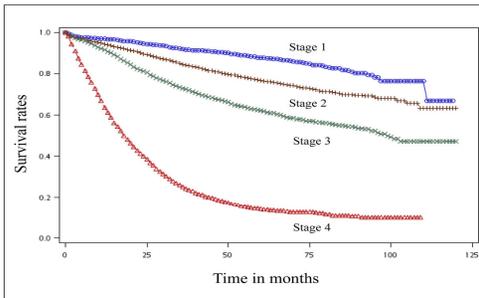


Impact of mailed outreach on colorectal cancer screening: a systematic review and meta-analysis

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BACKGROUND

- Colorectal cancer (CRC) is the 2nd leading cause of cancer deaths in the US. Screening reduces mortality and morbidity, but it is under-utilized.
- Multiple randomized controlled trials (RCT) suggest that mailed outreach invitations to complete CRC screening with a stool blood test can increase screening rates.
- However, mailed outreach has not been implemented on a widespread basis, perhaps due to lack of systematic synthesis of the consistency and magnitude of mailed outreach as a strategy for increasing screening.
- A systematic review and meta-analysis of the impact of mailed outreach offering stool blood tests for CRC screening might increase awareness of the strategy, inform public health recommendations (such as by the Community Guide to Preventive Services), and lead to more widespread adoption.



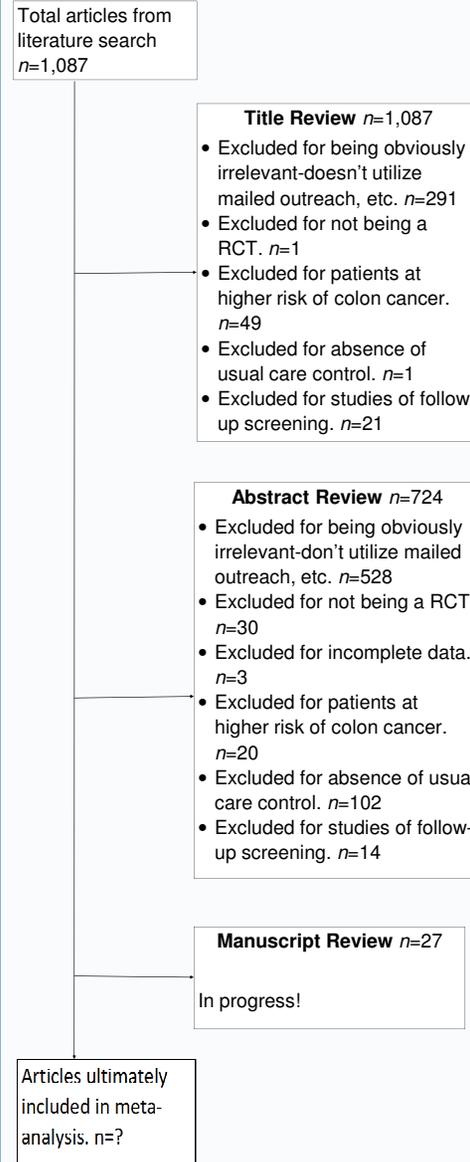
SPECIFIC AIM

- The aim of this meta-analysis is to evaluate randomized, controlled studies of impact of mailed intervention on promoting colorectal cancer screening.

METHODS

- Research question:** In adults overdue for CRC screening, is mailed outreach offering a stool-based screening test superior to usual care for promoting screening completion?
- Population:** Patients not up to date with screening who participated in a RCT evaluating the impact and efficacy of mailed intervention for non-invasive stool testing such as FOBT, FIT or multi-target stool DNA.
- Intervention:** Mailed invitation to complete colorectal cancer screening.
- Comparison:** Usual care screening, defined as office visit-based opportunistic offers to complete screening.
- Outcomes:** The primary outcome is mailed screening completion rate.
- Inclusion criteria:** Patients 18 and older not up to date with CRC screening who participated in a RCT evaluating a mailed stool CRC test; usual care control group; studies from 1980-present
- Exclusion criteria:** Absence of usual care control; incomplete data; inclusion of patients at higher risk of CRC (IBD, Crohn's disease)
- Literature search strategy:**
 - Identified relevant keywords + MESH terms with input from an expert librarian (KH): "Colorectal cancer screening", "mailed intervention/outreach", "fecal immunochemical test/FIT", "fecal occult blood test/FOBT"
 - Searched relevant databases: PUBMED, EMBASE, Cochrane Library, Google Scholar, CINAHL
 - Conducted title review to exclude irrelevant articles. Could exclude only very obviously irrelevant titles such as, "Interventions for promoting habitual exercise in people living with and beyond cancer"
 - Abstract review to exclude irrelevant studies
 - Detailed manuscript review to apply inclusion/exclusion criteria and abstract data. Two reviewers (MJ +BB) will apply inclusion/exclusion criteria to candidate studies to select those included for final review
- Data abstraction:** Patient demographics (ethnicity, sex, etc.), intervention components (type of test, reminder calls/mailings, etc.), and outcomes (CRC screening completion) will be extracted from each included article.
- Data synthesis and analysis:** GRADE criteria will be applied
- Risk of bias assessment:** Bias will be assessed quantitatively using Egger's regression test

RESULTS



FUTURE STEPS

- Completion of manuscript review and data extraction
 - Meta-analysis
 - Drafting the final paper
 - Publication!
- Then...
- Use data for policy change → changes in guidelines → future standard of care?
 - Population-specific mailed CRC screening research?

CONCLUSIONS

- Out of 1,087 studies, around 13 will ultimately be included in the final meta-analysis
- Preliminary data shows that mailed access to CRC screening kits significantly improves completion rates
- Implications for future standard of care: will mass mailed CRC screening be achievable? Will it become standard?
- Will insurance providers find it feasible to offer mailed CRC screening to all eligible patients? Will this be profitable?
- Mass uptake of mailed CRC screening may save lives by detecting polyps and cancer in early stages.

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FOR MORE INFORMATION:

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