EBI 1 Description: Automated Telephone Calls to Improve Completion of Fecal Occult Blood Testing

Highlights

Program Title	Automated Telephone Calls Improve Completion of Fecal Occult Blood Testing
Purpose	Designed to increase colorectal cancer screening among adults. *(2010)*
Program Focus	Awareness building and Behavior Modification
Population Focus	Adults
Topic	Colorectal Cancer Screening
Age	Adults (40-65 years), Older Adults (65+ years)
Gender	Female, Male
Race/Ethnicity	Alaskan Native, American Indian, Asian, Black, not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White, not of Hispanic or Latino origin
Setting	Clinical
Origination	United States
Funded by	NCI (Grant number(s): R01CA132709)
User Reviews	*(Be the first to write a review for this program)*

RTIPs Scores

This program has been rated by external peer reviewers. Learn more about RTIPs program review ratings.

- **Research Integrity** 4.6
- **Intervention Impact** 2.0
- **Dissemination Capability** 5.0

(1.0 = low 5.0 = high)

RE-AIM Scores

This program has been evaluated on criteria from the RE-AIM framework, which helps translate research into action.

- **Reach** 80.0%
- **Effectiveness** 66.7%
- **Adoption** 100.0%
- **Implementation** 57.1%

Description

Automated Telephone Calls Improve Completion of Fecal Occult Blood Testing is an automated telephone intervention to increase CRC screening using an FOBT home test kit. Staff at health maintenance organizations (HMOs) identify patients in an electronic database who will receive the automated calls. The criteria used to define the need for routine screening are as follows: (1) no completed FOBT screening within the past 12 months; (2) no flexible sigmoidoscopy or double-contrast barium enema (DCBE) within the past 5 years; (3) no colonoscopy within the past 10 years; and (4) no clinician order or referral for FOBT, or colonoscopy in the past 3 months. The intervention consists of a general reminder telephone call (type 1) that provides a brief overview of CRC, including the benefits of colorectal screening, and encourages use of a home FOBT kit as a relatively simple and low-risk method of CRC screening. Recipients of reminder calls can request an FOBT kit with instructions for completion by pressing a number on a touch-tone telephone. Patients who do not complete FOBT screening receive up to two additional reminder calls (type 1) at 6 and 12 weeks after the initial call. One additional FOBT return reminder call (type 2) targets patients who initially request an FOBT stool card kit but fail to return it within 4-5 weeks of the request. Automated calls to FOBT non-returners reiterate the benefits of CRC screening and remind to return a completed FOBT card. Non-returners are also given the opportunity to request an additional FOBT card if needed.

Community Preventive Services Task Force Finding
This program is an example of client reminder interventions (Colorectal Cancer Screening), which is recommended by the Community Preventive Services Task Force, as found in the *Guide to Community Preventive Services*.

Time Required
- Up to three, automated, type 1, general reminder calls, each 1 minute long - an initial call with follow-up calls at 6 and 12 weeks later if no FOBT has been completed
- One additional, automated, type 2, FOBT return call, approximately 1 minute long at 4-5 weeks following an initial patient request for an FOBT kit, if a completed FOBT has not been submitted

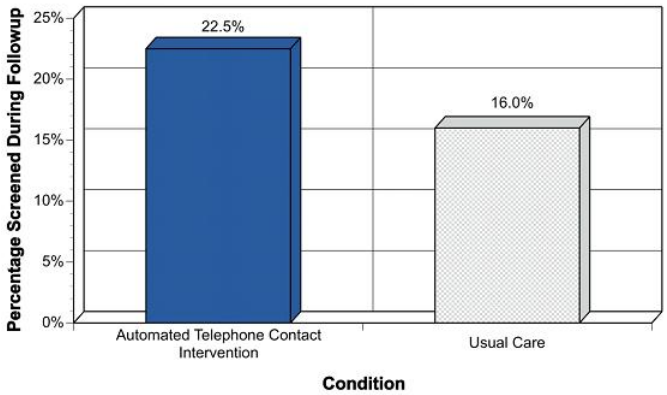
Intended Audience
The intervention targets adults aged 51-80 years at average risk for CRC and due for routine screening.

Suitable Settings
The intervention can be delivered through a group-model HMO or other clinical settings.

Required Resources
- Implementation guide
- Automated calling system
- Call scripts
- Mailed FOBT materials

Key Findings from Study
Six months after initiating study telephone contact, 22.5% of the intervention patients compared with 16.0% of the usual care patients had completed FOBT (p<.001); intervention patients were 1.31 times more likely than usual care patients to complete FOBT during the 6-month follow-up period after adjusting for age, gender, and prior receipt of CRC screening.

Figure 1. Completion of Fecal Occult Blood Testing During the 6-Month Follow-up Period



Source: Mosen DM, Feldstein AC, Perrin N, Rosales AG, Smith DH, Liles EG, Schneider JL, Lafata JE, Myers RE, Kositch M, Hickey T, Glasgow RE. (2010). Automated telephone calls improved completion of fecal occult blood testing. Medical Care, 48 (7), 604-610.

https://rtips.cancer.gov/rtips/programDetails.do?programId=1561044#Program

EBI 2 Description: Flu-FIT and Flu-FOBT Program

Highlights

Program Title	Flu-FIT and Flu-FOBT Program
Purpose	Designed to increase colorectal cancer screening among adults. *(2009)*
Program Focus	Awareness building and Behavior Modification
Population Focus	Adults
Topic	Colorectal Cancer Screening
Age	Adults (40-65 years), Older Adults (65+ years)
Gender	Female, Male
Race/Ethnicity	Alaskan Native, American Indian, Asian, Black, not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White, not of Hispanic or Latino origin
Setting	Clinical, Suburban, Urban/Inner City
Origination	United States
Funded by	American Cancer Society (Grant number(s): RSGPB-09-010-01-CPPB , CCCDA-050159), CDC (Grant number(s): 1R18DP001566-01), NCRR (Grant number(s): UL1 RR02413)
User Reviews	*(Be the first to write a review for this program)*

RTIPs Scores

This program has been rated by external peer reviewers. Learn more about RTIPs program review ratings.

- **Research Integrity** 4.7
- **Intervention Impact** 2.8
- **Dissemination Capability** 5.0

(1.0 = low 5.0 = high)

RE-AIM Scores

This program has been evaluated on criteria from the RE-AIM framework, which helps translate research into action.

- **Reach** 86.7%
- **Effectiveness** 66.7%
- **Adoption** 82.2%
- **Implementation** 71.4%

Description

The Flu-FIT and Flu-FOBT Program allows health care providers to increase access to colorectal cancer screening by offering home tests to patients at the time of their annual influenza (flu) vaccination. The program is designed to increase CRCS rates by conveying the importance of screening and getting an annual flu shot. The message to patients is that "just like a flu shot, you need FIT or FOBT every year." Nurses or medical assistants are provided a variety of tools to assist with offering a home FIT or FOBT kit to eligible patients, including visual aids for explaining the test to patients (including foods to avoid to prevent false positive results), simple written instructions for how to self-administer the test, video instructions, and stamped envelopes for completing and returning the kit to the laboratory. These materials are provided in English, Cantonese, Mandarin, Russian, Spanish, and Vietnamese. Nurses are encouraged to use whichever materials they find most useful to encourage patients to complete FIT or FOBT.

Community Preventive Services Task Force Finding
This program is an example of small media interventions (Colorectal Cancer Screening) and one-on-one education interventions (Colorectal Cancer Screening), which are recommended by the Community Preventive Services Task Force, as found in the *Guide to Community Preventive Services*.

Time Required
The intervention takes just a few minutes per patient and is implemented concurrently at seasonal flu vaccination clinics. One to 2 hours of staff training are required initially, with periodic brief review and reinforcement of program procedures and progress by a practice team leader or supervisor during the intervention.

Intended Audience
The Flu-FIT and Flu-FOBT Program is designed for patients aged 50-75 years who are both due for CRCS and receive annual flu shots during primary care visits or at drop-in flu shot clinics. Patients are considered due for CRCS if they have not had one of the following: FOBT or FIT in the past year, a flexible sigmoidoscopy in the past 5 years, or a colonoscopy in the past 10 years.

Suitable Settings
The Flu-FIT and Flu-FOBT Program can be implemented in community health centers, pharmacies, managed care organizations, and other health care settings where flu shots are provided and where FIT or FOBT is offered for average-risk colorectal cancer screening. To be successful, health care organizations offering Flu-FIT and Flu-FOBT Programs must be able to assure follow up of abnormal FIT or FOBT tests with diagnostic colonoscopy.

Required Resources
Required resources to implement the program include the following (available at program website):

- Mailed FLU-FIT and FLU-FOBT announcements
- Clinic posters to advertise the program
- Algorithms for patient flow and for using electronic medical records to assess FIT or FOBT eligibility
- Script to introduce/explain FIT or FOBT with flu shots to patients
- Visual aids to use when offering FIT or FOBT to patients
- Multilingual materials to explain why colorectal cancer screening is important, completion instructions, and video instructions
- Pre-addressed and pre-stamped mailing pouches
- Log sheet to record flu shots and kits dispensed
- Clinic nursing staff

Key Findings from Studies
Three studies were reviewed for this summary. Located in the San Francisco and Fresno, California, metropolitan areas, the study sites included:

- Six community-based primary care clinics offering flu shots (Study 1): Past-year CRCS rates, based on completion of the FOBT or any CRCS test in the past 12 months, increased in both study groups during the study period. The proportion of patients completing FOBT in the past year increased in the intervention group from 21.4% to 33.8% (12.4 percentage points), compared with an increase from 17.6% to 21.7% (4.1 percentage points) in the control group (p=.01). Likewise, the proportion of patients completing any CRCS test in the past year increased in the intervention group from 32.5% to 45.5% (13.0 percentage points), compared with an increase from 31.3% to 35.6% (4.3 percentage points) in the control group (p=.018).

- A hospital-based primary care clinic offering flu clinics (Study 2): By the end of the study period, 21.6% of the intervention group completed FOBT and 24.2% completed any CRCS test, compared with 11.8% and 13.4%, respectively, of the control group ($p<.001$ for both analyses).
    - Among patients due for CRCS when they received their flu shot, participants in the intervention group were more than twice as likely to complete FOBT (OR=2.25) and become up to date with CRCS (OR=2.22) by the end of the study period compared with patients in the control group ($p<.05$ for both analyses).

- Five flu shot clinics operated by an integrated managed care organization (Study 3): Among patients initially not up to date with CRCS guidelines, the percentage of patients who became up to date by the end of the flu season was significantly higher in the intervention group (68.0%) than in the control group (20.7%) ($p<.001$). Further analyses demonstrated that intervention group patients initially overdue for CRCS were 11 times more likely than control group patients initially overdue for CRCS to be up to date with CRCS when the study ended ($p<.001$).

Sources:

- Potter MB, Walsh JM, Yu TM, Gildengorin G, Green LW, McPhee SJ. (2011). The effectiveness of the FLU-FOBT program in primary care a randomized trial. American Journal of Preventive Medicine, 41 (1), 9-16.
- Potter MB, Phengrasamy L, Hudes ES, McPhee SJ, Walsh JM. (2009). Offering annual fecal occult blood tests at annual flu shot clinics increases colorectal cancer screening rates. Annals of Family Medicine, 7 (1), 17-23.
- Potter MB, Ackerson LM, Gomez V, Walsh JM, Green LW, Levin TR, Somkin CP. (2013). Effectiveness and reach of the FLU-FIT program in an integrated health care system: a multisite randomized trial. American Journal of Public Health, 103 (6), 1128-1133.

https://rtips.cancer.gov/rtips/programDetails.do?programId=1084580

Putting Public Health Evidence in Action

EBI Comparison Tool Activity for CRC Screening

Directions: In the Assessment Findings/Priorities column, enter information related to your community. For example, which health topic is the focus? On which audiences will you be focusing? Next, complete the same information for EBI 1 and EBI 2. Finally, compare the fit of each Option with your priority area answers. Which fits better?

Fit Criteria	Community Assessment Findings/Priorities	EBI 1	Does this fit your community?			EBI 2	Does this fit your community?		
			Yes	Some	No		Yes	Some	No
Health Goal/Problem	Low rates of Colorectal Screening								
Behavioral/ Environmental Objectives/Factors	Patients are not getting screened Providers are not recommending screening								
Determinant Objectives	Patients lack knowledge of when and how to get CRC screening Patients don't believe CRC screening is important to their health								

Delivery Methods	Federally Qualified Health Center with a patient navigator								
Priority Population	Rural, low literacy African Americans								
Organization/ Community Capacity and Resources	Have an electronic medical record that tracks CRC screening eligibility and completion								