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An Official American Thoracic Society/American College of Chest Physicians Policy Statement

The Choosing Wisely Top Five List in Adult Pulmonary Medicine

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The American Board of Internal Medicine Foundation's Choosing Wisely campaign aims to curb health-care costs and improve patient care by soliciting lists from medical societies of the top five tests or treatments in their specialty that are used too frequently and inappropriately. The American Thoracic Society (ATS) and American College of Chest Physicians created a joint task force, which produced a top five list for adult pulmonary medicine. Our top five recommendations, which were approved by the executive committees of the ATS and American College of Chest Physicians and published by Choosing Wisely in October 2013, are as follows: (1) Do not perform CT scan surveillance for evaluation of indeterminate pulmonary nodules at more frequent intervals or for a longer period of time than recommended by established guidelines; (2) do not routinely offer pharmacologic treatment with advanced vasoactive agents approved only for the management of pulmonary arterial hypertension to patients with pulmonary hypertension resulting from left heart disease or hypoxemic lung diseases (groups II or III pulmonary hypertension); (3) for patients recently discharged on supplemental home oxygen following hospitalization for an acute illness, do not renew the prescription without assessing the patient for ongoing hypoxemia; (4) do not perform chest CT angiography to evaluate for possible pulmonary embolism in patients with a low clinical probability and negative results of a highly sensitive D-dimer assay; (5) do not perform CT scan screening for lung cancer among patients at low risk for lung cancer. We hope pulmonologists will use these recommendations to stimulate frank discussions with patients about when these tests and treatments are indicated—and when they are not.

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Abbreviations: ATS = American Thoracic Society; NLST = National Lung Screening Trial; PE = pulmonary embolism

The United States spends more per capita on health care than any other developed nation.[1] Although spending more money yields health benefits in some contexts, the United States has crossed onto the "flat of the curve," in which spending more does not improve health.[2] Research on geographic variations in health-care spending has shown that spending more money, doing more testing, and providing more expensive treatments does not consistently yield better outcomes.[3] In fact, in many cases, overtesting and overtreatment can cause harm, as patients are exposed to radiation from extraneous imaging, physical complications from invasive procedures that are not clearly indicated, and adverse effects from unwarranted medications.[4]

Physicians have professional obligations to both their individual patients and to society.[5] As such, it is incumbent upon physicians to help rein in the use of tests and treatments that offer little benefit, may cause harm, and add considerable expense. The question is, where to begin? It can be difficult for busy clinicians to stay up-to-date on the latest evidence on the benefits and harms of all tests and treatments in their field, and

very few clinicians are fully cognizant of the costs associated with the care they provide.[6,7] For these reasons, in 2010, Howard Brody,[8] MD, PhD, challenged medical societies to compile evidence-based lists of the top five tests or treatments in their specialty that are commonly used at great expense, but that provide little benefit.

The American Board of Internal Medicine Foundation (ABIM) took the next step to make Dr Brody's vision a reality, initiating the Choosing Wisely campaign.[9] Choosing Wisely strives "to reduce overuse of tests and procedures and support physician efforts to help patients make smart and effective choices."[10] To date, >50 societies have partnered with Choosing Wisely to create top five lists. The American College of Chest Physicians and American Thoracic Society (ATS) joined forces to produce the top five list for adult pulmonary medicine.

Materials and Methods

To promote consistency with other Choosing Wisely lists, the ATS and American College of Chest Physicians agreed prospectively that this document would not be developed in accordance with the methodologic standards of the Institute of Medicine, ATS, or American College of Chest Physicians for clinical practice guidelines, but would reflect a consensus from a joint ATS/American College of Chest Physicians task force.

In September 2012, the leaderships of the ATS and American College of Chest Physicians each nominated up to five members to join the task force. The final task force included eight pulmonologists (this statement's authors). Task force members were selected to provide expertise in a broad range of areas within adult pulmonary medicine and included representatives from geographically diverse areas with experience in university hospitals, Veterans Health Administration medical centers, community-based integrated health-care systems, private practice, specialty services benefits management, and health-care administration.

During an initial meeting, we established the goals and ground rules guiding our task force. We agreed upon the following criteria for assessing potential items for inclusion in the top five list: (1) strength of evidence (how sure are we that our suggestion is correct?); (2) prevalence (how commonly do we think this issue arises?); (3) aggregate cost (how large are the anticipated cost savings if this suggestion is adhered to?); (4) relevance (to what extent is this a "core" or "unique" part of our profession, as opposed to an ancillary activity or part of good practice more generally?); (5) innovation (how much does this suggestion "move the needle" rather than recapitulate known best practices?).

Task force members then submitted suggested items to the task force lead (R. S. W.). Members derived items from multiple sources, including the literature, review of existing Choosing Wisely top five lists, feedback from community pulmonologists, and personal experience. The task force lead collated items, removed duplicates, and circulated the initial list of 30 unique items to the task force.

During the next meeting, we discussed each of these 30 items, debated the impact of each based on the five assessment criteria, and reached consensus on 10 items to explore in greater depth (Table 1). Working together with the task force lead, each task force member refined the wording of one to two items and an accompanying paragraph explaining the rationale for its inclusion. In doing so, the member synthesized the published literature relevant to the recommendation(s) and consulted with one to two content experts external to the task force (see the Acknowledgments section) to ensure the recommendation's appropriateness. Task force members then returned their refined item(s) to the task force lead with a list of supporting references. The lead compiled and distributed the list of 10 items and accompanying materials to the entire task force.

At our next meeting, we carefully reviewed all 10 proposed items. For each item, the designated member presented information relevant to the five assessment criteria, while others raised questions to clarify the intent, supporting evidence, impact, or relevance of the recommendation. After all views were heard, members independently rated each item on its overall impact as well as on each criterion. We agreed that the overall rating need not be an average of the criteria ratings, thereby enabling members to weigh certain criteria more heavily.

Task force members submitted their scores to the lead, who averaged members' scores and ranked the items based on their mean overall score. The five items with the best overall scores were retained in a "penultimate" list. The task force jointly edited the five recommendations and accompanying paragraphs to ensure clarity prior to submitting the list to the ATS and American College of Chest Physicians executive committees.

The executive committees sought feedback from additional content experts, discussed the items internally, and provided written comments on each item to the task force. The task force incorporated these suggestions; when nuances were disputed, we held discussions with the societies' leaderships to resolve disagreements, resulting in mutually agreeable wording changes.

The final list was then submitted to both societies' executive committees. Both the ATS and American College of Chest Physicians elected to endorse the final top five list. The joint ATS/American College of Chest Physicians top five list in adult pulmonary medicine was released by the Choosing Wisely campaign in October 2013.[10]

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