



*An NCI-funded  
Resource*

# Cancer Control Working Group

## CCSS PI Meeting

### June 5, 2008

Co-Chairs

Melissa M. Hudson

Kevin C. Oeffinger

- Remember, for the standard CCSS Questionnaires, cancer control topics usually have about 5-6 pages of questions every other year
- Question selection based upon space, clinical relevance, and the ability to answer a question within this type of study design (self-reported outcomes)

- Health status
- Health behaviors
- Health care utilization

- General health
- Mental health
- Limitations in activity
- Functional impairment
- Pain post cancer
- Anxiety/fears post cancer

# Health Behaviors

- Tobacco use (current, amt, ever, smokeless)
- Alcohol (daily, binging)
- Physical activity (not meeting CDC recommendations, sedentary)
- Breast/testicular self-exam
- Skin cancer protection

Note: Have not collected data on diet, calcium/Vit-D intake (due to length of validated instruments)

- General medical contact
- Hierarchy of cancer care (general/risk-based)
- ER visit (#, not reason)
- Hospitalization (#, reason, not duration)
- Surgical procedures
- Screening
  - Mammography
  - Pap smear
  - Colonoscopy
  - Echo
  - DXA

# Summary of Previous Research

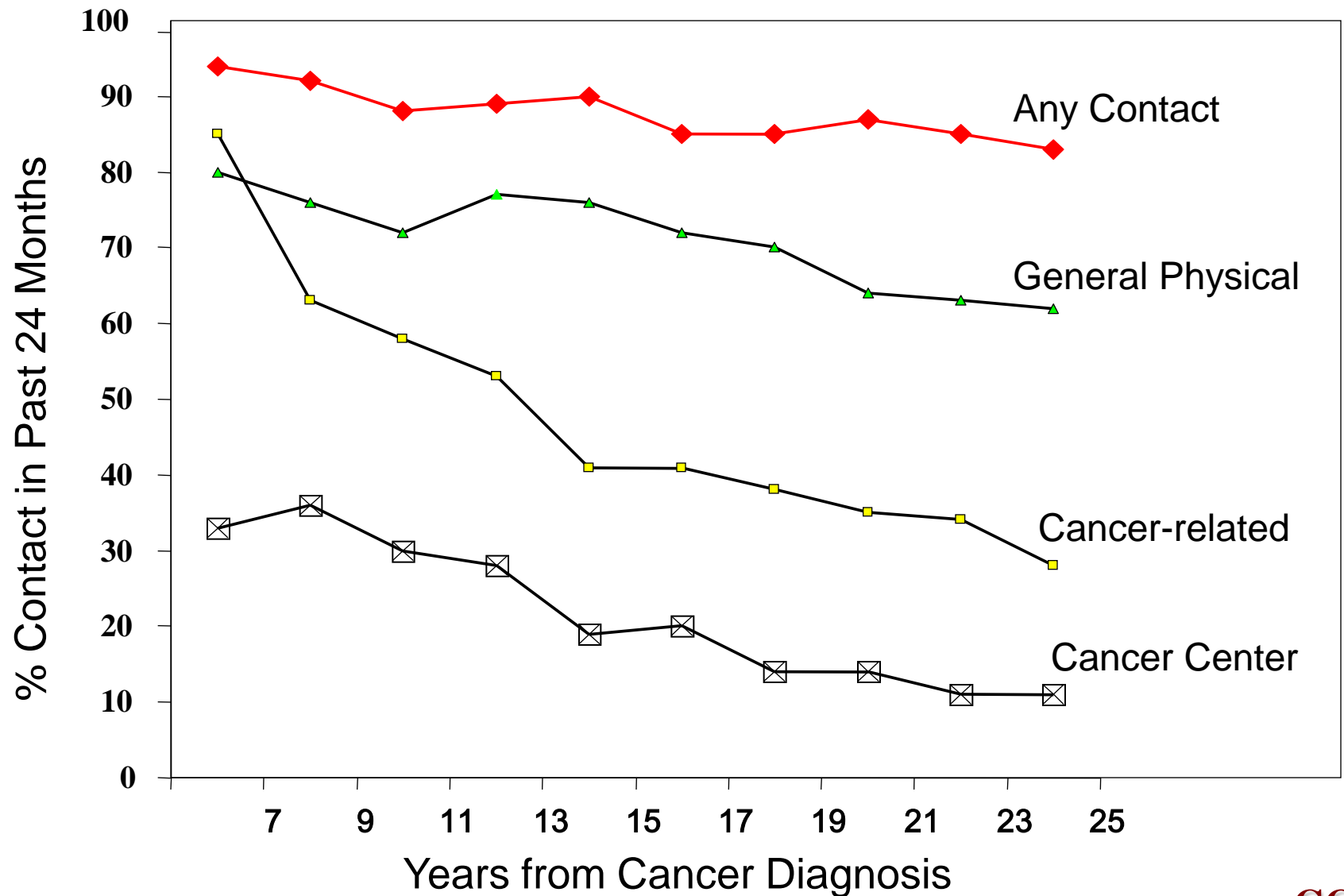
- Health status
  - Adult cohort, minority, specific diagnostic types
- Health care
  - Patterns over time, risk-based, regional access, utilization (hospitalizations)
- Health behaviors
  - Medical surveillance practices, physical activity, smoking, sun protection
- Interventions
  - Partnership for Health: peer-delivered smoking cessation counseling
  - Project VISION: medical surveillance promotion
- Educational:
  - CCSS Partners: development of educational curriculum about survivorship research and late effects

# Health Status Among 5+ Year Survivors

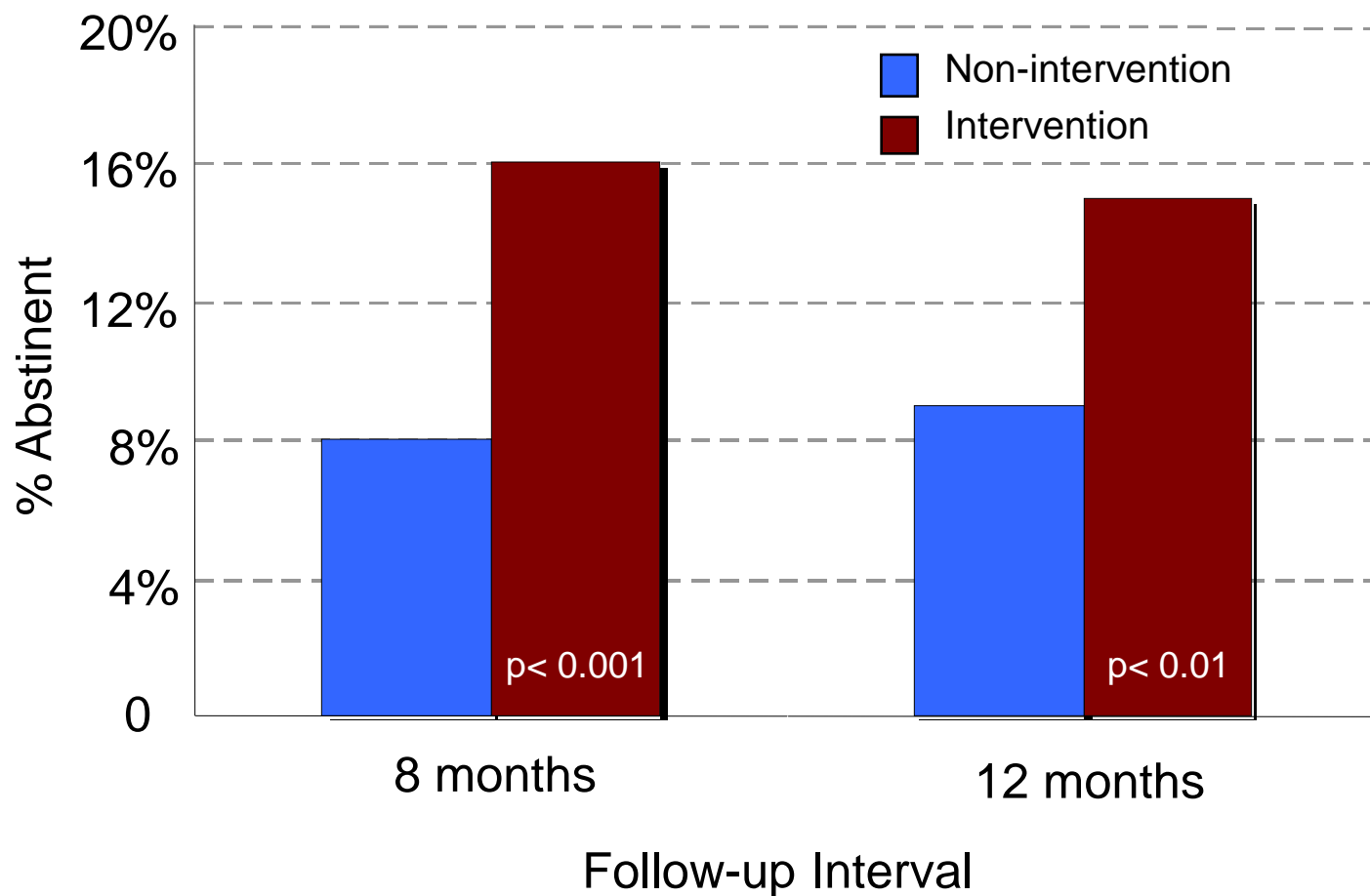
Health Domain	Impairment
General health	10.6%
Functional status	11.8%
Activity limitation	13.4%
Mental health	12.6%
Pain	10.2%
Anxiety/fears	13.2%
Any health domain	41.3%



# Health Care Utilization in 5+ Year Survivors



# Randomized Study of Smoking Cessation



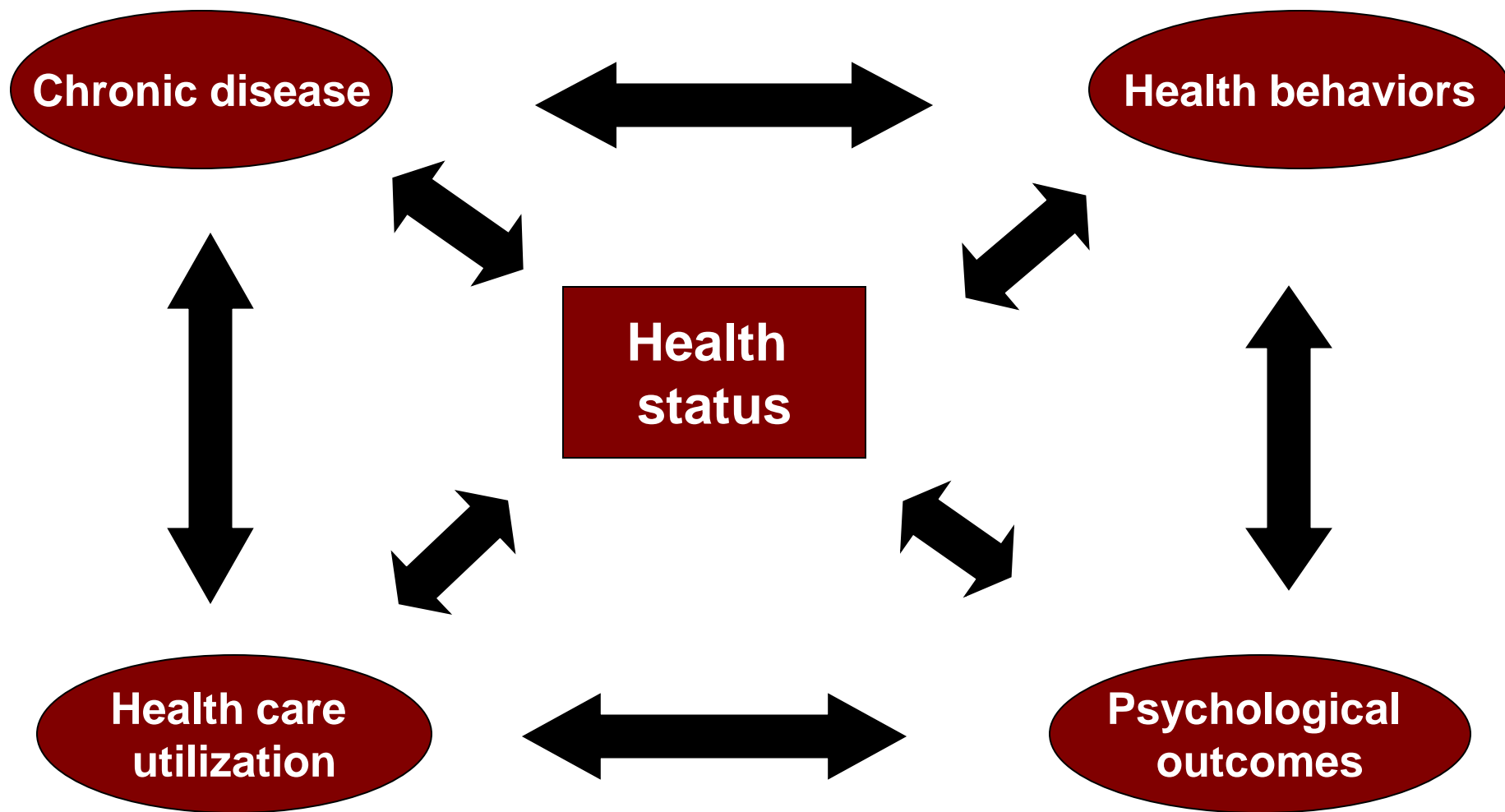
*Emmons, et al, J Clin Oncol, 2005*

# Interventions Seeking Funding

- EMPOWER Study: Encouraging mammography/ MRI and preventive opportunities for women exposed to radiation (Oeffinger): NCI
- ECHOS Study: Evaluating Cardiovascular Health Outcomes in Survivors (Hudson): NCI

- Health care utilization
  - Longitudinal changes
  - Legacy v. expansion cohort
- Cost of survivorship
- Cancer/medical screening
- Health status
  - Longitudinal, relationship to chronic disease, health behaviors, health care practices

# Knowledge Gaps



Variable	Baseline	2003 (FU2)	2007 (FU4)/Expanded
<b>Cancer control</b>			
Tobacco	X	X	X
Physical activity		X	X
Alcohol	X		X
Diet	O	O	O
<b>Health care</b>			
General	X	X	X
Cancer center	X	X	X
<b>Cancer screening</b>			
Mammogram		X	X
Colonoscopy		X	X
Pap	X	X	X
Skin		X	
<b>Other screening</b>			
Echo		X	X
DXA		X	X
<b>Mortality and SMN</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Health status</b>	<b>X</b>		<b>X</b>
<b>Chronic disease</b>	<b>X</b>		<b>X</b>
<b>Quality of Life</b>		<b>X</b>	

## **Simple (relatively) analyses**

- Continued descriptive analyses
- More detailed analysis of ‘predictors’
- Longitudinal changes
- Examples:
  - Changing patterns of health behaviors
  - Longitudinal changes in health care utilization

## **Complex analyses**

- Clustering of behaviors and practices (i.e. tobacco, alcohol, and mammography)
- Outcomes (mortality, chronic disease, SMN, QL) associated with health behaviors and health care practices
  - Collaboration with Chronic disease, SMN, and Epi/Biostat Committees



# Physical Activity Example

- 2003 CCSS survey: analysis for entire cohort (Ness)
- 54% did not meet CDC recommendations for PA
  - 23% sedentary (no physical activity past 4 wks)
  - Obvious relationships: CRT and amputation
1. More in-depth understanding of relationship between treatment exposures and physical activity
  2. Why are some amputees active and others not?
  3. Does physical inactivity predict (longitudinally) mortality (all-cause, cardiac-related), health status, subsequent cancers? With 2007 CCSS questionnaire, will have these outcomes.
  4. Can we intervene (can we increase levels of activity)

- Mammogram history - 25 items
- Health care - 7 items
- Chemoprevention - 2 items
- Pro's and Con's of mammography - 13 items
- Survivor-related health beliefs, knowledge, and psychological factors - 14 items
- Knowledge, beliefs, and perception of risk of breast cancer - 11 items
- Coping (COPE) - 24 items
- Multidimensional health locus of control - 18 items

- Women 25 – 50 yrs old
  - 88% response rate
  - 551 treated with chest RT  $\geq$  20 Gy
  - 561 without chest RT
  - 622 CCSS siblings
- Primary analysis has been completed
- Two additional analyses in progress
- Rich dataset for interested/motivated investigator
  - contact Kevin Oeffinger for further information