

Models to Improve Colorectal Cancer Screening Decisions

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Project Period: 09/30/2009-09/29/2011
Grant Number: R21 HS17651-01

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 was 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 can 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.

Findings

- Colonoscopy is cost effective to age 70 and fecal occult blood testing (FOBT) is cost effective to age 82.
- Colonoscopy is cost effective at all levels of comorbidity at age 50, but cost effectiveness decreases with age as comorbidity increases.

Main Objective

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 Service Considered

Colorectal cancer screening

Study Design, Data Sources & Sample Size

Cost effectiveness analysis, randomized controlled trial

Adults ages 70, 75, 80 , 85

Strategies Addressed from the HHS Strategic Framework on Multiple Chronic Conditions

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

Models to Improve Colorectal Cancer Screening Decisions (Continued)

- Physicians providing individualized decision support to their complex patients is feasible and can generate informed discussions about colorectal cancer screening.

Implications

Taking a patient's health status, underlying health conditions, and life expectancy into account can help clinicians make appropriate recommendations about whether to continue colorectal cancer screening in older adults.

Publications (as of September 2013)

UNC Working Group on Risk, Communication, and Health Care Decision-Making. Decisions Involving Cancer Prevention in the Elderly (DICE) Decision Aid – An educational tool for older adults to decide if colon cancer screening is right for them. Available at:
<http://www.shareddecisionmaking.org/Site/Welcome.html>.