

Family Medicine Updates



Ann Fam Med 2013;577-578. doi:10.1370/afm.1598.

AAFP RELEASES THIRD LIST OF TESTS, PROCEDURES PATIENTS, PHYSICIANS SHOULD QUESTION

The AAFP released its third list of Choosing Wisely recommendations September 24 during the 2013 Scientific Assembly, with the latest list focusing on issues such as routine prostate-specific antigen (PSA)-based screening and physical examinations tied to prescribing oral contraceptive medications.

An original member of the ongoing American Board of Internal Medicine Foundation effort to help physicians curtail the practice of ordering unnecessary tests and procedures, the AAFP now has issued a total of 15 recommendations on procedures or tests that physicians and patients should question.

The Academy is the only organization to have released a list in all 3 phases of the Choosing Wisely project, underscoring family physicians' long-term commitment to ensuring high-quality, cost-effective care for patients, according to (then) AAFP President-elect Reid Blackwelder, MD, of Kingsport, Tennessee.

"As primary care specialists, family physicians are the frontline providers for millions of Americans—so we have a duty to make sure our members are doing everything they can to provide the right care, for the right patient, at the right time," said Blackwelder. "In today's health care environment, it is increasingly important to ensure that physicians are delivering the most effective, beneficial care possible. These Choosing Wisely lists can help our members identify treatments and procedures that may be unnecessary or duplicative."

The Academy created its latest Choosing Wisely list of clinical recommendations via the AAFP Commission on Health of the Public and Science, which evaluated and approved each item using sources such as reviews from the Cochrane Collaboration and evidence reports from the Agency for Healthcare Research and Quality.

The most recent list adds the following 5 recommendations:

Don't Routinely Screen for Prostate Cancer Using a PSA Test or Digital Rectal Exam

There is convincing evidence that PSA-based screening leads to substantial over diagnosis of prostate tumors. Many tumors will not harm patients, while the risks of treatment are significant. Physicians should not offer or order PSA screening unless they are prepared to engage in shared decision making that enables an informed choice by patients.

Don't Require a Pelvic Exam or Other Physical Exam to Prescribe Oral Contraceptive Medications

Hormonal contraceptives are safe, effective, and well tolerated for most women. Data do not support the necessity of performing a pelvic or breast examination to prescribe oral contraceptive medications. Hormonal contraception can be safely provided on the basis of medical history and blood pressure measurement.

Don't Prescribe Antibiotics for Otitis Media in Children Aged 2 to 12 Years With Non-Severe Symptoms Where the Observation Option is Reasonable

The "observation option" refers to deferring antibacterial treatment of selected children for 48 to 72 hours and limiting management to symptomatic relief. The decision to observe or treat is based on the child's age, diagnostic certainty, and illness severity. To observe a child without initial antibacterial therapy it is important that the parent or caregiver has a ready means of communicating with the clinician. There also must be a system in place that permits reevaluation of the child.

Don't Perform Voiding Cystourethrogram Routinely in 1st Febrile Urinary Tract Infection (UTI) in Children Aged 2 to 24 Months

The risks associated with radiation (plus the discomfort and expense of the procedure) outweigh the risk of delaying the detection of the few children with correctable genitourinary abnormalities until their second UTI.

Don't Screen Adolescents for Scoliosis

There is no good evidence that screening asymptomatic adolescents detects idiopathic scoliosis at an earlier stage than detection without screening. The potential harms of screening and treating adolescents include unnecessary follow-up visits and evaluations due to false positive test results and psychological adverse effects.

"These recommendations demonstrate the ability of our Academy and others to look at evidence that may go against some of the established perceptions out there," Blackwelder said. "And while they are obviously not absolutes, owing to the fact that we treat individual patients, they are good evidence-based guidelines."

"For PSA screening in men without symptoms, the data is extremely clear that the test provides very little benefit for patients, along with a significant risk of harm from the diagnostic procedures and the treatments that are performed," he said. "Similarly, in terms of oral contraceptives to women, the data is very clear that unwanted pregnancy carries a much higher risk than the use of these various medications, as well as the fact that pelvic exams and other evaluations are really not necessary before prescribing."

To date, more than 50 medical specialty organizations have joined the effort, identifying a list of more than 160 tests and procedures physicians and their patients should question. Other lists will be released throughout 2013 and 2014.

Matt Brown
AAFP News Now



**From the American
Board of Family Medicine**

Ann Fam Med 2013;578-579. doi:10.1370/afm.1587.

THE ABFM BEGINS TO USE DIFFERENTIAL ITEM FUNCTIONING

The American Board of Family Medicine (ABFM) believes that it is important to have evidence to show that the pass-fail decisions related to its examinations are based upon accurately determining the minimum knowledge necessary to be a board certified family physician, and furthermore, that these decisions are unbiased against any particular subset of the population. Accordingly, as part of the ABFM's commitment to continuously improve the Maintenance of Certification for Family Physicians (MC-FP) process, the ABFM has started using differential item functioning (DIF) procedures to detect potentially biased items on its examinations. Although gender information has been collected for some time from examination applicants, we began collecting ethnicity data for applicants taking the MC-FP exam this past spring so that we could begin to conduct these analyses.

DIF procedures are based upon the idea that a test item is biased if individuals from different subpopulations, who are of equal ability, do not have the same probability of answering it correctly.^{1,2} Although pass rates are an indicator of whether a particular subpopulation is performing at a level comparable to the other subpopulations, it is silent with regard to whether the meaning of the scores is stable across subpopulations. These differences could be due to bias in the items that would effectively destabilize the construct.³ By this we mean that the items, when ordered by their difficulty, form a linear construct of less to more. If some items are more difficult or less difficult relative to the other items for a specific subpopulation, then the construct represented by the test is degraded to the extent that the items are disordered for that subpopulation. On the other hand, the hierarchical construct represented by the test could be very stable and the difference in pass rates could be due to differences of socioeconomic status and the potential associated inequities inherent in the educational system. DIF analysis permits us to disentangle item level bias from differences in ability among subpopulations.

The process of calibrating test questions with regard to their difficulty, both for samples from a subpopulation and from the overall population, is probabilistic. Therefore, this type of DIF study is best used as a screening tool to find biased items. It does not prove that the items are biased. The ABFM DIF process can be viewed as having 3 stages: (1) flagging potentially biased items, (2) examining the flagged questions' content for sources of bias, and (3) determining their final disposition.

Flagging Items

The particular method of DIF detection used by the ABFM is based on the dichotomous Rasch model.⁴⁻⁶ Using this method, the items are calibrated twice, first using only responses from members of the reference group and next using only responses from members of the focal group. Because the largest self-reported ethnicity among ABFM diplomates is white, the ethnicity reference group is considered to be white and the focal groups are the other ethnicity categories. Using this same reasoning, the reference group for gender is male and the focal group is female. Although the fine tuning of this method to meet the needs of ABFM is still being developed, the process will largely reflect the procedure described below.

For each item, the 2 calibrations are compared. If the 2 calibrations fall outside of the 95% confidence interval for their mean, then the item is flagged as potentially biased. Please note that the potential bias could be to the advantage or the disadvantage of the focal group. Also, when using this flagging criterion,