Linn, Benton, Lincoln Colorectal Cancer Screening Campaign Evaluation

"I got screened. Now, I'm talking about it."

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Project Background

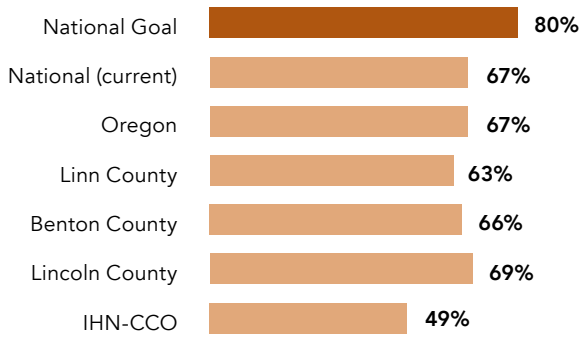
Colorectal cancer is the second leading cause of cancer deaths in Oregon but is highly preventable and treatable with regular screening. The US Preventative Services Task Force recommends that individuals aged 50–75 (45 for African Americans and even earlier for those with risk factors such as a family history) receive regular screenings.[1] The average screening rate in the state of Oregon is 67%.[2] Among Medicaid recipients in Linn, Benton, and Lincoln Counties served by IHN-CCO is 49%.[3] The National Colorectal Cancer Roundtable set a goal of achieving a national screening rate of 80% by 2018.[4]

The Colorectal Cancer Screening Campaign is a collaboration of Linn, Benton, and Lincoln County Health Departments with funding from InterCommunity Health Network CCO (IHN-CCO). The project demonstrates complementary and coordinated efforts of clinical and community-based prevention interventions to increase colorectal cancer screening. By systematically applying these interventions at multiple levels (individual, community, organizational, and policy), this project aimed to increase screening and utilization through collaboration efforts of the regional health department, IHN-CCO, health clinics, and non-traditional partners.

Given the low rates of screening not only statewide, but also among the most traditionally under-served individuals, the regional county health departments collaborated to develop a pilot campaign that would increase screening rates. To address barriers associated with regular screening, the regional campaign developed a program to work with clinics to promote the fecal immunochemical test (FIT) as well as more traditional methods like colonoscopy. The FIT test can be done at home and in some cases can be returned via mail, thus reducing the barrier of multiple visits to the doctor. The regional campaign also utilized Oregon Health Authority's (OHA) social marketing campaign, The Cancer You Can Prevent (thecanceryoucanprevent.org). This campaign, originally piloted in Clatsop County in 2011, recruited local champions to educate the public, promote regular screening, and to encourage individuals to talk to their friends and family about their own experiences getting screened.

The Linn Benton Lincoln Colorectal Cancer Screening Program's Planning and Evaluation Team (PP&E) consisted of public health specialists from each county, employing the principles of evidence-based practice and science for colorectal cancer screening. The PP&E Team recruited clinics in their respective counties to participate in the campaign. A set of clinics were recruited to be FIT pilot clinics which required the promotion of FIT testing with their patients via the social media campaign marketing materials, which included posters and brochures. The clinics were also to develop closed-loop referral processes, which would ensure follow up with patients who have not returned their screening kit or utilized another screening option. An additional set of clinics were recruited to only promote the state campaign materials in their clinics. In addition to the clinical efforts, county coordinators placed marketing materials in non-clinical settings throughout their respective communities and utilized advertisements to promote the campaign. The clinical pilot for the campaign started in January 1, 2016 and ended March 31, 2016.

Adults Aged 50–75 Meeting the US Preventative Services Task Force Recommendations for Colorectal Cancer Screening[2, 3, 4]



Project Objectives

The objective of this pilot was to increase colorectal screening rates among IHN-CCO members through community and clinical approaches. The goal was to achieve that through:

- Pilot FIT testing option for colorectal cancer screening in selected clinics.
- Test the impact of social media campaign in both community and clinics.
- Assist clinics in developing practices for systematic closed loop referral procedures in primary care clinics.
- Measure colorectal screening rates among IHN-CCO members when FIT testing is an option.
- Research and test culturally & linguistically appropriate educational and outreach methods for Spanish-speakers.

Timeline of Objectives

June–August 2015
Review data and develop project objectives. Conduct Literature review. Identify local champions for marketing campaign.

October–December 2015
Work with Oregon Health Authority to utilize campaign materials locally. Implement marketing campaign in Linn, Benton, and Lincoln Counties through radio and newspaper ads and billboards. Distribute marketing materials to non-traditional partners and locations (libraries, barber shops, social service agencies).

January–March 2016
Implement intervention in marketing only clinics and FIT pilot clinics. Conduct "Screening for Colorectal Cancer" training for clinical staff. Conduct mid-point evaluation interviews with FIT pilot clinics.

April–September 2016
Conduct final interviews with FIT pilot and marketing only clinics. Analyze qualitative data from interviews. Develop plan for education and outreach among Spanish-speaking populations.

October–December 2016
Analyze quantitative data. Implement outreach plan in Spanish-speaking populations. Publish pilot project evaluation report.

Methods

Evaluation Measures

- Will increased knowledge of screening and awareness of peers who have screened for colorectal cancer increase the rate of IHN-CCO members who screen?
- Will increased rates of physician recommendations of FIT increase screening?
- Will use of the less-invasive FIT increase reported rates of colorectal cancer?
- What lessons have been learned through collaboration between public health agencies, the coordinated care organization, and the clinical health system?

The PP&E Team utilized qualitative data through interviews conducted with clinic staff. FIT pilot clinics were interviewed at midpoint and at the end of the pilot period. Marketing pilot clinics were interviewed only at the end of the pilot period.

The PP&E Team also utilized quantitative data compiled by IHN-CCO through claims submitted by participating clinics.

Clinic Marketing

The goal of having marketing materials in the clinics was to aid providers in having the conversation with their patients, and to have educational materials that providers could hand to patients.

All participating clinics (both FIT and marketing pilot) were given OHA produced campaign materials consisting of posters and brochures. Clinics were encouraged to place materials in locations visible to their patients such as waiting rooms and exam rooms and to distribute to patients.

Community Marketing

The goal of the community marketing was to saturate the community and normalize the message of colorectal cancer screening.

Posters and pamphlets were distributed in non-clinical settings in all three counties. These materials were placed in the community settings where the eligible population is likely to see them on a regular basis. Examples of these locations include barber shops, community and senior centers, libraries, and post offices.

Examples of marketing materials such as posters, fliers, and billboards

In addition to placing these materials in community settings, ads were created and placed in local newspapers, buses, on billboards (in Linn and Benton Counties), and on local radio stations.

Clinic Training

Three trainings were held with clinic staff across the region; in Newport, Albany, and Sweet Home. These trainings were conducted by IHN-CCO Chief Medical Officer, Dr. Kevin Ewanchyna. FIT Pilot clinics were required to send staff to a training and marketing clinics were encouraged but not required to have staff attend.

The trainings consisted of an introduction to colorectal cancer screening and the options recommended by the US Preventative Services Task Force. It also served as a way to update clinic staff on currently recommended screening and those that are out-of-date and no longer recommended.

Patient Navigators – Achieving Equity in Colorectal Cancer Screening

The Linn Benton Lincoln Colorectal Screening project is working to better understand the barriers faced by Latinos to lifesaving cancer screening. Colorectal cancer is the second most commonly diagnosed cancer in both Latino men and women. Latinos are more likely to have more advanced-stage colon cancer or larger tumors when their disease is discovered than non-Hispanic whites. Latino adults 50 years of age and older are less likely to have had a recent screening test for colorectal cancer, 47%, than non-Hispanic whites 62%.[5]

Patient Navigation is a strategy to improve health outcomes, especially in vulnerable individuals and populations, by eliminating barriers to accessing culturally appropriate quality services. Research has shown that patient navigation helps to increase the rate of colorectal cancer screening and reduces barriers to treatment in medically underserved populations.[6] The project is collaborating with Benton County Health Services' Health Navigation program to better understand barriers to colorectal cancer screenings.

FIT Pilot Clinics

Education

No standard practice reported by clinics at midpoint check in.

Identification of patients due for screening

Clinic staff use EHR to check if a patient is due for a screening when the patient is scheduled for an appointment.

Outreach

At this point, only one clinic was checking the patient panel for those due for a screening without a scheduled appointment and proactively reaching out.

Roles for Clinic Staff

Most of the clinics do not have a dedicated panel manager to run reports on patients and check the EHR for the next day's appointments. Depending on the clinic a Medical Assistant or Nurse may do this.

Usually the Medical Assistant initiates the discussion on colorectal cancer screening options with the patient. The doctor will make the final determination on which screening is most appropriate – usually FIT or colonoscopy.

The Medical Assistant or Nurse usually explains to the patient how to complete the FIT.

Screening Practices

The clinic initiates a discussion on colorectal cancer screening options with the patient at their appointment.

In the EHR, Health Maintenance and the Meaningful Use Checklist are the areas used by the clinic staff to check whether the patient is up-to-date on their colorectal cancer screening. Additionally, one clinic reported utilizing a hard stop in the EHR, so Medical Assistants wouldn't be able to move forward in the EHR without initiating the discussion on colorectal cancer with the patient.

At this point, clinics reported referring for colonoscopy and FIT about half the time. While still referring for colonoscopy regularly, they reported an increase in referrals for FIT. Some clinics also reported using the outdated guaiac stool test because they feared patients would not follow through with an at-home test or colonoscopy.

Referral

Most clinics reported referring for colonoscopy and FIT about half of the time, though they report referring for FIT more often than before the pilot. Some also reported using the outdated guaiac stool test at the clinic. Many clinics do not keep a supply of FIT at the clinic that they physically hand to the patient. The test is usually ordered through a lab and sent or then given to the patient with instructions, though some clinics do report having a small supply in the exam rooms.

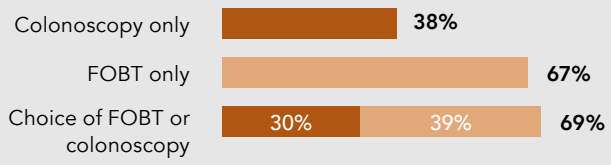
Follow Up

No standard practice reported by clinics at midpoint check in.

FIT vs Colonoscopy

A large clinic study showed that when patients have more choices, they are more likely to get screened.

Percent of Participant's Adherence to Colorectal Cancer Screening[7]

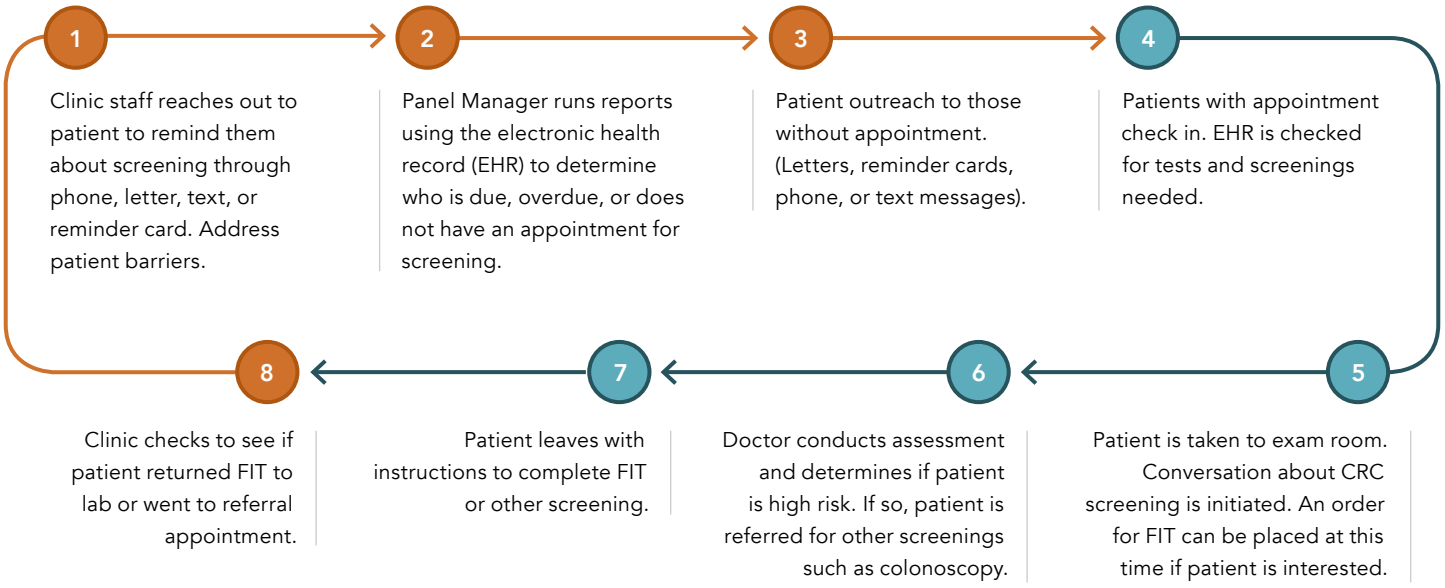


Takeaways

- Few clinics have dedicated panel managers – doing so would allow clinics to have a more proactive approach and to develop a consistent outreach and follow up plan.
- Very few clinics proactively check for screening behavior among those who haven't made appointments (need to reach those not reaching out on their own).
- Not many clinics mentioned if or what education they do with patients on how to conduct a FIT screen or whether they address the patients' comfort level with doing a screen at home.
- Use and knowledge of FIT screening is increasing.
- Clinics need help with developing workflow processes. What would the barriers be for them to implement these?
- How do clinics have patients return FIT kits – Can they mail them, or do they need to return in person?

Closed-Loop Referral Process

All FIT pilot sites participated in the development of a closed-loop referral process in their clinic. While the exact process varies from clinic-to-clinic, below is an example of what it can look like. A closed-loop referral creates clinical workflows that enable clinic staff to follow patients through the referral and screening process. It then allows clinics to identify and address barriers to screening to enable follow through with the referral.



FIT Pilot Clinics

Education

Clinics report using provided marketing materials in waiting and exam rooms; hung posters and handed pamphlets out to patients.

More providers report speaking with patients who meet criteria for screening about the importance of getting their colorectal cancer screening.

Clinics reported that the "Screening for Colorectal Cancer" training they received from the IHN-CCO Chief Medical Officer motivated their staff to properly educate patients about the importance of colorectal cancer screening.

Identification

Clinic checks for screenings the patient needs using the EHR. There continues to be a mix of clinics who do this only for patients with a scheduled appointment and of those who do this for all patients in the panel.

Clinics report finding different ways to utilize the EHR depending on their needs. Examples include setting up reminders for when a patient is overdue for a screening. Clinics with staffing capacity also report running reports on their patient panel. However, by the end of the pilot, some clinics still struggled to effectively use the EHR.

Outreach

Clinics with a smaller panel of patients were more likely to report doing outreach to patients.

Some clinics did report sending letters and calling patients to remind them to complete their screening.

One clinic reported planning to reach out to patients with upcoming appointments and those who have not yet made an appointment.

Roles for Clinic Staff

All clinics were in some stage of developing a workflow for a closed-loop referral process but also reported that this is heavily dependent on staffing capacity.

Clinics reported staffing turnover and having enough staff as a barrier to implementing a new clinic workflow that incorporates an increase in FIT referrals.

Screening Practices

Not all clinics made changes to their process but some identify prioritizing colorectal cancer screening.

One clinic reported plans to outreach to patients with upcoming appointments and those who have not yet made an appointment by using scheduling notes in the EHR to remind clinic staff and by sending FIT kits to patients in the mail.

Clinic reported seeing an increase in referrals for FIT from before the pilot started.

Clinics reported that having FIT kits available in exam rooms made them more likely to participate in the discussion of the importance of colorectal cancer screening with patients.

Some clinics reported starting to address patient barriers to screening, like not wanting to handle their feces, by including gloves with FIT kits.

Referral

Clinics noted that the partnership with public health was important to the development of a closed loop referral process, as it kept the topic on the priority list at a time when there are many asks of the clinic.

Follow Up

One clinic reported follow up with patients after referral. They are using the EHR to get notifications for those patients who have not completed their screen. Those patients receive a phone call from clinic staff to find out if there is a barrier to completing the screening or if the patient needs a new FIT sent to them.

One clinic also reports follow up with patients referred for a colonoscopy who have not followed through with the referral.

Some of the participating clinics reported being able to implement a closed-loop referral process – ensuring follow up with patients after giving referrals. Prior to being a part of the pilot many of the clinics did not have a system like this in place.

Takeaways

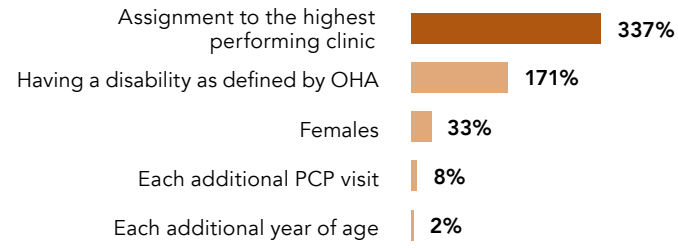
- Clinics focus on reaching out to only those patients on their panel who have scheduled an appointment. Very little to no outreach is being done with patients who are overdue for a screening but haven't made an appointment.
- Clinics have a limited capacity and staffing can be a real barrier to implementing processes shown to be effective in other clinics. More innovative approaches that can work around this barrier are necessary.
- Clinics need more subject matter expertise, guidance in creating workflows, best practices from other clinics and programs.
- The pilot period for the clinics to implement the new workflows was only three months. Clinics would have benefitted from more time to test new workflows and address their own barriers.
- There were challenges to working with the EHR. Not all clinics had staff dedicated to running reports. Not all clinics knew how to most effectively use the EHR.
- Areas of opportunity exist to increase patient return rate of FIT.

Summary of Claims Analysis

The source of the data was IHN-CCO member claims from Marketing or FIT & Marketing clinics with dates of service between January 1, 2015–June 30, 2015 and January 1, 2016–June 30, 2016. These claims were used to see if there was a difference in the rates of colorectal cancer screening before and after the clinics engaged in the campaign. Data was pulled on all IHN-CCO members that were 50–75 years old and assigned to one of the participating clinics.

Available demographic variables (e.g., gender, disability status, age) were examined to investigate why some members or populations get screened while others do not. As shown in the graph to the right, while being older, female, and having a disability may have increased the odds of screening, the data suggests that a far more important variable is clinic assignment. The project found that the more highly engaged a clinic was the more likely a patient was to follow through with their screening. Keeping all other variables constant, being assigned to the highest preforming clinic, increased the odds of being screened by 337%.

Percent Increase of the Odds of Being Screened for Members Assigned to the Participating Clinics



**This data is observational and thus is descriptive of this study only. Inference to a larger population cannot be drawn.*

Results of Claims Analysis

Overall, the colorectal cancer screening rates of the participating clinics increased by 2.6%. The Marketing clinics increased by 2.4% and the FIT & Marketing clinics increased by 2.9%.

Of the screened members, FIT rates after the campaign increased by 1.6% in the Marketing group, and 2.0% in the FIT & Marketing group.

Percent Increase of Members Screened for Colorectal Cancer

Percent Increase of FIT Screens of Total Screened Members

Marketing Clinics

Sharing of educational materials with patients

Clinics reported they did share materials. This was done both via conversations with patients and by posting materials in waiting rooms, exam rooms, and reception areas.

Discussion with patients

Clinics distributed and used educational materials to discuss the campaign and importance of screening with patients regularly at office visits.

Some clinics report using the opportunity of going over the screenings and tests a patient was due for to talk about colorectal cancer.

Reception of patients to discussion of colorectal cancer screening

Most clinics report that some of their patients were open to the discussion – at least an initial discussion – but not all. Also, some patients were willing to talk about it but didn't want to get a screening.

Discussion leading to screening

Some clinics weren't able to say if the discussion led patients to be screened but most felt that it made at least some of their patients more likely to participate in a colorectal cancer screening.

Encouraging patients to talk to friends and family

There were mixed results. Of the clinics who participated in the interview, just over half said they did encourage their patients to talk to their friends and family.

Of the clinics who did participate in this part of the marketing campaign, they report that they saw mixed results. Some of their patients were receptive to the idea. Clinics were unable to tell us if their patients actually followed through.

Change in discussion of colorectal cancer screening with patients going forward

Most clinics agreed that this campaign will change how they discuss colorectal cancer screening with their patients in the future. Some clinic staff feel like they have more knowledge, they realize their patients are more open to the conversation than they thought, and they will be more proactive with patients.

"Screening for Colorectal Cancer" Training

Most of the clinics did not attend the training. This was not a requirement for this group of clinics.

Clinics cited that the distance they had to travel to get to the training and the time taken away from their schedule inhibited their ability to attend.

Of the clinics that did attend, they felt that they gained more knowledge and helped them to more confidently discuss the screenings.

Takeaways

- Not all of the marketing clinics utilized all parts of the campaign like stressing the importance of having patients talk to their friends and family.
- Clinics had no follow up with patients to know if they did follow through on promoting the campaign with their friends and family.
- Clinics had a difficult time attending the in-person training due to staffing and time constraints. Are there other types of training they can get instead?
- Overall, clinic staff liked and used the marketing materials and felt that they helped to get the conversation going with patients.

Pilot Findings

Clinics were invested in the process, but the PP&E Team found that with a pilot period of only three months to implement a new clinical workflow, many did not have enough time. If doing this project again, the PP&E Team would recommend allotting more time to the planning and implementation period, so clinics have enough time to test the workflow.

Additionally, the PP&E Team recommends offering training to clinics on EHR use, workflow development and implementation, and creating a staffing plan. It was assumed that clinics would know best how to create their own workflow and how to utilize the EHR. However through interviews with clinic staff, it became apparent that some of the clinics struggled with how to use the EHR to run reports and implement processes like hard stops that ensure clinic staff finish a process before moving on in the patient's record. Clinics identified that seeing examples of other clinical workflows would have been helpful in getting them going.

The PP&E Team found that having educational materials, like posters and brochures, in the waiting room and in the exam rooms helped spur conversation between providers and patients. It is also recommend having FITs in the exam rooms, so providers can show patients what the test looks like, can discuss the process with patients, and can address barriers patients have to completing the test.

Some of the participating clinics had inventive ideas on how to follow up with patients and address barriers. Examples include sending reminders via birthday cards, sending FITs in the mail, reminder cards and letters, phone calls, and text messages. Utilize technology to make these follow up procedures less cumbersome on staff.

Sustainability

Elements of sustainability were naturally built into the objectives of this project. A primary objective of this project was to work with clinics to develop a closed-loop screening and referral process. Through the project timeline, clinics worked through adjusting their existing clinical workflows to build in consistent screening, referral and follow up processes that will be followed after the project period is over.

In developing these new clinical workflows, the pilot clinics were also able to identify staffing needs that would enable them to implement their new workflows. By making changes to their staffing plan, they can build their capacity and make their workflow changes more sustainable. For example by creating clinical care teams, clinics can ensure that all team members are trained to be used at their highest skill level and that staff can effectively cross train to make up for potential staffing changes and shortages.

As part of the technical assistance to the clinics, the PP&E Team provided training on the importance of colorectal cancer screening and updated recommendations regarding tests that should and should not be used. Due to the nature of staff turnover, clinics will have staff with a mixed amount or possibly no formal training. A possibility of dealing with this issue could be the creation of a training plan that clinic management can add to their already existing training for onboarding new staff.

Lessons Learned

Throughout the course of any project, it can be normal to make changes based on factors like new information learned, capacity among your project staff, or participation (or lack of) from stakeholders. The PP&E Team realized the need to make changes to our original objectives based on this information that may have ultimately affected the outcomes of the project.

Staffing changes during the project on both the program coordination and clinic sides can disrupt the continuity of relationships. It is important, if possible, to maintain consistent staffing in key positions like those that interact with outside stakeholders. If possible, plan for ways to keep clinics engaged and participating throughout the process.

It is vital to have good communication with clinics regarding technical assistance and training needs. Clinical staff benefit from training on the importance of staying up-to-date on screenings, what tests to recommend and why, which tests to not use or recommend, and how to provide health education that motivates their patients to participate in the screening process. Due to the nature of staff turnover, it would be beneficial to work with clinic management to include this training into already existing training plans for new staff.

The PP&E Team found that clinics also wanted or appreciated more guidance on creating clinical workflows. Showing examples of how closed-loop referral processes have been created in other clinics, can be a real benefit. While every clinic is different and will need to create and implement workflows differently, there is no need for them to completely recreate a process that other clinics have been using successfully. This can also add legitimacy to the project in the eyes of clinics staff and can help to create stronger relationships with clinic management.

Overall, the PP&E Team learned the importance of partnership and collaboration. In the past public health has kept itself separate from the clinical-side of healthcare. Public health professionals tend to focus on policy development and allow clinics to focus on direct patient care. However, projects like these underscore the importance of the collaboration between population and individual-level health. No one group can improve the health of a community alone. So much more work can be accomplished when public health and clinical health bring their strengths together.

In Partnership with InterCommunity Health Network Coordinated Care Organization.
To learn more, visit **thecanceryoucanprevent.org**

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