

Moving Toward Shared Decision Making for Lung Cancer Screening

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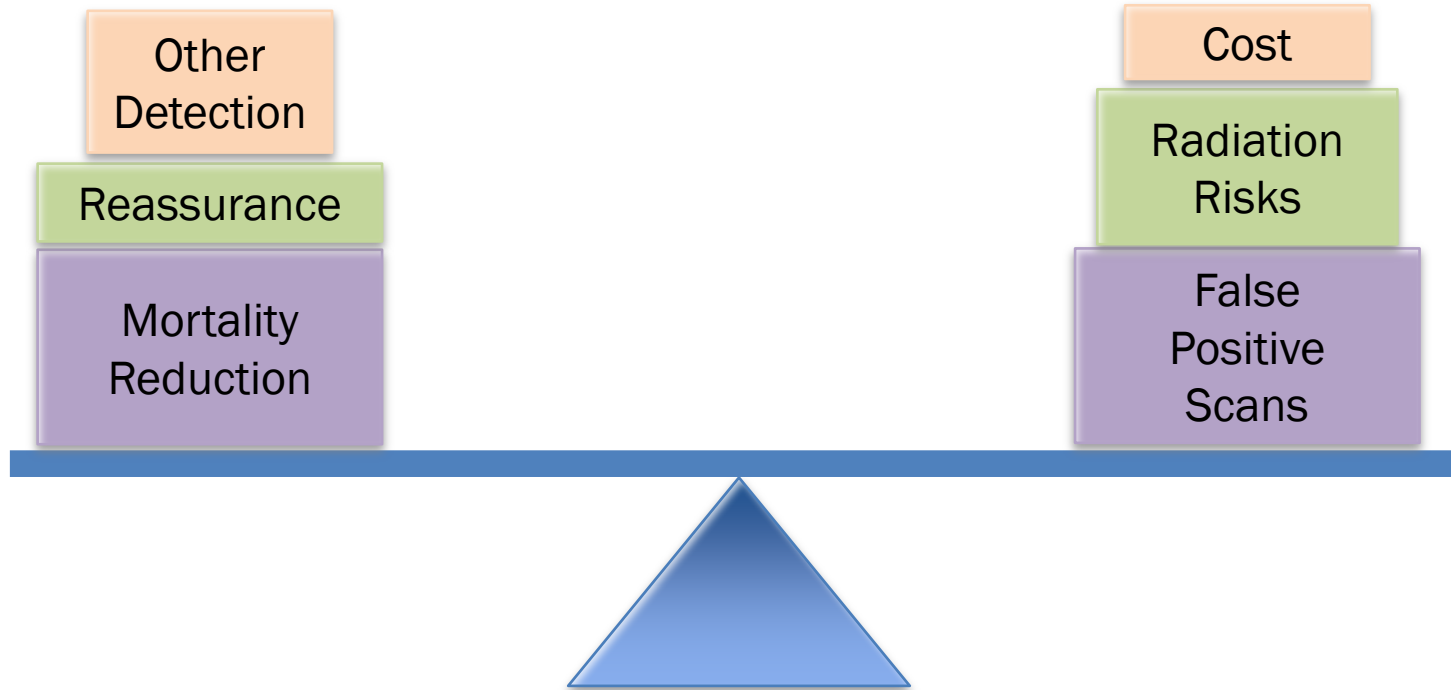
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Overview

- Distinguishing Lung Cancer Screening from Other Established Cancer Screening Programs
- The Role of Shared Decision Making in Lung Cancer Screening
- The Impact of Provider Education Regarding Lung Cancer Screening

The novelty and complexity of LCS decisions make LCS choices a unique clinical venture.



If you build it, they will come...



**Baseball in cornfields... yes;
Lung cancer screening... not so much.**

Lung cancer screening needs to be implemented differently than other cancer screenings.

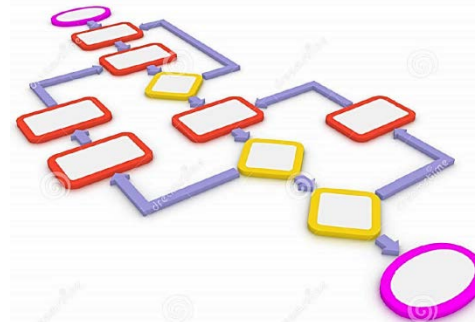


- CONTINUE to provide responsible and timely information on lung screening and research advancements to the public.
- NATIONAL FRAMEWORK FOR EXCELLENCE IN LUNG CANCER SCREENING AND CONTINUUM OF CARE
 - Lung Cancer Alliance

Lung cancer screening needs to be implemented differently than other cancer screenings.



Screening as
Guideline Compliance
vs. a Personal Choice



Screening as
an Event vs.
an Algorithm

At least 3 reasons why lung cancer screening should be different.

- ① The risk benefit profile is enhanced on both sides, creating greater decision making burden.
- ② The eligibility criteria are targeted (not population-based), and the target population might be considered vulnerable.
- ③ There are some factors that aren't that different, but we don't do them well now—lung cancer screening is a chance to re-design and re-implement cancer screening
 - ◆ Screening is a process/algorithm, not an event
 - ◆ Screening is a patient choice, not a mandate
 - ◆ Screening has harms that are meaningful to some (not all) individuals

Shared Decision Making (SDM) is the recommended approach for providers to discuss lung cancer screening (LCS) with patients at high risk for lung cancer.



The USPSTF Final Guideline for LCS specifically endorses SDM.

Shared Decision Making

“The decision to begin screening should be the result of a thorough discussion of the possible benefits, limitations, and known and uncertain harms.”



(Humphrey et al., 2013, Annals of Internal Medicine, Online)

(Moyer et al., 2013, Annals of Internal Medicine, Online)

<http://www.uspreventiveservicestaskforce.org/uspstf13/lungcan/lungcanfact.pdf>

The American Cancer Society promotes informed and shared decision making regarding LCS choices.

Informed and Shared Decision Making

- A process of *informed and shared decision-making* with a clinician related to the potential benefits, limitations, and harms associated with screening for lung cancer with low-dose computed tomography should occur before any decision is made to initiate lung cancer screening.



Shared Decision Making (SDM)

Informed Decision Making occurs when an individual...

- **understands** what the clinical service involves, including...
 - potential benefits, harms, limitations, alternatives, & uncertainties
- has considered **personal preferences**, as appropriate;
- has **participated in decision making** at the desired level
- makes a decision **consistent with those preferences**...

Shared Decision Making connotes a process in which providers and patients **collaborate as partners** in the decision-making process.

Ongoing Research



- *Development and Feasibility Testing of a Lung Cancer Screening Decision Aid (R21CA173880)*

■ Investigators

- Jamie L. Studts (UK)
- Margaret M. Byrne (UM)
- Richard Thurer (UM)
- Christina R. Studts (UK)

■ Consultants

- Mary Politi (Wash U.)
- Mark Roberts (Pitt)
- Sarah Hawley (Michigan)
- Saul Dobney (Dobney Assoc.)
- Phil Haubert (Wintermute)

■ External Advisory Board

- Graham Colditz (Wash U.)
- Jamie Ostroff (MSKCC)
- Amy Copeland (LCA)
- Angela Webb (UK)

Primary care providers will play a central role in determining uptake of LCS.

- Best predictor of cancer screening behavior is primary care provider recommendation.
- However, *lung cancer screening* needs to be approached from a different model due to the high risk/high reward nature of LDCT.
- Greater need for patient engagement in exploring potential benefits/harms and personal preferences (*preference-sensitive decision*).



Primary care providers have information and skill development needs regarding LCS & SDM.

- Survey of 358 primary care providers (PCPs) in Kentucky regarding knowledge and practices regarding lung cancer screening
- Initial phase in the development of a screening excellence program
- Results
 - Over 15% refer for CXR for LCS
 - Nearly 40% had not talked to a single patient about LCS in past 12 months
 - Only 23% were aware of professional society guidelines regarding LCS
 - Approximately 36% acknowledged awareness of the NLST results
- Continuing education efforts are needed acutely to increase knowledge and skills among primary care providers regarding LCS

(Bensadoun & Mullett)

LCS – SDM Program Content

- ① Overview
- ② Lung Cancer Epidemiology/Justification for Screening
- ③ History of Lung Cancer Screening Research
- ④ Recent Lung Cancer Screening Research Results (NLST & PLCO)
- ⑤ Emerging Screening Guidelines (USPSTF, ACS, NCCN, LCA)
- ⑥ Implementation of Lung Cancer Screening–Key Components
 - ❑ Patient Navigation, Tobacco Cessation, Shared Decision Making
- ⑦ Shared Decision Making
 - ❑ Basic Principles of Shared Decision Making
 - ❑ Shared Decision Making in Lung Cancer Screening
- ⑧ Conclusions & Discussion

LCS – SDM Continuing Education Program

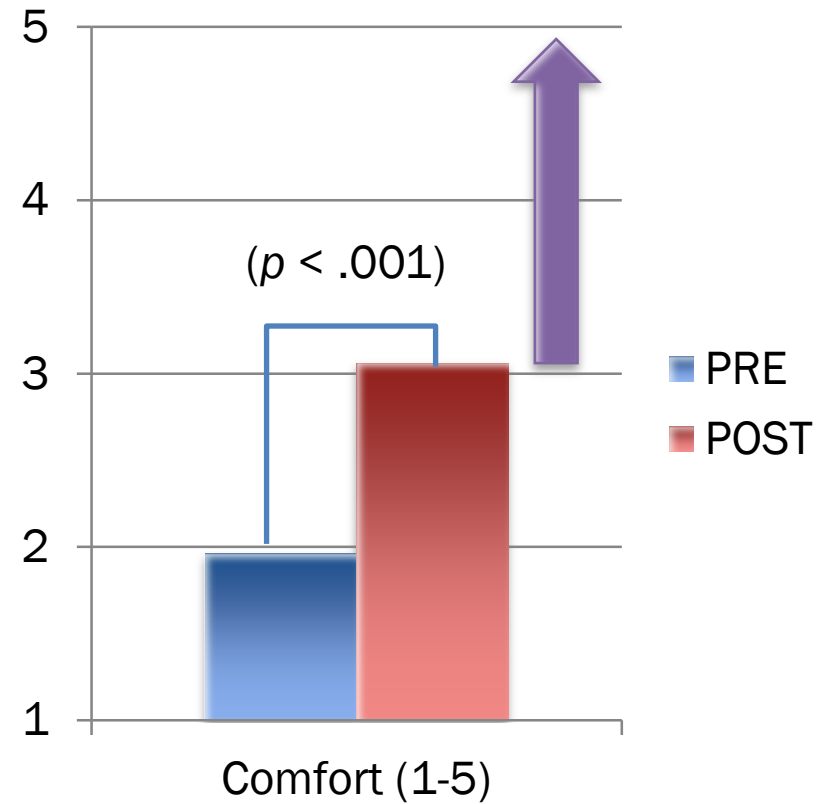
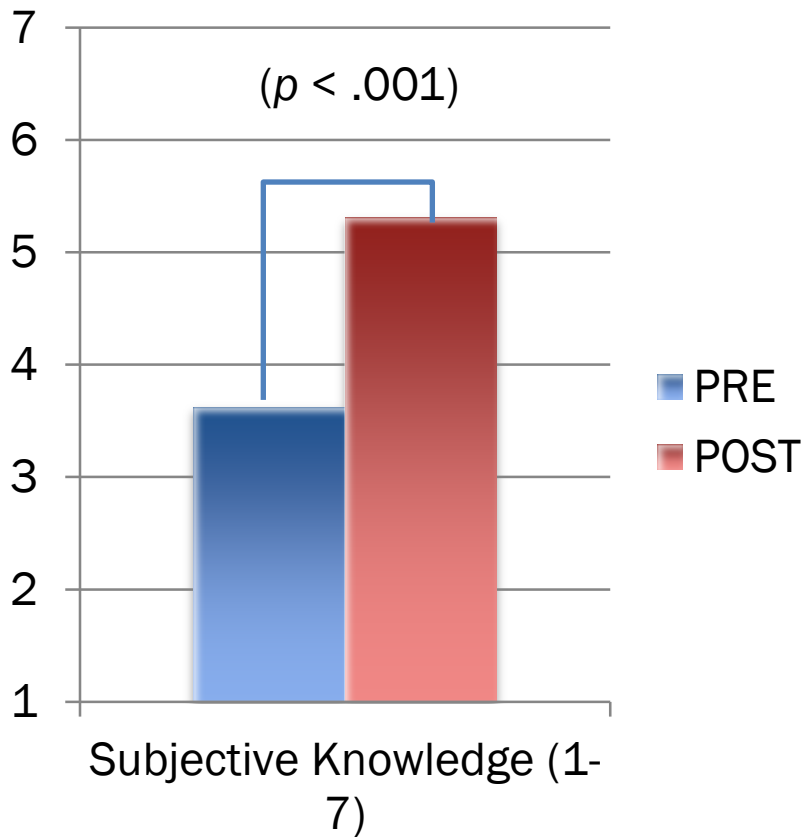
Procedure & Measures

- Participants (N=18) completed PRE and POST surveys
 - knowledge
 - attitudes
 - practices regarding LCS & SDM
 - demographic information
 - acceptability & feasibility (POST only)

Key Results

- *Acceptability*
 - 100% of respondents indicated that they would recommend the program to a colleague.
- *Feasibility*
 - Participants rated their satisfaction with the program as 8.83 (± 1.82) on a scale of 0 to 10.

A diverse group of rural PCPs demonstrated benefit following the LCS-SDM CE program.



Provider Education Summary

- There is a notable need for education and training regarding lung cancer screening among primary care providers.
- Few providers are aware of LDCT and very few have the requisite skills to fulfill USPSTF recommendations to use SDM as a platform to engage patients regarding lung cancer screening.
- A face-to-face continuing education pilot program demonstrated feasibility and acceptability as well as preliminary efficacy in promoting greater LCS knowledge and SDM self-efficacy.
- Future approaches should consider exploring longer-term effects, platforms with broader dissemination, and greater focus on SDM skills development and evaluation.

Community Engagement

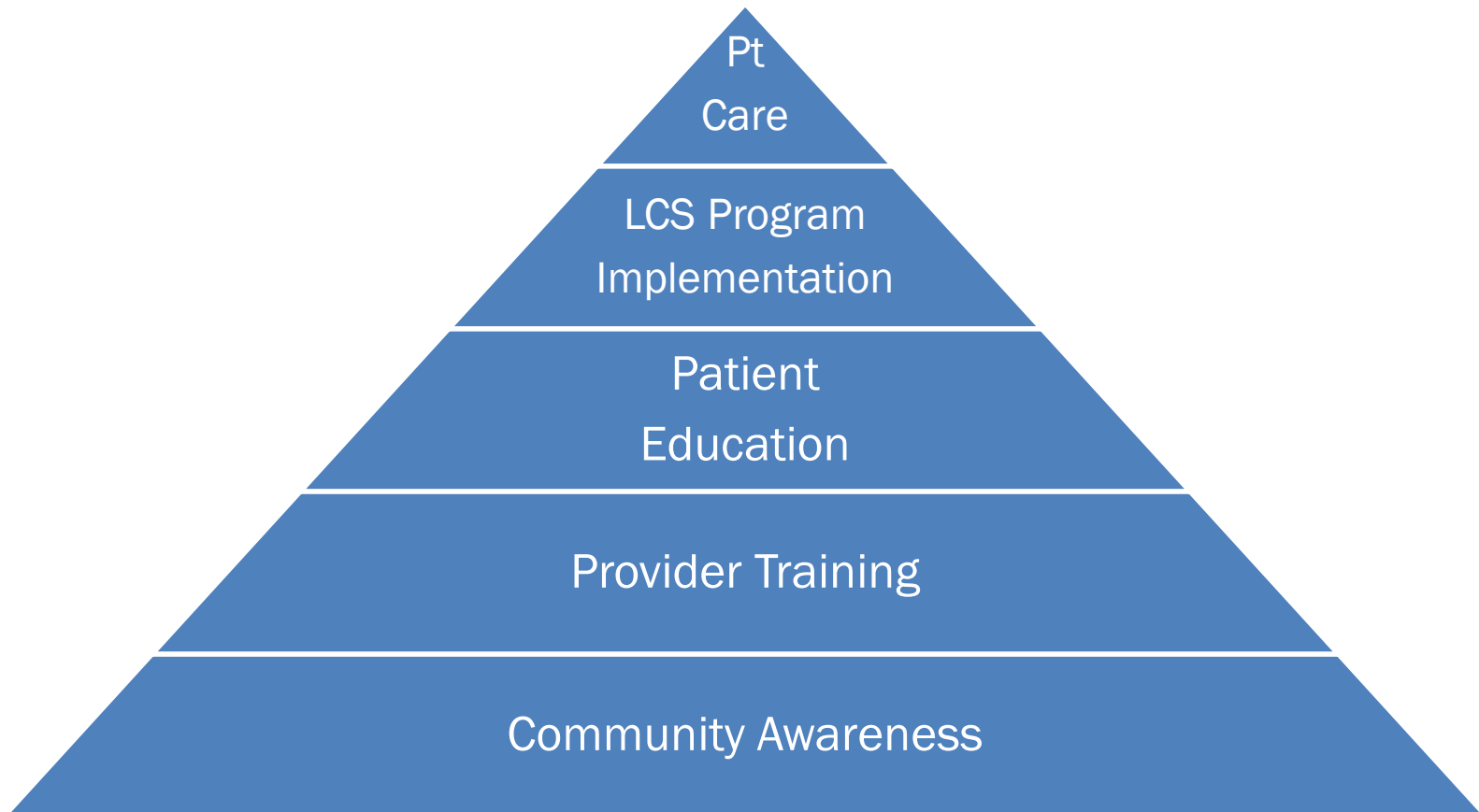
- The Kentucky Cancer Program conducted 14 community-based panel discussions on lung cancer screening throughout the state.

Lung Cancer Screening Meeting Sites



- In Kentucky, we are working with developing programs to provide consultation to achieve high quality implementation.

Dissemination and implementation research is needed to insure high quality lung cancer screening program development.



Conclusions

1. Results of the NLST create a unique opportunity to reduce lung cancer mortality. *(Promise)*
2. However, implementation of lung cancer screening needs to proceed differently than current cancer screening processes *(Challenge)*
3. We have a brief window to create optimal, high quality lung cancer screening programs that can fulfill the promise and meet the challenge, and *SDM* is a reasonable path to achieve these aims.

Colleagues, Collaborators, and Support

University of Miami

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- Richard Thurer, MD

University of Pittsburgh

- Mark Roberts, MD

Maine Medical Center

- Paul Han, MD



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- Eric Bensadoun, MD

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- William Witt, MD
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