

ACHIEVEMENTS IN PREVENTION

A New Model of Thinking in Clinical Preventive Services

The Harms of Screening: an Unseen Problem

Most of us know that screening for cancer and other preventive services can help save lives, but not everyone realizes that preventive services also have the potential to cause harm. For example, a colonoscopy to screen for colon cancer can cause bleeding or even a tear of the intestine, especially in adults aged 75 and older. Or, a woman may experience psychological distress if she screens positive for breast cancer, whether or not the test result is accurate.

For cancer screening and other preventive services to be of value, the potential for benefit must be greater than the potential for harm.

However, harms have not been well defined, and therefore have been difficult to describe and measure.



A New Classification System to Understand Harms

The Research Center for Clinical Preventive Services (smart-screening.org) at the University of North Carolina, Chapel Hill, is focused on reducing unintended harms to patients that occur as a result of preventive services.

As a result of the work of the Center, Dr. Russell Harris, the Center Director, and his colleagues published "[The Harms of Screening: A Proposed Taxonomy and Application to Lung Cancer Screening](#)" in *JAMA Internal Medicine* in February 2014. In the article they proposed a "taxonomy of harms" to help providers and patients better understand how screening can lead to harms. The taxonomy includes four domains of harms to be considered:

- Physical harms
- Psychological harms
- Financial strain
- Opportunity costs

What is Next?

The authors hope that the taxonomy will raise awareness about the potential harms of screening, and will help move research and clinical decision making about preventive services away from an emphasis on benefits alone, to a more balanced consideration of both benefits and harms.

More specifically, the authors hope the taxonomy will:

- Assist researchers and systematic reviewers in asking questions that identify and measure harms
- Assist guideline panels in better defining what harms to weigh against potential benefits
- Encourage clinicians to discuss harms with patients
- Help patients and the public better understand the trade-offs involved with screening

