Effectiveness and Costs of Tailored Reminders to Increase Return of Fecal Immunochemical Tests

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Public Health Statement
Increasing colorectal cancer (CRC) screening among persons aged 50-75 reduces incidence and mortality.\textsuperscript{1}

Objective
An Enhanced Call Reminder Program (ECRP) based on Stages of Change theory\textsuperscript{2} equipped clinics to conduct tailored reminder calls to achieve a greater return rate of fecal immunochemical tests (FIT).

Methods/Approach

- Implementation strategies:
  - Designed practice work-flow protocols for FIT distribution.
  - Identified staff to make up to three follow-up calls for unreturned FITs. Included nurses, care coordinators, health coaches, and lab technicians.
  - Trained staff on Stages of Change theory, use of Stages of Change algorithm, and tailored messaging for each stage.
  - Utilized a tracking log to monitor follow-up reminder calls and data collection.
  - Collected cost data on average staff salary and time to track unreturned FITs, make calls, and/or send letters.

Results
Impact of ECRP on FIT return rates in partner health systems:

- $5041$ FIT tests distributed over 10-17 months.
- $41.1\%$ average initial return rate without reminders.
- $41.2\%$ average return for outstanding FIT after reminder intervention.
- $60.7\%$ overall average FIT return rate.
- Achieved an average increase of $19.6\%$ percentage points.

Cost analysis per FIT returned:

- $\$60.18$ average total cost of tracking, calls, and mailings per FIT returned.
- $\$11.20$ average cost of reminders only.
- Analysis limitation:
  - Two health systems had higher costs for tracking due to electronic health record (EHR) problems and difficulty receiving lab completion reports.
  - Rural clinics with small populations generally have higher costs due to low volume and economy of scale.

Discussion/Implications

- Timing for initiation of reminders impacts the outcome. Clinics starting reminders within one-to-two weeks after FIT is not returned had better return rates than clinics waiting three-four weeks.
- Initial mode of contact makes a difference with better outcomes coming from tailored message phone calls versus sending a mailed reminder.
- Average total cost per FIT returned is in similar range ($\$45-\$74$) to another study in community health centers.\textsuperscript{3}
- All participating health systems are continuing the program in their clinics in some form. This indicates the program is sustainable in a primary care setting.

Challenges/Limitations

- Key challenges included:
  - Updating clinic workflow to integrate the ECRP.
  - Concerns in some clinics about duplication of tracking on spread sheet and in the EHR.
  - Inconsistent tracking and data collection. Additional clinics participated in the program but were excluded from analysis due to incomplete data.
  - Staff turnover and need for retraining.

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References