THE UNIVERSITY OF ARIZONA
College of Nursing

Dissemination and Implementation of Colon Cancer Screening Program for low-income, multicultural Arizona residents

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Background

- Recent trends in increased colorectal cancer (CRC) screening test utilization are not mirrored in poor and minority populations.
- CRC screening rates are particularly low for those who do not identify a primary care provider or clinic and who also have lower levels of education, income, and insurance.
- Efficacious interventions to improve cancer screening are rarely disseminated in community settings using a rigorous scientific design.
- We will detail the process of conducting a dissemination and implementation study in the context of our presently funded D & I program: *Navigation from Community-to-Clinic to Promote CRC Screening in Underserved Populations (Navegantes por Salud).*

Preliminary Studies

a) A tailored CRC screening education intervention in primary care [2.2 odds of being screened for CRC] *(Menon et al., Annals of Behavioral Medicine. 2011;42(3):294-303)*

b) A matched control, pilot study showing higher rates of screening among those navigated from the community setting into clinics (35%) compared to no navigation (11.8%) (Larkey, L., Menon, U., & Szalacha, L. (2012) Community-to-clinic tailored navigation for colorectal cancer screening Annals of Behavioral Medicine, 43(Supplement:1):S177-S177)

Purpose

- Combined two successful programs of research
- Developed and tested a community-to-clinic tailored navigation intervention using a dissemination (randomized phase) and implementation (non-randomized phase)

Study Groups: Phase 1

- General Education + Tailored Navigation and General Education only
- All participants received group education on cancer screening and risk
- General education group received up to 5 reminder calls
- Navigation group received up to 10 calls from navigators who assisted them with barriers using a tailored message bank

Study Groups: Phase 2

- All those who made a clinic appointment received tailored navigation from a trained study navigator, through a combination of in-person meetings and phone calls.

Outcomes

Primary outcomes: Clinic appointment and CRC screening

Secondary outcomes:

Roles and responsibilities of the statistician and/or methodologist in a D&I study includes:

- Design of a study
- Appropriate models or theoretical frameworks
- Frameworks for evaluation (i.e., RE-AIM)
- Fidelity and re-invention or adaptation of successful interventions
- Diffusion of Innovation Principles

Sample Characteristics

- 416 participants completed the eligibility baseline survey
- 344 attended a class at a site that was randomly assigned to Tailored Navigation (210) or Education only (134)
- 67% Female, 33% Male; Mean age = 60, SD=7.56
- 10% African Amer., 2.9% Amer. Indian/AL Native, 2% Asian Amer., 79.4% White (5.5% not answered)
- 67.2% Latino/a
- 42.7% Uninsured; 41.3% Medicare/Medicaid
- 36.6% Earned $9,999 or less, 36.3% Earned $10,000 – $24,999

Bi-Variate Results

Phase 1: 30% (n = 106) made clinic appointments

ED + TN participants were **2.56 times** more likely to have made a clinic appointment **(80/210, 38.1%)** than were the **ED** alone participants **(26/134, 19.4%, OR = 2.56, 95% CI = 1.53-4.26)**

Bi-Variate Results, *continued*

Phase 2: Of the 106 who made clinic appointments, 76.4% (n = 81) completed their Clinic Intake. Of the 81 who completed their Clinic Intake, 81.5% (n = 66) completed CRC Screening.

Overall, ED + TN participants were almost **4 times more likely to be screened** (55/214, 25.7%, OR = 3.77 (95% CI = 1.89 – 7.52) than were the ED alone participants (11/131, 8.4%).

Multiple Logistic Regression Results

Controlling for sex, race, ethnicity, relational status, education, income and insurance, only Intervention Group (Wald = 11.52, p<.01) and Education (Wald = 11.52, p<.01) were significant predictors of CRC Screening (Naglekerke R Square = .23).

Controlling for the demographic characteristics, ED+TN participants were 4 times more likely to be screened than were the ED participants (AOR=4.1, 95%CI = 1.82-9.30).

5 Core Values for D & I Studies

Rigor and Relevance

Efficiency

Collaboration

Improved Capacity

Cumulative Knowledge

Conclusions

Tailored Navigation (TN) was successfully disseminated to a community-to-clinic setting to bring a largely underinsured population into clinics to be screened for CRC.

We demonstrated that translation of an efficacious tailored navigation cancer screening intervention via an implementation model is both feasible and associated with an increase in CRC screening rates.

Next Research Steps

- Stepped wedge design study with outcomes of breast, cervical and CRC screening
- Target high and average risk individuals
- Study implementation process in primary care clinics over the final 2 years of a 5-year study