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Choosing Wisely: 10 practices to stop—or adopt—to reduce overuse in health care

The evidence-based recommendations presented here, made by the AAFP and other societies, can help you to avoid unnecessary testing and interventions.

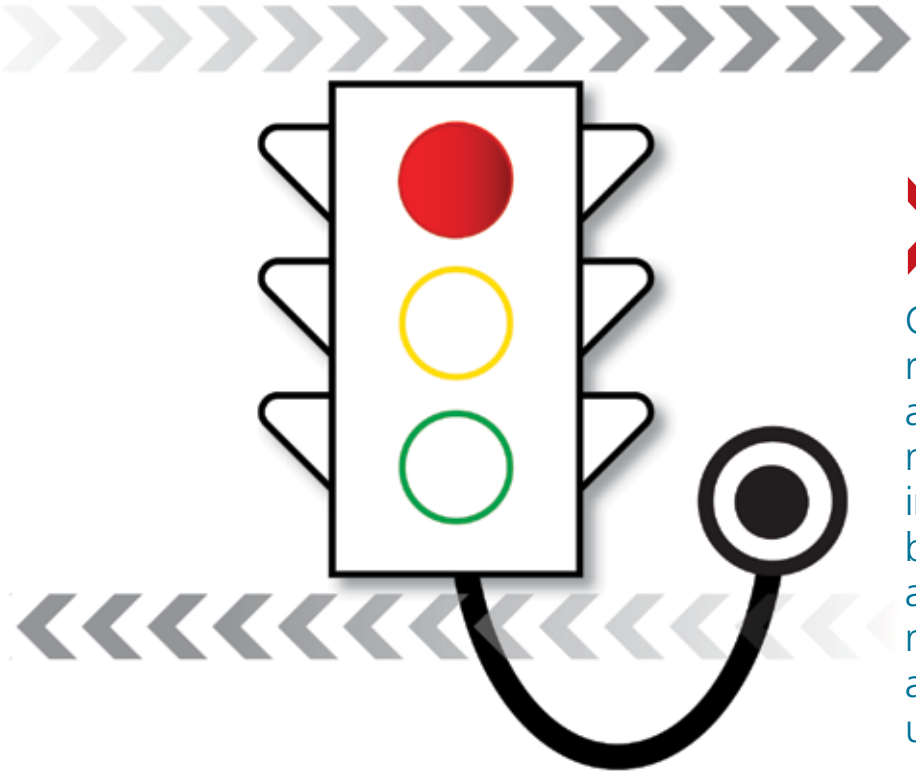
When medical care is based on consistent, good-quality evidence, most physicians adopt it. However, not all care is well supported by the literature and may, in fact, be overused without offering benefit to patients. Choosing Wisely, at www.choosingwisely.org, is a health care initiative that highlights screening and testing recommendations from specialty societies in an effort to encourage patients and clinicians to talk about how to make high-value, effective health care decisions and avoid overuse. (See "Test and Tx overutilization: A bigger problem than you might think"[1-3] on page 398).

Enabling physician and patient dialogue. The initiative began in 2010 when the American Board of Internal Medicine convened a panel of experts to identify low-value tests and therapies. Their list took the form of a "Top Five Things" that may not be high value in patient care, and it used language tailored to patients and physicians so that they could converse meaningfully. Physicians could use the evidence to make a clinical decision, and patients could feel empowered to ask informed questions about recommendations they received. The initiative has now expanded to include ways that health care systems can reduce low-value interventions.

Scope of participation. Since the first Choosing Wisely recommendations were published in 2013, more than 80 professional associations have contributed lists of their own. Professional societies participate voluntarily. The American Academy of Family Physicians (AAFP), Society of General Internal Medicine, and American Academy of Pediatrics (AAP) have contributed lists relevant to primary care. All Choosing Wisely recommendations can be searched or sorted by specialty organization. Recommendations are reviewed and revised regularly. If the evidence becomes conflicted or contradictory, recommendations are withdrawn.

Making meaningful improvements by Choosing Wisely

Several studies have shown that health care systems can implement Choosing Wisely recommendations to reduce overuse of unnecessary tests. A 2015 study examined the effect of applying a Choosing Wisely recommendation to reduce the use of continuous pulse oximetry in pediatric inpatients with asthma, wheezing, or bronchiolitis. The recommendation, from the Society of Hospital Medicine–Pediatric Hospital Medicine, advises against continuous pulse oximetry in children with acute respiratory illnesses unless the child is using supplemental oxygen.[4] This study, done at the Cincinnati Children's Hospital Medical Center, found that within 3 months of initiating a protocol on all general pediatrics floors, the average time on pulse oximetry after meeting clinical goals decreased from 10.7 hours to 3.1 hours. In addi-



Choosing Wisely recommendations are not guidelines or mandates. They are intended to be evidence-based advice from a specialty society to its members and to patients about care that is often unnecessary.

tion, the percentage of patients who had their continuous pulse oximetry stopped within 2 hours of clinical stability (a goal time) increased from 25% to 46%.[5]

Patients are important drivers of health care utilization. A 2003 study showed that physicians are more likely to order referrals, tests, and prescriptions when patients ask for them, and that nearly 1 in 4 patients did so.[6] A 2002 study found that physicians granted all but 3% of patient's requests for orders or tests, and that fulfilling requests correlated with patient satisfaction in the specialty office studied (cardiology) but not in the primary care (internal medicine) office.[7]

From its inception, Choosing Wisely has considered patients as full partners in conversations about health care utilization. Choosing Wisely partners with *Consumer Reports* to create and disseminate plain-language summaries of recommendations. Community groups and physician organizations have also participated in implementation efforts. In 2018, Choosing Wisely secured a grant to expand outreach to diverse or underserved communities.

Choosing Wisely recommendations are not guidelines or mandates. They are intended to be evidence-based advice from a specialty society to its members and to patients about care that is often unnecessary. The goal is to create a conversation and not to eliminate these services from ever being offered or used.

Improve your practice with these 10 primary care recommendations

1 Avoid imaging studies in early acute low back pain without red flags.

Both the AAFP and the American Society of Anesthesiologists recommend against routine X-rays, magnetic resonance imaging, and computed tomography (CT) scans in the first 6 weeks of acute low back pain (LBP).[8,9] The American College of Emergency Physicians (ACEP) recommends against routine lumbar spine imaging for emergency department (ED) patients.[10] In all cases, imaging is indicated if the patient has any signs or symptoms of neurologic deficits or other indications, such as signs of spinal infection or fracture. However, as ACEP notes, diagnostic imaging does not typically help identify the cause of acute LBP, and when it does, it does not reduce the time to symptom improvement.[10]

2 Prescribe oral contraceptives on the basis of a medical history and a blood pressure measurement. No routine pelvic exam or

other physical exam is necessary.

This AAFP recommendation[11] is based on clinical practice guidelines from the American College of Obstetricians and Gynecologists (ACOG) and other research.[12] The ACOG practice guideline supports provision of hormonal contraception without a pelvic exam, cervical cancer (Pap) testing, urine pregnancy testing, or testing for sexually transmitted infections. ACOG guidelines also support over-the-counter provision of hormonal contraceptives, including combined oral contraceptives.[12]

3 Stop recommending daily self-glucose monitoring for patients with diabetes who are not using insulin.

Both the AAFP and the Society for General Internal Medicine recommend against daily blood sugar checks for people who do not use insulin.[13,14] A Cochrane review of 9 trials (3300 patients) found that after 6 months, hemoglobin A1C was reduced by 0.3% in people who checked their sugar daily compared with those who did not, but this difference was not significant after a year.[15] Hypoglycemic episodes were more common in the "checking" group, and there were no differences in quality of life. A qualitative study found that blood sugar results had little impact on patients' motivation to change behavior.[16]

4 Don't screen for herpes simplex virus (HSV) infection in asymptomatic adults, even those who are pregnant.

This AAFP recommendation[17] comes from a US Preventive Services Task Force (USPSTF) Grade D recommendation.[18] Most people with positive HSV-2 serology have had an outbreak; even those who do not think they have had one will realize that they had the symptoms once they hear them described.[18] With available tests, 1 in 2 positive results for HSV-2 among asymptomatic people will be a false-positive.[18]

There is no known cure, intervention, or reduction in transmission for infected patients who do not have symptoms.[18] Also, serologically detected HSV-2 does not reliably predict genital herpes; and HSV-1 has been found to cause an increasing percentage of genital infection cases.[18]

5 Don't screen for testicular cancer in asymptomatic individuals.

This AAFP recommendation[19] also comes from a USPSTF Grade D recommendation.[20] A 2010 systematic review found no evidence to support screening of asymptomatic people with a physical exam or ultrasound. All available studies involved symptomatic patients.[20]

6 Stop recommending cough and cold medicines for children younger than 4 years.

The AAP recommends that clinicians discourage the use of any cough or cold medicine for children in this age-group.[21] A 2008 study found that more than 7000 children annually presented to EDs for adverse events from cough and cold medicines.[22] Previous studies found no benefit in reducing symptoms.[23] In children older than 12 months, a Cochrane review found that honey has a modest benefit for cough in single-night trials.[24]

7 Avoid performing serum allergy panels.

The American Academy of Allergy, Asthma, and Immunology discourages the use of serum panel testing when patients present with allergy symptoms.[25] A patient can have a strong positive immunoglobulin E (IgE) serum result to an allergen and have no clinical allergic symptoms or can have a weak positive serum result and a strong clinical reaction. Targeted skin or serum IgE testing—for example, testing for cashew allergy in a patient known to have had a reaction after eating one—is reasonable.[26]

8 Avoid routine electroencephalography (EEG), head CT, and carotid ultrasound as initial work-up for simple syncope in adults.

These recommendations, from the American

A 2006 analysis of inpatient lab studies found that doctors ordered an average of 2.96 studies per patient per day, but only 29% of these tests contributed to management.

Epilepsy Society,[27] ACEP,[28] American College of Physicians,[29] and American Academy of Neurology (AAN),[30] emphasize the low yield of routine work-ups for patients with simple syncope. The AAN notes that 40% of people will experience syncope during adulthood and most will not have carotid disease, which generally manifests with stroke-like symptoms rather than syncope. One study found that approximately 1 in 8 patients referred to an epilepsy clinic had neurocardiogenic syncope rather than epilepsy.[31]

EEGs have high false-negative and false-positive rates, and history-taking is a better tool with which to make a diagnosis. CT scans performed in the ED were found to contribute to the diagnosis of simple syncope in fewer than 2% of cases of syncope, compared with orthostatic blood pressure (25% of cases).[32]

Test and Tx overutilization: A bigger problem than you might think

Care that isn't backed up by the medical literature is adopted by some physicians and not adopted by others, leading to practice variations. Some variation is to be expected, since no 2 patients require exactly the same care, but substantial variations may be a clue to overuse.

A 2006 analysis of inpatient lab studies found that doctors ordered an average of 2.96 studies per patient per day, but only 29% of these tests (0.95 test/patient/day) contributed to management.[1] A 2016 systematic review found more than 800 studies on overuse were published in a single year.[2] One study of thyroid nodules followed almost 1000 patients with nodules as they underwent routine follow-up imaging. At the end of the study, 7 were found to have cancer, but of those, only 3 had enlarging or changing nodules that would have been detected with the follow-up imaging being studied. Three of the cancers were stable in size and 1 was found incidentally.[3]

9 Wait to refer children with umbilical hernias to pediatric surgery until they are 4 to 5 years of age.

The AAP Section on Surgery offers evidence that the risk-benefit analysis strongly favors waiting on intervention.[33] About 1 in 4 children will have an umbilical hernia, and about 85% of cases will resolve by age 5. The strangulation rate with umbilical hernias is very low, and although the risk of infection with surgery is likewise low, the risk of recurrence following surgery before the age of 4 is as high as 2.4%.[34] The AAP Section on Surgery recommends against strapping or restraining the hernia, as well.

10 Avoid using appetite stimulants, such as megesterol, and high-calorie nutritional supplements to treat anorexia and cachexia in older adults.

Instead, the American Geriatrics Society recommends that physicians encourage caregivers to serve appealing food, provide support with eating, and remove barriers to appetite and nutrition.[35] A Cochrane review showed that high-calorie supplements, such as Boost or Ensure, are associated with very modest weight gain—about 2% of weight—but are not associated with an increased life expectancy or improved quality of life.[36]

Prescription appetite stimulants are associated with adverse effects and yield inconsistent benefits in older adults. Megesterol, for example, was associated with headache, gastrointestinal adverse effects, insomnia, weakness, and fatigue. Mirtazapine is associated with sedation and fatigue.[37] JFP

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