



A Primary Care Guide to

Choosing Wisely® at Intermountain

Tests and Treatments Doctors and Patients Should Discuss

According to the Institute of Medicine, up to 30% of healthcare delivered in the U.S. is unnecessary and may cause harm.^{10M} Patterned after the Choosing Wisely® campaign (www.choosingwisely.org) of the American Board of Internal Medicine (ABIM) Foundation (www.abimfoundation.org), this document summarizes key areas prone to overuse or misuse of medical tests and procedures at Intermountain Healthcare. It also provides advice on underused care and preventive care visits. Links are provided to tools that summarize the evidence (CPMs and national guidelines), reinforce best practice at the point of care (orders, forms, and quick references), and enable conversations with patients (patient education).

1 PREVENTIVE CARE

2 UNDERUSED CARE

3 WISE LAB TESTS

4 WISE MEDICATIONS

5 WISE IMAGING

1. PREVENTIVE CARE | *Encourage preventive care visits but not unnecessary tests.*

- **Regular visits**—DO encourage preventive visits, with services based on evidence-based recommendations. Services should be based on the patient's age, sex, and risk factors. **More information:** [Intermountain Preventive Care Guidelines](#), [USPSTF recommendations](#), [CMS Quick Reference](#). Patient education for women ([English / Spanish](#)), men ([English / Spanish](#)), and teens ([English / Spanish](#)).
- **Labs**—Order only those labs that meet evidence-based criteria, and associate the appropriate diagnosis to each lab when ordering. See recommendations in table 1 below for commonly overutilized labs.

Table 1. Preventive care lab tests

Overutilized labs	Evidence-based recommendation
Chemistry panels	There is no evidence to support routine screening chemistry panels; chemistry tests should be performed only if assessing specific symptoms or monitoring specific conditions.
TSH	Only if signs/symptoms of hyper- or hypothyroidism, family history of autoimmune thyroiditis, or goiter
Urinalysis in men	Only if risk factors for chronic kidney disease or exam shows signs/symptoms of condition for which UA is required for diagnosis
CBC	Only if exam shows signs/symptoms of condition for which a CBC would be required for diagnosis

- **Lifestyle management**—During all visits, DO focus on lifestyle management. Potential opportunities exist during any visit to work with patients on positive changes for improving overall health and enhancing quality of life.

The "5A" framework (see below) is a proven way to help patients do this, supported by motivational interviewing techniques and tools. Access these tools through Intermountain's [Weight & Lifestyle Management CPM](#) and tools and Intermountain's [Behavior Change Framework](#).

The 5A Framework

- **Assess** physical activity, BMI, and weight circumference, nutrition, sleep quantity and quality, mental health, tobacco and alcohol use.
- **Advise** on personal health risks and relevant, evidence-based behavior changes.
- **Agree** on one or two specific, measurable, behavior-change goals based on patient preferences and readiness to change. Help the patient determine small achievable steps with a time frame to reevaluate progress. Document goals and steps.
- **Assist** the patient in developing an actionable plan using elements of the [Behavior Change Framework](#) such as evaluating environment, social support, discussing a growth mindset, prompts, increasing ability and overcoming barriers, and discuss tracking and accountability.
- **Arrange** for follow-up, referrals, reporting mechanisms, and other assistance as necessary.

2. UNDERUSED CARE | *Don't skip the important, evidence-based tests and treatments below.*

- **Breast cancer screening—Follow Intermountain recommendations.** For breast cancer, women ages 19 to 39 should have a clinical breast exam every one to three years; women age 40 and older should have a clinical breast exam and mammogram annually. Women with additional risk factors should start regular mammography earlier. May discontinue at age 75 or if conditions limit life expectancy to less than 10 years (HEDIS/STARS).

More information: [Intermountain Preventive Care Screening Recommendations](#)

- **Colorectal cancer screening—Follow Intermountain recommendations.** Colorectal cancer screening typically should begin at age 50 for low/normal risk patients, with follow-up intervals varying from annually for those who receive a fecal immunochemical test (FIT), to 10 years for those receiving colonoscopy, or more frequently depending on the findings on initial screening. After a negative colonoscopy, further screening (such as FIT) should not be performed on asymptomatic patients during the 10-year interval until the next colonoscopy. Colon cancer screening can stop at age 75 or if comorbid conditions limit life expectancy. Screening should not occur after age 85 (HEDIS/STARS).

More information: [Intermountain Preventive Care Screening Recommendations](#)

- **Adult vaccinations—Think beyond flu and pneumonia.** It's important for adults to have regular influenza and pneumococcal vaccines (HEDIS/STARS), but it is also important to remember vaccines such as Tdap (and Td booster), Hepatitis B (for diabetics ages 18–59 years), and Zoster (after age 50).

More information: [CDC/ACIP Adult Immunization Schedule](#)

- **Prediabetes—Prediabetes is common and underdiagnosed (one in three adults has pre diabetes).** Screen all patients age 40–70 with BMI > 25 kg/m² and one or more risk factors (high risk ethnicity,

high blood pressure, hyperlipidemia, history of PCOS, history of GDM or baby > 9 lbs., sedentary lifestyle, first-degree relative with type 2 diabetes. Consider screening adults 18–39 with risk factors. Screen using either fasting blood glucose or HbA1c.
More information: [Diabetes Prevention Program CPM](#).

- **Depression—Screen for depression regularly.** The PHQ-2 is a brief, effective screening tool and should be followed by the PHQ-9 if the PHQ-2 is positive. Patients already diagnosed with depression should be seen regularly (every two to four weeks) initially or if not in remission, and then they should be seen every six to 12 months if in remission. (Remission is defined as a follow-up PHQ-9 score of 4 or less.)
More information: [PHQ-9 \(PHQ-2 is first 2 questions\)](#), [C-SSRS Quick Screen](#), [Suicide Prevention CPM](#), [Depression CPM](#). Patient education ([English](#) / [Spanish](#))

- **STIs—Screen for chlamydia and gonorrhea in sexually active adults as part of preventive care.** Screen annually for chlamydia and gonorrhea in sexually active adults. Screen all sexually active women ages 19-24, and women ages 25 and older who are at high risk (more than one sexual partner, STI history, and/or not using condoms consistently and correctly). Women treated for chlamydia and/or gonorrhea should be tested within 3–5 months after treatment is completed.

More information: [Intermountain Preventive Care Screening Recommendations](#)

- **Tobacco Use—Screen for tobacco use and provide cessation treatment as appropriate.** The 5As approach (see [page 1](#)) and *Behavior Change Framework* are helpful and assessing and counseling patients. Treat with nicotine replacement therapy (NRT), varenicline (Chantix) or bupropion (Zyban). Refer to [waytoquit.org](#). Refer SelectHealth patients to [Quit for Life](#) program (866-784-8454).

More information: [Quitting Tobacco: Your Journey to Freedom booklet](#) (the last two pages include resources for referral).

National Choosing Wisely® Resources

Choosing Wisely®—an initiative of the ABIM Foundation—encourages physicians, patients, and other healthcare providers to talk about medical procedures that are unnecessary (and might even cause harm). This initiative provides evidence-based recommendations from national specialty societies, along with other resources, at www.choosingwisely.org. Some of the recommendations are listed below (click the underlined titles below to open each list):



Selected lists:

[Allergy, Asthma, and Immunology](#)

[Cardiology](#)

[Family Practice](#)

[Gastroenterology](#)

[Geriatrics](#)

[Internal Medicine](#)

[Nephrology](#)

[Nuclear Cardiology](#)

[Obstetrics and Gynecology](#)

[Oncology](#)

[Pediatrics](#)

[Radiology](#)

Other Choosing Wisely® resources:

- Consumer education: www.choosingwisely.org/doctor-patient-lists
- Twitter: [@ABIMFoundation](#)
- Medical Professionalism blog: blog.abimfoundation.org

3. LAB TESTS | *Limit lab tests to those with an evidence base that supports their use.*

- **Preventive care—Don't order lab tests that lack an evidence base to support their use.** Frequently over-ordered tests include urinalysis, CBC, chemistry panels, and TSH. See Preventive Care Visits on [page 1](#) for evidence-based recommendations for preventive care labs.
- **Cervical cancer screening—Don't routinely order annual HPV/Pap tests.** According to the Choosing Wisely® list from the [American Academy of Family Physicians](#), Pap tests are not helpful for women under 21 or after a hysterectomy for noncancer disease. Follow [Intermountain's Preventive Care Screening Guidelines](#) for cervical cancer screening, based on American Congress of Obstetricians and Gynecologists (ACOG) guidelines:
 - Women younger than 21 years: Cervical cancer screening is NOT needed.
 - Women aged 21 to 29 years: Pap test every 3 years. (Annual screening for women with immunocompromised status, HIV, or DES exposure in utero.) Note: HPV testing in women younger than 30 should only be done on a Pap test result of "ASCUS."
 - Women aged 30 to 65 years: Pap test combined with HPV test every 5 years. (Annual screening for women with immunocompromised status, HIV, or DES exposure in utero.)
 - Women older than 65 years: Pap tests are NOT needed if a woman has had 3 or more normal Pap tests in a row and no abnormal tests in the past 10 years. (Continue routine screening for women with history of cervical cancer, immunocompromised status, HIV, or DES exposure in utero.)
 - Post cervix removal: If hysterectomy was for benign disease, Pap tests are not needed (continue pelvic exams). If history of abnormal cell growth (CIN2/CIN3), screen annually until 3 consecutive negative Pap tests, then discontinue.
- **Other labs—Order the right test.** Limit labs to those that may alter treatment decisions or are medically necessary. See the guidance in table 2 below.

Table 2. Lab test recommendations

Factor	Recommended	NOT recommended
Cardiac risk	Traditional risk markers: HDL + LDL, combined with other Framingham factors	Novel cardiac risk markers: Tests such as LDL fractionation testing (LDL-P, VAP testing, etc.) or homocysteine for routine screening in patients who do not have other risk factors or elevated risk
Vitamin D	25-(OH)D	1,25-(OH)D
H. pylori infection	Breath/stool testing	Serologic testing
HLA disease association	Recommendations differ based on the HLA-associated disorder	HLA testing (predictive value too poor for diagnosis of ankylosing spondylitis, etc.)
Inherited thrombotic disorders	Use thrombophilia testing only if it will affect treatment plans, which is uncommon	Factor V Leiden by PCR Total antigen tests (for protein C, protein S, and antithrombin deficiency)
Prediabetes / diabetes mellitus	Fasting blood glucose or HbA1c	C-peptide levels (not necessary for diagnosis)
PSA (prostate specific antigen)	Shared decision making for patients ≤ 70 years	Patients > 70 years
Thyroid function	TSH, followed by free T4 if necessary	FTI and/or T3 uptake tests (outdated and not appropriate)

4. MEDICATIONS | *Use antibiotics and other drugs only when necessary; choose generics when possible.*

- **Antibiotic use—Don't prescribe antibiotics for acute rhinosinusitis or bronchitis.** According to the Choosing Wisely® list from the American Academy of Allergy, Asthma, and Immunology, most acute rhinosinusitis is caused by a viral infection and resolves without treatment in two weeks — only 0.5% to 2% of cases become bacterial infections.^{AAAAI} The Choosing Wisely® list from the American Academy of Family Physicians states that antibiotics are prescribed in more than 80% of outpatient visits for acute sinusitis, which accounts for 16 million office visits and \$5.8 billion in annual health care costs.^{AAFP} Antibiotics can also contribute to antibiotic resistance.
More information: [Acute Cough: Bronchitis CPM](#), [Bronchitis Flash Card](#), [Sinusitis CPM \(Adult and Pediatric versions\)](#), and [Sinusitis Flash Card \(Adult and Pediatric versions\)](#) as well as [Coughs and Colds patient education \(Adult English / Adult Spanish\)](#) ([Pediatric English / Pediatric Spanish](#))
- **Antibiotic choice—If antibiotics are prescribed, choose a narrow-spectrum medication if possible.** Narrow-spectrum medications are less likely to cause resistance or lead to superinfection.
- **Medication administration—Don't use IV/parenteral therapies when PO would suffice.** Oral therapy is more cost effective and reduces the risk of other complications.
- **Generics—Choose generics first.** Generic medications that are FDA [AB rated](#) have been proven to be as effective as brand-name medications, and they save the patient money.
- **Testosterone—Only prescribe testosterone in men found to have low testosterone levels.** Testosterone is not clinically proven to be effective in women or in men who do not have a documented low testosterone level based on blood testing.

5. IMAGING | *Limit imaging to tests that may alter care.*

- **Low back pain—Avoid imaging tests in acute low back pain unless there are red flags for serious pathology or injury.** According to the Choosing Wisely® lists from the American Academy of Family Physicians and the American College of Physicians, lumbar imaging increases costs without improving outcomes.^{AAFP,ACP}
More information: Intermountain's [Proven Imaging for Low Back Pain CPM](#) (appropriate use criteria for the most common medical scenarios), [Low Back Pain CPM](#), [Low Back Pain patient education \(English / Spanish\)](#)
- **Heart—Stress testing should only be ordered for patients with signs and symptoms of low-to-intermediate risk of underlying obstructive coronary artery disease.** In addition, the specific type of test should be tailored for the individual patient's needs and specified in the order. Refer to Intermountain's [Proven Imaging for Known or Suspected Coronary Artery Disease CPM](#) for appropriate use criteria. Be sure all ordering clinicians include in the patient medical record the clinical details for which the test is ordered and the actions taken based on the results of the study.
More information: [Proven Imaging for Known or Suspected Coronary Artery Disease CPM](#) (appropriate use criteria), [Optimizing Cardiac Nuclear Stress Tests \(PowerPoint\)](#), [ACC/AHA Criteria](#)
- **Suspected pulmonary embolism (PE)—Don't image for suspected PE without moderate or high pre-test probability.** According to the Choosing Wisely® lists from the American College of Radiology and the American College of Physicians, imaging is usually not appropriate as the initial test for suspected PE.^{ACR,ACP} The Revised Geneva Score (and if necessary, a d-Dimer test) can help determine pre-test probability. Patients with a negative d-Dimer do not need pulmonary imaging. For pregnant patients, the first step is evaluating deep vein thrombosis (DVT) signs.
More information: Intermountain's [Proven Imaging for Suspected Pulmonary Embolism CPM](#) (for appropriate use criteria), [CT for Suspected PE CPM](#), [PE in Pregnancy CPM](#)
- **Osteoporosis—Avoid DEXA for screening in women younger than 65 years or men younger than 70 years with no risk factors.** According to the Choosing Wisely® list from the American Academy of Family Physicians, DEXA screening is not cost-effective in younger patients.^{AAFP}
- **Double imaging—Avoid imaging both with and without contrast, unless absolutely necessary.** Imaging both with and without contrast is rarely needed. Consult with a radiologist if you are considering an imaging procedure with and without contrast and you're uncertain that both are absolutely necessary.

REFERENCES

AAAAI American Academy of Allergy, Asthma, and Immunology: 10 things physicians and patients should question. Choosing Wisely website. Available at <http://www.choosingwisely.org/societies/american-academy-of-allergy-asthma-immunology/>. Accessed November 24, 2017.

AAFP American Academy of Family Physicians: 10 things physicians and patients should question. Choosing Wisely website. Available at <http://www.choosingwisely.org/societies/american-academy-of-family-physicians/>. Accessed November 24, 2017.

ACP American College of Physicians: 10 things physicians and patients should question. Choosing Wisely website. Available at <http://www.choosingwisely.org/societies/american-college-of-physicians/>. Accessed November 24, 2017.

ACR American College of Radiology: 10 things physicians and patients should question. Choosing Wisely website. Available at <http://www.choosingwisely.org/societies/american-college-of-radiology/>. Accessed November 24, 2017.

IOM Institute of Medicine. *Best Care at Lower Cost: The Path to Continuously Learning Health Care in America*. 2013. Washington, DC: The National Academies Press..

CPM DEVELOPMENT TEAM

- Jonathan Anderson, Data Analyst
- Suzanne Carlile, MSN
- Denney Edgel, Data Analyst
- Mark R. Greenwood, MD, Program Medical Director
- Sharon Hamilton, Program Director
- Ken Schaecher, MD
- Tamara Sheffield, MD
- Steven Towner, MD
- Jeffrey Twitchell, MD
- Kathi Whitman, MA (Medical Writer)

► RESOURCES

Patient resources

Clinicians can order Intermountain patient education booklets and fact sheets for distribution to their patients from Intermountain’s Online Library and Print Store, iprintstore.org. Patient education resources referred to in this CPM include:

- *Coughs and Colds* patient education ([Adult English / Adult Spanish](#)) ([Pediatric English / Pediatric Spanish](#))
- *Depression* booklet ([English / Spanish](#))
- *Low Back Pain* fact sheet ([English / Spanish](#))
- *Preventive Care for Men: Your Plan* ([English / Spanish](#))
- *Preventive Care for Teens and Young Adults* ([English / Spanish](#))
- *Preventive Care for Women: Your Plan* ([English / Spanish](#))
- *Quitting Tobacco: Your Journey to Freedom* booklet ([English / Spanish](#))

Provider resources

To find this and other CPMs, flash cards, and other tools, clinicians can go to intermountainphysician.org/clinicalprograms, and select the relevant topic from the topic list on the right side of the screen.



Provider resources referred to in this CPM include:

Intermountain CPMs	
<ul style="list-style-type: none"> • Acute Cough: Bronchitis CPM • CT for Suspected PE CPM • Depression CPM • Diabetes Prevention Program CPM • Low Back Pain CPM • PE in Pregnancy CPM 	<ul style="list-style-type: none"> • Proven Imaging for Known or Suspected Coronary Artery Disease CPM • Proven Imaging for Suspected Pulmonary Embolism CPM • Sinusitis CPM (Adult and Pediatric versions) • Suicide Prevention CPM • Weight & Lifestyle Management CPM
Other Intermountain tools	Third-party resources
<ul style="list-style-type: none"> • Behavior Change Framework • C-SSRS Quick Screen • Intermountain Preventive Care Guidelines • Intermountain Preventive Care Screening Recommendations • Optimizing Cardiac Nuclear Stress Tests (PowerPoint) • PHQ-9 (PHQ-2 is first 2 questions) 	<ul style="list-style-type: none"> • ACC/AHA Criteria • CDC/ACIP Adult Immunization Schedule • CMS Quick Reference • FDA Orange Book: Approved Drug Products with Therapeutic Equivalence Evaluations • Quit for Life program (866-784-8454) • USPSTF recommendations • waytoquit.org

This CPM presents a model of best care based on the best available scientific evidence at the time of publication. It is not a prescription for every physician or every patient, nor does it replace clinical judgment. All statements, protocols, and recommendations herein are viewed as transitory and iterative. Although physicians are encouraged to follow the CPM to help focus on and measure quality, deviations are a means for discovering improvements in patient care and expanding the knowledge base. Send feedback to Mark Greenwood, MD, Intermountain Healthcare, Medical Director Primary Care Clinical Program. (MarkR.Greenwood@imail.org).