National Breast and Cervical Cancer Early Detection Program's Patient Care Coordination Demonstration Project

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Division of Cancer Prevention and Control

Acknowledgments

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Disclaimer

The findings and conclusions in this presentation are those of the presenters and do not necessarily represent the views of the Centers for Disease Control and Prevention.

Objectives

By the end of the presentation, participants will be able to describe:

- the CDC care coordination demonstration project
- patient navigation measures
- common patient barriers addressed through patient navigation
- components of the implementation evaluation

Presentation Outline

- Program background and context
- Overview of the funded programs
- Logic model
- Program models and activities
- Measures and evaluation
- Lessons learned

BACKGROUND AND CONTEXT

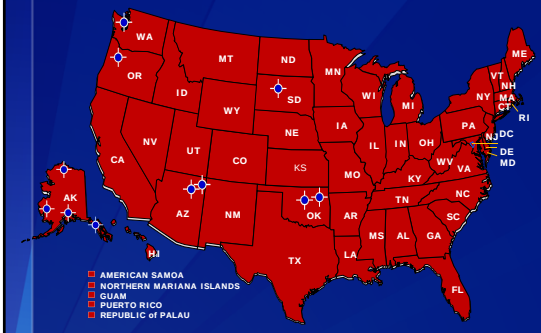
National Breast and Cervical Cancer Early Detection Program (NBCCEDP)

- Created by Breast & Cervical Cancer Mortality Prevention Act of 1990
- Established to provide access to screening and diagnostic services for underserved women

NATIONAL Breast & Cervical Cancer Early Detection Program
SCREENING WOMEN, SAVING LIVES

National Breast and Cervical Cancer Early Detection Program (NBCCEDP)

67 Screening Delivery Systems



American Indian Initiative:

Arctic Slope Native Assn, Ltd – North Slope Borough, Barrow, AK
Cherokee Nation – Tahlequah, OK
Cheyenne River Sioux Tribe – Eagle Butte, SD
Hopi Tribe – Kykotsmovi, AZ
Kaw Nation – Kaw City, OK
Native American Rehabilitation Assn of the Northwest, Inc
Navajo Nation – Window Rock, AZ
South Puget Intertribal Planning Agency – Shelton, WA
Southcentral Foundation – Anchorage, AK
Southeast Alaska Regional Health Consortium – Sitka, AK
Yukon-Kuskokwim Health Corp – Bethel, AK

Since 1991:

- >4.2 million women screened
  - 53% are of minority race or ethnic background
- >10.4 million breast and/or cervical cancer screening examinations completed
- 54,276 breast cancers detected
- 3,113 invasive cervical cancers detected

Source: April 2012 MDE submission

More than just screening and diagnosis

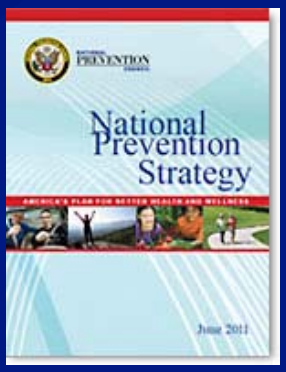
- Program management
- Data management
- Quality assurance / quality improvement
- Professional development
- Public education/ Targeted outreach
- Patient navigation / Case management

Additional Context

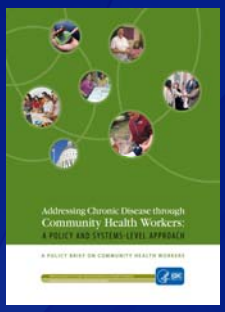
- Patient Protection and Affordable Care Act of 2010
  - Full implementation in 2014
  - Extends healthcare coverage to previously uninsured persons
  - Ensures greater access to preventive care, including cancer screening
  - Presents opportunity for public health to partner with larger personal health systems

National Prevention Strategy

- Maintain a skilled, cross-trained, and diverse prevention workforce, **including Patient Navigators (PNs)** and Community Health Workers (CHWs)



CDC Efforts Around CHW/PN Workforce Development



- CDC CHW Policy Brief
- ASTHO Brief
- 50 of 69 state cancer control plans include references to:
  - CHWs, patient navigators, outreach workers, community health representatives, promotores, community health advisors, lay health educators, lay health advisors, or peer educators.

What Defines Patient Navigation?

"Individualized assistance offered to patients, families, and caregivers to help overcome healthcare system barriers, and facilitate timely access to quality health and psychosocial care from pre-diagnosis through all phases of the cancer experience."

-Association of Oncology Social Workers, Oncology Nursing Society, and C-Change

- **Nurse Navigators**
- **Social Work Navigators**
- **Lay Navigators**
  - May be Community Health Workers (CHWs)
  - Often supervised by social worker or nurse

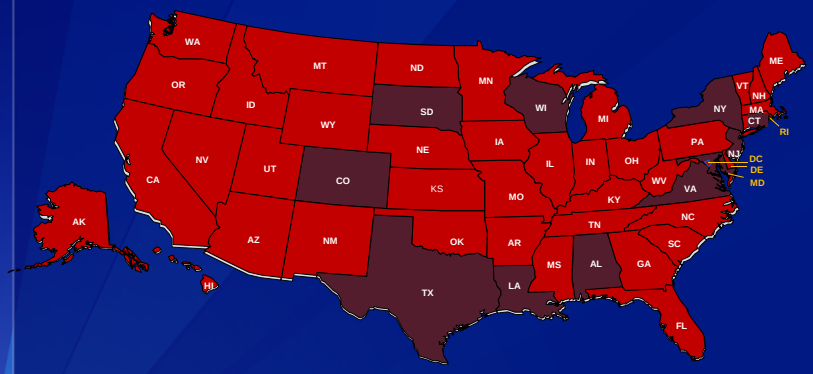
http://www.aosw.org/ ; http://www.ons.org/ ; http://c-changetogether.org/

CARE COORDINATION OVERVIEW

Project Overview

- **Purpose** – Demonstrate expanded roles for state health departments in the early detection of breast and cervical cancer through targeted outreach, patient navigation, and case management
- **Objectives**
  - Create and implement changes in operational systems, policies, and/or practices to improve coordination of cancer prevention and early detection activities
  - Extend existing patient navigation and case management activities into larger health settings to provide these essential services to additional program-eligible women, not currently covered by NBCCEDP-funded services

Care Coordination Program Grantees



Care Coordination Grantees

Alabama
Colorado
Connecticut
Louisiana
Maryland
New Jersey
New York
South Dakota
Texas
Virginia
Wisconsin

LOGIC MODEL

NBCCEDP Care Coordination Logic Model

IF we conduct these activities → **THEN we expect these outcomes**

Inputs

CDC Funds and Technical Support

NBCCEDP Care Coordination Supplemental Resources
- Grantee institution infrastructure (e.g., resources, staff, expertise)
- Grantee Partners

Activities

Infrastructure/System
- Work with new health care providers
- Support systems & policy change within health care delivery system

Patient Navigators
- PN recruitment and employment
- PN training design and delivery

Patient Navigation

- Patient outreach and recruitment
- Patient assessment and barrier identification (geographic, language, cost, education, cultural, anxiety, fatalism)
- Patient education
- Resolution of patient barriers
- Patient tracking and follow-up
- Data collection and reporting

Immediate Outputs

Infrastructure/System
- # / type of expanded health care settings
- # / type systems/policy change

Patient Navigators
- # / type PNs employed
- PN supervision provided
- # trained / # training
- satisfaction with training

Navigated Patients
- #/type of outreach activities
- # recruited for navigation
- Patient demographics
- # patients assessed
- # navigated for screening
- # navigated for diagnosis
- #/type of barriers identified
- # / type (individual, group) of education delivered
- # / type of PN activities delivered to reduce barriers
- Time spent to navigate
- # / type of reminders provided; # patients tracked
- Data collected and reported (e.g., # assessment forms completed, # PN log forms completed)

Short-Term Outcomes

Infrastructure/System
- Expanded and integrated PN programs in community

Patient Navigators
- Competent & culturally sensitive PNs
- Increased knowledge of community & health care system
- Increased knowledge of breast and cervical cancer
- Increased skills for delivering navigation activities

Navigated Patients
- Increased access to health care coverage
- Increased access to screening and diagnostic services
- Reduced barriers to care
- Increased adherence to screening/diagnostic/treatment recommendations
- Reduced no-show rate for appointments
- Improved timeliness for diagnostic resolution and treatment initiation
- Reduced lost-to-follow-up
- Improved patient and provider satisfaction
- Increased screening prevalence within health care setting
- Increased cost efficiencies

Intermediate Outcomes

Infrastructure/System
- Sustainable PN programs in community

Patient Navigators
- Qualified PN Staff retained
- Program able to recruit and supervise qualified PNs

- Increased access and adherence to breast and cervical cancer screening, diagnostic services, and cancer care for patients experiencing health disparities
- Improved coordination of care among & between public health, medical, social service, & community personnel/providers
- Improved adherence to screening guidelines
- Improved screening prevalence in communities

Long-term Outcomes

- Reduced &/or eliminated health disparities
- Improved disease-specific outcomes
- Decreased morbidity & mortality due to breast and cervical disease

Contextual & External Factors
Broader NBCCEDP program, grantee institutional setting; partner organizations; service delivery context; unexpected positive and negative events during project (e.g., changes in Medicare/Medicaid funding; other navigation programs)

CHARACTERISTICS OF PROGRAM MODELS

Priority Populations

- **Specific populations identified**
  - Race/ethnicity
  - Rural populations
- **Example**
  - Women in rural areas
  - American Indian populations

Geographic Reach

Type	Grantee
City	MD
County	AL, MD, NJ
Region	LA, NY, TX, VA, WI
State	CT, CO
Reservation	SD

Program Setting

- Federally Qualified Health Centers
- County Health Departments
- Community Clinics
- Hospitals
- University Health Systems
- Urban Indian Health Clinics

Patient Barriers

- Geographic
- Financial
- Language/cultural
- Education
- Other (fear, environmental issues, negative past experiences)

ACTIVITIES

Grantee Activities

- **Program development**
  - Award Dissemination
  - Staffing
  - Partnership Development & Management
- **Program implementation**
  - Patient Navigation & Data Management Training
  - Data Systems Development & Refinement
  - Instituting Policy/Operational Changes
  - Delivering Care Coordination Services
- **Program monitoring**
  - Performance measures
  - Evaluation

CDC Technical Assistance

- **Developed a grantee listserv for information sharing and communications**
- **Individual site calls**
- **Technical assistance and consultation**
  - PSB Program Consultants
  - PSB Care Coordination workgroup
- **Scheduled networking events**
- **Hosted webinars**

Monitoring and Evaluation

- Developed performance measures in collaboration with grantees
- Data reporting tool
- Site visit with 2 sites

MEASURES

Developing Measures

- Adapted from existing measures used in NBCCEDP
- Reflects the navigation process and patient flow
- Emerges from the logic model

Examples of Process Measures

Category of Measurement	Potential Measures	Potential Data Source
Infrastructure / system	Number and type of health care settings where PNs are placed Number and type of systems or policy changes instituted	Program records
Navigator staff	Number and type of navigators hired or moved to care coordination program	Staff records
Navigator training	Number of trainings provided for patient navigation Number of people trained for patient navigation Participant satisfaction with training Knowledge and skills of navigators	Training records Pre-post survey of participants
Patient outreach and recruitment	Number and type of outreach and recruitment activities Number of people recruited for navigation	Program records
Patient assessment and barrier identification	Number of patients enrolled and assessed Socio-demographics of patients Number of patients navigated for screening	Patient records Patient assessment forms and patient navigation plans

Examples of Short-term Outcome Measures

Category of Measurement	Potential Measures	Potential Data Source
Infrastructure / system	Extent of integrated PN programs in community	Program records
Navigator staff	Navigator staff retention rate Knowledge and skills of navigators	Staff records, periodic assessment of navigator skills and knowledge
Adherence to screening or diagnostic test	Percent of patients navigated who complete their screening or diagnostic test	Medical records
No-show appointments	Percent of navigated patients who miss scheduled appointment for screening or diagnostic exam	Medical records, navigator tracking system
Timeliness of screening test, diagnostic test, and cancer treatment initiation	Average (or median) number of days between referral for screening and screening completion Average (or median) number of days between abnormal screening result and diagnostic completion Average (or median) number of days between diagnosis and initiation of cancer treatment services	Medical records

Performance Measures

Category of Measurement	Proposed Measures	Goal
Infrastructure / Systems	Description of operational and policy changes that improve coordination of breast and cervical cancer screening / diagnostics care	N/A
Navigation Targets	The percentage met of the annual projection for the number of patients to be enrolled, assessed, and navigated	>80%
Patient Assessment	The percentage of patients enrolled for navigation receiving a formal assessment to identify patient barriers and needs	>95%
Clinic screening prevalence	Percent of age-eligible patients within the clinic census who are up-to-date on breast and cervical cancer screening	>80%

Performance Measures

Category of Measurement	Proposed Measures	Goal
Breast Cancer Diagnostic Measures	Percentage of navigated patients with abnormal screening results with complete diagnostic follow-up	>90%
	Percentage of navigated patients with abnormal screening results with time from screening test result to final diagnosis > 60 days	<25%
	Median number of days between abnormal screening result and diagnostic completion	
	Percentage of navigated patients diagnosed with breast cancer with treatment started	>90%
	Percentage of navigated patients diagnosed with breast cancer with time from date of diagnosis to treatment started >60 days	<20%
	Median number of days between diagnosis and initiation of cancer treatment services	
	Percentage of navigated patients with abnormal screening results lost-to-follow-up	<10%

- Yellow shaded measures are performance measures used for the NBCCEDP

Performance Measures

Category of Measurement	Proposed Measures	Goal
Cervical Cancer Diagnostic Measures	Percentage of navigated patients with abnormal screening results with complete diagnostic follow-up	>90%
	Percentage of navigated patients with abnormal screening results with time from screening test result to final diagnosis >90 days	<25%
	Median number of days between abnormal screening result and final diagnosis	
	Percentage of navigated patients diagnosed with cervical neoplasia (CIN2, CIN3, CIS) or invasive carcinoma with treatment started	>90%
	Percentage of navigated patients diagnosed with cervical neoplasia (CIN2, CIN3, CIS) with time from date of diagnosis to treatment started > 90 days	<20%
	Median number of days between diagnosis and initiation of treatment for CIN2, CIN3, CIS	

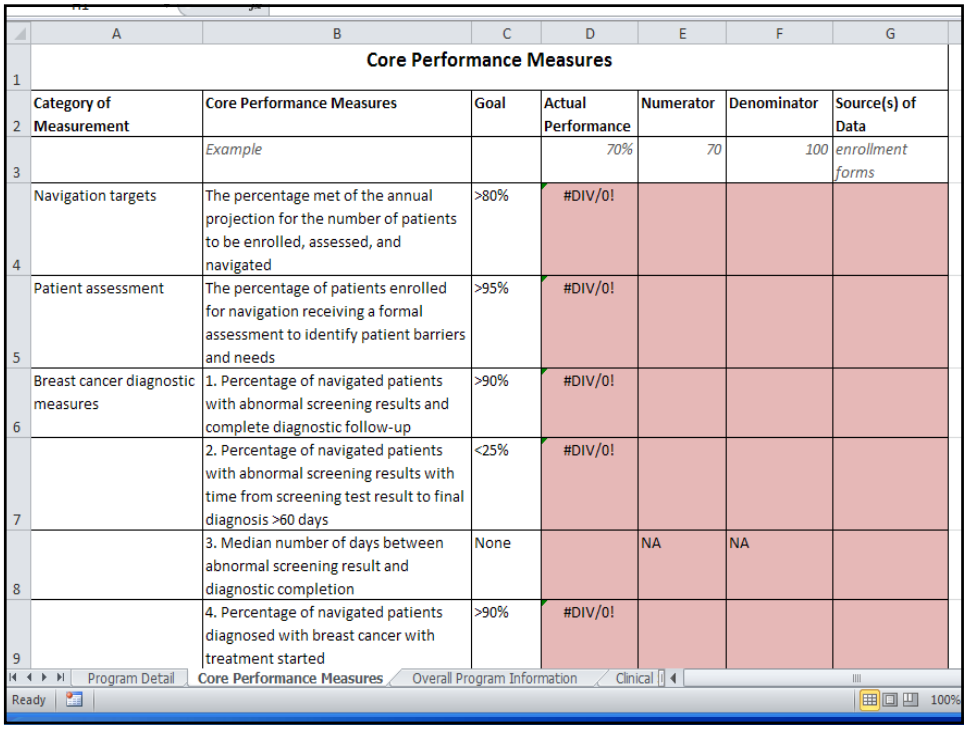
Performance Measures

Category of Measurement	Proposed Measures	Goal
Cervical Cancer Diagnostic Measures	Percentage of navigated patients diagnosed with invasive carcinoma with time from date of diagnosis to treatment started >60days	<20%
	Median number of days between diagnosis and initiation of cancer treatment services	
	Percentage of navigated patients with abnormal screening results lost-to-follow-up	<10%

EVALUATION

Implementation Evaluation

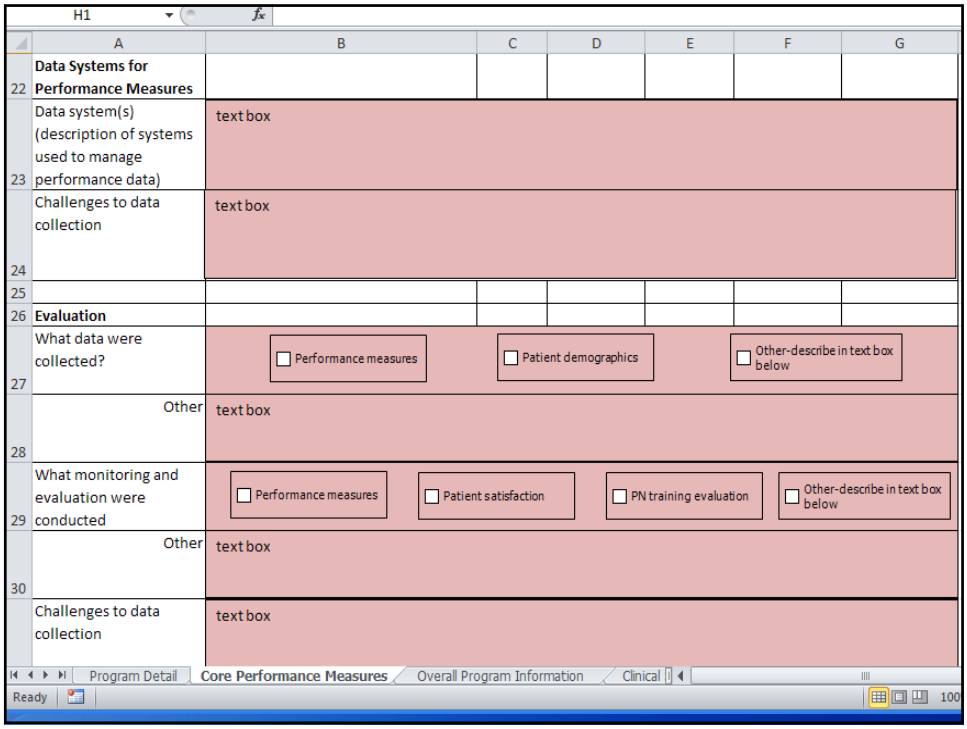
- **Standard data reporting tool**
  - 11 grantees
  - Narrative on program development, implementation, and continuation
  - Measures and data system
  - Aggregate data on navigated patients
  - Description of navigator background and training



	A	B	C	D	E	F	G
1	**Core Performance Measures**						
2	**Category of Measurement**	**Core Performance Measures**	**Goal**	**Actual Performance**	**Numerator**	**Denominator**	**Source(s) of Data**
3		*Example*		*70%*	*70*	*100*	*enrollment forms*
4	Navigation targets	The percentage met of the annual projection for the number of patients to be enrolled, assessed, and navigated	>80%	#DIV/0!			
5	Patient assessment	The percentage of patients enrolled for navigation receiving a formal assessment to identify patient barriers and needs	>95%	#DIV/0!			
6	Breast cancer diagnostic measures	1. Percentage of navigated patients with abnormal screening results and complete diagnostic follow-up	>90%	#DIV/0!			
7		2. Percentage of navigated patients with abnormal screening results with time from screening test result to final diagnosis >60 days	<25%	#DIV/0!			
8		3. Median number of days between abnormal screening result and diagnostic completion	None		NA	NA	
9		4. Percentage of navigated patients diagnosed with breast cancer with treatment started	>90%	#DIV/0!			

Program Detail | Core Performance Measures | Overall Program Information | Clinical

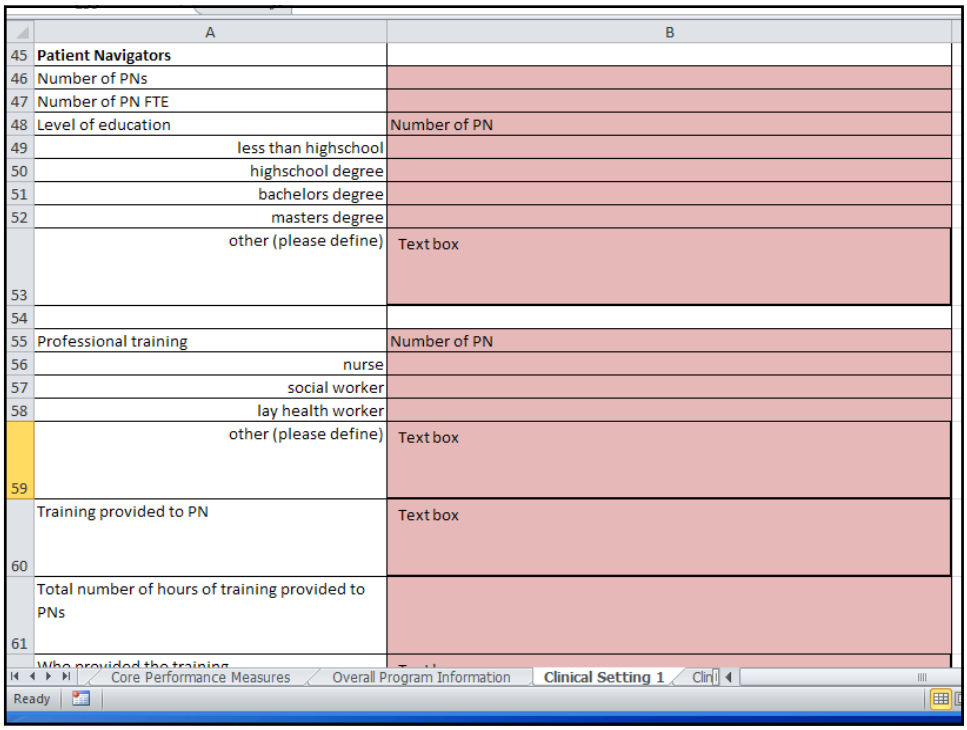
Ready 100%



	A	B	C	D	E	F	G
22	**Data Systems for Performance Measures**						
23	Data system(s) (description of systems used to manage performance data)	text box					
24	Challenges to data collection	text box					
25							
26	**Evaluation**						
27	What data were collected?	☐ Performance measures ☐ Patient demographics ☐ Other-describe in text box below					
28	Other	text box					
29	What monitoring and evaluation were conducted	☐ Performance measures ☐ Patient satisfaction ☐ PN training evaluation ☐ Other-describe in text box below					
30	Other	text box					
	Challenges to data collection	text box					

Program Detail | Core Performance Measures | Overall Program Information | Clinical

Ready



	A	B
45	**Patient Navigators**	
46	Number of PNs	
47	Number of PN FTE	
48	Level of education	Number of PN
49	less than highschool	
50	highschool degree	
51	bachelors degree	
52	masters degree	
53	other (please define)	Text box
54		
55	Professional training	Number of PN
56	nurse	
57	social worker	
58	lay health worker	
59	other (please define)	Text box
60	Training provided to PN	Text box
61	Total number of hours of training provided to PNs	

Core Performance Measures | Overall Program Information | Clinical Setting 1 | Clin

Ready

Implementation Evaluation

- **In-depth site visits**
  - Two grantees
  - Two-day site visits in May and June 2012
  - Interviews with stakeholders
  - Facilitators and challenges
  - Accomplishments and lessons learned

LESSONS LEARNED

Challenges

- **Staffing/Contracting**
  - Delays
- **Implementation**
  - Start-up longer than anticipated
  - Issues with identifying women comparable to the B/C program

Challenges

- **Data**
  - Data system incompatibility
  - Missing data
  - Development of standard data definitions
  - Data sharing for patient tracking and navigation

Accomplishments

- **Developed new partnerships**
  - Federally Qualified Health Centers and Community Health Centers
  - Screening resources
- **Local-level networking among health systems**
- **Increased access to screening**
- **Developed and improved data systems**
- **Enhanced data use and data quality**

Accomplishments

- **Better understanding of patient barriers**
- **Identification of key resource / service gaps**
- **Integration of care coordination with clinical care**
- **Using PN model for other chronic disease areas**

Next Steps

- Completion of the implementation evaluation
- Final project report

Future Directions

- Improving Public Health-Primary Care partnerships
- Establishing standard data variables for patient navigation in cancer screening programs
- Supporting high quality training for navigators
- Promoting care coordination as public health practice
- Leveraging public health strengths

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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