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NCI COMMUNITY CANCER CENTERS PROGRAM

NCI Community Cancer Centers Program Evaluation– Overview

National Cancer Advisory Board Meeting

September 8, 2008

Steven Clauser, PhD

Chief, Outcomes Research Branch, NCI

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

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Presentation Outline

- Overview of evaluation
  - Evaluation guiding principles
  - NCI Evaluation Oversight Committee
  - Evaluation components
  - Illustrative and overarching evaluation questions
  - Conceptual framework overview
  - Evaluation methods
- Completed and planned activities
- Dissemination plan

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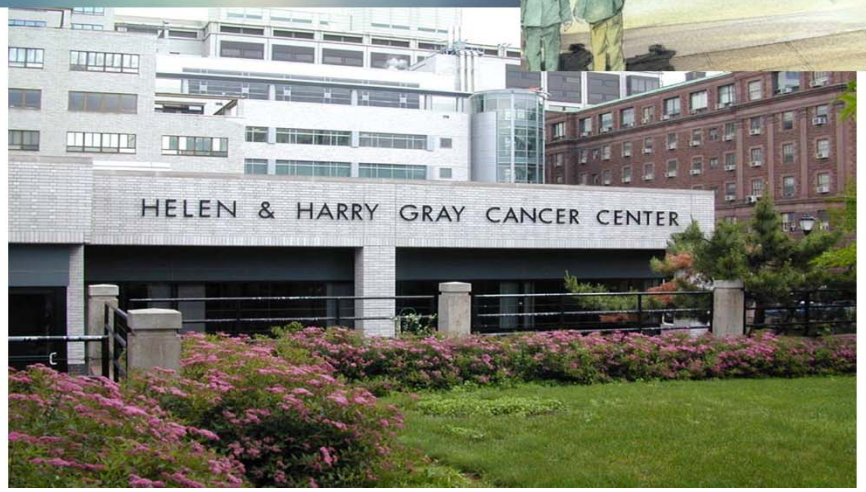
Samples of Variation of Community Cancer Centers



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Evaluation Guiding Principles

- Measures of interest are grounded in theory and current understanding in the literature
- Multilevel and multimethod approach to increase reliability of findings
- Triangulation of findings will help interpret program development and performance over time

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NCCCP Evaluation Oversight Committee

- Chair: Mary Fennell, PhD, Brown University
- External members
  - Timothy Johnson, PhD, U of Illinois at Chicago
  - Brian Weiner, PhD, UNC, Chapel Hill
  - Jane Zapka, ScD, Medical University of South Carolina
  - Thomas Gribbin, MD, Lack Cancer Center, Grand Rapids, MI
  - Mark Hornbrook, PhD, Kaiser-Permanente, Portland, OR
- Consultants to the Committee
  - Arnie Kaluzny, PhD, UNC Chapel Hill
  - Donna O'Brien, MHA, Consultant to the Director

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Evaluation Components

- *Internal evaluation* specific to program development
  - Being led by NCI staff (i.e., NPAC) to guide program development and assess progress over time
- *External evaluation* specific to program assessment
  - Being led by RTI International to assess outcomes of interest and inform program enhancements over time

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Illustrative Evaluation Questions

Program Development	Program Assessment
Can the NCCCP model improve quality of care?	What changes in practice patterns, trial accrual, and adherence to evidence-based practice have been facilitated by NCCCP?

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Illustrative Evaluation Questions

Program Development	Program Assessment
How can a knowledge exchange network support the advancement of goals for NCI and the NCCCP program?	How does sharing best practices or leveraging external partnership (e.g., work with NCI Comprehensive Cancer Centers) facilitate and sustain program performance?

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Overarching Evaluation Questions

- What organizational requirements are necessary to effectively manage/implement NCCCP?
- What changes in each pillar and for the cancer service line overall seem to be facilitated by NCCCP?
- What changes and elements are sustainable and potentially replicable?

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Conceptual Framework Overview

- NCCCP is currently an idea about a desired outcome
  - While some “pillars” (e.g., clinical trials) are more specific, overall NCCCP is an evolving program, set of practices, specific metrics, and improvement targets
- Therefore, pilot sites are not so much adopting and assimilating NCCCP as they are *inventing it* in collaboration with NCI

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Conceptual Framework Overview

- Therefore, organizational theory and management science are needed to answer three key evaluation questions:
  - **Sense-making:** Are pilot sites fully grasping the idea of the NCCCP?
  - **Operationalizing:** How well are sites applying the idea to their specific situation?
  - **Learning:** Based on lessons learned, can sites make the necessary organizational and programmatic changes to succeed?

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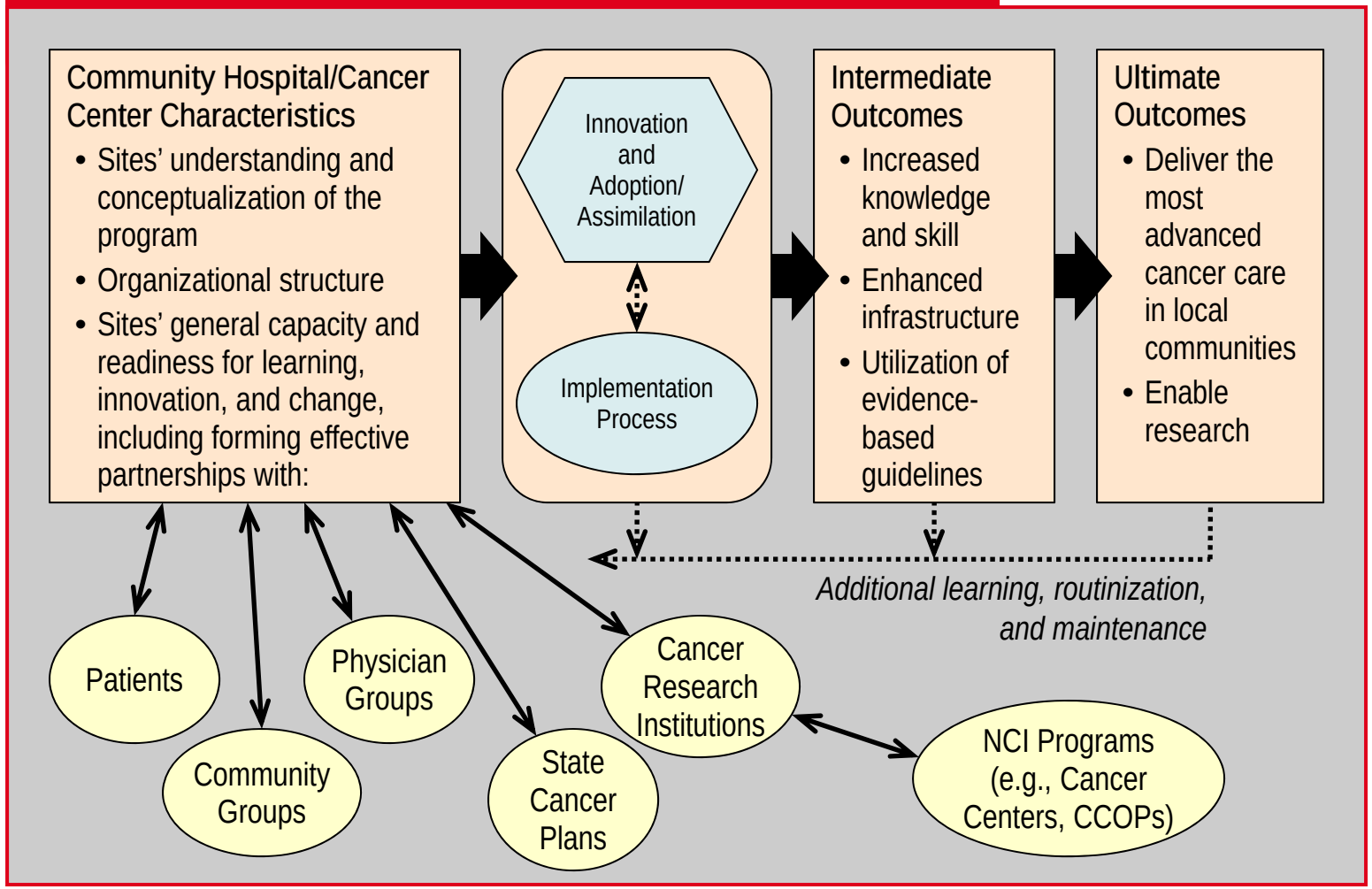
Conceptual Framework

Environment: Health care market, characteristics of community served, and linkage with the NCCCP pilot national research network



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Evaluation Methods

- Case studies
- Economic studies
- Patient surveys

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Case Study

- A longitudinal, multiple case study design is being used to
  - Understand NCCCP implementation
  - Assess change in site performance over time
  - Determine NCCCP structures and processes associated with successful implementation and performance
- Multimethods approach to collect and analyze quantitative and qualitative data on key outcomes for overall Program and each Core Component

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Economic Study

- Micro-cost study
  - To identify average and/or incremental costs associated with NCCCP activities, by site
    - NCI-funded and supplemental cost totals
    - “Return on investment”
- “Business case”/“strategic case” for participation
  - From organizational leadership perspective:
    - Expected short and long-run financial impact
    - Other associated strategic goals
- Method for addressing evaluation questions related to program sustainability

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Patient Survey

- **Purpose**: Understand the experience with care in the NCCCP pilot from the ***patient's perspective***, with regard to
  - Access to clinical trials and psycho-social care
  - Coordination of care (e.g., multidisciplinary care and patient navigation)
- **Approach**: Sample NCCCP patients twice, 18 months apart, to assess change over time
  - 475 patients/site each time will be sampled

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Overall Analysis Plan

- Multimethod analysis
  - Each data source will be coded and analyzed to present specific findings
- Triangulation of findings
  - Combine data from all sources to assess multiple factors influencing program outcomes
- Multiple reports, spread out over 3-year pilot

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Year 1 Highlights

- Case study
  - Site visits conducted to all 16 sites in spring 2008
  - Coding and analysis of Year 1 data currently underway
- Economic study
  - Working with sites on data collection protocols
- Patient survey
  - Survey drafted, cognitively tested, and undergoing final revisions
  - IRB clearances in process

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Years 2 and 3 Activities

- Case study
  - Repeat visits in spring 2009 and 2010
    - Add focus groups with patients and caregivers
- Economic study
  - Ongoing micro-cost data collection and analysis
  - Implement “strategic case” study
- Patient survey
  - Implement first survey in late fall 2008
  - Field second round in spring 2010

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Dissemination Plans

- Periodic reporting to inform NCI leadership and advisory boards
  - Evaluation design report (fall 2008)
  - Cross-site case study report (fall 2009 and 2010)
  - Patient survey reports (summer 2009 and fall 2010)
  - Annual economic study report (fall 2009 and 2010)
- Manuscripts and presentations to inform evaluation science

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EXTRA SLIDES

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Illustrative Measures for Each NCCCP Pillar

- Biospecimens
  - What is the current status of the sites for biospecimen collection and reporting?
  - What are the gaps in achieving best practices for biospecimen collection and reporting?
- Clinical Trials
  - What type of clinical trials is each site involved in implementing? How do the sites change over time in terms of the clinical trials they are implementing (e.g., increased capacity)?
  - How does patient accrual change over time (e.g., # patients enrolled, race/ethnicity of accrued patients)?

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Illustrative Measures for Each NCCCP Pillar

- Disparities
  - What is the demonstrated commitment to the underserved? How is this changing over time?
  - What is the system of care to reach disparate populations (e.g., clinics in rural settings, MDs working outside hospital)?
- IT
  - What is the current status of EMR implementation for oncology practices at each site?
  - What components of caBIG are sites able to implement during NCCCP? What are the barriers/challenges to implementing caBIG components?

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Illustrative Measures for Each NCCCP Pillar

- Quality of Care
  - To what extent have sites established multidisciplinary care teams to ensure coordination and continuity of cancer treatment? How does this change over time?
  - What is the evidence that methods and structures to "bring state-of-the-art" oncology care (and early phase translational science) have been accomplished within the NCCCP setting?
- Survivorship
  - What is the quality of follow-up care provided to survivors?
  - To what extent have sites implemented treatment summaries?

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Case Study

- Quantitative data:
  - Baseline Assessment Survey on key indicators completed by sites in 12/07
  - Repeat of Assessment Survey at interim (11/08) and again at end of pilot (11/09)
  - Analysis of secondary data sources, such as submissions for Commission on Cancer
  - Selected program data collected by Subcommittees (e.g., data from Breast Screening Tracking Tool)

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Case Study

- Qualitative data:
  - State-of-the-art qualitative data collection and analysis using N*Vivo software to code findings from:
    - Interviews of key stakeholders (e.g., lead physicians, PI, hospital leaders)
    - Applications, progress reports, and other program documents
    - Focus groups with patients and caregivers

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Example of Analysis Specific to Disparities

- Evaluation question: To what extent do NCCCP sites reduce cancer health care disparities?
  - Illustrative case study variables:
    - Baseline and follow-up measures of geographic and estimates of racial/ethnic groups served prior to NCCCP
    - Changes in community outreach, partners, and populations served over time
    - Enhancements to Patient Navigation programs during pilot
    - Accrual of disparate groups to clinical trials
    - Improved adherence to evidence-based therapies for disparate groups

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Example of Analysis Specific to Disparities

- Illustrative economic study variables:
  - Changes in proportion of charity care cases reported by each hospital
  - Sites' costs of disparities-related activities
- Illustrative patient survey variables:
  - Disparities in awareness of and access to cancer services reported by patients
  - Changes over time in reported awareness and access