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Community health center patients' response to and beliefs about outreach promoting clinical preventive services

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ABSTRACT

We sought community health center (CHC) patients' feedback regarding an outreach intervention promoting primary prevention of cardiovascular disease to patients at increased risk. We performed a telephone survey that assessed whether patients recalled receiving the intervention, what actions occurred in response to the intervention, and patient attitudes regarding receipt of preventive service messages from their CHC. Participants ($n = 80$) were 89% male, and 59% were black. Among the 88% of respondents who reported a healthcare visit, 84% reported a discussion about cholesterol or heart disease risk with their provider, of these 44% reported a statin was recommended and 89% reported currently taking it. Participants reported high acceptability of receiving preventive service messages, but were less likely to agree that they wanted to receive preventive service messages via text or email compared to other modes of contact. Our results show that outreach programs to promote indicated preventive services were viewed positively by this patient group. We also identified areas where the CVD prevention program may have lost effectiveness.

1. Introduction

Cardiovascular disease (CVD) is the leading cause of disparities in years of life lost by race and low socioeconomic status (Wong et al., 2002; Anon, 2004). Community health centers (CHCs) often serve racial and ethnic minority populations and individuals with low socioeconomic status. One potential strategy to reduce national CVD disparities is to deliver outreach promoting the primary prevention of cardiovascular disease to CHC patients. We recently reported the results of a randomized controlled trial within three CHC networks evaluating the effect of an individualized outreach intervention aimed at improving the appropriate use of statins for primary prevention of CVD among high risk patients (Persell et al., 2015). The intervention consisted of mailed and telephone outreach by a care manager that informed the patient that (1) they were at higher than average risk of CVD and estimated the patient's global CVD risk and (2) recommended actions to discuss with their clinician which included the use of medication to lower cholesterol. All patients were encouraged to schedule a visit to discuss the information with their clinician. Chart reviews following outreach showed that the intervention increased the proportion of patients with face-to-face encounters with a clinician at which cholesterol treatment was addressed, however the vast majority of these documented discussions did not result in a statin prescription.

As part of the original study protocol, we surveyed patients in the outreach intervention group by phone to identify barriers and facilitators to statin uptake and to evaluate patients' perceptions of the intervention. Additionally, we assessed patients' general attitudes and preferences about receiving outreach promoting clinical preventive services from their CHC.

2. Methods

2.1. Study setting

Three CHC networks—two in Chicago, IL and one in Northern Arizona—participated in the previous randomized controlled trial, and all three sites recruited patients for this survey. Recruitment took place between November 2013 and October 2014 after patients had completed a 1-year follow-up period. Interested patients provided verbal informed consent prior to completing the survey. The study was approved by the Institutional Review Board of Northwestern University and by internal review processes at the three participating CHCs.

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2.2. Participant eligibility

Eligibility criteria for the randomized trial have been reported previously (Persell et al., 2015). Briefly, criteria included men ≥35 and women ≥45 years old with a 10-year risk of coronary death or myocardial infarction (based on Framingham risk score) of at least 10%, English or Spanish listed as preferred language, and a visit to the participating CHC within 6 months prior to randomization. All eligible patients, identified by EHR query, were randomized resulting in 328 patients assigned to the intervention arm. Primary care providers (PCPs) could mark intervention patients as excluded from outreach. To be eligible for survey recruitment, a patient must have been sent intervention outreach and have a telephone number listed within the EHR (Fig. 1). When reached by a care manager during initial intervention outreach, some patients refused all further contact regarding CVD prevention and were thus excluded from survey recruitment.

2.3. Survey instrument

The survey was developed by study team and included the following domains: (1) Receipt of intervention (2) Response to intervention (3) Outcome of CVD prevention discussions with providers and (4) Patient attitudes and preferences regarding receipt of preventive service messages from their CHC. We asked whether the patient received outreach and what actions they took following the outreach (including visit with provider, lifestyle or medication changes). Among patients who had a CVD primary prevention discussion with their PCP we asked what recommendations were provided to the patient and what actions were taken. Patients who reported receiving a prescription for a statin medication were asked whether they started it and, if not, the reasons for non-initiation. Patients who initiated a stain were asked whether they were still taking it at the time of the interview, their current level of adherence to it, and if they stopped taking it, the reasons why. Finally, patients were asked if they thought it was a good idea for the health center to let them know when they were due for three preventive service needs: (1) flu shot, (2) cancer screenings, and (3) things to do to lower their risk of developing CVD and how they preferred to receive such preventive health messages. Participants responded on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Demographic items were also included.

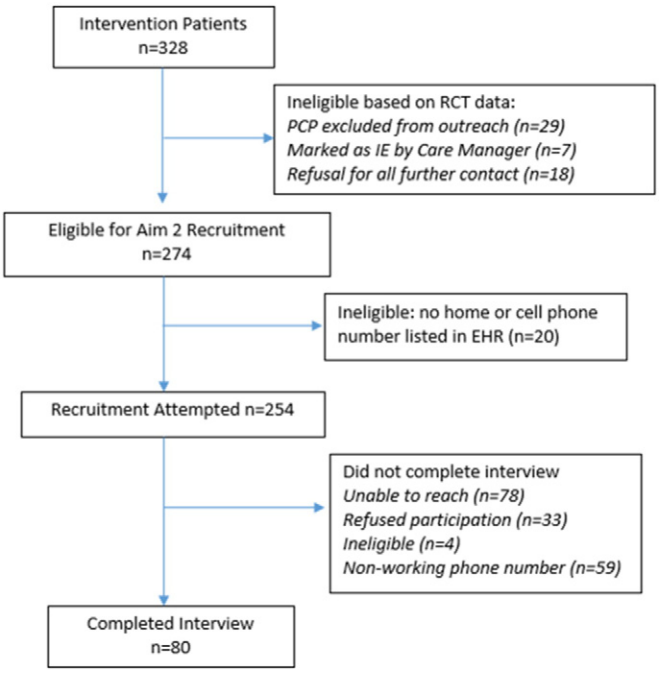

Fig. 1. Participant flow diagram. RCT: randomized controlled trial; PCP: primary care provider; IE ineligible; EHR: electronic health record.

2.4. Survey administration

We collected current patient contact information from the EHR. Eligible participants were mailed a recruitment opt-out letter. Within two weeks of the letter, study staff called all patients that did not opt-out. Up to six contact attempts were made at varying times of day, evening, and weekend to maximize our ability to reach patients. Once verbal consent was obtained, the interviewer read each item aloud to participants and directly recorded responses in SNAP survey software that allowed for appropriate skip patterns based on previous responses (SNAP v10 Mercator Research Group, Ltd., Boston). The survey took between 10 and 15 min to complete, and participants were mailed a $25 gift card as a thank you for their participation.

2.5. Analysis

Descriptive statistics were used to describe participant characteristics and to report summary measures for quantitative items. All analyses were done using SAS v 9.4 (SAS Institute Inc., NC) Missing data ranged from 1 to 13%. Responses about patient preferences for how they would like to receive messages about preventive health services were compared using the Wilcoxon signed rank sum test which is a non-parametric version of a paired samples *t*-test. Due to multiple comparisons, we applied the Bonferroni correction. *P* values <0.0033 were considered statistically significant.

3. Results

3.1. Population studied

We attempted to survey 254 patients; 191 patients had working telephone numbers, and we completed interviews with 80 participants (response rate: 31.5%) (Fig. 1). Participants were 89% male, 59% black, and 58% reported a high school level of education or less. The sample of interviewed patients was not different from the whole outreach intervention population on the distribution of CHC site, gender, or race. Most participants thought their 10-year risk of developing CVD was average (43%) or low (28%) (Table 1).

3.2. Receipt of intervention and actions taken in response to the intervention

The majority of participants (55 of 80) reported receipt of at least one component of the intervention. This included 25 (31%) who recalled receiving both the mailing and a telephone call, and 30 (38%) who recalled receiving only one or the other. There were 25 (31%) who did not recall receiving any of the intervention components. Among the 55 who reported receipt of at least one component of the intervention, 42 (76%) reported making a visit to a clinician at their CHC to discuss CVD prevention and 12 (25%) reported a visit to a different healthcare provider. Table 2 presents other self-reported behaviors taken following the intervention.

3.3. Barriers to having a CVD prevention discussion

Among the 13 patients who reported receipt of at least one component of intervention who did not schedule a visit to see a doctor or nurse, 10 patients responded to items asking about barriers. On a scale of 1 'strongly disagree' to 5 'strongly agree' participants generally did not agree that traditional barriers were applicable for them: scheduling difficulties (mean [M] = 2.3, standard deviation [SD] 1.89), transportation difficulties (M = 2.0, SD = 1.63), work or family responsibilities (M = 2.3, SD = 1.89), cost of visit (M = 2.0, SD = 1.49), concern