### **Supplemental materials for:**

Nunez ER, Bolton RE, Boudreau JH, et al. "It can't hurt!": why many patients with limited life expectancy decide to accept lung cancer screening. *Ann Fam Med*. 2024;22(2):95-102.

#### **Supplemental Appendix**

#### **Semistructured Patient Interview Guide**

- 1. Can you start by telling me a little bit about yourself and the care you receive at VA?
  - a. How long have you been getting care at the VA?
  - b. What types of providers do you see?
- 2. Can you tell me a little bit about your health?
  - a. What health concerns are you currently facing?
  - b. How does your health impact your day-to-day life?
  - c. In general, do you tend to use the doctor a lot for your health problems, or a little? To what extent do you pursue treatment for your health problems? (*probe for how aggressive they are with managing their health*)
- 3. The VA routinely screens patients for various conditions including cancer. To what extent have you undergone any screenings for cancer? (probe for types of screenings, when, outcomes. If they don't mention lung cancer screening, probe for this specifically)
  - a. How do you decide whether or not to get screened for cancers?
    To what extent have you been involved in deciding whether to get cancer screening or not?
  - b. What is most important to you in making decisions about whether to undergo cancer screening? (*probe for detection, treatment, potential to extend life, invasiveness, etc*)
  - c. Are there instances in which you would not want to pursue cancer screening?
  - d. Are there instances in which you might consider screening to be an unnecessary test?
- 4. We are interested in learning more about patients' decisions and experiences of undergoing screening for lung cancer specifically. To what extent are you worried about developing lung cancer?
  - a. To what extent do you think you are at risk for lung cancer? (probe for smoking history, asbestos, military exposures, family history, etc)
  - b. How worried are you about lung cancer in comparison to your other health problems?
  - c. What do you see as the potential benefits of getting screened for lung cancer? Potential risks/harms of getting screened?
  - d. If it were up to you, how would you balance the benefits and risks in making a decision about whether to get screened or not?
- 5. I'd like to know more about the conversations you've had with your doctors or others in the VA about lung cancer screening. Who have you talked to in the VA about lung cancer screening?
  - a. <u>Can you describe that conversation?</u> How did the topic of lung cancer screening come up? What pros and cons of screening did your provider discuss with you?
  - b. What information did your provider share with you? How helpful was this information? Were there pieces of information that were most helpful? Not helpful?
  - c. What guestions did your doctor have for you?
  - d. What questions did you have for your doctor? Were you able to ask your questions? Were your questions answered? Are there things you would still like to know?
  - e. Did your doctor review any paper materials or websites with you when you discussed lung cancer screening? To what extent was that helpful? Did the doctor give you **any materials** to review on your own? Tell me more about that (*probe for timing, content, usefulness*). If you did not have a chance to review any materials, do you think that would have been helpful to you?

- 6. Based on the conversations you had with your doctor about lung cancer screening, what decision was made about whether to pursue screening? Who made that decision? To what extent did that decision align with what you wanted?
  - a. For decisions to screen: Did the screening process match your expectations of how you thought it would go? Do you have any regrets? Is there anything else that you wish your doctor had told you about screening?
  - b. For decisions <u>not to screen</u>: To what extent are you still comfortable with that decision? Do you have any regrets? Is there anything else that you wish your doctor had told you about screening?
- 7. Now, imagine that your health is so poor that you don't have long to live. In such a situation, screening for lung cancer might have little benefit for you. To what extent would you want your provider to consider screening you for lung cancer? How would you want your provider to talk to you about that, if at all?
- 8. What recommendations would you have for how the VA can improve discussions about lung cancer screening for patients like yourself?
- 9. Is there anything else that we haven't talked about today that you think would be important for me to know?

#### Supplemental Figure. Overarching conceptual framework guiding study development.

### **Local Clinical Setting**

- Local norms, practice patterns about LCS
- LCS program policies

- Dedicated resources, time to discuss LCS
- LCS quality measures

### Clinician

- Personal attitudes about LCS
- Expected LCS outcomes
- Guideline awareness
  Skills: prognostication, risk communication, sharing decisions
  - Autonomy
  - Implicit bias

## **Patient**

- Overall health goals
- Trust in clinician
- Screening beliefs
- Values about LCS benefits & harms
- Perceived health and symptoms
- Anticipated regret, fear of cancer

# **Decision whether to undergo LCS**

Note: Factors that influenced LCS decision making are <u>underlined</u>, and factors that were not influential are *italicized* based on findings from our qualitative analysis with patient participants. Of note, patients were not probed regarding clinician and local clinical setting factors. Circumstantial and logistical considerations, which were not in our conceptual model, emerged as a key influence on patient decision making in the analysis.

Patient-level factors screening beliefs and values about LCS benefits are captured in the Results section titled Perceptions of LCS: "It's Better to Know"