Background and Purpose

The Centers for Disease Control and Prevention (CDC) recently completed an effectiveness study of the New Hampshire Colorectal Cancer Screening Program (NHCRSP) and the NHCRCSP PN intervention. A high-quality patient navigation (PN) component is a critical building block for successful colorectal cancer (CRC) screening programs, as shown in previous studies (McAdoo et al., 2008). This study investigated how the NHCRCSP PN intervention improved patient navigation for CRC screening.

The purpose of this study was to describe the NHCRCSP PN intervention, measure PN outcomes, and examine aspects of implementation that may have contributed to intervention effectiveness.

Methods

We conducted a case study of the NHCRCSP program. Data were collected between June 13 and October 3, 2014. The study was approved by CDC’s institutional review board. The case study included:

- Review of program documents;
- Analysis of program data for 443 intervention patients served July 1, 2012 to September 30, 2013 (N=443);
- Implementation: Reach (N=443);
- Implementation: Fidelity (N=443).

Results

NHCRCSP PN Description

Patients were residents of NH, ≥50 years old, and registered patients of a primary care provider. PN provided the following services:

1. Introduction call (PN calls the patient and explains the program);
2. Reasons to refer (PN answers questions and obtains consent);
3. Day before test call (PN calls the patient to confirm the appointment);
4. Day of test call (PN calls the patient to assist with the appointment);
5. Review of test results call (PN calls the patient to discuss the results);
6. Follow-up call (PN calls the patient to provide additional support).

PN calls were made by a registered nurse or a medical assistant with a bachelor’s degree in a health-related field. PN used a standardized call script and followed a protocol of six telephone calls with the client at Range.

Study Outcomes (N=443)

- Core Program Components:
  - Patient navigation to 300+ patients annually to support colonoscopy surveillance & screening
  - Program’s (NHCRCSP) patient navigation (PN) intervention. A significantly increased number of patients were referred for colonoscopy (0.8% vs. 16.0%, p<.001).
  - Fewer patients cancelled less than 24 hours prior to the scheduled appointment (0.0% vs. 13.3%, p<.001).
  - Patients were more likely to claim PN was helpful and supported them in the CRC screening process.

- Implementation: Reach (N=443)
  - 83.3% of patients spoke to a PN at least 6 times

- Implementation: Fidelity (N=443)
  - 65.0% of patients spoke to PN at least 6 times

- Implementation Quality: (N=235)
  - 100.0% of patients who called were reached

- Client Satisfaction Survey

- Modifiable PN Components:
  - The staff at the colonoscopy prep for the colonoscopy so that I could understand them.
  - I would recommend this program to family and friends.

Conclusions

- This model of PN employs nurse navigators with physician oversight and a 6 telephone call protocol.
- Consistent with the comparison study, results of this study demonstrate a highly effective intervention that warrants dissemination.
- Core components were identified that should be preserved in future replications.
- Strong implementation may partially explain the program’s success including extensive program reach, high-fidelity delivery of PN, and physician oversight.

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