.org/from_home/publications/press_releases/nr11-20-09.cfm
14. The Breast Cancer Risk Assessment Tool is based on a statistical model known as the "Gail model," Retrieved January 2010 from: http://www.cancer.gov/bcrisktool/
15. U.S. Preventive Services Task Force (USPSTF) Aspirin for the Prevention of Cardiovascular Disease Recommendation Statement Date: March 2009. http://www.ahrq.gov .
16. Standards of Medical Care in Diabetes—2010, DIABETES CARE, VOLUME 33, SUPPLEMENT 1, JANUARY 2010. http://care.diabetesjournals.org