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Decision making among Veterans with incidental pulmonary nodules: A qualitative analysis

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Pulmonary nodule;
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Summary
Purpose: Among patients undergoing lung cancer evaluation for newly diagnosed, incidental pulmonary nodules, it is important to evaluate the shared power and responsibility domain of patient-centered communication. We explored Veterans' perceptions of decision making with regards to an incidentally-detected pulmonary nodule.
Methods: We conducted semi-structured, qualitative interviews of 19 Veterans from one medical center with incidentally-detected pulmonary nodules that were judged as having a low risk for malignancy. We used qualitative description for the analysis, focusing on patients' perceptions of shared decision making with their primary care provider (PCP). Interviews were conducted in 2011 and 2012.
Results: Patients almost always played a passive role in deciding how and when to evaluate their pulmonary nodule for the possibility of malignancy. Some patients felt comfortable with this role, expressing trust that their clinician would provide the appropriate care. Other patients were not satisfied with how these decisions were made with some expressing concern

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that no decisions had actually occurred. Regardless of how satisfied they were with the decision, patients did not report discussing how they liked to make decisions with their PCP.
Conclusions: Veterans in our study did not engage in shared decision making with their clinician. Some were satisfied with this approach although many would have preferred a shared approach. In order to reduce patient distress and improve satisfaction, clinicians may want to consider adopting a shared approach when making decisions about pulmonary nodule evaluation.
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Introduction

Patients are commonly diagnosed with incidental pulmonary nodules [1—3], caused in part by the widespread and increasing use of computed tomography (CT) [4—7]. While the American Academy of Family Physicians (AAFP) recently concluded there was insufficient evidence to recommend for or against lung cancer screening [8], most organizations, including the United States Preventive Services Task Force, now recommend low dose CT for lung cancer screening [9—14]. If screening is widely adopted, many more patients will be diagnosed with pulmonary nodules. Indeed, the National Lung Screening Trial (NLST), on which these recommendations are largely based, reported that 39% of participants were identified with findings initially suspicious for lung cancer, usually a pulmonary nodule [15]. Because 96% of these findings were falsely positive, many patients were exposed to potential complications and psychosocial risks from the procedures used to diagnose benign disease. Notably, this potential for risk was cited by the AAFP as a reason they did not recommend lung cancer screening.

There are usually three decisions that occur after detection of a small pulmonary nodule [16]. The first decision is how to best determine the cause of the nodule through either further imaging surveillance (usually CT), more advanced imaging such as positron emitted tomography (PET), or invasive procedures such as a biopsy or surgical resection. Clinical guidelines recommend that most patients with nodules smaller than 9 mm undergo CT imaging surveillance [17—19] and then the second decision is to determine what time interval to obtain a follow-up scan. Third, for patients who are current or former smokers, a decision regarding smoking behaviors is recommended as it is felt nodule detection may be an important teachable moment [20,21].

It is widely advocated, though based on very limited evidence, that clinicians use a shared approach when making decisions with their patients and the American College of Chest Physicians recommends shared decision-making for patients with pulmonary nodules [9,16,22—26]. Shared decision making is an important component of patient-centered communication [27,28] whose core elements include: define/explain the healthcare problem, present reasonable or expected options, discuss pros/cons, clarify patient values/preferences, discuss patient ability/self-efficacy, present what is known and make recommendations, check/clarify the patient's understanding, make or explicitly defer a decision, and arrange follow-up [29]. Recent systematic reviews among patients from multiple settings found that a majority preferred a shared role in the decision making process [30,31]. There is some concern that patients who engage in shared decision making will make unwise decisions or that they will not follow guidelines but the evidence, albeit limited, suggests otherwise [32—35].

Guided by a theoretical model of patient-centered communication [27,36] (Fig. 1), we previously reported qualitative results from a cohort of Veterans with incidentally-detected pulmonary nodules. That report focused on the biopsychosocial, patient as person, and therapeutic alliance domains which showed that patients had inadequate knowledge of their nodule and little opportunity to engage their clinician regarding their emotional reaction to this diagnosis [37]. As the next step to a better understanding of the communication process, we sought to evaluate the shared power and responsibility domain.

Methods

Overview and setting

Veterans at the Portland Veterans Affairs Medical Center (PVAMC), an academic-affiliated referral hospital with multiple affiliated primary care clinics, who were identified with an incidentally detected pulmonary nodule or nodules, were eligible. We recruited participants from April, 2011 through May 2012. At the PVAMC, thoracic radiology imaging results from Veterans with unsuspected radiologic findings (usually pulmonary nodules) are electronically flagged by the radiologist who reviews the image(s) [3]. The primary care provider (PCP) is responsible for notifying the patient and determining the evaluation for the participants in our study.

The electronic medical records (EMR) from patients with pulmonary nodules who had been flagged by the interpreting radiologist were reviewed. Patients with a low risk of lung cancer, as determined by the nodule size and the treating clinician's plan to obtain non-urgent imaging follow-up in the future, were considered potentially eligible. Nodules were identified incidentally as part of routine care, not screening. Patients meeting these criteria were then invited to participate by mail after receiving approval from the PCP and, if relevant, their mental health provider. Of Veterans sent a recruitment letter, 34%