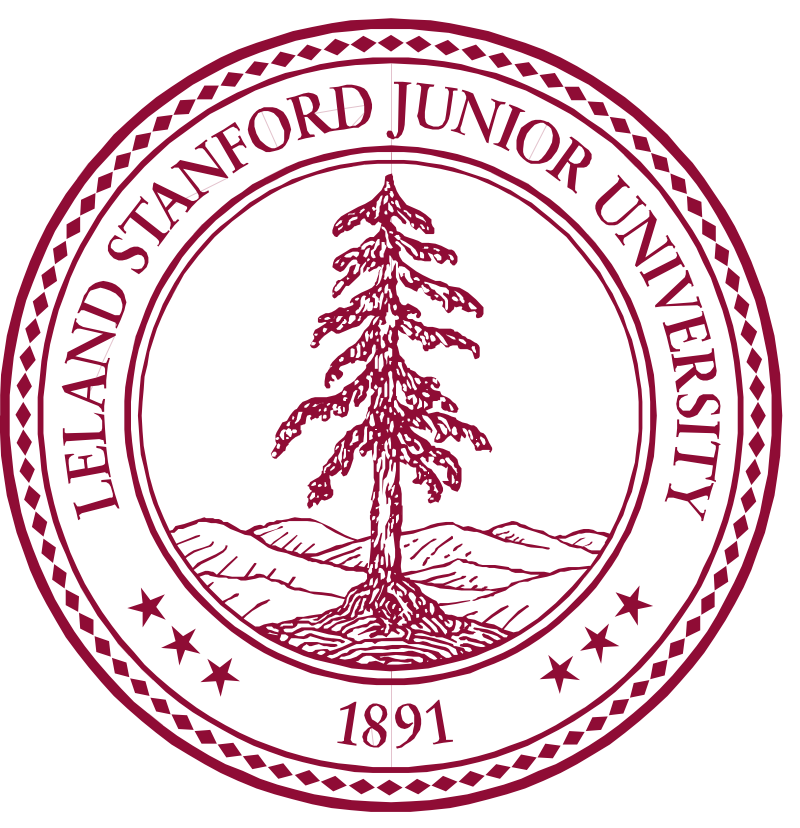


The Effectiveness of a Multimodal Intervention to Increase Compliance of Colorectal Screening Tests in Federally Qualified Health Centers in Monterey County



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Background

Colorectal cancer (CRC) screening rates are low among vulnerable populations, and especially low at Federally Qualified Health Centers (FQHCs). Studies have shown that outreach can improve CRC screening rates, but little is known about the effectiveness of multimodal intervention in priority populations at FQHCs.

We sought to determine the efficacy of a multimodal approach to increase completion of CRC screening (using a fecal immunochemical test, or FIT) at four FQHCs of the Clinica de Salud del Valle de Salinas (CSVS) with high levels of priority populations. Salinas Valley demographics finds about 90% of the residents as Latino; 92% of CSVS patients live below the poverty line.

This study compared FIT completion rates during a two month period utilizing the standard clinic approach prior to the intervention in comparison to FIT completion rates at the clinics during the two month period during and after the completion of the intervention in October 2015. The intervention included in-service training of clinic staff, meetings with medical providers, provision of written instructions to staff, identification of patient navigators to identify and counsel patients, navigators checking for FIT compliance two weeks after the kit was provided, then contacting non-compliant patients by telephone to encourage completion, and to offer brief education and support.

We found a three-fold increase in completion rates from the pre-intervention period to the post-intervention period. Our study indicates that a careful multi-faceted interaction in conjunction with medical providers and patients can dramatically improve colorectal cancer testing rates, even in difficult settings with vulnerable patient populations.

Community Partner



The setting of the study was in four of the eight general FQHCs of the **Clinica de Salud del Valle de Salinas (CSVS)** located primarily in the Salinas Valley and contiguous regions of Monterey County, California.

The CSVS population mix consists of primarily vulnerable populations, including unauthorized immigrants, farmworkers, and México/Central America local indigenous people who do not speak Spanish or English.

Project Description

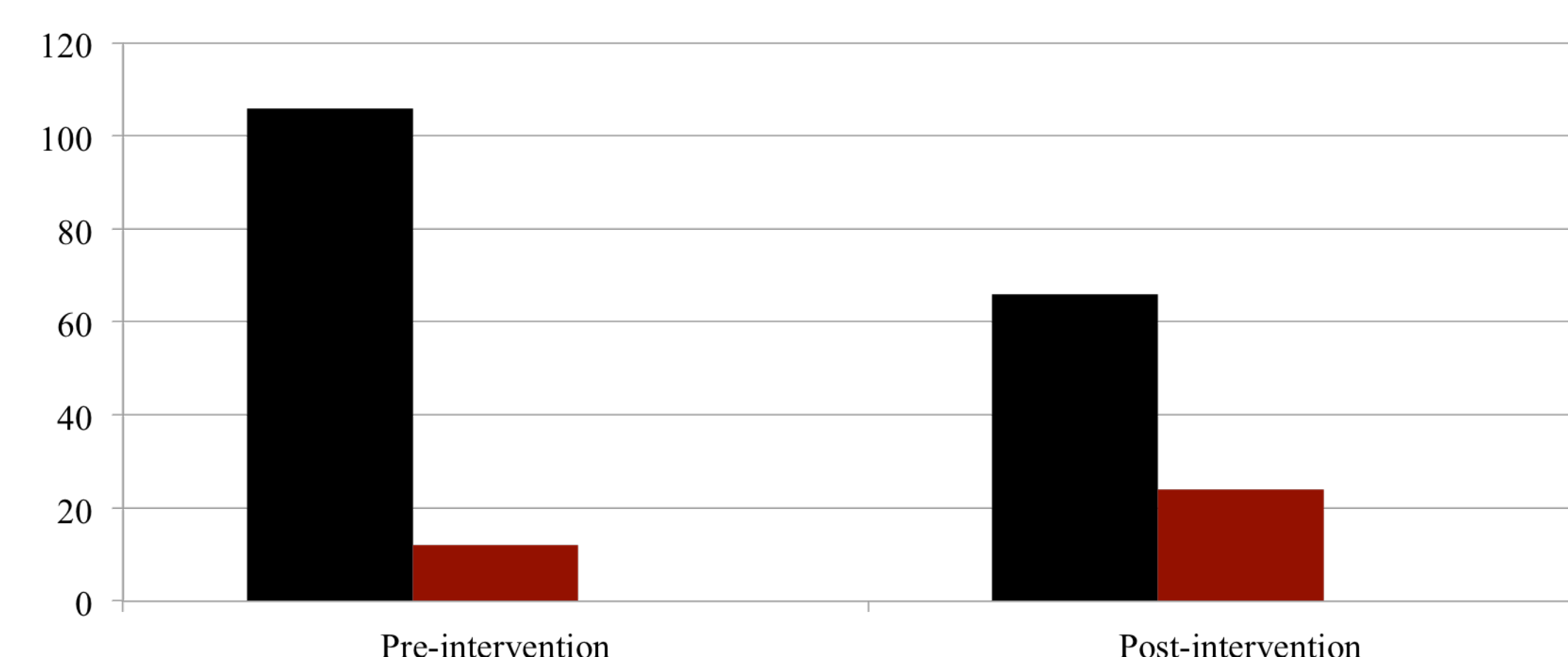
This project was initiated by Dr. Dale O'Brien, MD MPH, Executive Director of the local nonprofit, Cancer Patients Alliance. Partnering with Dr. Jasmaine Williams of Stanford University, with a background in cancer biology and community health, the goals of this summer fellowship were to study the effect of intervention and advocacy in increasing colorectal cancer screening rates in select general medical clinics.

In partnership with the Clinica de Salud del Valle de Salinas, the first phase of the project involved working with CSVS administration (including CEO, Dr. Maximiliano Cuevas) and staff to learn about ongoing efforts in the medical clinics. Next, we visited with staff at each of the four clinics of interest along with Erick Lopez, Community Health Services Manager of CSVS, to discuss barriers to improved colorectal screening rates and solicit ideas for this particular intervention. Last, we implemented the multimodal intervention described in the "Background" section and obtained post-intervention data for subsequent analysis.

Ilya Kim, a Stanford undergraduate majoring in Human Biology, assisted in the analysis of pre-intervention and post-intervention data obtained by CSVS staff. The quantitative data from the pre- and post-intervention periods are described in detail in the following section.

Outcomes

During the pre-intervention period 106 FIT kits were distributed in the four clinics, with subsequent completion of 13 tests for a rate of 12 percent. During the post-intervention period 66 FIT kits were distributed with subsequent completion of 24 tests for a rate of 36 percent.



Given these data, we find a **three-fold increase in completed CRC screening rates** from the pre-intervention period as compared with the post-intervention period.

The intervention appears to improve FIT completion rates in priority populations in the setting of a FQHC.

Lessons Learned

Nationwide, the proportion of FQHC patients who are current with colorectal cancer screening recommendations ranges from about 7% to 12%. This is roughly consistent with the CSVS population and compares to about 60% colorectal cancer screening compliance of the general population.

ANNUAL INCOME (in thousands)	< 20	20-35	35-50	50-75	> 75
CURRENT PERCENTAGE	45.1	55.2	61.7	63.7	66.0

Ethnicity and socioeconomic (SES) considerations sharply define these rates. Only 53% of Latinos nationwide are current, and 39% of those with incomes below the federal poverty line. These low rates are not merely academic as detecting colon cancer will save lives. Previous research supports the finding that low SES is associated with death from colorectal cancer.

For our pilot project in testing the effectiveness of this multimodal intervention, several key stakeholders were critical in achieving the desired outcome of improved colorectal cancer screening rates among vulnerable populations treated at CSVS clinics. These stakeholders include CSVS administration and CSVS staff.

Recommendations

1. Establish close personal relationships with clinic staff, including medical providers.
2. At the outset of the project, set action goals for the patients including careful, culturally appropriate instruction, and a brief teaching interaction at the time of the clinic visit.
3. Include a post-clinic visit contact for non-responders within a reasonable time period from the office visit (approx. two weeks).
4. Follow-up with patients, clinical laboratory, and clinic personnel.

Acknowledgements

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