



Improving Cancer Care and Expanding Research in the Community

The NCI Community Cancer Centers Program

National Cancer Advisory Board
June 23, 2010

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Presentation



- Mission
- Background
- Uniqueness of NCCCP
- Metrics
- Interim Accomplishments
- Evaluation
- ARRA Expansion

NCCCP Research Mission



The NCCCP is

- a network of hospital cancer centers that serves as
- a community-based platform to support basic, clinical and population-based research initiatives
- across the cancer care continuum—from prevention, screening, diagnosis, treatment, and survivorship through end-of-life care.

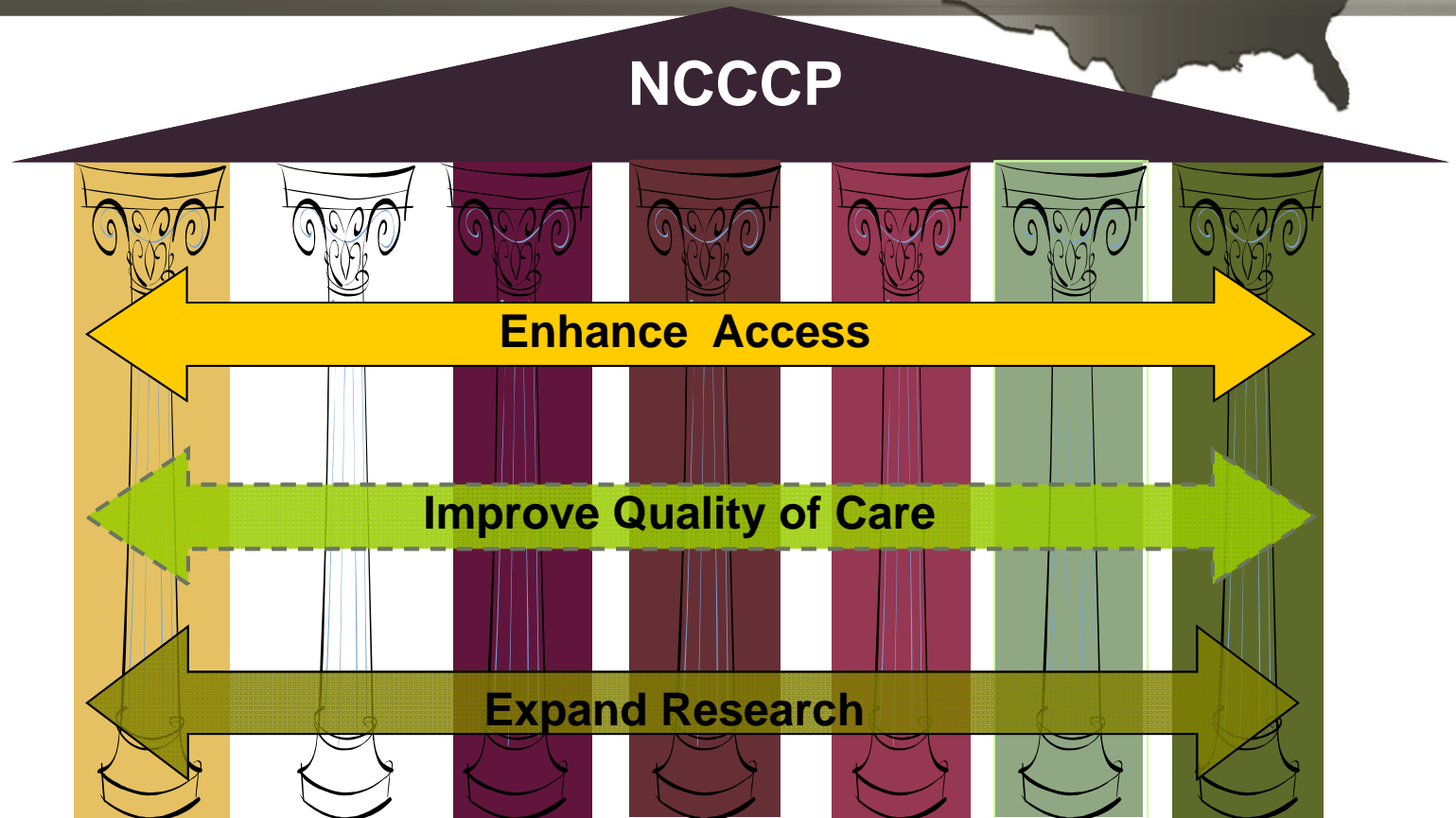
Long Term: improve care through expanding research in the community setting

NCCCP Phase I: *Building Research Capacity*

NCCCP Strategic Plan

- Phase I: Pilot
 - 2007-2010
 - Build Research Capacity
- Phase II
 - 2010-2012
 - Build Research Capacity
 - Support Extramural Research
- Phase III
 - 2012-2015
 - Support Extramural Research

NCCCP: Studying Ways To....



Disparities
40% of Funding

Quality of Care

Survivorship and Palliative Care

Advocacy

Biospecimens

Clinical Trials

EHR and caBIG (IT)

Cancer Continuum

Prevention Screening Treatment Palliative Care Follow-up Survivor Support End-of-life Care

Unique Program Attributes



- Public-private partnership
- CEO commitment
- Contract
- Networking among sites
- Synergy with NCI programs
- Leveraging partnerships with national organizations
- Rigorous program evaluation methods

Review of Progress to Address Goals

- Define Challenge
- Create Goals
- Develop and Measure Metrics
- Interim Accomplishments
- Network Projects to Address Goals

Healthcare Disparities



Challenge

- Sites' knowledge and capacity to focus disparities efforts to drive measurable improvements

Goal

- Improve patient education, patient navigation programs and community outreach

Metrics

- Number and purpose of community partners
- Number of cancer patients provided navigation
- Site collection of race and ethnicity data

Healthcare Disparities

Interim Accomplishments, First 16 Months



Improvements in Community Outreach and Navigation

Disparities Outcome (% of sites with change)	Change from Baseline*
<u>Community Outreach</u>	
% of sites increasing number of community partners	75%
% of sites which established community advisory committees	From 44% to 88%
% of sites with increase in community outreach staff	56%
% of sites which utilized new community resources	56%
% of sites with increased participation in community events	56%
<u>Navigation</u>	
% of sites with use of navigators	From 88% to 100%
% of sites which added navigation staff	75%
% of sites tracking race and ethnicity of patients navigated	From 25% to 50%
% of sites tracking the number of patients navigated	From 50% to 75%
% of sites providing navigator training	From 31% to 81%

*Site reported data from baseline assessment survey to interim assessment survey at 16 months

Healthcare Disparities



Network-level Interim Accomplishments

- Developed NCCCP Disparities Vision, Work Plan and Dashboard with metrics—**improving sites ability to focus program activities across program areas and the cancer care continuum**
- Race/ethnicity tracking – **improved tracking by OMB Guidelines**
- Cultural Awareness Webinars—**education**



Disparities Example: *Billings Clinic and Native Americans, Billings, Montana*

National Cancer

"Sites are making investments in disparities infrastructure and services that they would not have made without NCCCP" - RTI evaluator

- Biospecimen disposal policy for American Indians
- 2 Community Health Representatives hired – tribe members
- Program Coordinator hired--PhD researcher from Assiniboire Tribe
- Mammography partnership with hospital adjacent to Reservation
- Cultural awareness and education programs
- Increased trust and access

Quality of Care



Challenge

- Care coordination issues related to working with private practice physicians
- Data collection methods to adhere to guidelines

Goal: Increase quality of care through increased use of multidisciplinary care conferences (MDCs), evidence-based guidelines, and genetic services and molecular testing

Metrics

- Offer genetic counseling and molecular testing
- Adherence to evidence-based guidelines
- Number, type and frequency of multidisciplinary care conferences (MDCs) and year started

Quality of Care

Interim Accomplishments, First 16 Months

Improvements in genetic services, molecular testing and use of evidence-based guidelines

Quality of Care Outcome (% of sites with change)	Change from Baseline*
Genetic and Molecular Testing	
% of sites offering genetic counseling-not asked at baseline	81%
% of sites offering molecular testing	88% to 94%
Evidence-based Guidelines	
% of sites using Commission on Cancer EQUIP quality indicators	From 56% to 100%
% of sites with physicians participating in ASCO's QOPI	From 0% to 50%
% of sites with increased use of NCCN guidelines	50%
% of sites with increased use of ASCO guidelines	38%
% of sites with increased use of ACOS guidelines	50%
% of sites with increased use of ACS guidelines	38%
% of sites with increased number of direct linkages to organizations for QoC	69%

*Site reported data from baseline assessment survey to interim assessment survey at 16 months

Quality of Care



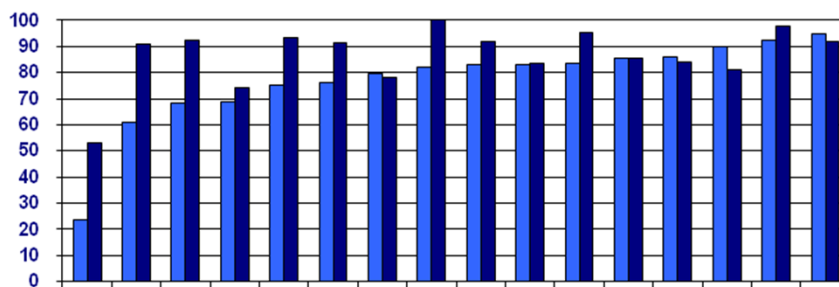
Network-level Projects

- National Partnerships: National Quality Initiatives
 - Commission on Cancer's *Rapid Quality Reporting System* (RQRS) beta test
 - real-time cancer registry reporting and surveillance tool to prospectively monitor adherence to evidence-based guidelines
 - ASCO *Quality Oncology Practice Initiative*[®] (QOPI)
 - quality improvement collaborative around quality indicators for private practice oncologists

RQRS: Breast Conservation Surgery and Radiation Therapy Performance Rates at NCCCP '07 Sites

National Cancer

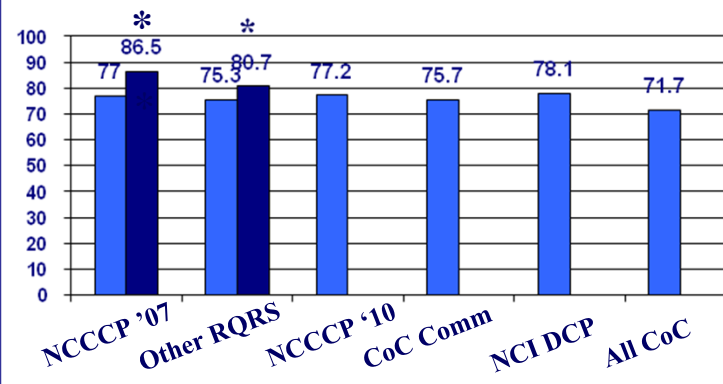
Change in Performance Rates
16 NCCCP Pilot Sites





RANGE

	2007 Baseline Range	24-95
	2008 RQRS Implemented	53-100

Change in Performance Rates
NCCCP vs Other CoC Programs



	 2007 Baseline	 2008 RQRS	
NCCCP	77	*86.5	*Stat Sig
Other RQRS	75.3	*80.7	

RQRS: Assess and Compare Performance by Age, Race, Insurance, Education and Income.....

All Beta Sites [61]	
Race	Performance Rate
White	70.2% n=94 (95%CI: 63.8-76.6)
Black	67.6% n=37 (95%CI: 58.8-76.4)
Hispanic	80% n=5 (95%CI: 44.1-100)
API	75% n=4 (95%CI: 32.1-100)
Other/Unknown	50% n=4 (95%CI: 14.3-85.7)

All Beta Sites [61]	
Income	Performance Rate
< \$30,000	61.1% n=18 (95%CI: 38.6-83.6)

All Beta Sites [61]	
Education	Performance Rate
29% +	72% n=25 (95%CI: 54.4-89.6)
20% - 28.9%	70% n=40 (95%CI: 55.8-84.2)
14% - 19.9%	73.1% n=26 (95%CI: 56-90.1)
< 14%	
Unknown	
TOTAL	

All Beta Sites [61]	
Age	Performance Rate
30 TO 39	58.3% n=12 (95%CI: 30.4-86.2)
40 TO 49	70.7% n=41 (95%CI: 56.8-84.7)
50 TO 59	68.1% n=47 (95%CI: 54.8-81.4)
60 TO 69	72.7% n=44 (95%CI: 59.6-85.9)
TOTAL	69.4% n=144 (95%CI: 61.9-77)

All Beta Sites [61]	
Insurance	Performance Rate
Not Insured	80% n=5 (95%CI: 44.9-100)
Private Insurance	64.3% n=14 (95%CI: 39.2-89.4)
Managed Care	65.9% n=82 (95%CI: 55.6-76.1)
Medicaid	81.3% n=16 (95%CI: 62.1-100)
Medicare	60% n=5 (95%CI: 17.1-100)
Medicare w/ Supplement	66.7% n=15 (95%CI: 42.8-90.5)



American Society of Clinical Oncology

Making a world of difference in cancer care

NCCCP QOPI[®] Program

National Cancer

- Private practice oncologists participate in a quality improvement collaborative around quality indicators consistent with NCCCP program aims
- ASCO provides practice profiles at the NCCCP site level
- NCCCP QOPI[®] physicians share improvement data, assess improvement opportunities, and QI targets

Siegel, RD., Clauser, SB., Lynn, JM. "A National Collaborative to Improve Oncology Practice: The NCI Community Cancer Centers Program QOPI Experience." *Journal of Oncology Practice*, vol. 5(6) 2009.



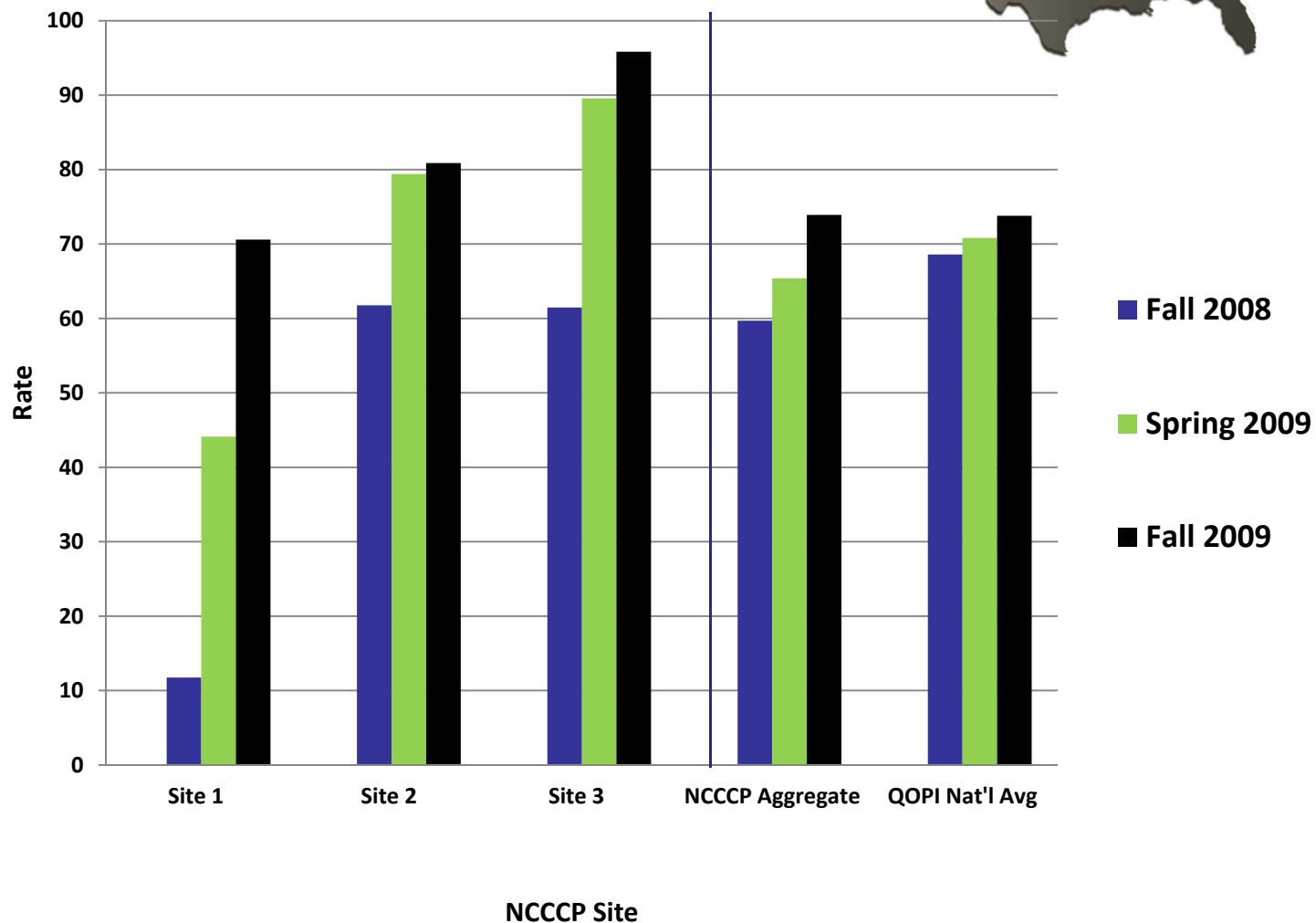
American Society of Clinical Oncology

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NCCCP QOPI[®] Data Analysis

Aggregate Pain Assessment

National Cancer



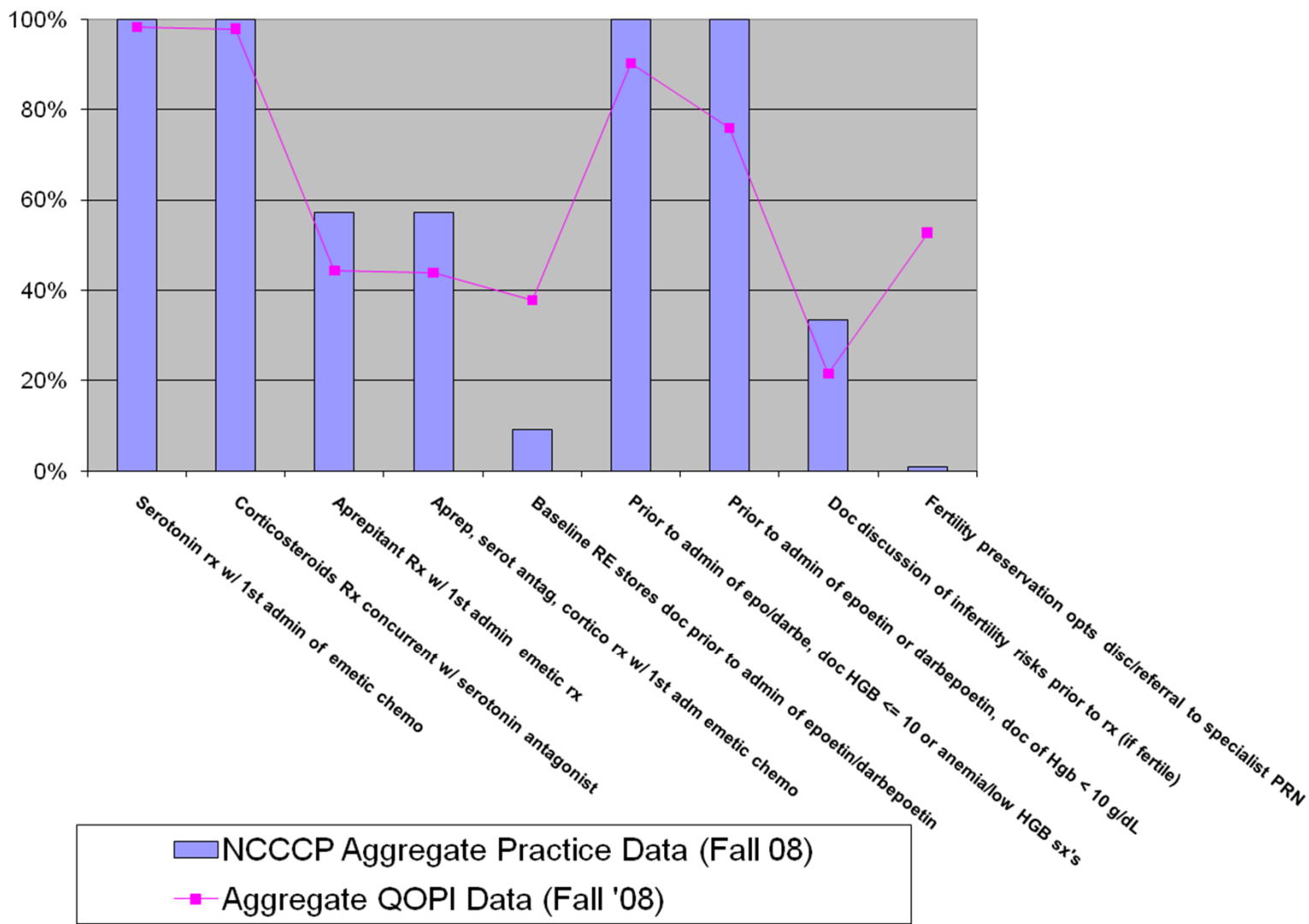


American Society of Clinical Oncology

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NCCCP/QOPI[®] Summary Performance Symptom/Toxicity Module – Fall 2008

National Cancer





A multidisciplinary program of the
American College of Surgeons

Quality of Care



American Society of Clinical Oncology

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National Cancer

Network-level Interim Accomplishments

- National Partnerships: National Quality Initiatives
 - Commission on Cancer's *Rapid Quality Reporting System* (RQRS) beta test—increased adherence to evidence-based practices at the hospital level
 - ASCO Quality Oncology Practice Initiative[®] (QOPI) — increased adherence to evidence-based practices at the private-practice physician level
- Multidisciplinary Care – 27 new MDCs since start
- Sharing best practices for network improvement

Clinical Trials



Challenges

- Limited participation in clinical trials, including minority and other underrepresented populations; Limited tracking mechanisms

Goal: Enhance clinical trials infrastructure to accrue more patients to more types of trials, increase physician participation, and expand tracking efforts to better understand accrual barriers.

Metrics

- Number of patients accrued (total and by race and ethnicity)
- Number of trials opened and number of early phase trials
- Number of types of trials (i.e. prevention, treatment)
- Number of physicians eligible to enroll patients
- Number of physicians who have accrued patients to clinical trials

Clinical Trials

Interim Accomplishments, First 16 Months

Improvements in infrastructure and tracking

Clinical Trials Outcome (% of sites with change)	Change from Baseline*
<u>Expanding clinical trials infrastructure</u>	
% of sites with increase in participating physicians	33%
% of sites with increase in participating nurses and patient navigators	50%
% of sites with increase in participating outreach coordinators	33%
% of sites using patient navigators for CT referral	From 19% to 44%
% of sites with additional CT screening activities	75%
<u>Tracking</u>	
% of sites tracking individual trials	From 38% to 63%
% of sites tracking disease grouping of trials	From 19% to 38%
% of sites tracking all trials	From 31% to 69%
% of sites tracking patients being screened	From 50% to 88%
% of sites tracking minority accrual across all trials	From 31% to 100%

*Site reported data from baseline assessment survey to interim assessment survey at 16 months

Increase in Clinical Trials by Type



<u>Trial</u>	<u>Y1</u>	<u>Y2</u>	<u>*Y3</u>
Treatment	609	852	705
Symptom Management/ Cancer Control	98	92	78
Screening/Early Detection/Diagnostic	5	11	8
Prevention	9	8	6
Epidemiologic/ Observational/ Outcome	22	40	43
Correlative Studies	44	71	72

***Y3=6 months of data**

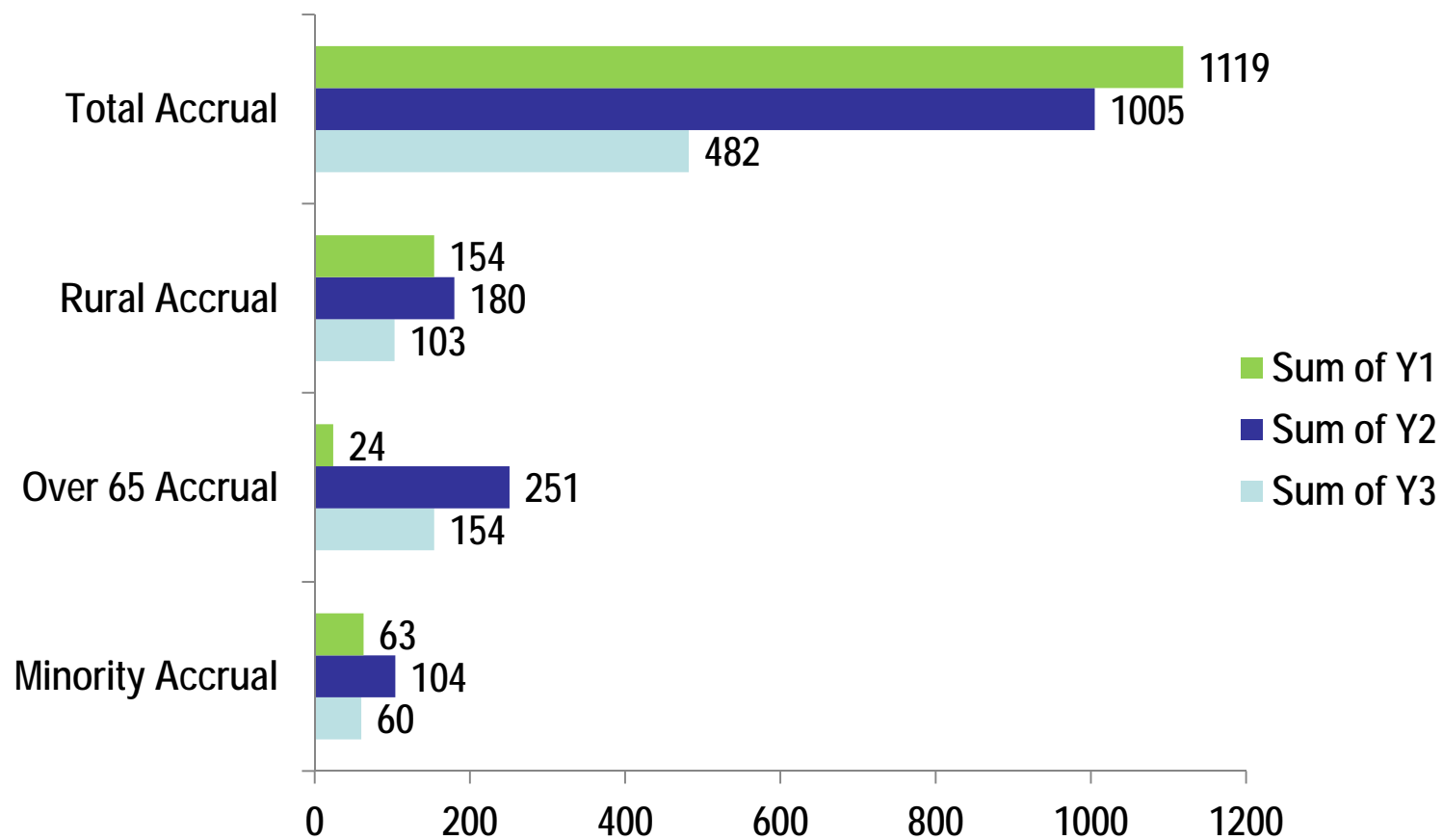
Increase in Clinical Trials by Phase



<u>Phase</u>	<u>Y1</u>	<u>Y2</u>	<u>*Y3</u>
I	4	8	2
I/II	13	12	7
II	231	287	212
II/III	4	11	3
III	422	600	549
IV	3	3	5
N/A	116	173	154
Pilot	2	1	2

*Y3=6 months of data

Increase in Rural, Elderly and Minority Accrual



Clinical Trials



Network-level Interim Accomplishments

- Physicians participating—**increased**
- Staffing to support—**increased**
- Number of trials opened—**increased**
- Types of trials—**greater variety and increase in early phase**
- Rural, Elderly and Minority accrual—**increased**
- Web-based Screening and Accrual Log
- Wake Forest CLL cancer control trial
 - Recruited 22% of trial total and 42% of the CTSU accrual
- Underserved Accrual Project

Site Example—*St. Francis Medical Center, Grand Island, Nebraska*

	Pre-NCCCP		Post-NCCCP	
Year	Y -2	Y-1	Y1	Y2
Medical Oncology Support	Dr. Mehmet Copur Only Med Onc in Grand Island			2 Med Oncs join
Other FTE Support	1 non-RN	2 non-RN	2.3	3 (2RNs) Genetic Counselor Nurse Navigator
Available CTs	13	15	19	37
CT Accrual	22	47	56	103
% Accrual	4%	9%	10.4%	19%

2010 ASCO CT Participation Award (1/10 awardees)

2010 ASCO Community Oncology Research Grant (1/3 awardees)

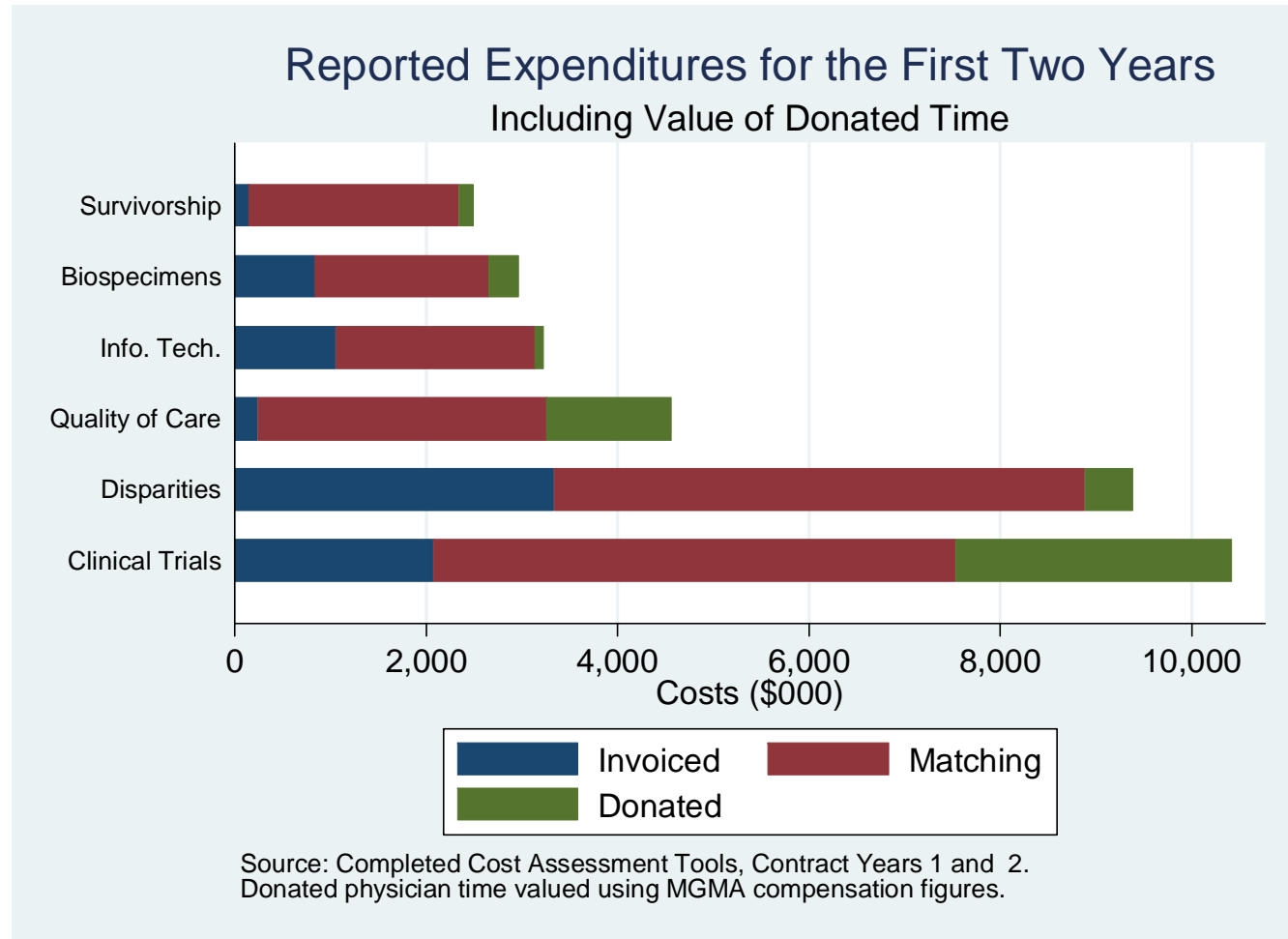
Accomplishments Beyond Deliverables

Focus Area	All Deliverables Met	Current Accomplishments Beyond Deliverables
Survivorship & Palliative Care	<ul style="list-style-type: none">•Treatment Summary•Palliative Care Program	<ul style="list-style-type: none">•Survivorship Programs•Psychosocial Care•Education
Biospecimens	<ul style="list-style-type: none">•Assess NCI Best Practices for Biospecimen Collection	<ul style="list-style-type: none">•Biospecimen collection: 3 TCGA sites, 4 Moffitt TCC sites•Formalin fixation standards-16 sites•2 sites have biorepositories
IT	<ul style="list-style-type: none">•Assess caBIG Implementation•Implement EHRs	<ul style="list-style-type: none">•10 sites deploy tools by end of 2010•ASCO/NCCCP Oncology-EHR Whitepaper

- Case studies
 - change in program structure & processes over time
- Patient perspective studies
 - Surveys and focus groups
- Economic studies
 - Micro-cost studies and strategic case study
 - Strategic case study
- Clauser SB, Johnson MR, O'Brien DM, Beveridge JM, Fennell ML, Kaluzny AD. Improving clinical research and cancer care delivery in community settings: evaluating the NCI community cancer centers program. *Implementation Sciences*, 4:63 (26 Sep 2009)

Micro-Cost Study Interim Results— *Highly Leveraged Program*

Sites contributing \$3.3 to every \$1 NCI dollar



Supporting Extramural Research



- H. Lee Moffitt Cancer Center
 - Dr. William Dalton
- University of Maryland
 - Dr. Claudia Baquet
- PRO-CTCAE Network
 - Dr. Ethan Basch

Moffitt Total Cancer Care— *Partnership with NCCCP Sites*



- Total Cancer Care Research Project
 - 4 NCCCP Sites **Collecting Biospecimens**
- N01 Clinical Trials: **Early Drug Development Program**
 - 2 NCCCP Sites participating
- **Health Outcomes Research** on Clinical Trials Participation
 - 2 NCCCP Sites participating



National Cancer

University of Maryland School of Medicine St. Joseph's Cancer Institute (NCCCP Site)— *Benefits and Products*

Community Engagement

- CBPR planning
- Esophageal Cancer Disparities Translational Research Study

Screening Partnership

- Foster screening in racial/ethnic minorities and other underserved populations

Clinical Trials Education

- Physicians and Patients in minority, rural and urban communities

National Bioethics Research Center

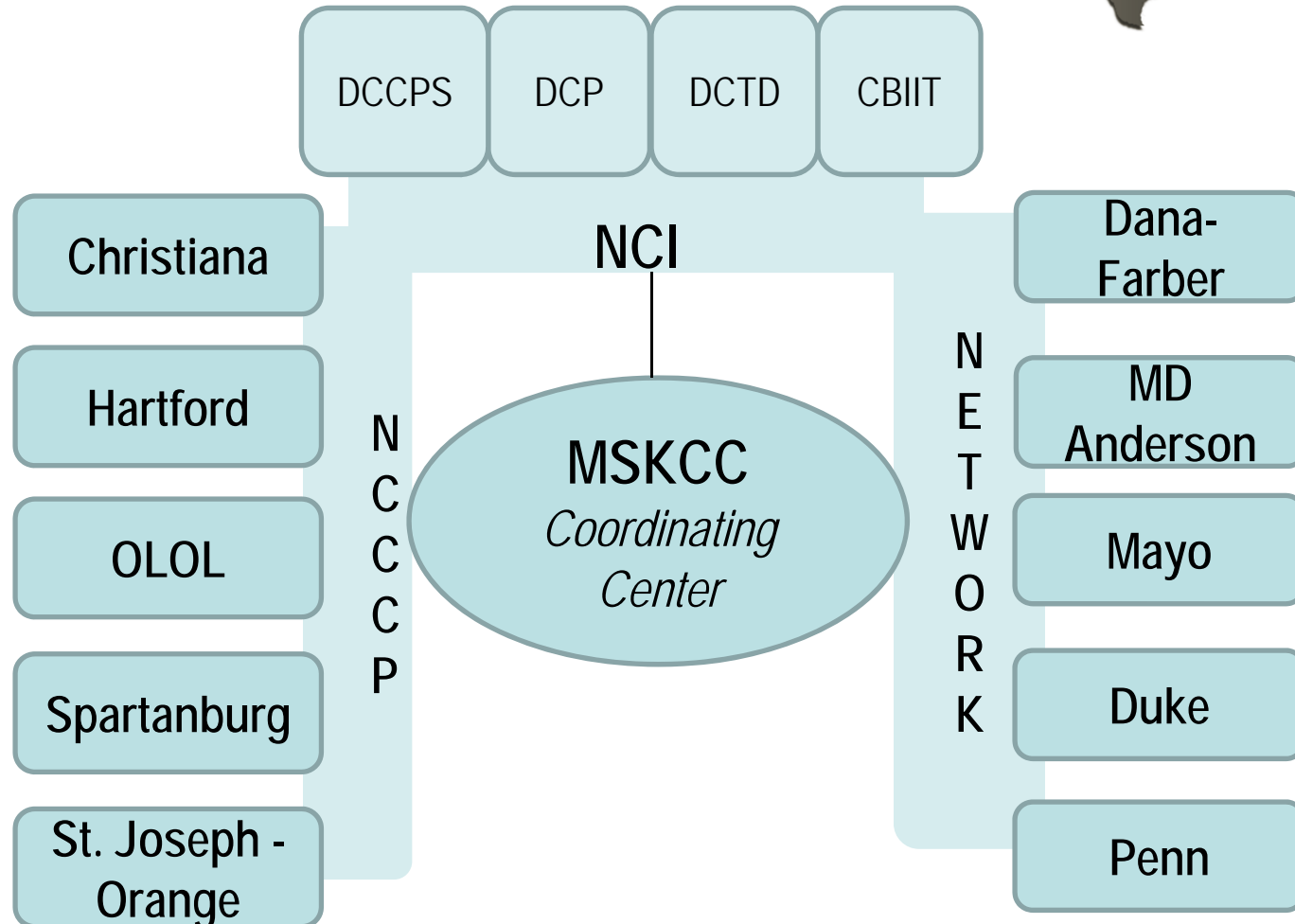
- Community Bioethics, Research Ethics, Clinical Trials and Health Disparities Mini Medical School Program
- Physician CMEs on Bioethics, Research Ethics and Clinical Trials

Research Translation and Dissemination

- Community Cancer Trial Collaboration
- African Americans and Clinical Trials Models

Patient Reported Outcomes Network

PRO-CTCAE
Patient Symptom Reporter



PRO-CTCAE— *Benefits of NCCCP Sites*

PRO-CTCAE
Patient Symptom Reporter




- Access to community perspectives
 - Weekly planning conference calls
- Access to patients
 - Enriching at NCCCP sites by race/ethnicity and ECOG status
- Opportunity to field-test new technology
- Gain understanding of whether this approach is ultimately feasible

NCCCP Phase II: *Research Capacity and Support*

NCCCP Strategic Plan

- Phase I: Pilot
 - 2007-2010
 - Build Research Capacity
- Phase II
 - 2010-2012
 - Build Research Capacity
 - Support Extramural Research
- Phase III
 - 2012-2015
 - Support Extramural Research

American Recovery and Reinvestment Act (ARRA)

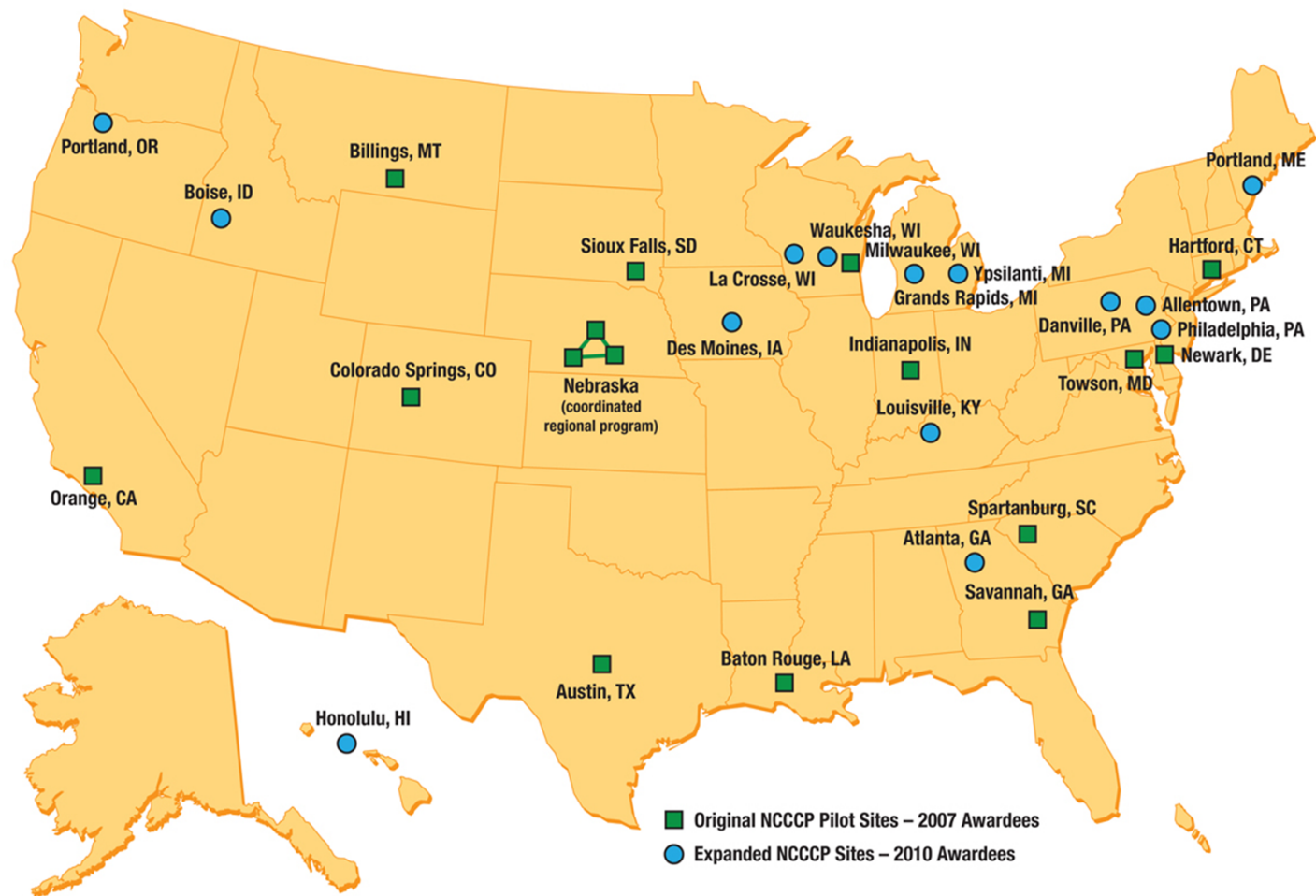


- 2 years of funding
- \$40 million to pilot NCCCP organization
 - 18 specific projects
 - Many NCI program collaborations: CNPs, Early Drug Development Program, PRO-CTCAE
- \$40 million to new organizations
 - 14 community cancer centers joined network
 - Raising the bar on program requirements

NCCCP Hospitals 2010

NCI Community Cancer Centers Program

NCCCP Hospitals



Contributions of the NCCCP Network

- 58,000 new cancer cases per year
- 23 million people served
- 22 states
- CCOPs—13
- MB-CCOPs—2
- Community Network Program Partnerships—10
- Cancer Research Network (HMO Network)—1
- Linkages with designated centers and other research partnerships
- Site-specific basic, clinical and health services research initiatives

Top 3 Interim Accomplishments to Date



- Investment in Disparities Programs
 - Mobilized sites
 - Created leveraging opportunities
 - Community benefit
- Value of Network
 - NCI/NCCCP partnership
 - Accelerate advances
 - "Raises all boats"
- Building Research Capacity
 - Increased staffing to support research activities
 - Standardized data and biospecimen collection across sites
 - caBIG-compatible data warehousing
 - Highly leveraged financially
 - Commitment to goals by going beyond deliverables
 - Demonstrated support of research activities spanning basic, clinical and health services research

NCCCP Research Mission



The NCCCP is

- a network of hospital cancer centers that serves as
- a community-based platform to support basic, clinical and population-based research initiatives
- across the cancer care continuum—from prevention, screening, diagnosis, treatment, and survivorship through end-of-life care.

Long Term: improve care through expanding research in the community setting

NCI Collaborative Effort



- NCI OD
 - *Dr. Maureen Johnson*
 - *Ms. Jean Lynn*
- CRCHD
 - *Dr. Ken Chu*
 - *Dr. Sanya Springfield*
 - *Dr. Deborah Duran*
- DCCPS
 - *Dr. Steve Clauser*
 - *Dr. Julia Rowland*
 - *Dr. Irene Prabhu Das*
 - *Ms. Kate Castro*
- DCLG
 - *Dr. Beverly Laird*
 - *Ms. Cheryl Jernigan*
- DGP
 - *Dr. Wortia McCaskill-Stevens*
 - *Ms. Diane St. Germain*
- DCTD
 - *Ms. Andrea Denicoff*
- CBIIT
 - *Dr. Ken Buetow*
 - *Dr. Leslie Derr*
 - *Ms. Brenda Duggan*
- OBBR
 - *Dr. Carolyn Compton*
 - *Dr. James Robb*
- OCE
 - *Ms. Mary Anne Bright*
 - *Ms. Sabrina Islam-Rahman*
- SAIC-Frederick, Inc.
 - *Ms. Joy Beveridge, Ms. Deb Hill*
 - *Mr. Frank Blanchard*
 - *Ms. Linda Ritchie, Ms. Kelly Spore*
 - *Ms. Jenny Starliper, Deb Whitmore*
 - *Ms. Maureen Dyer*
- Consultants
 - *Dr. Arnie Kaluzny*
 - *Dr. Mary Fennell*
 - *Ms. Donna O'Brien*
 - *Ms. Nancy Murphy*

NCAB Input Requested



- In what additional ways can NCI best utilize the NCCCP community-based research infrastructure?
- What are the best ways to encourage academic investigators to collaborate with the NCCCP sites?