

Cancer Control Working Group

CCSS Investigator Meeting 2012

Kevin C. Oeffinger

Key points

- Maintain the ‘cure’,
Maintain the quality of the cure
- Innovation and creativity
- Collaboration across working groups
- New expertise from your institutions

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REVIEW ARTICLE

Health Behaviors, Medical Care, and Interventions to
Promote Healthy Living in the Childhood Cancer Survivor
Study Cohort

*Paul C. Nathan, Jennifer S. Ford, Tara O. Henderson, Melissa M. Hudson, Karen M. Emmons,
Jacqueline N. Casillas, E. Anne Lown, Kirsten K. Ness, and Kevin C. Oeffinger*

PI of AOI / Concept Proposals

- David Buchbinder
- Deidre Caplin
- Rena Conti
- Cheryl Cox
- Casey Daniel
- Prassad Gawade
- Nobuko Hijiya
- David Hodgson
- Melissa Hudson
- Lee Jones
- Anne Kirchhoff
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- James Klosky
- Stephanie Kovalchik
- Anne Lown
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- Ann Mertens
- Paul Nathan
- Shoshana Rosenberg
- Blythe Ryerson
- Stephanie Smith

Cancer Control Domains

- Health services
- Health status
- Health economics
- Lifestyle behaviors
- Risk-reducing interventions
- Populations:
 - Survivors with key exposures
 - Survivors without key exposures
 - Siblings
 - Population norms (NHIS)

Health Services

- General health care
- Risk-based or cancer-related care
- Hospitalizations
- Cancer screening
- Employment and insurance
- Other care
 - Complementary / alternative medicine
 - Dental care

MEDICAL CARE

The next questions are about health care received during the 2 year period between **November 2007 and November 2009**.

B1. During this two year period, which of the following health care providers (excluding dentists) did you see or talk to for medical care? This includes routine and sick care. (Mark all that apply)

- None **→ Go to Question B8, next page.**
- Physician (including Osteopath)
- Nurse Practitioner/Physician's Assistant
- Nurse
- Chiropractor
- Physical therapist
- Other

If Other, please describe.

B2. Where did you receive your health care? (Mark all that apply)

- Doctor's office
- Oncology (cancer) center or clinic
- Other type of clinic
- Hospital
- Emergency room or urgent care center
- Long-term follow-up clinic
- Other

If Other, please describe.

B3. During this 2 year period, how many times did you see a physician?

- None 7-10 times
- 1-2 times 11-20 times
- 3-4 times More than 20 times
- 5-6 times

B4. As you know, you were asked to participate in this study because you were once diagnosed with a cancer, leukemia, tumor, or similar illness. How many of the visits to the physician indicated in question B3 (during the 2 year period) were related to this previous illness?

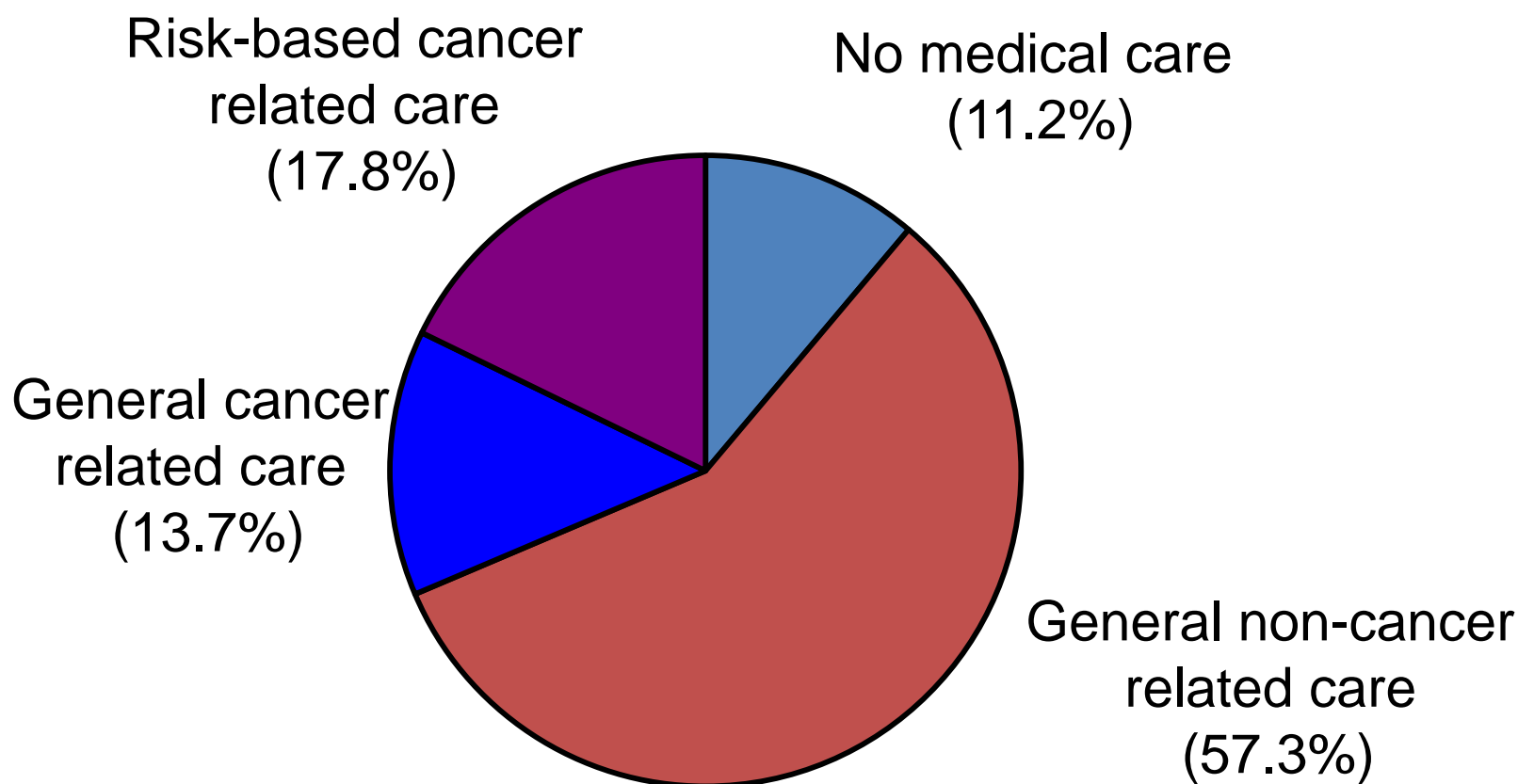
- None 7-10 visits
- 1-2 visits 11-20 visits
- 3-4 visits More than 20 visits
- 5-6 visits

B5. Did you discuss any of the following issues with your physician or primary health care provider during any of these visits?

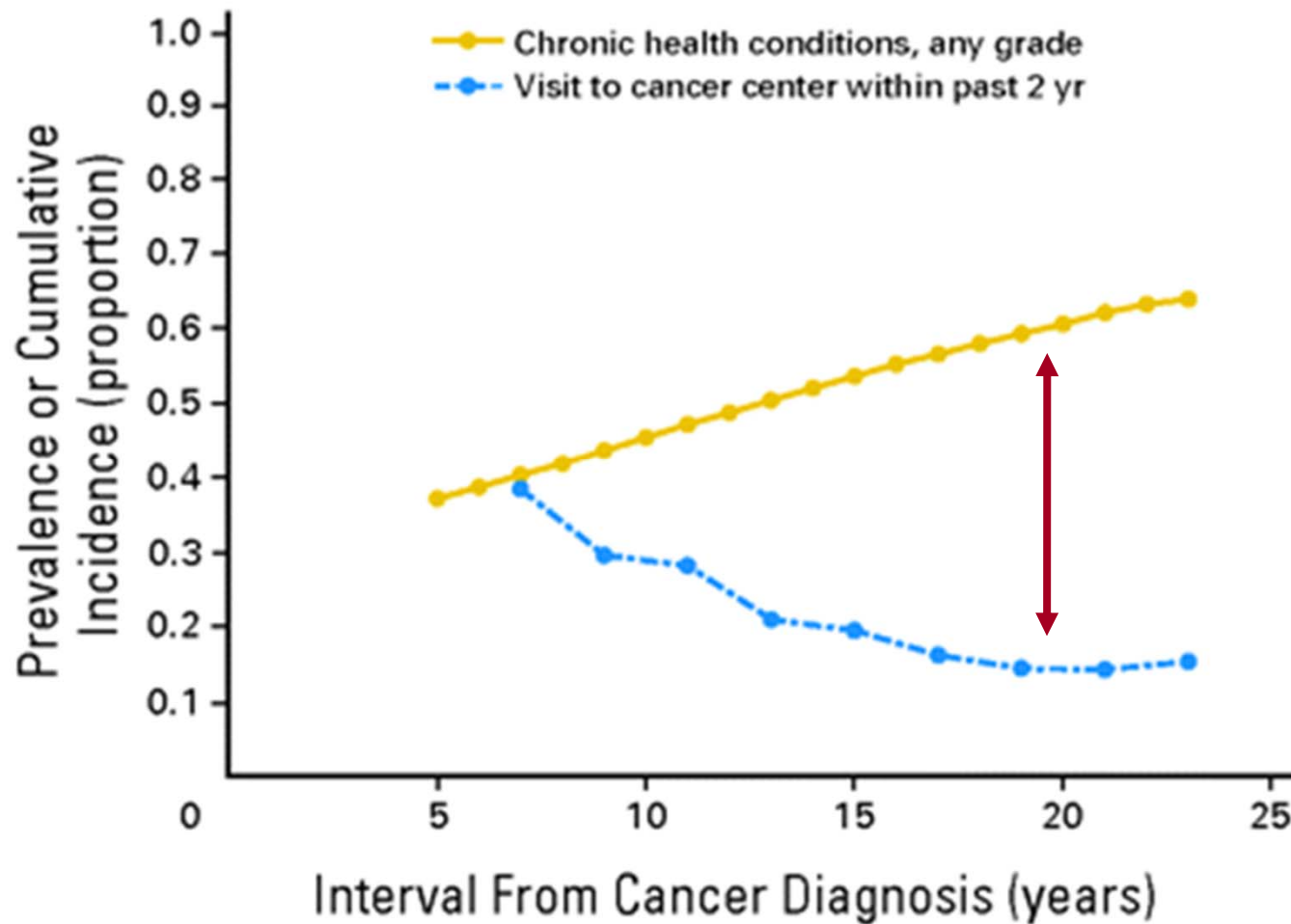
	No	Yes
a. Heart disease	<input type="checkbox"/>	<input type="checkbox"/>
b. Osteoporosis (weak or brittle bones)	<input type="checkbox"/>	<input type="checkbox"/>
c. Risk of developing cancer (breast, skin, other).	<input type="checkbox"/>	<input type="checkbox"/>
d. Hepatitis C	<input type="checkbox"/>	<input type="checkbox"/>
e. Dental problems	<input type="checkbox"/>	<input type="checkbox"/>
f. Fertility issues	<input type="checkbox"/>	<input type="checkbox"/>
g. Mental health	<input type="checkbox"/>	<input type="checkbox"/>
h. Other issues related to your history of cancer or other serious illness during childhood	<input type="checkbox"/>	<input type="checkbox"/>

Only a minority of childhood cancer survivors are receiving risk-based survivor-focused health care

Nathan PC, et al. J Clin Oncol, 2008



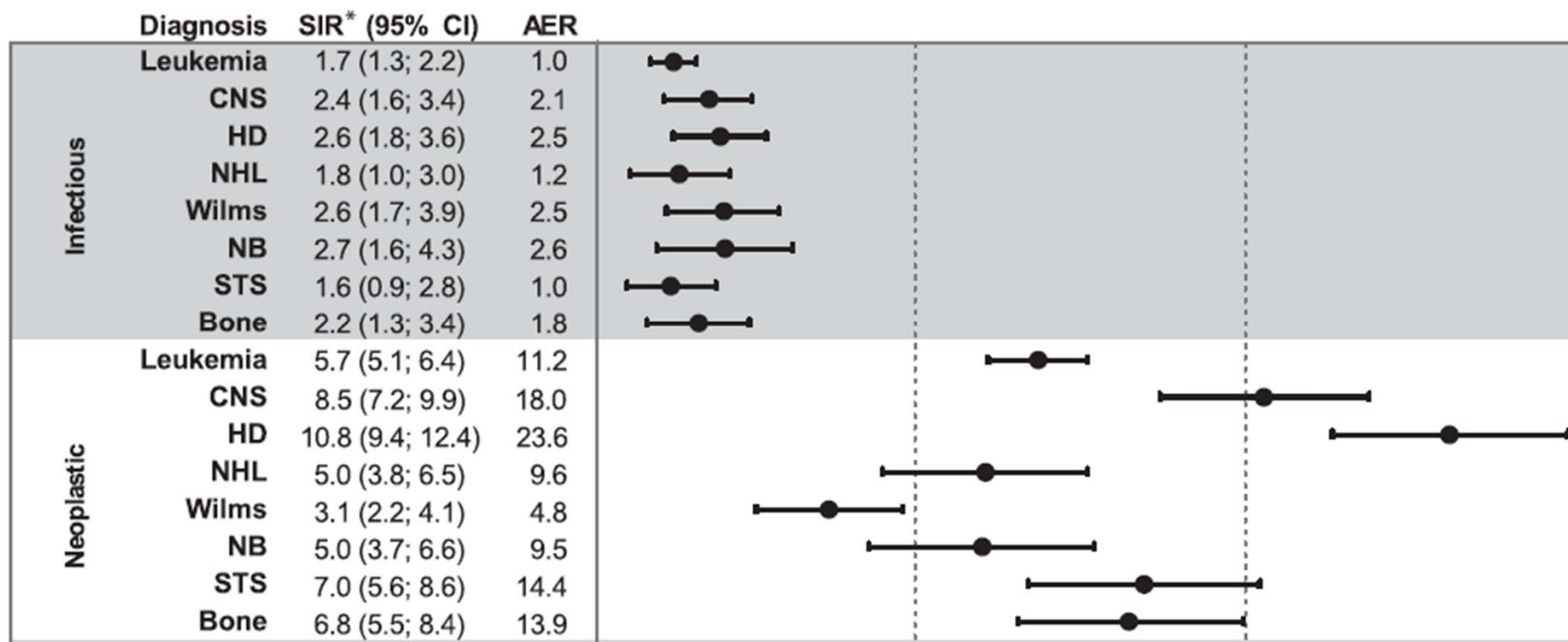
Most childhood cancer survivors are
not followed at a cancer center
Nathan PC, et al. J Clin Oncol, 2009



Hospitalization rates among adult survivors

Kurt BA, et al. *Pediatr Blood Cancer*, 2012

60% higher hospitalization rate than US population



Cancer Screening

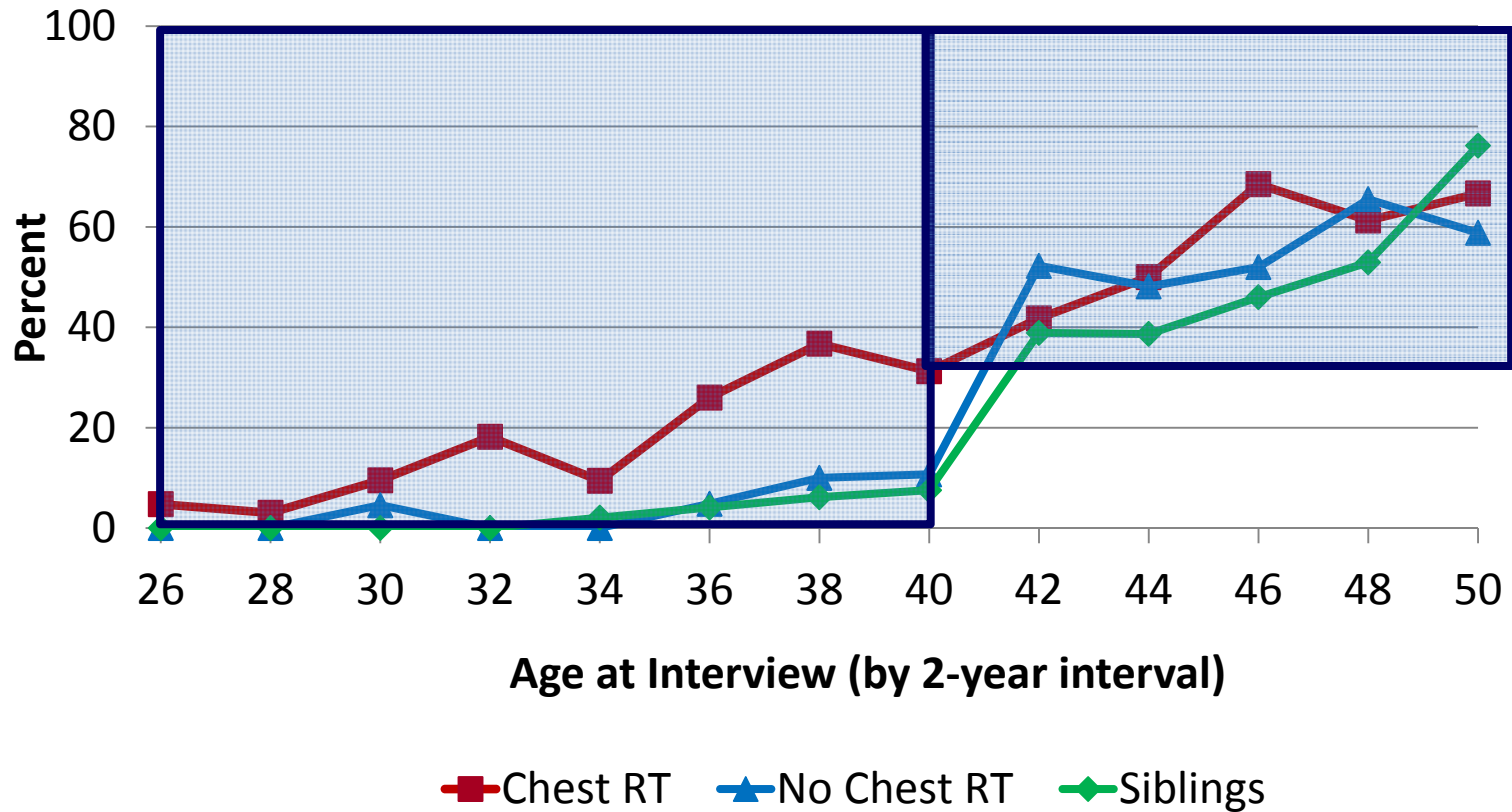
- Breast cancer
- Colorectal cancer
- Cervical cancer
- Skin cancer

Cancer Screening

- Breast cancer
- Colorectal cancer
- Cervical cancer
- Skin cancer
- Not included in previous surveys
 - Thyroid (ultrasound)
 - Gastric (upper endoscopy)
 - Prostate (PSA)
 - Renal / bladder (UA)
 - Meningioma (MRI)
 - Genetic testing

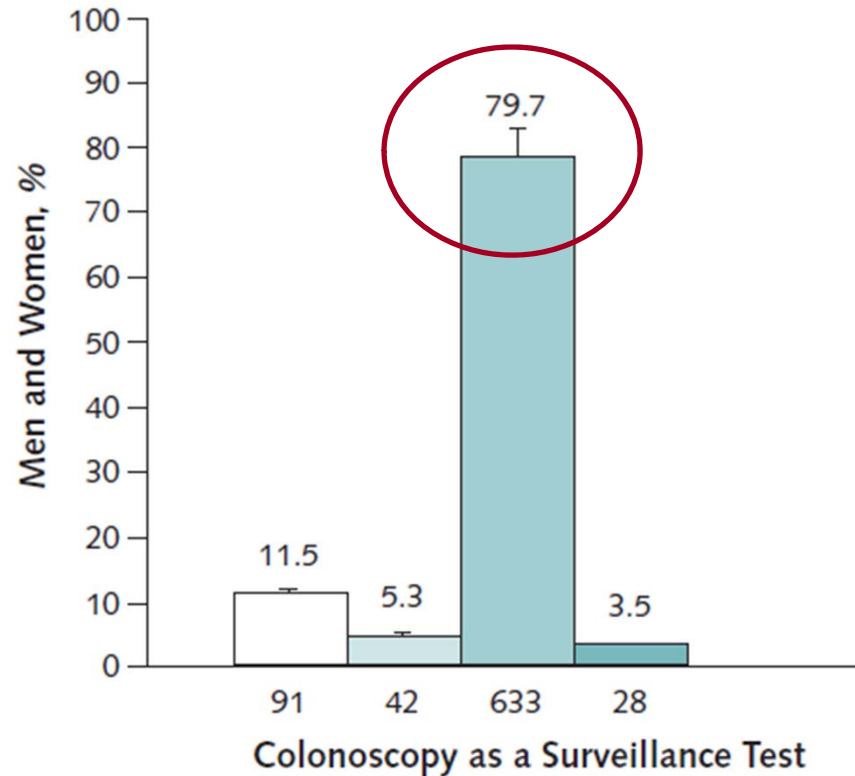
Proportion of women with at least TWO screening mammogram within the preceding FOUR years

Oeffinger KC, et al. JAMA, 2009

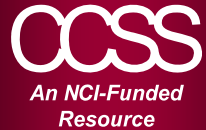


Proportion of women with at least TWO screening mammogram within the preceding FOUR years

Nathan PC, et al. Ann Intern Med, 2010



- Had test within recommended period
- Had test, but not within recommended period
- Never had test
- Unknown



CCSS Health Services Matrix

Item	Baseline	2000	2003	2005**	2007
General	X		X		X
Risk-Based			X		X
Hospitalization	X	X	X	X	X
Employment	X		X		X
Insurance	X	X	X		X
Mammogram			X	X	X
CRC screening			X		X
Pap smear			X		X
Skin screening			X		

** Mammogram practice survey – 1976 women age 25-50 (chest RT, no chest RT, sibs)

Health Services - Future

- Longitudinal analysis of outpatient care (baseline to 2007) – Casillas / Nathan
- Impact of location and type of follow-up care on morbidity/mortality – Nathan / Oeffinger

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- Longitudinal analysis of outpatient care (baseline to 2007) – Casillas / Nathan
- Impact of location and type of follow-up care on morbidity/mortality – Nathan / Oeffinger
- **NEEDS:**
 - High utilizers (outpatient, inpatient, ER)
 - Risk-based care among specific populations or in relation to specific outcomes
 - Chronic disease outcomes (updated) and health care utilization (cross-sectional or longitudinal)

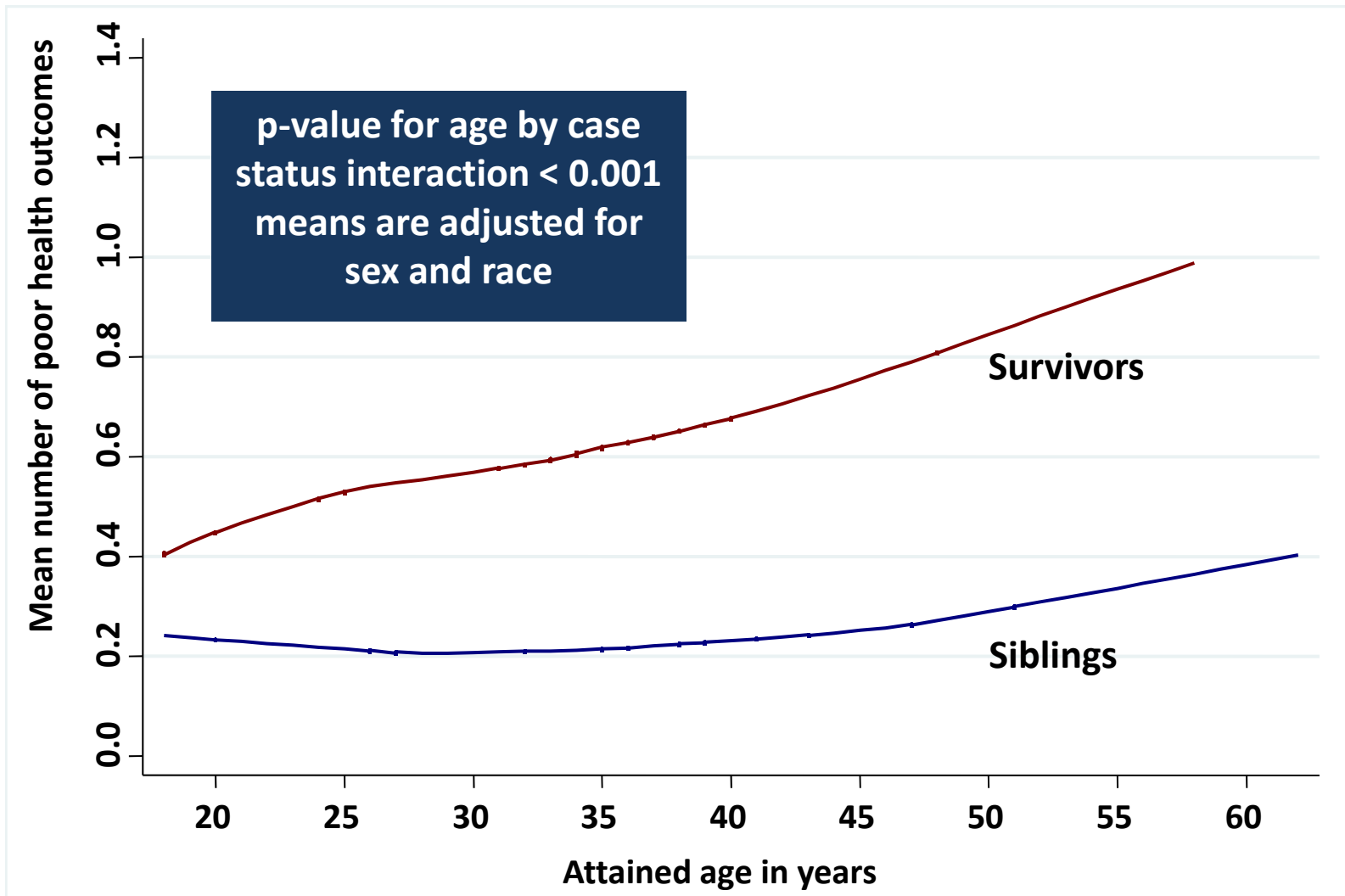
Domains

- General health
- Symptoms of depression, anxiety, somatization
- Physical functioning
- Activity limitations
- Pain
- Survivor anxiety / fears

Hudson MM, et al. JAMA, 2003

Change in overall health status score by attained age

Hudson MM, et al. SIOP 2011



- Cost-effectiveness of CRC screening in survivors post abdominal RT – Hodgson
- Health system use and cost implications of amputation vs limb salvage surgery – Conti

Area of Major Need = Opportunity

Lifestyle Behaviors Matrix

Item	Baseline	2000	2003	2005	2007
Tobacco	X		X		X
Alcohol	X				X
Physical activity			X		X
Sun protection			X		
Information needs			X		X

Areas not included in previous surveys:

- Diet
- Vitamin D

Lifestyle Behaviors - Future

- Tobacco use among sibs - Buchbinder
- Lifestyle behaviors and site-specific cumulative incidence of SMNs – Kovalchik / Pfeiffer
- Exercise behavior(MET hrs/wk) and chronic health conditions – Jones / Ness

Lifestyle Behaviors - Future

- Tobacco use among sibs - Buchbinder
- Lifestyle behaviors and site-specific cumulative incidence of SMNs – Kovalchik / Pfeiffer
- Exercise behavior(MET hrs/wk) and chronic health conditions – Jones / Ness
- **NEEDS:**
 - Tobacco use longitudinal analysis
 - Lifestyle behaviors and health care utilization
 - Exercise behavior by cancer or end organ disease
 - Further collaboration with chronic disease, second cancer, and psychology working groups

Risk-Reducing Interventions

- INSURE – health care needs
R21CA142921, Cheryl Cox
- Efficacy of a Tobacco Quit Line
R01CA127964, Robert Klesges
- ECHOS – cardiac screening
R01NR011322, Melissa Hudson / Cheryl Cox
- EMPOWER – breast cancer screening
R01 CA134722, Kevin Oeffinger
- Breast cancer risk prediction model
R01CA136783, Chaya Moskowitz

Risk-Reducing Interventions

Reducing skin cancer risk in childhood cancer survivors - R01 application - Alan Geller (Harvard)

1. Determine the impact of a Patient Activation and Education intervention (PAE) with and without physician education (PAE + MD) and teledermatology (PAE + MD + TD) on skin cancer early detection practices measured at baseline, 12, and 18 months.
2. Determine the impact of the intervention on time to diagnosis.

Career Development Awards

- Health beliefs & behavior: cohort studies in pediatric cancer survivorship
K07CA134935, Tara Henderson
- Diet and insulin resistance among survivors of childhood leukemia
ACS Cancer Control Career Development Award for Primary Care Physicians,
Emily Tonorezos

Future Goals

- Above highlighted areas of need
- Multimodal interventions
- Expand work in risky behaviors (interventions)
- HCV screening and counseling intervention
- Diet and exercise intervention
- Frailty and aging
- Study cancer control outcomes in CCSS Expansion Cohort

Cancer Control – Core Leadership

- Paul Nathan – Health Services co-chair
- Tara Henderson – Lifestyle Behaviors, co-chair
- Jennifer Ford – Lifestyle Behaviors, co-chair
- Melissa Hudson
- Kiri Ness
- Ann Mertens
- Cheryl Cox
- Jacqueline Casillas
- Chaya Moskowitz