

Pulmonologists' Reported Use of Guidelines and Shared Decision-making in Evaluation of Pulmonary Nodules

A Qualitative Study

Renda Soylemez Wiener, MD, MPH; Christopher G. Slatore, MD; Chris Gillespie, PhD;
and Jack A. Clark, PhD



BACKGROUND: Selecting a strategy (surveillance, biopsy, resection) for pulmonary nodule evaluation can be complex given the absence of high-quality data comparing strategies and the important tradeoffs among strategies. Guidelines recommend a three-step approach: (1) assess the likelihood of malignancy, (2) evaluate whether the patient is a candidate for invasive intervention, and (3) elicit the patient's preferences and engage in shared decision-making. We sought to characterize how pulmonologists select a pulmonary nodule evaluation strategy and the extent to which they report following the guideline-recommended approach.

METHODS: We conducted semistructured qualitative interviews with 14 pulmonologists who manage patients with pulmonary nodules at four clinical sites. Transcripts of audiorecorded interviews were analyzed using the principles of grounded theory.

RESULTS: Pulmonologists reported consistently performing steps 1 and 2 but described diverse approaches to step 3 that ranged from always engaging the patient in decision-making to never doing so. Many described incorporating patients' preferences only in particular circumstances, such as when the patient appeared particularly anxious or was aggressive in questioning management options. Indeed, other factors, including convenience, physician preferences, physician anxiety, malpractice concerns, and physician experience, appeared to drive decision-making as much as, if not more than, patient preferences.

CONCLUSIONS: Although pulmonologists appear to routinely personalize pulmonary nodule evaluation strategies based on the individual patient's risk-benefit tradeoffs, they may not consistently take patient preferences into account during the decision-making process. In the absence of high-quality evidence regarding the optimal methods of pulmonary nodule evaluation, physicians should strive to ensure that management decisions are consistent with patients' values.

CHEST 2015; 148(6):1415-1421

Manuscript received November 24, 2014; revision accepted February 25, 2015; originally published Online First March 19, 2015.

AFFILIATIONS: From the Center for Healthcare Organization and Implementation Research (Drs Wiener, Gillespie, and Clark), Edith Nourse Rogers Memorial VA Hospital, Bedford, MA; the Pulmonary Center (Dr Wiener) and the Department of Health Policy and Management (Dr Clark), Boston University School of Public Health, Boston, MA; Health Services Research and Development (Dr Slatore), and the Section of Pulmonary and Critical Care Medicine (Dr Slatore), VA Portland Health Care System, Portland, OR; and the Division of Pulmonary and Critical Care Medicine (Dr Slatore), Department of Medicine, Oregon Health and Science University, Portland, OR.

FUNDING/SUPPORT: This study was supported by the National Cancer Institute [K07 CA138772 to Dr Wiener] and by a Veterans Health Administration Office of Health Services Research and Development Career Development Award [CDP 11-227 to Dr Slatore]. This study was also supported by resources from the Edith Nourse Rogers Memorial VA Hospital, Bedford, MA, and the Portland VA Medical Center, Portland, OR.

CORRESPONDENCE TO: Renda Soylemez Wiener, MD, MPH, Pulmonary Center, Boston University School of Medicine, 72 E Concord St, R-304, Boston, MA 02118; e-mail: rwiener@bu.edu

© 2015 AMERICAN COLLEGE OF CHEST PHYSICIANS. Reproduction of this article is prohibited without written permission from the American College of Chest Physicians. See online for more details.

DOI: 10.1378/chest.14-2941

With the rising use of CT scanning,¹ pulmonary nodules are being detected increasingly, and more will be found as low-dose CT screening for lung cancer becomes prevalent. It is important to evaluate pulmonary nodules to identify those that represent lung cancer. However, evaluation involves important trade-offs: avoiding the harms of underevaluation (delay in diagnosis and treatment of lung cancer) and over-evaluation (excessive radiation, physical complications of invasive procedures). Moreover, no high-quality studies have compared nodule evaluation strategies, contributing to uncertainty regarding optimal management.

Fortunately, guidelines exist to help physicians choose the most appropriate evaluation strategy for an individual patient.^{2,3} Acknowledging the tradeoffs inherent to nodule evaluation and the limitations of the evidence, the American College of Chest Physicians (CHEST) guidelines suggest a three-step process to selecting a

pulmonary nodule evaluation strategy: (1) assess likelihood of cancer, (2) assess candidacy for invasive testing, and (3) incorporate patient preferences and engage in shared decision-making.² However, physician surveys

FOR EDITORIAL COMMENT SEE PAGE 1365
SEE RELATED ARTICLES PAGES 1405 AND 1422

and studies of practice patterns suggest tremendous variation in nodule evaluation, with frequent deviation from the guideline recommendations.⁴⁻⁸ The reasons for this variation are unclear.

Using qualitative interviews, we explored how pulmonologists approach decision-making for pulmonary nodule evaluation. We analyzed how closely pulmonologists reported that they adhered to the steps recommended in the CHEST guidelines and identified other factors pulmonologists consider in decisions surrounding pulmonary nodule evaluation.

Materials and Methods

We conducted semistructured interviews with 14 pulmonologists at four sites affiliated with two academic centers. Pulmonologists were invited by e-mail to participate. All participants provided informed consent, per the approved institutional review board protocols (Boston University Medical Campus H-31643; Portland VAMC 2630).

Interviews probed how physicians choose a strategy for nodule evaluation, how they discuss options with patients, their views of patients' risk perception and distress related to the nodule, and how they manage patients' concerns. Interviews were conducted by R. S. W. or

C. G. S. (both pulmonologists), digitally recorded, and transcribed verbatim.

We performed a qualitative analysis of the transcripts, facilitated by Atlas.ti software (ATLAS.ti GmbH). Members of the study team (R. S. W., C. G., J. A. C.) independently performed close readings of the transcripts and collaboratively developed a coding scheme that arose from both open coding of emergent themes using principles of grounded theory⁹ and application of prespecified categories (ie, adherence to guideline steps). We systematically attached codes to relevant text segments, discussing coded segments as a group to achieve consensus, and iteratively extracted coded segments for comparison among interviews.

Results

The pulmonologists we interviewed represented a broad range of experience. One-half were attending physicians, with as many as 28 (mean, 6) years of practice in pulmonary medicine (Table 1). The remainder were pulmonary fellows.

Guidelines and Their Limitations as Drivers of Decision-making

Although some pulmonologists acknowledged the limitations of the guidelines ("I don't find the guidelines all that satisfying" [P10]) and the evidence underlying them ("We don't have great data to support this" [P3]), almost all participants referenced the guidelines as the driving force behind their choice of nodule evaluation strategy ("You feel obligated to follow the guidelines" [P6]). Some explicitly mentioned the three steps recommended in the guidelines: "What determines [evaluation] is how

concerned I am [about cancer], what the patient wants, and what the patient can tolerate" (P9).

Guideline Step 1: Assess Risk of Malignancy

All participants reported assessing the risk of malignancy as a critical early step in selecting an evaluation strategy. Pulmonologists considered a variety of risk factors (Table 2).

Guideline Step 2: Assess Ability to Tolerate Invasive Procedures

Many pulmonologists also referenced the second step in the algorithm proposed by the guidelines: assessing whether the patient could tolerate an invasive procedure such as biopsy or resection of the nodule. For example, one pulmonologist summarized these considerations: "the patient's underlying condition...do they have bad emphysema?...Are they likely to tolerate a procedure, are they likely to tolerate a resection?" (P6).

Download English Version:

<https://daneshyari.com/en/article/5953546>

Download Persian Version:

<https://daneshyari.com/article/5953546>

[Daneshyari.com](https://daneshyari.com)