

# Research Centers for Excellence in Clinical Preventive Services

*Working to get the right services, to the right people, at the right time*

## UNC Research Center for Excellence in Clinical Preventive Services

[www.smart-screening.org](http://www.smart-screening.org)

### Center Location

Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill

### Center Focus

Appropriate Use of Clinical Preventive Services

The Center seeks to understand and encourage appropriate use of screening through an integrated research agenda.

### Center Director

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## Understanding Physicians' and Patients' Views of Harms and Clinical Preventive Services

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Physicians play a direct and important role in deciding what screening services are appropriate for patients. While they make decisions every day about whether or not to screen patients for a variety of health issues, little is known about how physicians think about these screening services or the factors that affect decision making.

For every patient, physicians must weigh different factors that influence a screening decision, including potential harm. Gaining insights about which factors physicians consider and how they handle conflicting information is key for developing strategies to reduce use of inappropriate screening services.

In this study we sought to gain a deeper understanding of how physicians view the potential benefits and harms associated with **prostate and colon cancer screening services**, both of which are potentially overused and are considered harmful for certain groups of patients. This research also addressed how physicians make decisions about these screening services, and the contextual conditions within which their decisions are made.

### Big Questions

1. How do physicians think about potentially harmful clinical preventive services?
2. Do physicians know about the harms of screening tests and consider them in relation to other factors when making decisions about recommending a screening to a patient?
3. What factors are most important for physicians when making screening recommendations?

The project was done in two phases. In phase 1, we conducted one-on-one physician interviews and a clinician survey (with physicians, nurses, and physician assistants) to explore both the depth and breadth of physicians' beliefs and attitudes toward harms of preventive screening, and to understand how they make screening decisions.

In Phase 2, we developed case studies from interviews with selected patients along with their physicians, to describe the context and influences for making decisions about colorectal cancer screening.

## What Did We Learn?

From our **one-on-one physician interviews**, we learned that:

- Physicians consider several factors when deciding to screen a patient: patient age, patient health, family history, social environment, clinical guidelines, and patient preference.
- Most physicians would pursue screening for both prostate cancer and colorectal cancer regardless of a patients' age because the current environment favors screening.
- Patient preference was an important factor for physicians when considering screening, and most physicians would honor a request for screening even if they didn't consider the screening to be necessary.
- Potential harms of screening were rarely part of discussions with patients.

*"I often will go ahead and test if [the patient] asks for it. I'd probably try to talk him out of it but if he wanted it, I would go ahead and let him have it."*

-Lead Physician

From our **clinician surveys**, we learned that:

- 90% reported that clinical evidence strongly influenced their screening recommendations.
- 62% reported they would regret not recommending screening if a patient was later diagnosed with cancer.
- 15% did not see much harm in ordering screening tests even if they are not recommended.
- Clinicians could name harms of screening for prostate cancer using the Prostate Specific Antigen test (PSA) and screening for colorectal cancer using a colonoscopy, but mostly focused on physical and psychological harms rather than other types of harms, such as stigma and costs.
- Screening recommendations were highly influenced by patient age and patient request, with clinicians being more likely to recommend tests for younger patients and for patients who request screening.

From our **case studies interviews** with primary care physicians and their patients, we learned that:

- Physicians reported patient age and comorbidities to be the most important factors in their decisions to offer colorectal cancer screening. For patients, a doctor's recommendation was the most influential factor.
- When a patient preferred to be screened, but the physician thought screening was not needed, the physician often deferred to the patient.

## What Does This Mean?

Better strategies are needed to help physicians discuss the balance of benefits and harms of preventive screening with patients. Future work should assess ways to help physicians consider clinical evidence and handle conflicting guidelines. Physicians need support to not screen older patients and those who request inappropriate screening. They also need tools to help communicate potential harms of screening tests and to engage patients in making informed decisions about preventive screening.

## Where to Learn More

To learn more about this project please visit [www.smart-screening.org](http://www.smart-screening.org)