

## Models to Improve Colorectal Cancer Screening Decisions

Principal Investigator: Carmen Lewis, MD, MPH  
Institution/Partners: University of North Carolina,  
Chapel Hill  
Project Period: 09-30-2009 - 09-29-2011

### Description

Many experts believe that patients must have a life expectancy of 5 or more years to benefit from colorectal cancer screening. However, this issue has not been examined to determine the threshold at which the net benefits of colorectal cancer screening exceed the harms. An existing and well-validated model of colon cancer screening will be adapted to examine the cost-effectiveness of screening at different ages and life expectancies, and to develop decision aids for physicians and patients. These decision aids will inform individual decisions about colorectal cancer screening, based on the patient's age, number of co-morbid conditions, functional status, risk of complications, and likelihood of benefiting from the screening.

### Specific Aims

1. Test the incremental cost-effectiveness of stopping colorectal cancer screening in average risk patients at ages 70, 75, 80 and 85 versus continuing screening.
2. Determine the effect of different numbers of comorbid chronic illnesses, different levels of functional status, and different risks of screening complications on life expectancy; and the cost-effectiveness of colorectal cancer screening in older patients.
3. Incorporate the information generated from these models into existing patient and physician decision aids for use in individual, tailored patient-physician communication, and test their usability with physicians and older adults.

### Main Objective

To improve the quality of individualized decision making related to colon cancer screening in older adults.

### Chronic Conditions Considered

Focused on burden of chronic disease; chronic conditions not specified.

### Preventive Services Considered

Colorectal cancer screening

### Study Design & Population

Cost effectiveness analysis, randomized controlled trial

Adults ages 70, 75, 80, 85

### Strategies Addressed from the National MCC Strategic Framework

- 1.A. Identify evidence-supported models
- 1.B. Define appropriate outcomes
- 4.C. Increase clinical health research



Prevention & Chronic Care Program  
IMPROVING PRIMARY CARE