NOVEMBER 14-18, 2018 | BOSTON, MASSACHUSETTS

THE GERONTOLOGICAL SOCIETY OF AMERICA®

Momentum Discussion

Older Adults and Cancer: Building the Research and Clinical Care Infrastructure for an Aging Population

Panelists: Harvey Jay Cohen, Elana Plotkin & Peggy Burhenn

November 17, 2018

Supported by Pfizer

CARG
CANCER & AGING RESEARCH GROUP
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City of Hope

“Even as we embrace new, exciting drugs and technologies, the time-honored medical tradition of compassion and active listening is the core of what we do.”

Arti Hurria, MD, FASCO

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Momentum Discussion

Older Adults and Cancer: Importance of the Topic

Panelist: Harvey Jay Cohen, MD, Center for the Study of Aging and Human Development, Duke University

November 17, 2018

Momentum Discussion
Older Adults and Cancer: Importance of the Topic

Harvey Jay Cohen, MD
Center for the Study of Aging and Human Development
Duke University

The Gerontological Society of America

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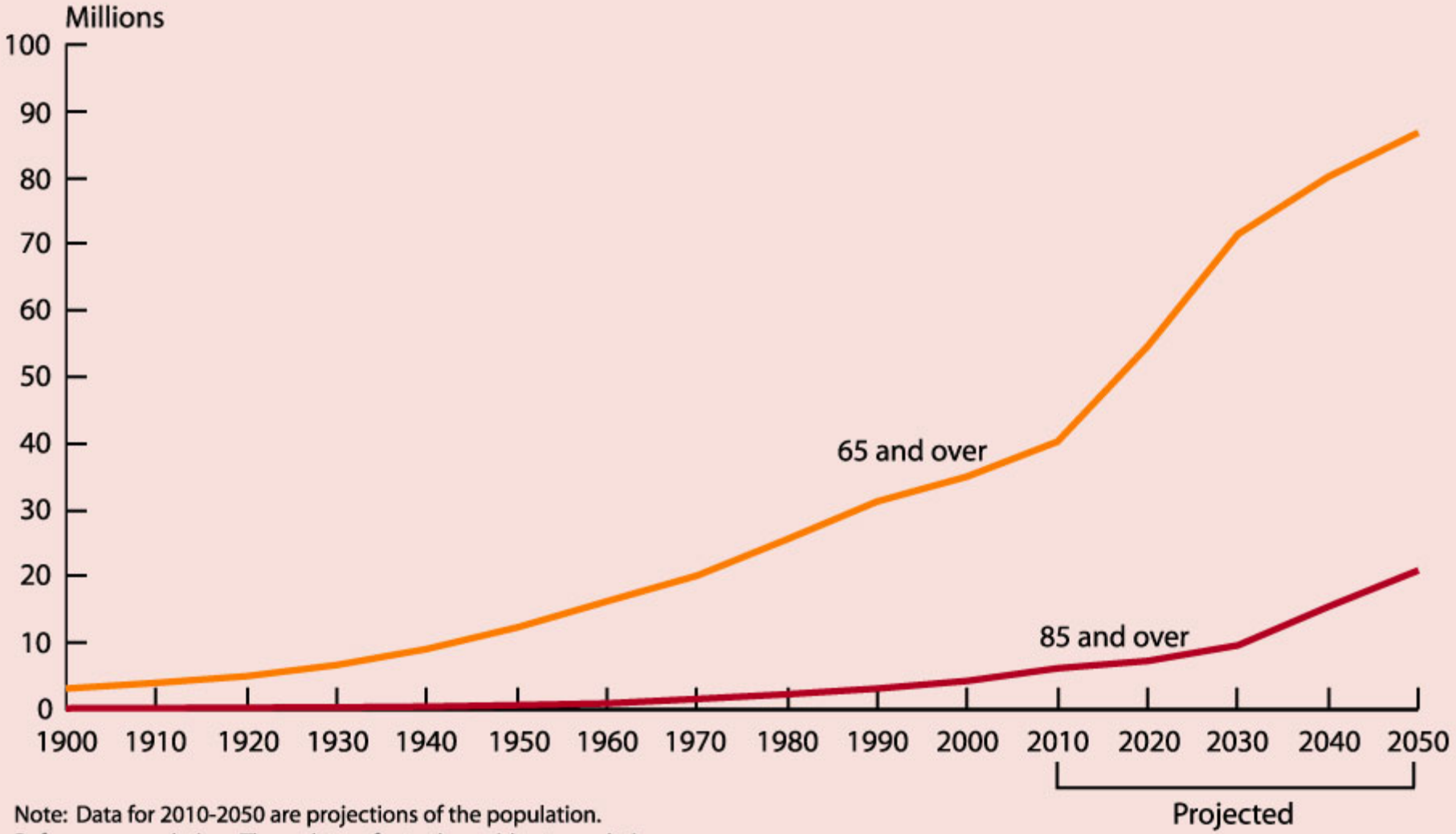
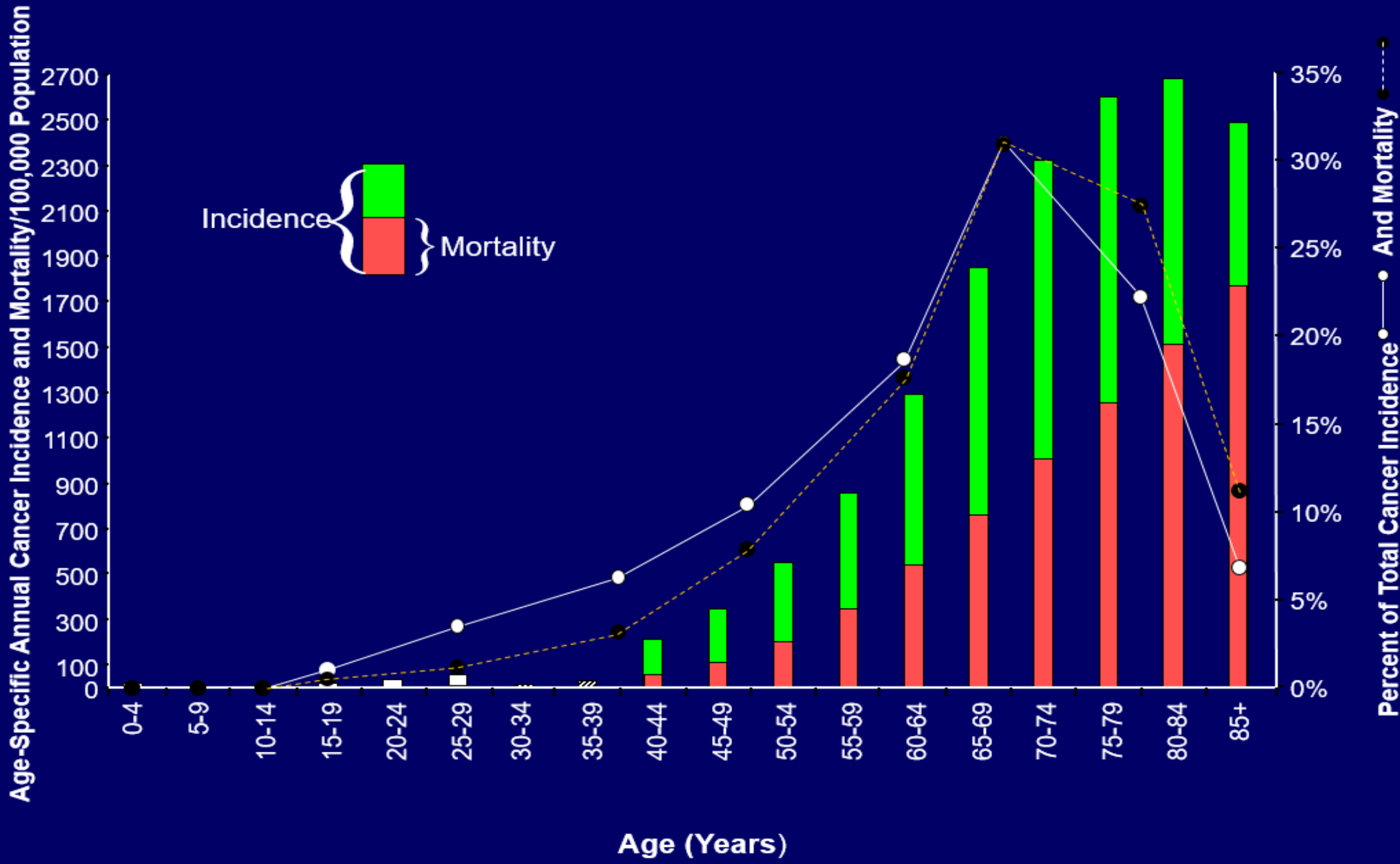
Number of people age 65 and over, by age group, selected years 1900-2000 and projected 2010-2050



Note: Data for 2010-2050 are projections of the population.
Reference population: These data refer to the resident population.
Source: U.S. Census Bureau, Decennial Census and Projections.


Age-Specific Annual Cancer Incidence and Mortality/100,000 Population
2700
2500
2300
2100
1900
1700
1500
1300
1100
900
700
500
300
100
0
Incidence
Mortality
0-4
5-9
10-14
15-19
20-24
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70-74
75-79
80-84
85+
Age (Years)
35%
30%
25%
20%
15%
10%
5%
0%
Percent of Total Cancer Incidence And Mortality

Cancer Burden and Aging

56% of Cancer Diagnoses,

68% of Cancer Deaths,

59% of Cancer Survivors are ≥ age 65 in the US

50% of Cancer Survivors are ≥ age 70

IOM Report 2013

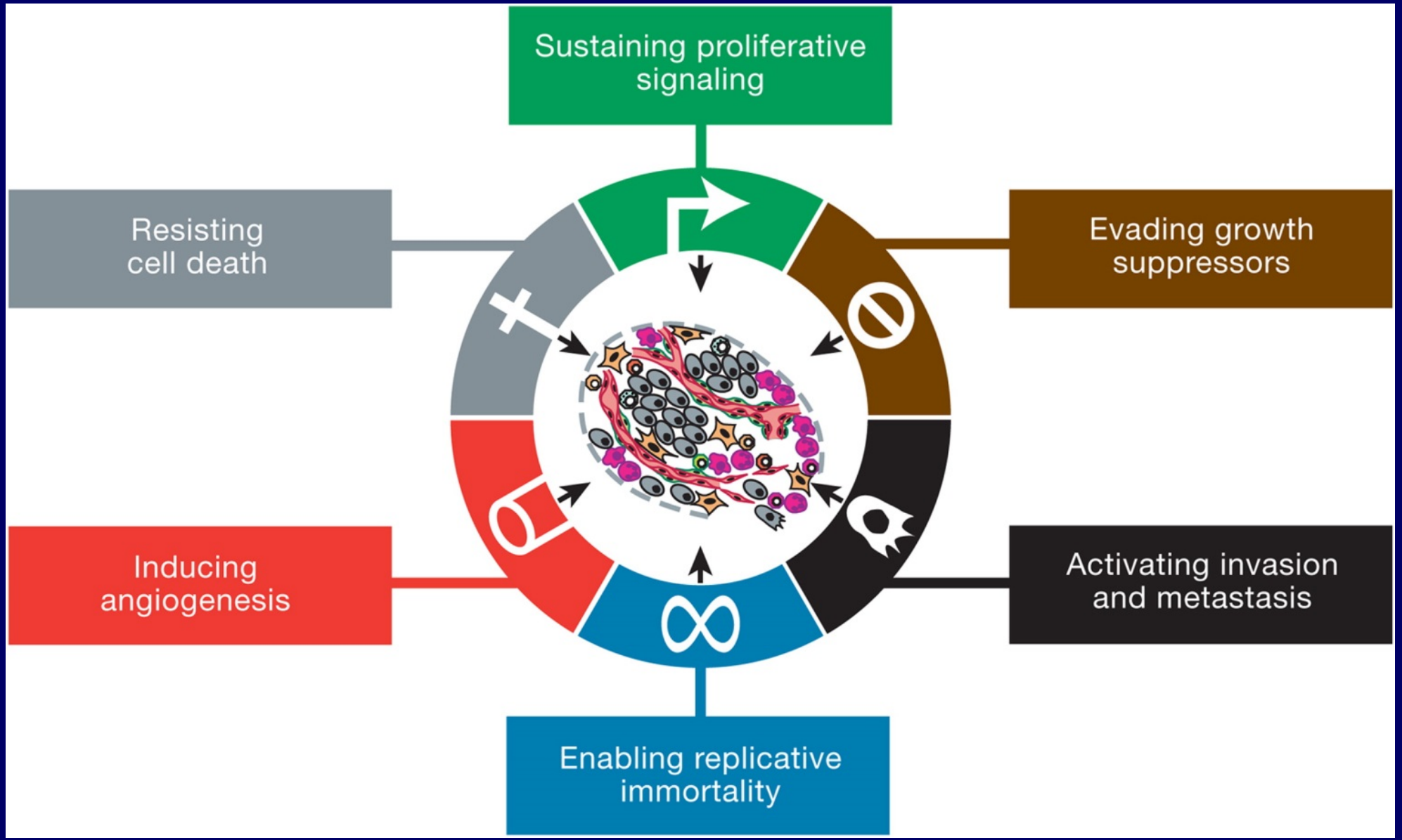
CANCER INCREASE WITH AGE THEORIES

- Immune System – decreased surveillance
- Carcinogenic Exposure – longer duration, increased susceptibility
- Increased DNA instability
- Decreased ability to repair DNA
- Oncogene activation or amplification
- Defects in Tumor Suppressor Genes
- Telomere Shortening
- Microenvironment – senescence, inflammation

Hallmarks of Aging

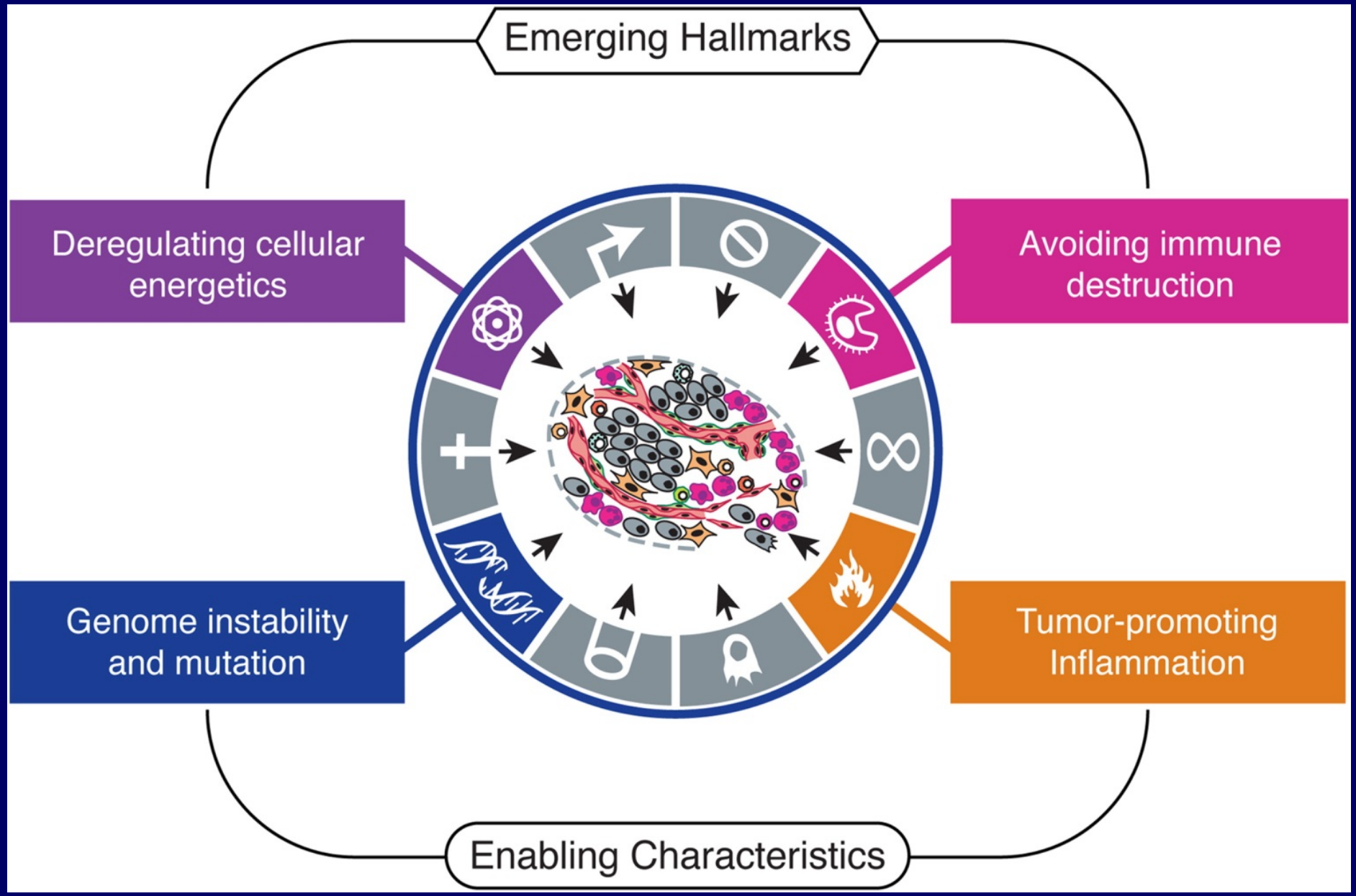
López-Otín,
Cell, 153: 1194-1217, 2013

Hallmarks of Cancer



Hanahan, Cell , 144: 646-674, 2011

Hallmarks of Cancer



Hanahan, Cell, 144: 646-674, 2011

WHAT'S DIFFERENT ABOUT OLDER PATIENTS?

- Heterogeneity of health status
- Physiologic changes
- Increased prevalence of disease
- Tendency to have multiple, often interacting, diseases
- Under-reporting of symptoms
- Atypical presentation of common illnesses
- Increased importance of social support
- Increased rates of adverse effects to medications and therapies
- Different goals of therapy

AGING PHYSIOLOGY AND CANCER

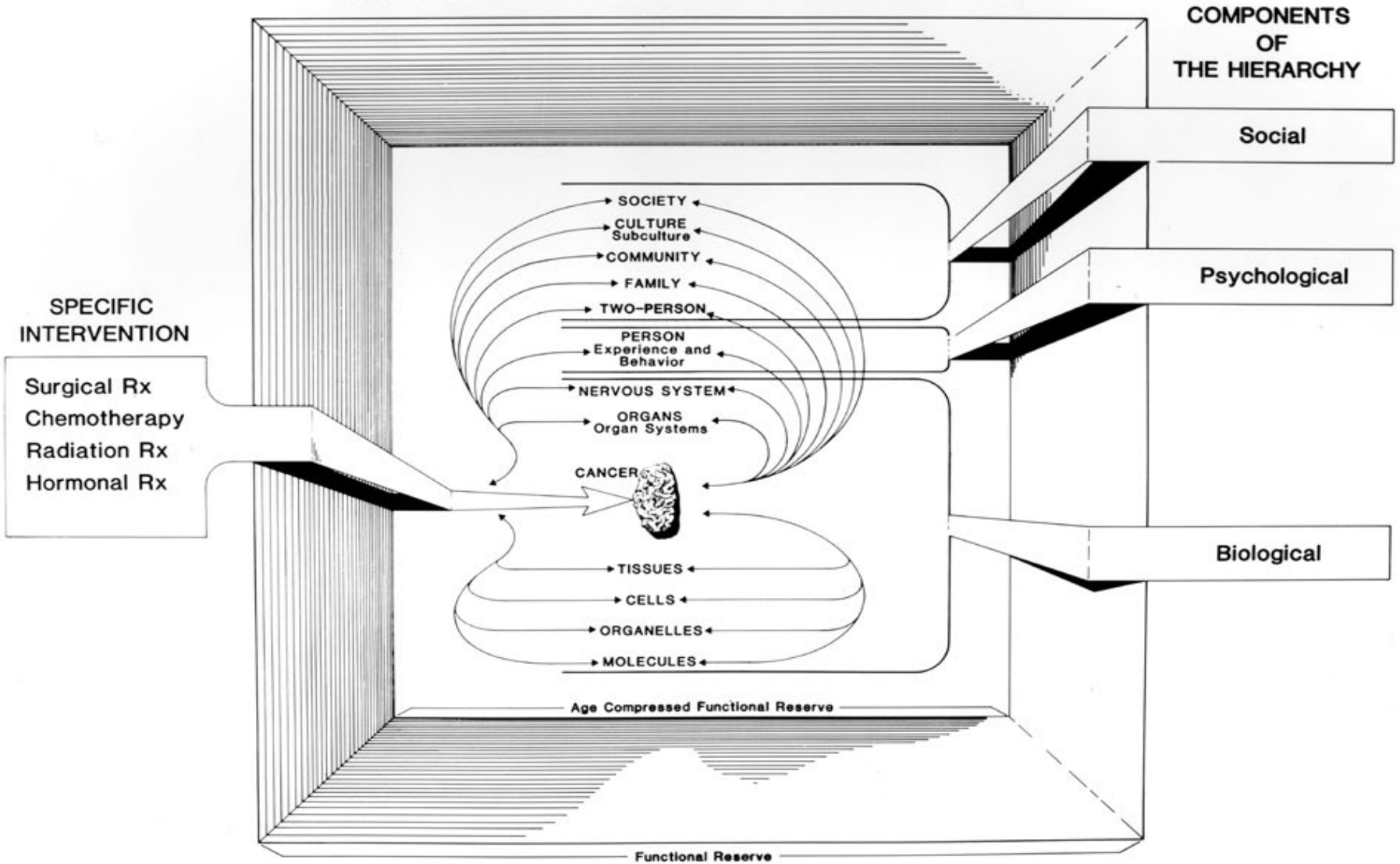
Aging Physiology	Cancer Relevance
Cardiopulmonary	Surgery
↓ Max CO, VO2 Max	C/P toxic drugs
↓ Elasticity	
Skin – ↓ wound healing	Surgery
CNS – ↓ brain wt,	Patient interactions
cerebral blood flow	CNS toxic drugs
Special senses – ↓ taste	Nutrition
smell ↓ salivary flow	Radiation therapy

AGING PHYSIOLOGY AND CANCER

Aging Physiology	Cancer Relevance
Hematopoiesis – ↓response under stress	Chemotherapy & Radiation Therapy
Immune system – ↓response	Infection
Body composition – ↓lean, ↑ fat	Drug Distribution
Liver – ↓ mass and flow, ↓ oxidative metab	Hepatic Drug Metabolism
Kidney – ↓ GFR	Renal drug excretion

THE COMPREHENSIVE GERIATRIC MODEL

THE PATIENT'S ORGANIZATIONAL HIERARCHY



Cohen, Demaria; Physician Guide to Cancer Care Complications. Decker, P.240, 1986

COMPREHENSIVE GERIATRIC ASSESSMENT

GERIATRIC ASSESSMENT FOR ELDERLY CANCER PATIENTS

Goals

- Prediction of outcomes, e.g. toxicity
- Patient selection
- Management during treatment
  - Comorbidities
  - Medications
- Survivorship management

Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

Advising the nation • Improving health

VIEWPOINT

Improving the Quality of Cancer Care in an Aging Population

Recommendations From an IOM Report

Arti Hurria, MD
City of Hope Comprehensive Cancer Center, Duarte, California.

Mary Naylor, PhD, RN
New Cortland Center for Transitions and Health, University of Pennsylvania School of Nursing, Philadelphia.

Harvey Jay Cohen, MD
Center for the Study of Aging and Human Development and Duke Cancer Institute, Duke University Medical Center, Durham, North Carolina.

Findings from the recently released report from the Institute of Medicine (IOM) Committee on Improving the Quality of Cancer Care: Addressing the Challenges of an Aging Population, titled *Delivering High-Quality Cancer Care: Charting a Course for a System in Crisis*,[1,2] underscore that the United States has entered a new era in cancer care. The complexity of challenges that US society will confront in achieving the quality of care and outcomes individuals seek and deserve have been magnified because cancer is now an integral part of the aging phenomenon. As the earliest wave of baby boomers enters Medicare, cancer is diagnosed at a higher rate (53%), accounts for a higher percentage of survivors (59%), and results in more deaths among individuals 65 years and older (68%), compared with younger individuals.[3,4] With 10 000 individuals reaching age 65 years each day, the incidence of cancer is expected to increase by 67% among this population from 2010 to 2030.[5] Unquestionably, this major shift in demographics further compels a geriatric assessment that provides measures of functional rather than chronological age. This would expand the breadth and depth of data available for understanding the characteristics of patients who may benefit from treatment as well as for developing interventions for those vulnerable to adverse effects. In sum, for patients and physicians to adequately balance the risks and benefits of therapy, the IOM committee recommends that research studies include a plan to recruit a population that represents the age distribution and health-risk profiles of patients with cancer.

For decades, researchers have acknowledged the importance of obtaining information on cancer therapeutics in older adults, yet these individuals continue to be underrepresented in trials conducted for US Food and Drug Administration (FDA) registration.[6] Therefore, new drugs are often tested and FDA approved in a younger, healthier, fit population. The package insert (prescribing information) has a "geriatric usage" section; how-

JAMA, Vol. 310, Number 17, 2013

Goals of the Recommendations

1. Provide patients and their families with understandable information about cancer prognosis, treatment benefits and harms, palliative care, psychosocial support, and costs.
2. Provide patients with end-of-life care that meets their needs, values, and preferences.
3. Ensure coordinated and comprehensive patient-centered care.
4. Ensure that all individuals caring for cancer patients have appropriate core competencies.
5. Expand the breadth of data collected in cancer research for older adults and patients with multiple comorbid conditions.
6. Expand the depth of data collected in cancer research through a common set of data elements that capture patient-reported outcomes, relevant patient characteristics, and health behaviors.
7. Develop a learning health care information technology system for cancer that enables real-time analysis of data from cancer patients in a variety of care settings.
8. Develop a national quality reporting program for cancer care as part of a learning health care system.
9. Implement a national strategy to reduce disparities in access to cancer care for underserved populations by leveraging community interventions.
10. Improve the affordability of cancer care by leveraging existing efforts to reform payment and eliminate waste.

To Expand the Evidence

- Enroll more older, vulnerable, comorbid patients in clinical trails – need incentives
- Utilize Geriatric Assessment approaches
- Tailor endpoints to population – include patient values
- Incorporate host bio/psychosocial as well as tumor markers
- Optimize use of novel trial designs e.g.
  - Extended Designs for toxicity
  - Clinical Effectiveness research
- Maximize already available data – e.g. publish full age descriptive of clinical trial and analyze for age relationships

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THE GERONTOLOGICAL SOCIETY OF AMERICA®

Momentum Discussion

Multidisciplinary Approaches To Caring For Geriatric Patients With Cancer

Panelist: Elana Plotkin, CMP-HC, Association of Community Cancer Centers

November 17, 2018

ASSOCIATION OF COMMUNITY CANCER CENTERS

MULTIDISCIPLINARY APPROACHES TO CARING FOR GERIATRIC PATIENTS WITH CANCER

THE GERONTOLOGICAL SOCIETY OF AMERICA®

ACCC
Association of Community Cancer Centers

SIOG
INTERNATIONAL SOCIETY OF GERIATRIC ONCOLOGY

ACCC

Association of Community Cancer Centers

The leading education and advocacy organization for the multidisciplinary cancer team.

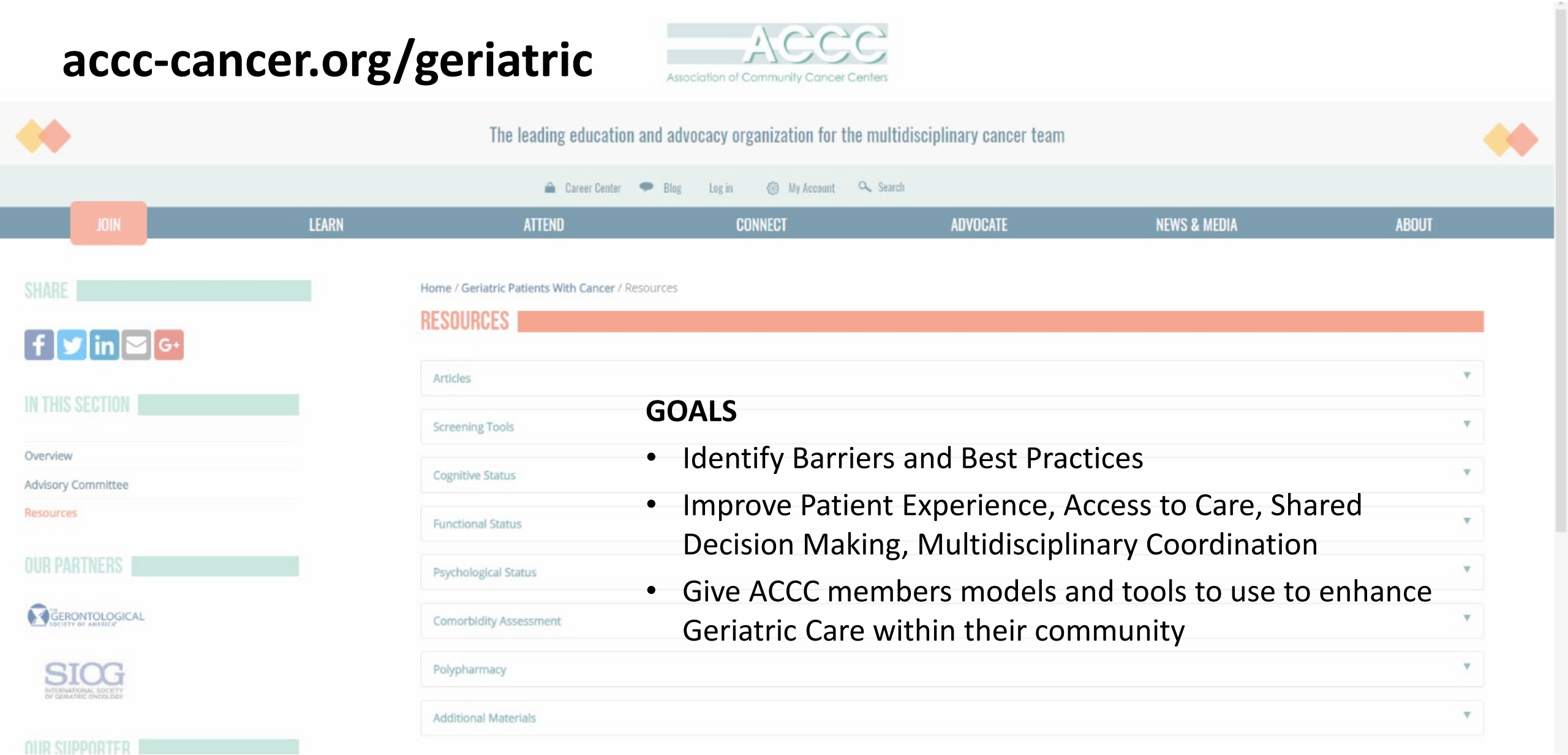
Multidisciplinary Membership

- Billers & Coders
- Financial Advocates
- Hospital President/CEO/COO/VPs
- Medical Directors
- Nurses & Nurse Practitioners
- Oncology Service Line Directors
- Program & Practice Administrators
- Pharmacists
- Medical, Radiation, & Surgical Oncologists
- Social Workers

ACCC is a powerful network of more than 25,000 multidisciplinary practitioners and 2,000 cancer programs and practices nationwide.

ACCC members work in every care delivery setting, from private practices to hospital-based cancer programs, large healthcare systems, and major academic centers.

accc-cancer.org/geriatric

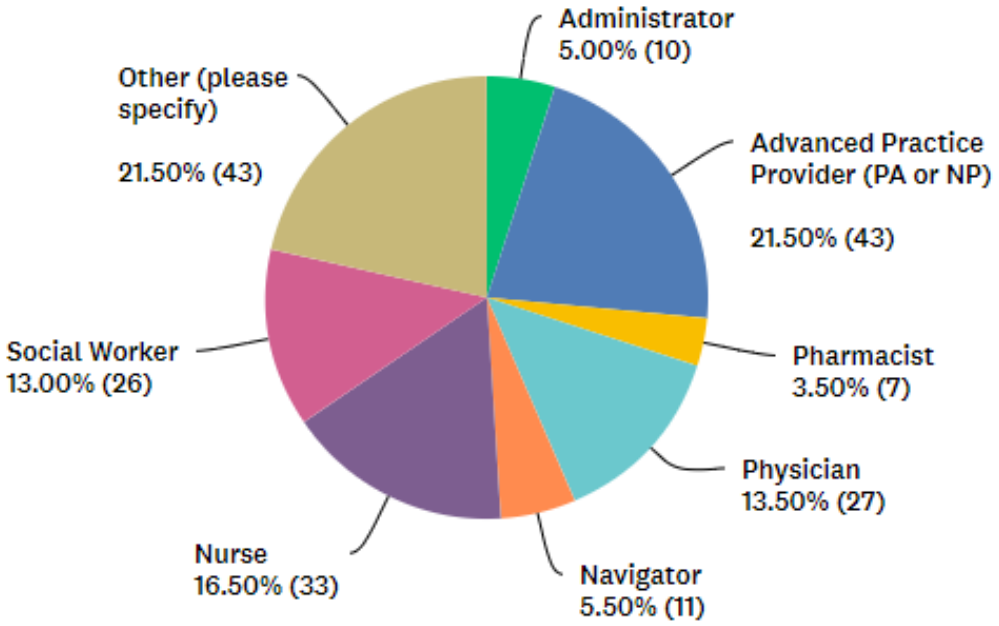


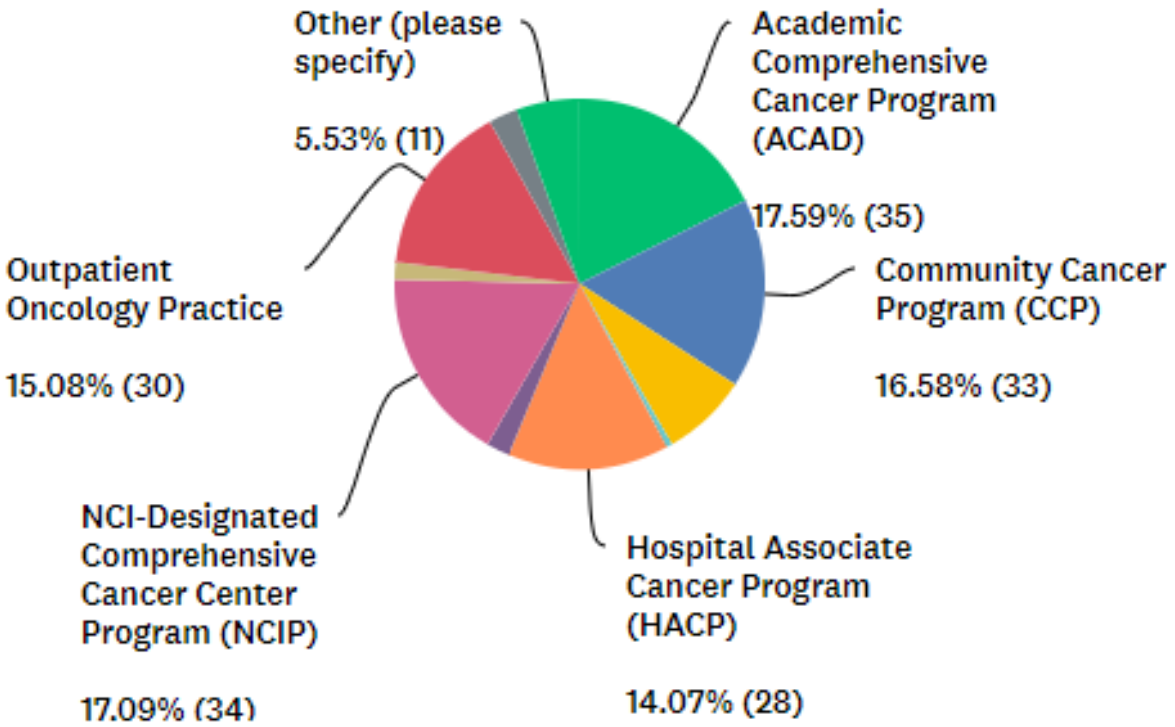
GOALS

- Identify Barriers and Best Practices
- Improve Patient Experience, Access to Care, Shared Decision Making, Multidisciplinary Coordination
- Give ACCC members models and tools to use to enhance Geriatric Care within their community

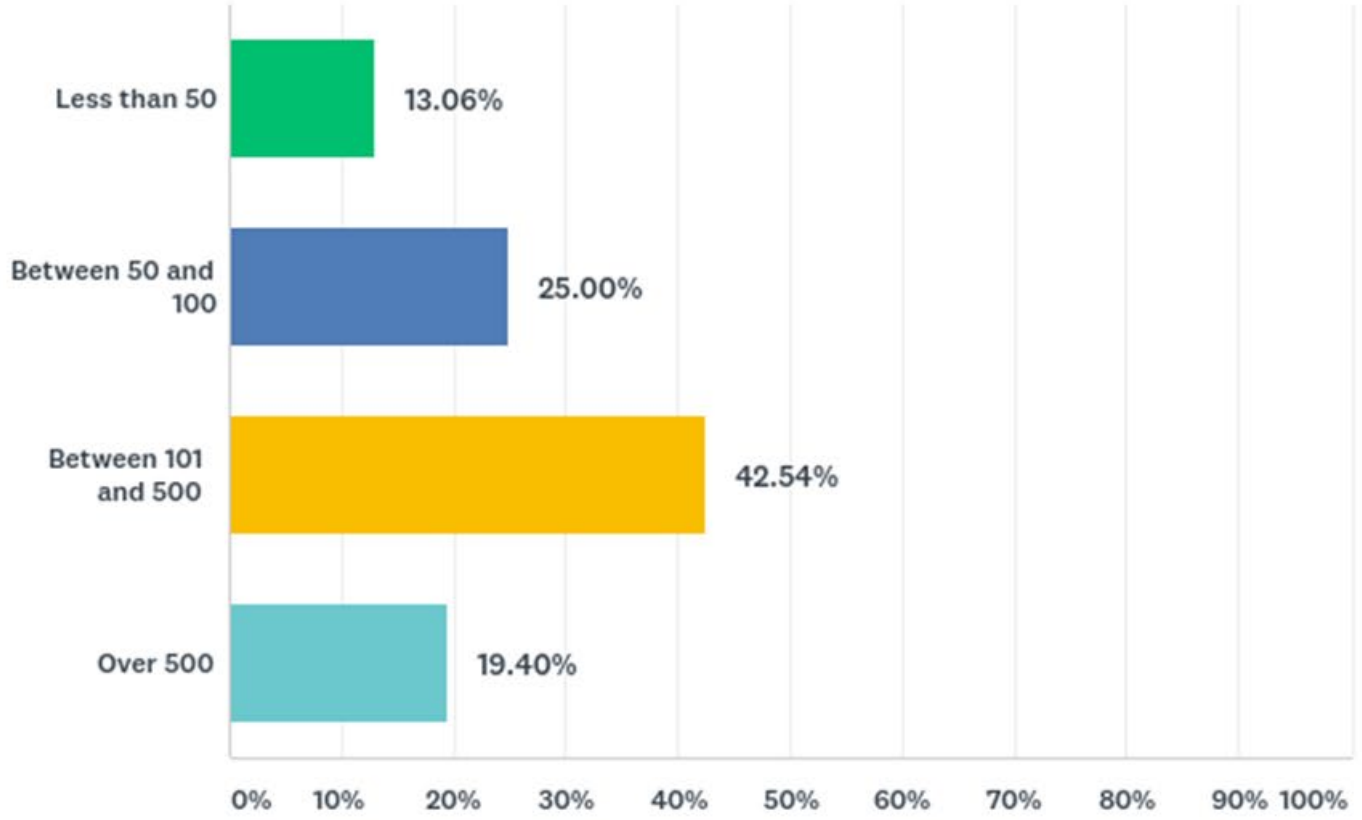
Survey Highlights

- 332 responses

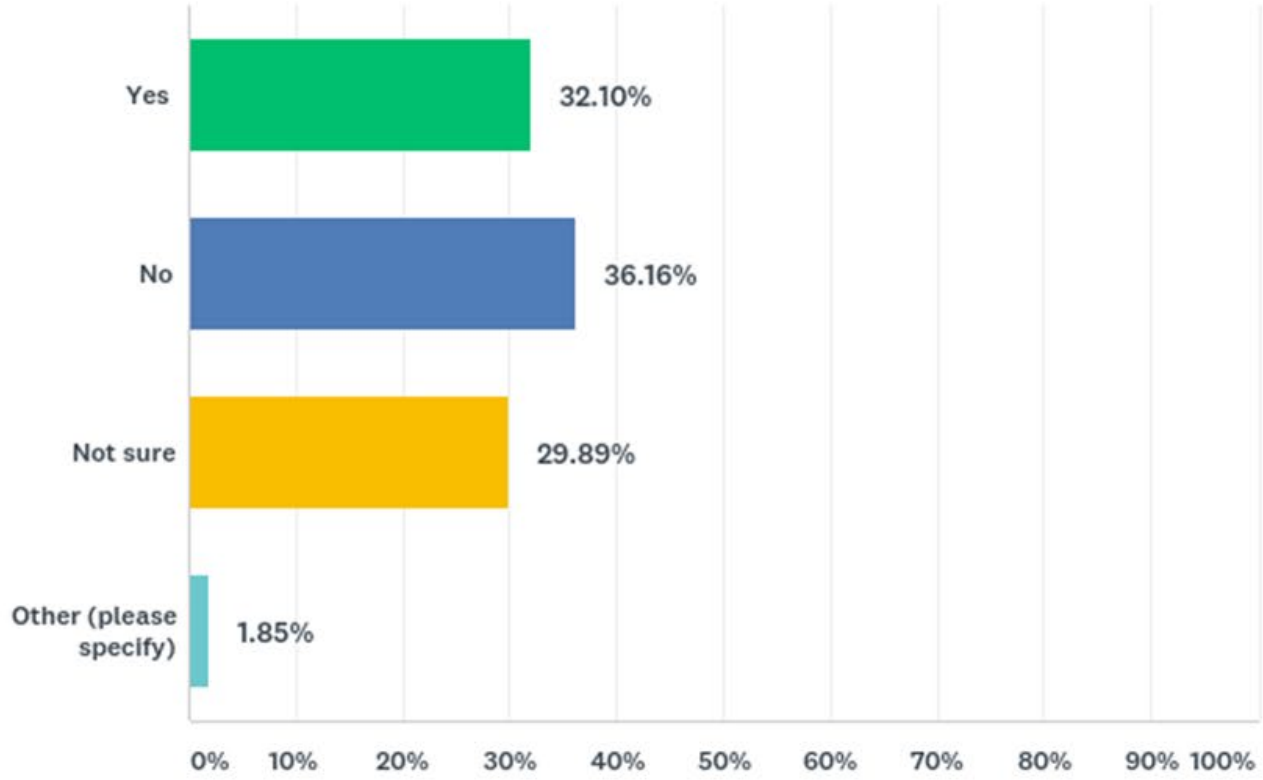




Q7 Please estimate the average number of older adults (age 65 and older) seen at your cancer clinic or program each month.



Q9 Have any oncology providers or other clinical staff received a board certification in gerontology/geriatrics or taken specialty training/have expertise in gerontology/geriatrics (may include research interests)?



32%

Geriatric Assessment & Evaluating Older Adults

- **95% *strongly agree or agree*** that their older adult patients would **benefit** from **a comprehensive geriatric assessment (CGA**) in addition to the oncology assessment, prior to starting treatment. [Q12, n= 255]

- **Yet only 17% routinely conduct a CGA** [Q15, n=253]

Geriatric Assessment & Evaluating Older Adults

- **74%** of respondents *either* **don't use screening tools or plan to incorporate them** in their programs in the near future. [Q13, n= 243]

- Respondents will conduct **additional targeted assessments** with older adult patients when patients [Q16, n=207]:
  - Present with signs of depression or cognitive impairment (20%)
  - Have significant/multiple comorbidities (16%)
  - Advanced, high risk and metastatic patients (8%)

Top 3 Barriers to Conducting CGA

- Time constraints (60%)
- Limited familiarity with available validated geriatric screening/assessment tools (49%)
- Limited personnel (46%)

Provider-Patient Communication about Treatment Goals, Options & Decision-Making

- **Less than 10%** of respondents **utilize patient decision-making aids or tools** [Q31, n=205].
- When **efficacy and safety** of a treatment are **similar**, respondents cited these **top 3 factors** for **influencing mode of treatment administration** [Q33, n=195]:
  - Patient preference (81%)
  - Patient medication management ability and adherence (77%)
  - Availability of caregiver support (77%)

Clinical Trials

- The **majority (62%)** of respondents **are *not* aware of efforts** in place or planned at their cancer program **to increase clinical trial participation among older adults** [Q34, n=206].

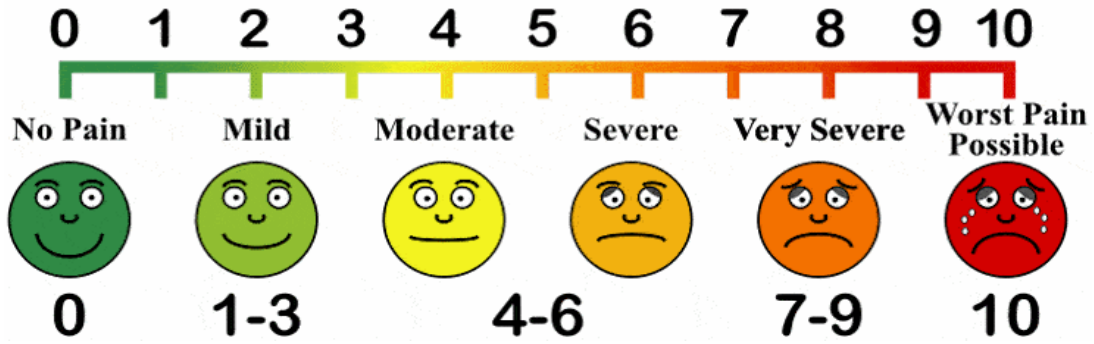
- **45% of respondents** say they do look at **the *age range* of trial participants** when **reviewing clinical literature** or the PI. [Q35, n= 203]
    - **75%** of physicians

Care Transitions & Interdisciplinary Communication

- **44%** of respondents' cancer programs have a **formal process for transitioning** patients to post-treatment and survivorship care [Q39, n=206].
- **End-of-life planning** is most often addressed through the **patient completion of advance directives**. To address end of life planning these approaches were **most cited** [Q41,n=203] :
  - We have patients complete advance life directives (61%).
  - We routinely discuss end of life planning with advanced cancer patients (52%)
  - We discuss end-of-life planning when the patient has exhausted all treatment options (48%)

Care Transitions & Interdisciplinary Communication

- Respondents cited these **challenges to palliative care referral** [Q40, n = 202]:
  - Patients don't understand the benefits of palliative care and/or think it's the same as hospice care (68%)
  - Palliative care is thought of late in the treatment experience (55%)
  - Physicians don't understand the benefits of palliative care. (40%)
  - There are not enough palliative care trained-staff. (32%)



Techniques for Evaluating Older Adults

Respondents rely primarily on clinician-dependent mechanisms for assessing older patients for geriatric related health concerns

Evaluation Category	Top 3 Cited Techniques & Tools
Fitness for treatment	1. **ECOG/Karnofsky performance status (76%)** 2. Evaluation of ADLs (48%) 3. Review notes in medical record (36%)
Cognitive status	1. **Asking simple questions to assess orientation** (54%) 2. Mini-mental status exam (36%) 3. Don't formally evaluate cognition with older patients (27%)
Psychological status/Depression screening	1. **NCCN distress thermometer** (55%) 2. The patient interview (36%) 3. Ask the patient directly if depressed (34%)
Comorbidities	1. **History and physical exam by oncologist** (68%) 2. Check EMR for comorbidities (55%) 3. PCP notes (51%)
Toxicity risk for proposed chemotherapy	1. **CARG toxicity calculator** (36%) 2. CRASH (23%)

Techniques for Evaluating Older Adults

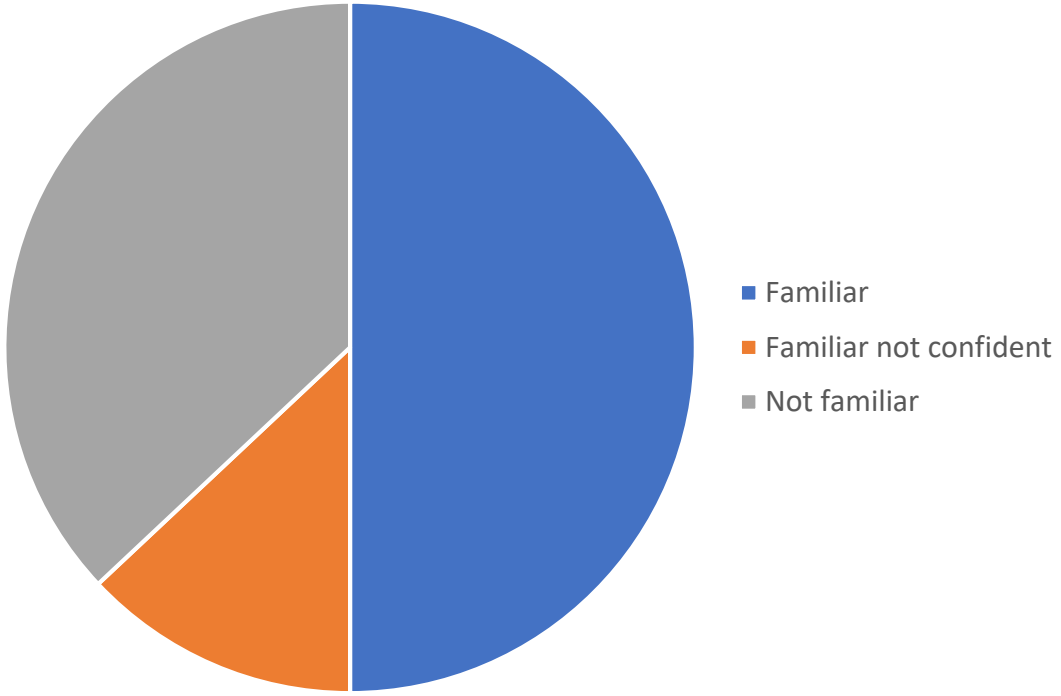
- **Prior to starting treatment**, respondents **most cited evaluating these 5 factors** in their older adult patients [Q25, n=208]:
  - Risk of falls (74%)
  - Evaluation of support system/caregivers (73.6%)
  - Transportation barriers (73.1%)
  - Polypharmacy/medication assessment (70.1%)
  - Financial toxicity (65%)
- A minority of respondents have **health information technology (HIT**) that supports **screening patients for high risk medications** [Q27, n=211]:
  - 36% of respondents indicated have access to HIT to identify **medication/disease contraindications**
  - 26% of respondents indicated have access to HIT to identify **medication adverse events**
  - 20% of respondents indicated have access to HIT to identify **treatment risks that outweigh benefits**

Physicians n=38

- **90%** of physician respondents **believe** in the **benefits of CGA, 30% routinely conduct a CGA**
- Approximately **50% indicated they don't use screening tools in their programs to identify patients for CGA**.
- **30%** indicated they use ***other tools*** or screeners for specific health concerns e.g. depression
- Of the respondents who indicated **using screening tools listed**
  - 10% indicated they were always comfortable with the results
  - 24% almost always comfortable with the results
  - 14% sometimes comfortable with the results.

Physicians

- **63%** of physicians are **familiar with the Shared Decision-Making Model, 50%** indicate they are **confident** in using the model [Q29, n=28]



Physicians

- Physicians indicated they **evaluate patients pre-treatment** for most often for [Q25, n=28]:
  - Polypharmacy/medication assessment (89%)
  - Patients' medication management skills (71%)
  - Risk of falls (71%)
  - Evaluation of support system/caregivers (68%)
  - Transportation barriers (68%)
  - Treatment adherence barriers (64%)

Examples of Effective Practices in the Care of Older Adults with Cancer

Practices & Processes

- Nurse managed care coordination with off site care
- Advance practitioner run chemotherapy preparation visits with screening tools
- Neuropsychologist and outpatient palliative care team/programs
- Dedicated geriatric oncology clinic/evaluation center
- Part time/on call supportive care staff (social work, nutrition, palliative etc.)
- Survivorship care plans and programs (with nurse navigator)
- SDM integrated into chemo consent

HCP Training & Patient Education

- In-services, seminars, conferences
- Geriatric Oncology led CME programs for interdisciplinary staff
- Lecture series/Grand Rounds presentations
- Video and online learning & training courses
- Geriatric Communication Skills training
- Annual competency testing
- Monthly multidisciplinary geriatric case conferences
- Patient chemotherapy teaching sessions
- Patient oral chemo compliance program with follow-up

Other

- Validated Screening/Assessment Tools:
  - PHQ2,7,9 (depression severity measures)
  - FACT-G (QOL questionnaire),
  - Mini-nutritional assessment
  - St. Louis Univ Mental Status assessment tool for geriatric pop (SLUMS)
- Memberships: NICHE (Nurses Improving Care for Healthcare System Elders)

Q44, n = 70; Open ended question - Please provide examples of effective practices and processes, trainings, resources and tools your cancer program has implemented or offered, that you believe improve the treatment and experience of geriatric oncology patients.

Takeaways

- Geriatric expertise and resources are scarce
- Although validated tools for geriatric assessment in oncology care exist, they are not yet routinely utilized by providers
- Physicians may drive care, but it is essential for the multidisciplinary team to be engaged and knowledgeable
- No consensus on definition or metrics for quality & value

Questions?

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THE GERONTOLOGICAL SOCIETY OF AMERICA®

Momentum Discussion

Model of Care:
The City of Hope Experience

Panelist: Peggy S. Burhenn, MS, RN-BC, AOCNS, City of Hope, Clinical Nurse Specialist

November 17, 2018

the MIRACLE of SCIENCE with SOUL

City of Hope®

MOMENTUM DISCUSSION OLDER ADULTS AND CANCER

MODEL OF CARE: THE CITY OF HOPE EXPERIENCE

Peggy S. Burhenn, MS, RN-BC, AOCNS
City of Hope
Clinical Nurse Specialist

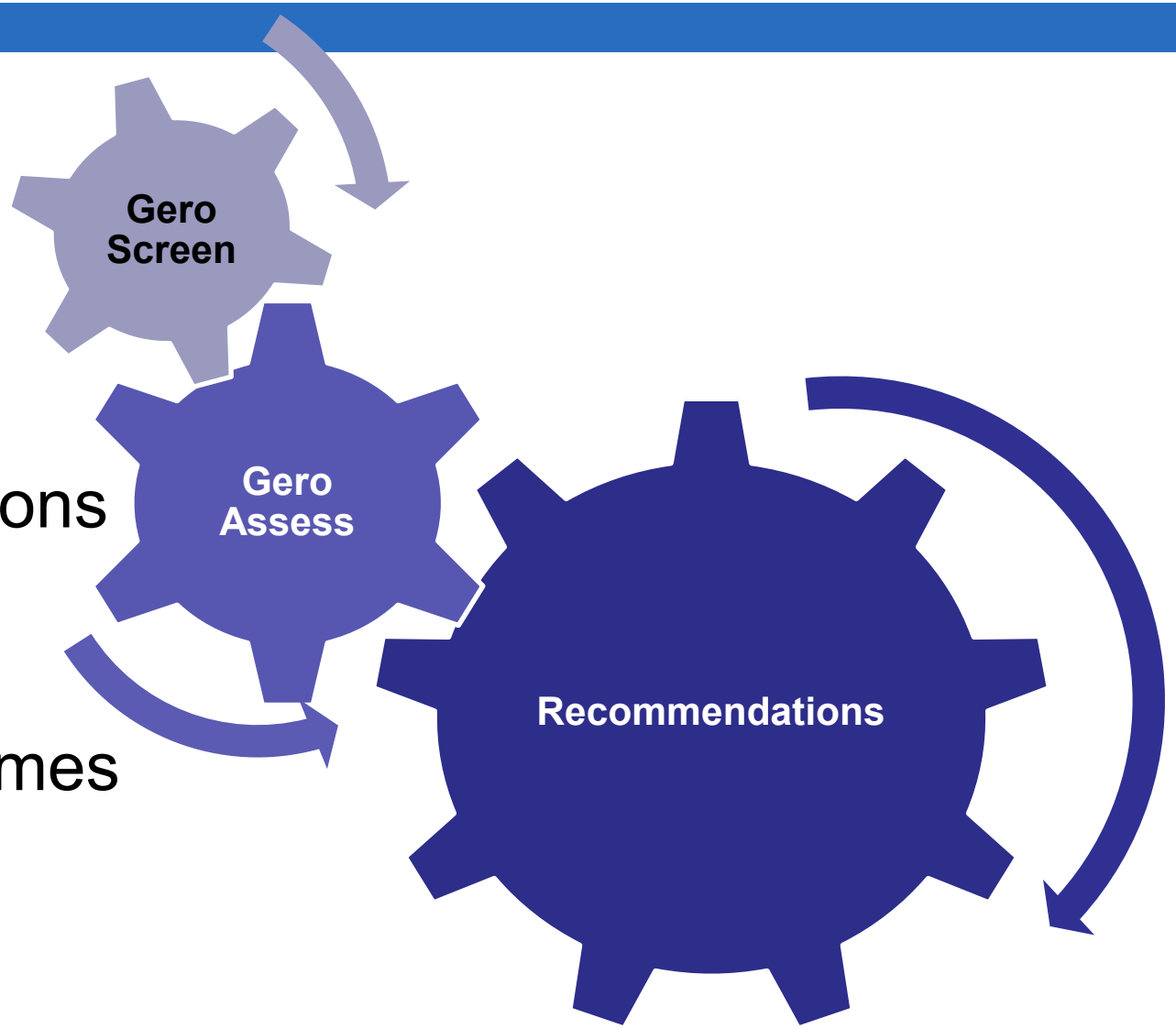
Disclosures

- I do not have anything to disclose.

Survey Says…Reasons for not doing CGA or Screening

Geriatric Oncology Care

- Geriatric screening
- Geriatric assessment
- Recommendations for referrals or interventions
- Evaluate outcomes

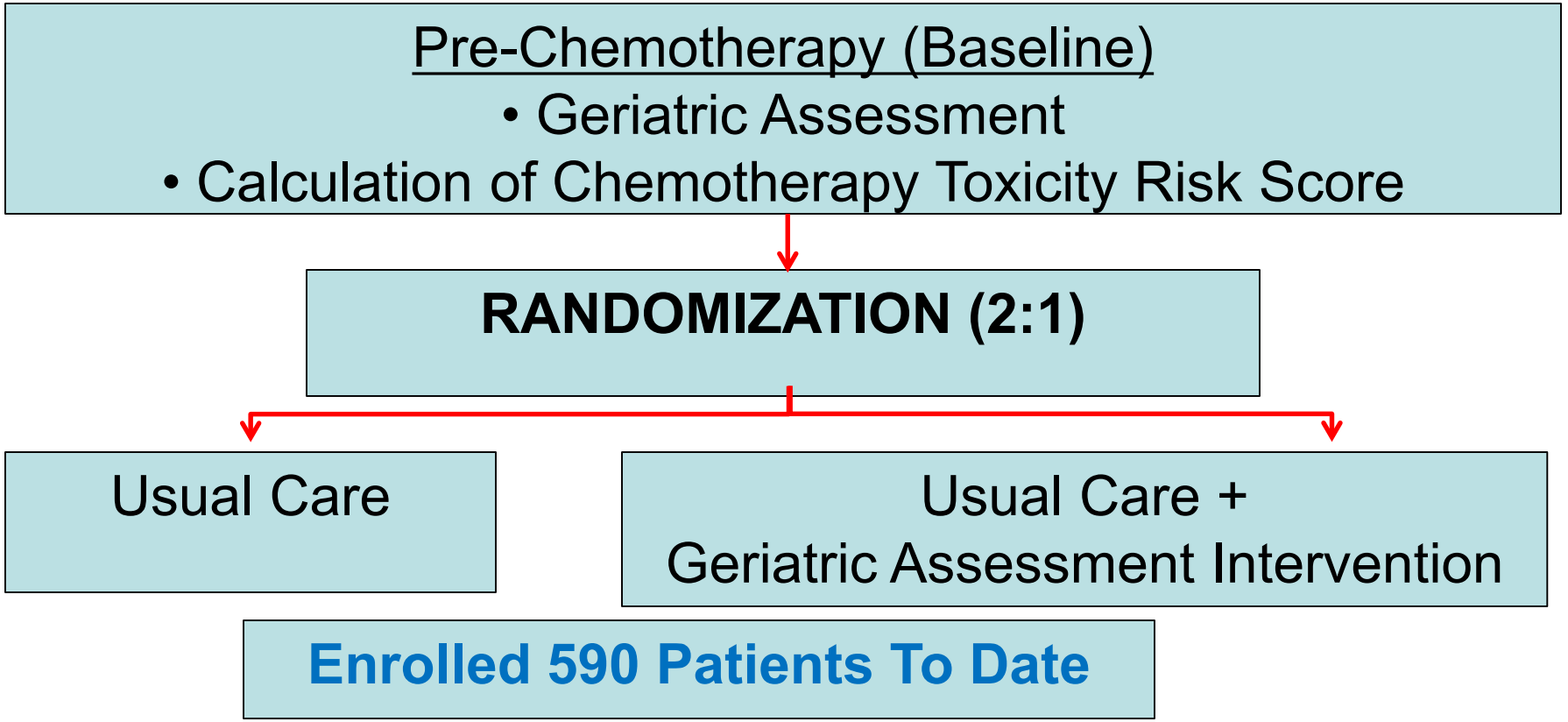


Improving Care

- Model of care: Case study City of Hope
- Model testing under IRB protocol
- **Can we intervene to decrease risks associated with treatment in the older population?**
- Perform GA
- Offer interventions
- Follow up

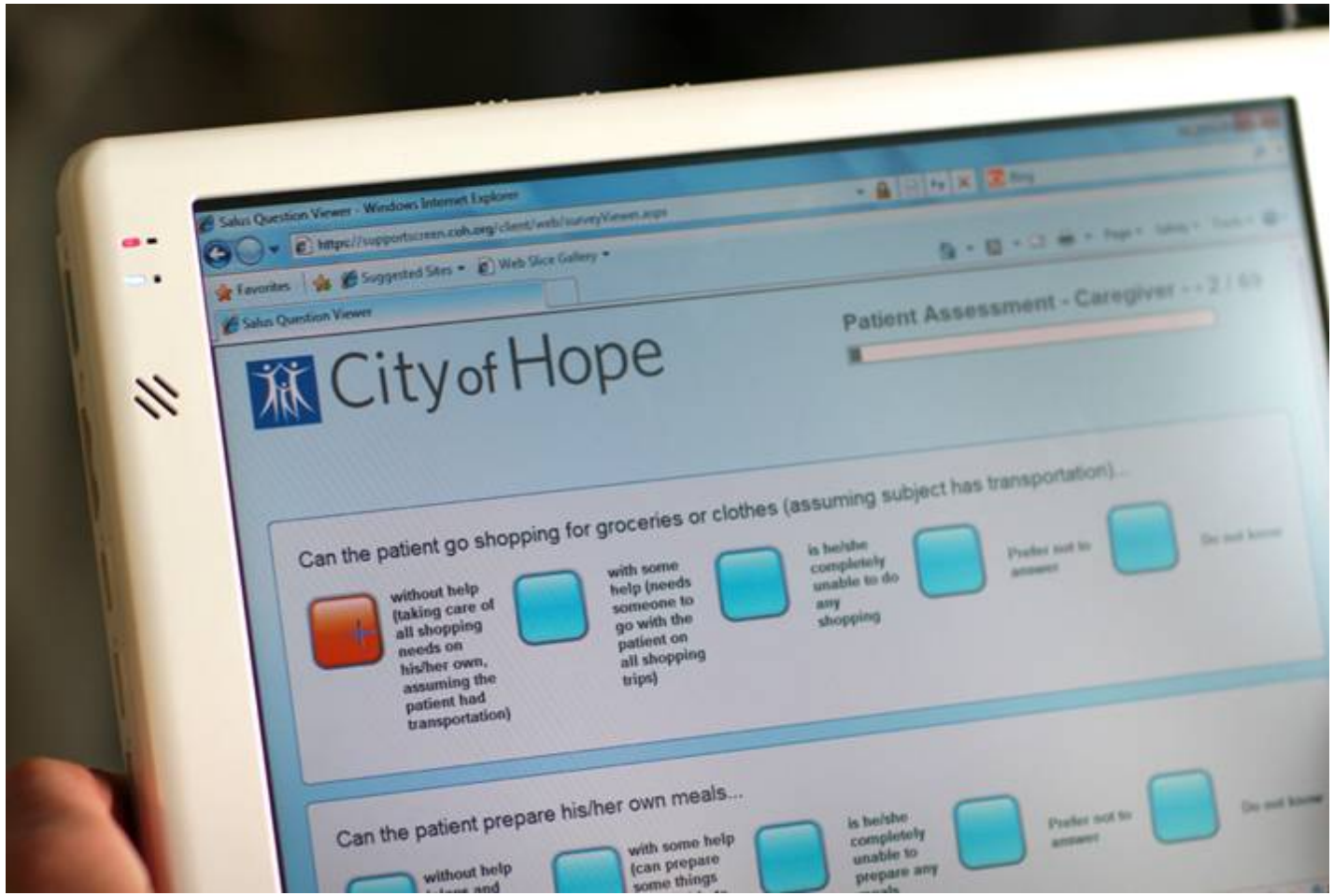
Can we intervene in older adults with cancer? (UniHealth Grant PI:Hurria)

Objective: To determine if geriatric assessment driven interventions will lead to improved patient outcomes



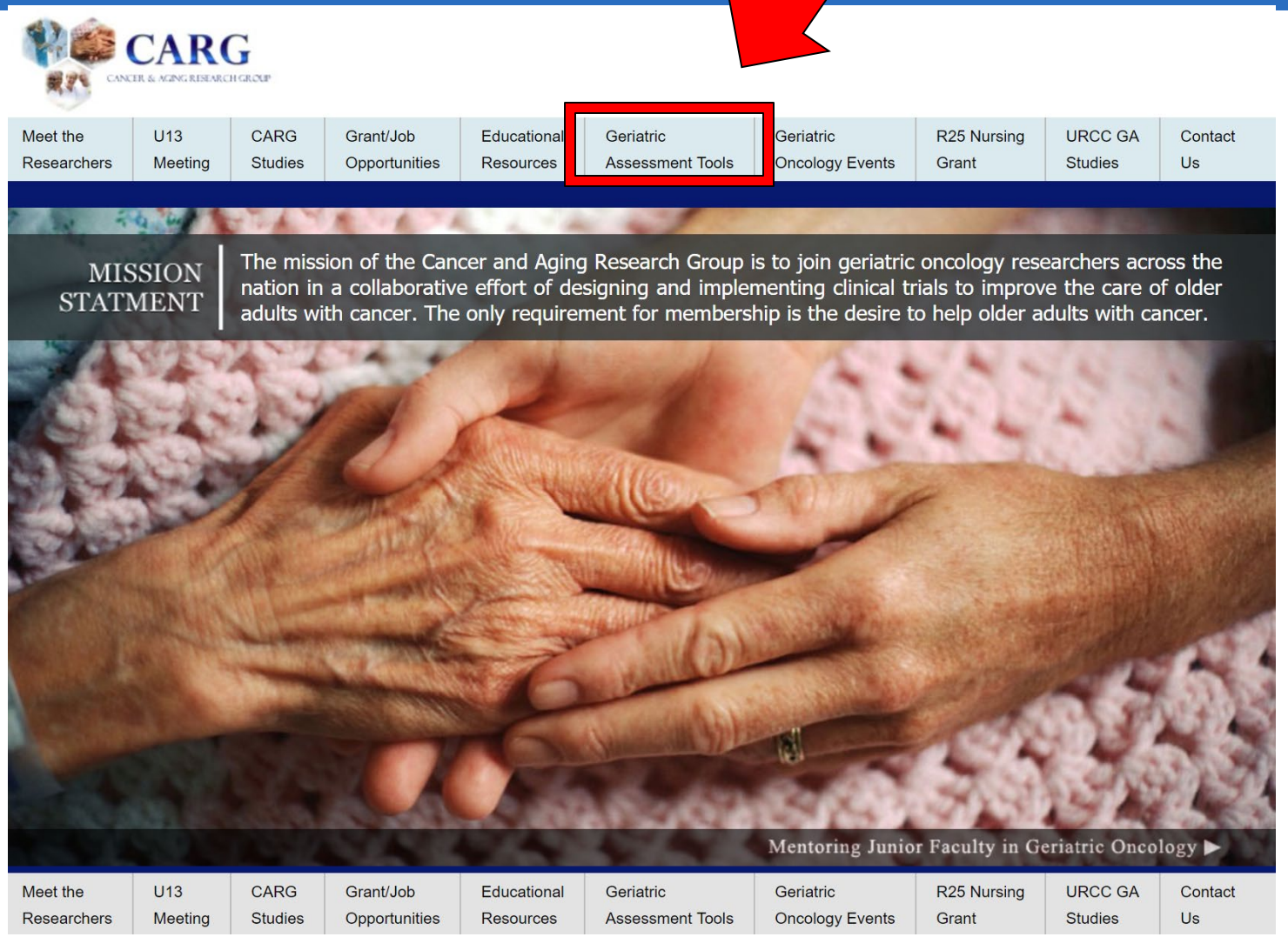
CARG Geriatric Assessment

Assessment on tablet device



Tool is available….

Mycarg.org



GERIATRIC ASSESSMENT TOOLS

Chemotherapy Toxicity Tool and Geriatric Assessment Tool

The Chemo-Toxicity Calculator

The Chemo-Toxicity Calculator is a pre-chemotherapy assessment that captures sociodemographics, tumor/treatment variables, laboratory test results (hemoglobin, creatinine clearance), and geriatric assessment variables (function, comorbidity, cognition, psychological state, social activity/support, and nutritional status). The Chemo-Toxicity Calculator is based on the results of a study which enrolled 500 patients across seven participating institutions, in order to identify factors that predict risk of severe chemotherapy-related side effects in older adults with cancer (Hurria et al. JCO 2011). The results from this study were identified by the American Society of Clinical Oncology's as one of the Clinical Cancer Advances in 2012. Having this predictive model that incorporates geriatric and oncologic correlates of vulnerability to chemotherapy toxicity in older adults could help both the healthcare provider and the patient weigh the benefits and risks of chemotherapy treatment. Our ultimate goal is to utilize this Chemo-Toxicity Calculator in clinical practice, where it can be used as a part of shared decision-making.

Chemo Toxicity Calculator

Geriatric Assessment Tool

A geriatric assessment is utilized to capture information about a patient's medical history as well as functional, cognitive, and psychosocial status, which can then be used by treating physicians to identify the most vulnerable patients (for example, those at high risk for chemotherapy toxicity). However, these assessments have not been routinely used in oncology practice because of the time and resources required for their administration. A geriatric assessment tool (that can be completed primarily by patients) was developed for incorporation into oncology clinical trials and routine care settings.[1,2] The domains that are assessed include functional status, comorbidities, medications, nutritional status, cognitive function, and psychosocial status.
Please click on the below for more information regarding the geriatric assessment tool:

[1] Hurria et al. Cancer 2005

[2] Hurria et al. JCO 2011

Geriatric Assessment in English
- Patient portion
- Healthcare provider portion

Geriatric Assessment in Spanish (Evaluación Geriátrica en Español)
- Porción del paciente
  FACITtrans Certified Translation Cerificate (Spanish)

Geriatric Assessment in Mandarin (老年人評估)
- 病人部分
  FACITtrans Certified Translation Cerificate (Traditional Chinese)

Geriatric Assessment in Japanese (日本人の高齢者評価)
- 患者部分
  FACITtrans Certified Translation Cerificate (Japanese)

Geriatric Assessment in Korean (일본의 노인병 평가)
- 환자 부분
  FACITtrans Certified Translation Cerificate (Korean)

Geriatric Assessment in Armenian (վերադարձի գնահատումը հայերեն)
- հիվանդի բաժին
  FACITtrans Certified Translation Cerificate (Armenian)

Geriatric Assessment available in:
- **English**
- **Spanish**
- **Mandarin**
- **Japanese**
- **Korean**
- **Armenian**

After Assessment

- Generates list of potential interventions
- Chemotherapy toxicity score is calculated
- Recommendations are sent to treating oncologist and primary care provider

We identified the following:

Recommendations for issues identified from the Geriatric Assessment	
Assistance with IADL (housework, taking medicines, handling own money)	Refer to occupational therapy
Patient reports history of falls	Refer to physical therapy
Polypharmacy (8 prescribed medication(s), 4 OTC medication(s) and 1 herb(s)/vitamin(s))	Pharmacist review
Comorbidities (high blood pressure, diabetes, depression)	Identify and communicate with the outside MD to manage comorbidity
Patient reports hearing is fair	Follow-up by geriatric oncology NP
Social support concerns (no one to give information to understand a situation, no one to confide in or talk to, no one whose advice the patient wants)	Refer to social work
Anxiety 7/10	

Team Meeting

Geriatric Oncology in the Real World

- Major medical centers
  - Access to specialists and referrals
  - Grant funding supports personnel and resources
- Smaller clinics and non-affiliated centers
  - Less access
  - How can we arrange Gero Care?
  - Need to collaborate with Gero professionals to meet needs of older adults with cancer

Educating Nurses in Geriatric Oncology to Improve Quality Care

- Geriatric oncology curriculum for nurses
- Educate 400 nurses over 5 years
- Team of 3 nurses…..Manager, Educator, RN/NP
- "Train the trainer"
- Geriatric oncology initiatives at their own institution
- Follow-up with participants 6, 12, and 18 months post-course
- Monthly conference calls

Last Course Feb. 25-27th 2019

NIH R25 CA183723 Grant

Information on Nursing Course

Discussion

- How can all oncology practices access gero services?
- How do we share gero knowledge with oncology providers?
- How can we make gero screening or assessment mainstream and accessible?
- How can we help oncology providers connect with gero providers in their service area?

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THANK YOU!

Peggy S. Burhenn
pburhenn@coh.org

Momentum Discussion
Older Adults and Cancer
CARG and the CARG Infrastructure Grant

Harvey Jay Cohen, MD
Center for the Study of Aging and Human Development
Duke University

The Gerontological Society of America

November 17, 2018

Cancer and Aging Research Group

- Formed in November 2006

Mission:

To join geriatric oncology researchers across the nation in a collaborative effort of designing and implementing clinical trials to improve the care of older adults with cancer.
The only requirement for membership is the desire to help older adults with cancer.

- Seed Funding: Hartford Foundation
  City of Hope Research Funds

Cancer and Aging Research Group

- Meeting #1: City of Hope – April 2007

  Support from City of Hope and the Hartford Foundation

- Meeting #2: University of Rochester – September 2008

  Support from ASCO/ASP, City of Hope, MSKCC, University of Rochester, Hartford Foundation

- Meeting #3: U13 Conference #1 – September 2010

  Support from U13 Grant in collaboration with NIA/NCI, University of Chicago, CALGB

U13 AG048721 Grant
Collaboration Between CARG, NCI, and NIA

Goal: Create a "roadmap" of knowledge gaps and priority areas for research at the cancer and aging interface

Biological, Clinical, and Psychosocial Correlates at the Interface of Cancer and Aging Research

William Dale, Supriya G. Mohile, Basil A. Eldadah, Edward L. Trimble, Richard L. Schilsky, Harvey J. Cohen, Hyman B. Muss, Kenneth E. Schmader, Betty Ferrell, Martine Extermann, Susan G. Nayfield, Arti Hurria, on behalf of the Cancer and Aging Research Group

J Natl Cancer Inst, 2012

Designing Therapeutic Clinical Trials for Older and Frail Adults With Cancer: U13 Conference Recommendations

Arti Hurria, William Dale, Margaret Mooney, Julia H. Rowland, Karla V. Ballman, Harvey J. Cohen, Hyman B. Muss, Richard L. Schilsky, Betty Ferrell, Martine Extermann, Kenneth E. Schmader, and Supriya G. Mohile

J Clin Oncol, 2014

Improving the Quality of Survivorship for Older Adults With Cancer

Supriya G. Mohile, MD, MS[1]; Arti Hurria, MD[2]; Harvey J. Cohen, MD[3]; Julia H. Rowland, PhD[4]; Corinne R. Leach, PhD, MPH, MS[4]; Neeraj K. Arora, MS, PhD[5]; Beverly Canin[6]; Hyman B. Muss, MD[7]; Allison Magnuson, DO[8]; Marie Flannery, PhD, RN, AOCN[9]; Lisa Lowenstein, PhD[10]; Heather G. Allore, PhD[11]; Karen M. Mustian, PhD, MPH[12]; Wendy Demark-Wahnefried, PhD, RD[13]; Martine Extermann, MD[14]; Betty Ferrell, PhD, MA[15]; Sharon K. Inouye, MD, MPH[16]; Stephanie A. Studenski, MD, MPH[17]; and William Dale, MD, PhD[18]

Cancer, 2016

Mentoring the Next Generation

VOLUME 26 · NUMBER 19 · JULY 1 2008

JOURNAL OF CLINICAL ONCOLOGY

COMMENTS AND CONTROVERSIES

Mentoring Junior Faculty in Geriatric Oncology: Report From the Cancer and Aging Research Group

Arti Hurria, *City of Hope, Duarte, CA*
Lodovico Balducci, *H. Lee Moffitt Cancer and Research Institute, Tampa, FL*
Arash Naeim, *University of California, Los Angeles, Los Angeles, CA*
Cary Gross, *Yale University, New Haven, CT*
Supriya Mohile, *University of Rochester, Rochester, NY*
Heidi Klepin, *Wake Forest University, Winston-Salem, NC*
William Tew, *Memorial Sloan-Kettering Cancer Center, New York, NY*
Leona Downey, *University of Arizona, Tucson, AZ*
Ajeet Gajra, *University of New York Upstate Medical University, Syracuse, NY*
Cynthia Owusu, *Case Western Reserve University, Cleveland, OH*
Homayoon Sanati, *University of California at Irvine, Irvine, CA*
Theodore Suh, *The Cleveland Clinic, Cleveland, OH*
Robert Figlin, *City of Hope, Duarte, CA*

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The Cancer and Aging Research Group

CARG MANUSCRIPTS

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CARG MANUSCRIPTS continues

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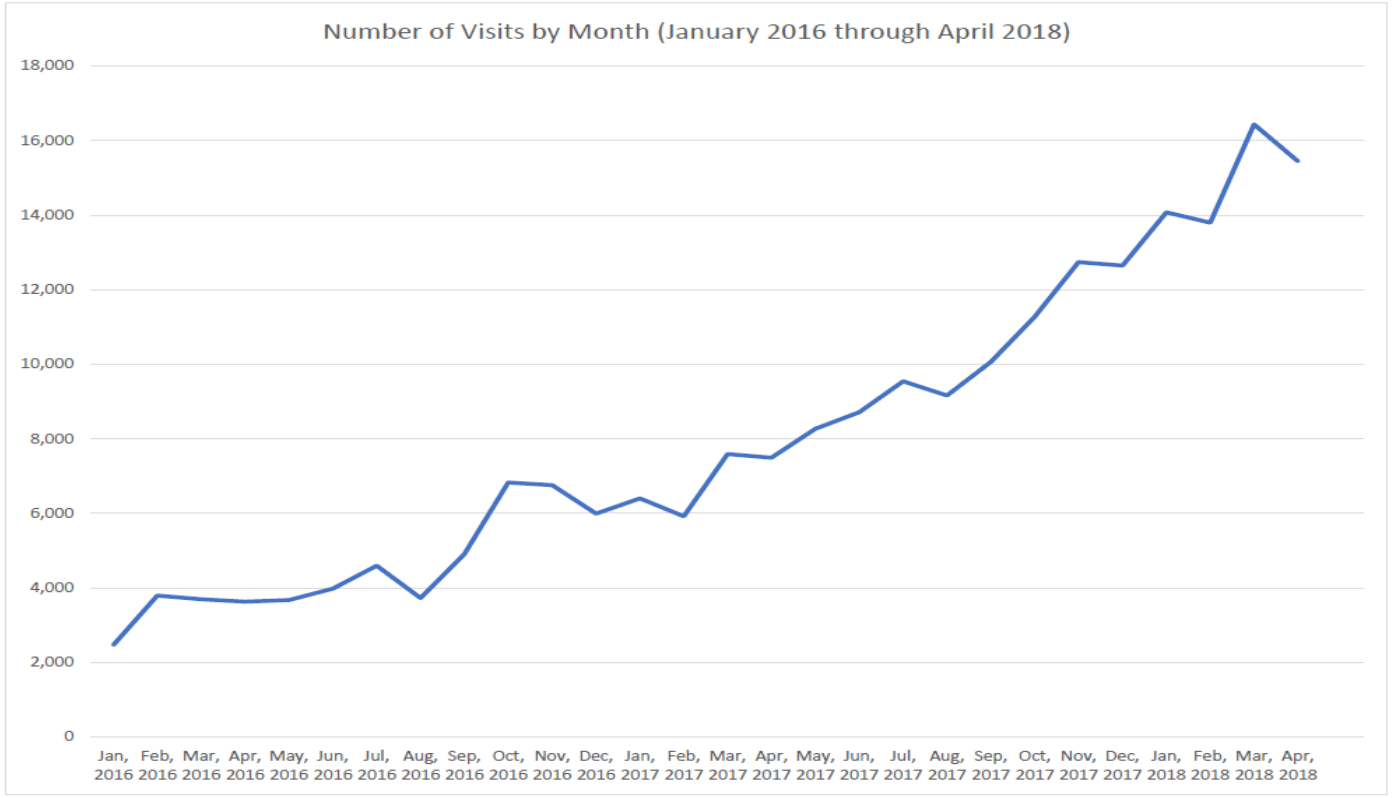

JOURNAL OF CLINICAL ONCOLOGY ORIGINAL REPORT

Validation of a Prediction Tool for Chemotherapy Toxicity in Older Adults With Cancer

Arti Hurria, Supriya Mohile, Ajeet Gajra, Heidi Klepin, Hyman Muss, Andrew Chapman, Tao Feng, David Smith, Can-Lan Sun, Nienke De Glas, Harvey Jay Cohen, Vani Katheria, Caroline Doan, Laura Zavala, Abrahm Levi, Chie Akiba, and William P. Tew

R21/R33 Grant: Building Infrastructure for Geriatric Oncology Research

- MPIs:
  - Drs. William Dale, Arti Hurria, and Supriya Mohile
- Overall Goal:
  - To develop a sustainable national research infrastructure to facilitate and support significant and innovative projects that address key interdisciplinary research questions at the aging and cancer interface.

Goals

The overall goal of geriatric oncology research infrastructure to improve clinical care (R21/R33) :

- Establish a sustainable national research infrastructure to facilitate and support significant innovative projects addressing key interdisciplinary research questions at the aging and cancer interface.
- To accelerate research efforts, to create a more robust infrastructure to facilitate and foster interdisciplinary.
- Collaborative research in aging and cancer, to focus on the career development of investigators to grow the field.
- To widely disseminate the research findings.

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Infrastructure Grant

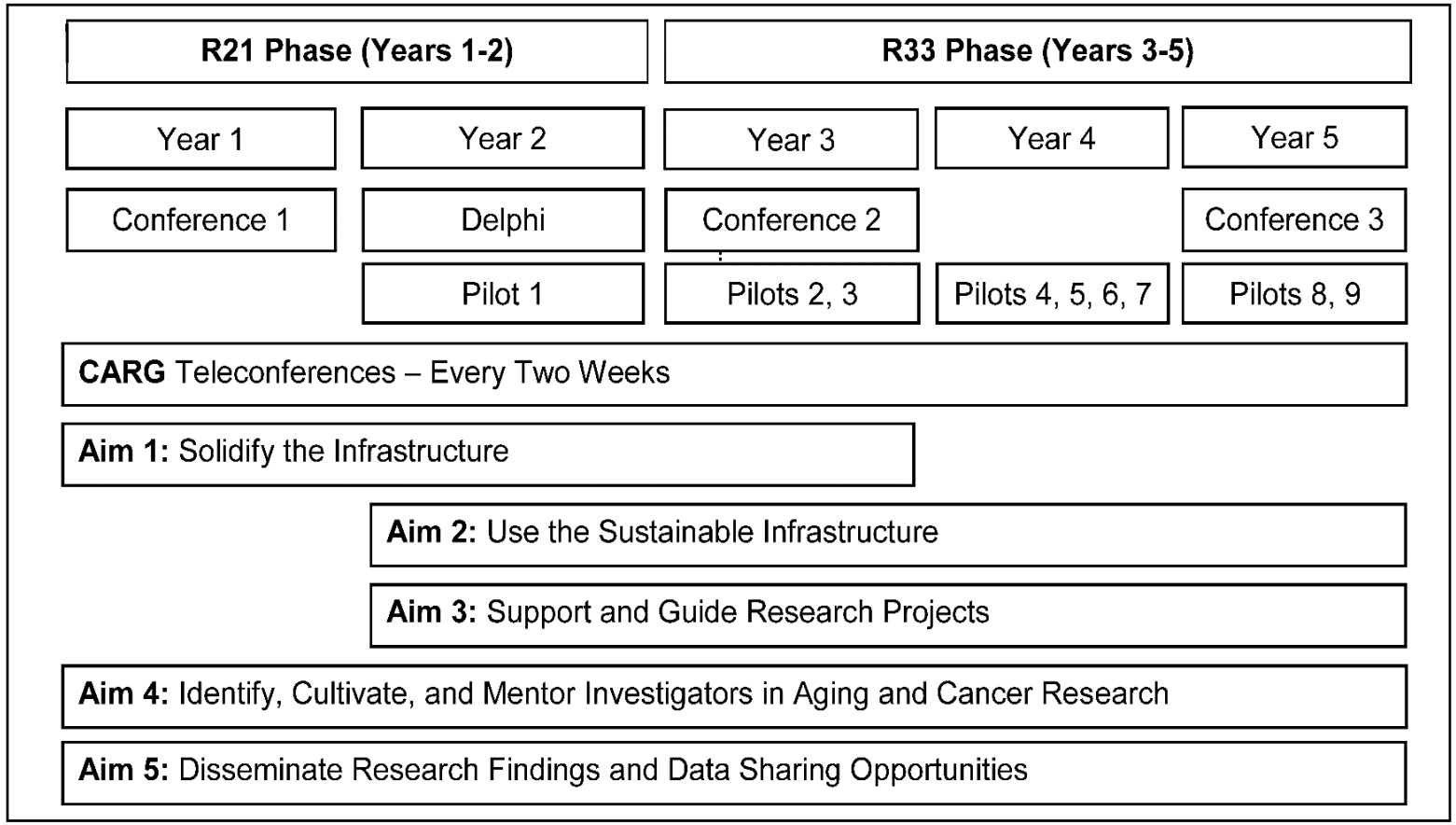
Funded by NIH/NIA
Grant No. 1R21AG059206

CARG Infrastructure Grant Specific Aims

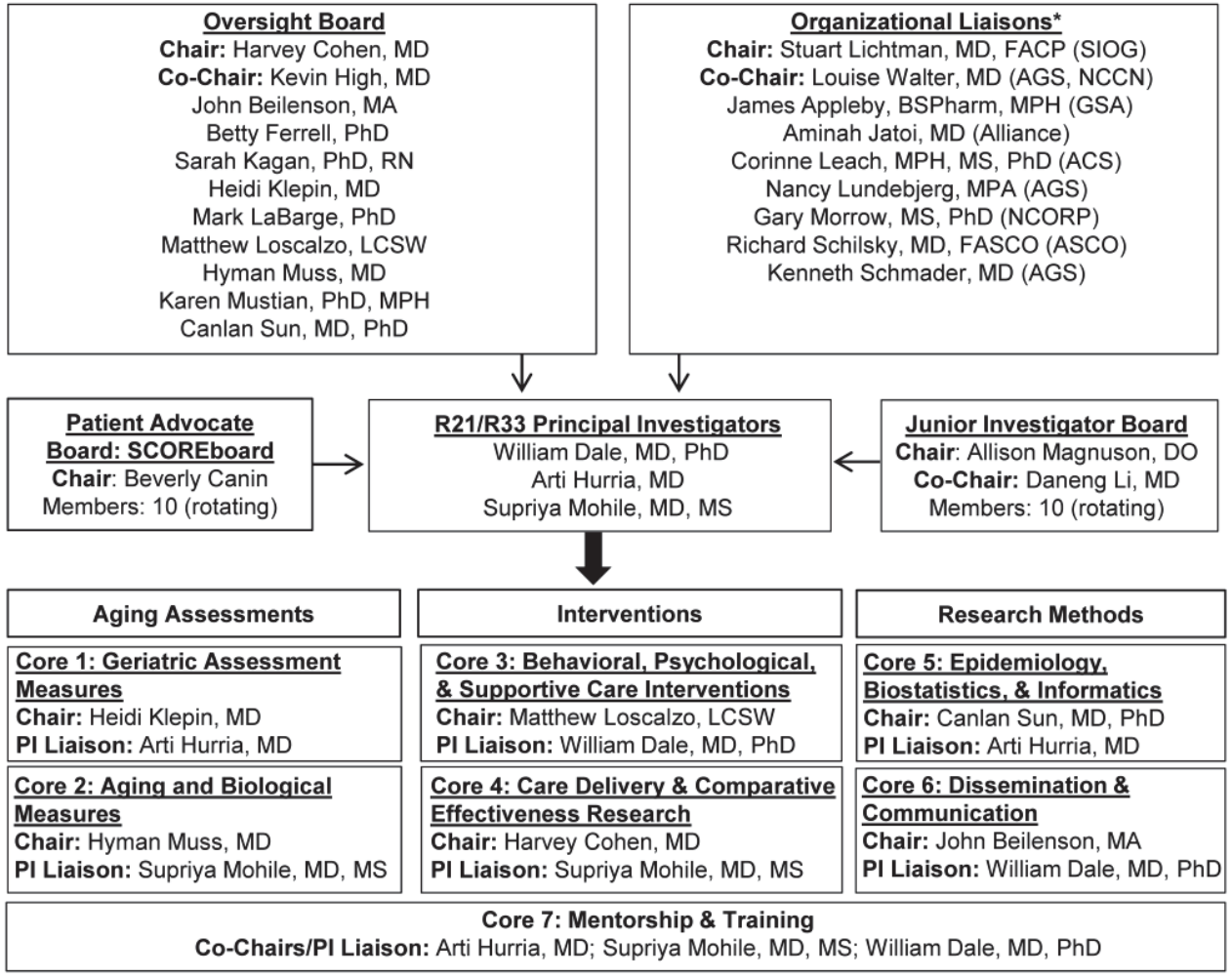
Aim 1	• ***Solidify the Infrastructure and Expertise***
Aim 2	• ***Utilize the Sustainable Infrastructure***
Aim 3	• ***Support and Guide High-Priority Research Projects***
Aim 4	• ***Identify, Cultivate, and Mentor Investigators***
Aim 5	• ***Disseminate through Effective Communication Strategies***

Setting the Foundation

Figure 1: Schema of Events for "Geriatric Oncology Research Infrastructure to Improve Clinical Care"



Organization Structure



*SIOG: International Society of Geriatric Oncology; AGS: American Geriatrics Society; NCCN: National Comprehensive Cancer Network; GSA: Gerontological Society of America; Alliance: Alliance for Clinical Trials in Oncology; ACS: American Cancer Society; NCORP: National Cancer Institute Community Oncology Research Program; ASCO: American Society of Clinical Oncology.

Aim 2: R21 Phase

Conference 1, guided by the Delphi Survey the Cores will be established through an iterative feedback process

Finalized set of standard operating manuals for each Core will be created

Core infrastructure will be evaluated

Refinements will be made

Developing the Cores

Aging Assessments	Interventions	Research Methods
Core 1: Geriatric Assessment Measures **Chair:** Heidi Klepin, MD **PI Liaison:** Arti Hurria, MD	**Core 3: Behavioral, Psychological, & Supportive Care Interventions** **Chair:** Matthew Loscalzo, LCSW **PI Liaison:** William Dale, MD, PhD	**Core 5: Epidemiology, Biostatistics, & Informatics** **Chair:** Canlan Sun, MD, PhD **PI Liaison:** Arti Hurria, MD
Core 2: Aging and Biological Measures **Chair:** Hyman Muss, MD **PI Liaison:** Supriya Mohile, MD, MS	**Core 4: Care Delivery & Comparative Effectiveness Research** **Chair:** Harvey Cohen, MD **PI Liaison:** Supriya Mohile, MD, MS	**Core 6: Dissemination & Communication** **Chair:** John Beilenson, MA **PI Liaison:** William Dale, MD, PhD
Core 7: Mentorship & Training **Co-Chairs/PI Liaison:** Arti Hurria, MD; Supriya Mohile, MD, MS; William Dale, MD, PhD		

*SIOG: International Society of Geriatric Oncology; AGS: American Geriatrics Society; NCCN: National Comprehensive Cancer Network; GSA: Gerontological Society of America; Alliance: Alliance for Clinical Trials in Oncology; ACS: American Cancer Society; NCORP: National Cancer Institute Community Oncology Research Program; ASCO: American Society of Clinical Oncology.

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The Cores

- Merge Core 1 and Core 2:
  - Rename Core 1 – Clinical and Biological Measures of Aging
- Keep Core 3 and Core 4 separate
  - Add Interventions somewhere
- Redefine Core 5: Research Methods and Biostatistics
  - Adding geriatric questions to datasets
- Establish a Leadership Core

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Aim 3: Support and Guide High-Priority Research Projects

Pilot Projects

- 9 awards will be funded during the grant period
  - Modeled after GEMSSTAR award (investigators must garner matching funds)
  - R21 phase: 1 pilot award ($15K from grant & $15K from matching funds)
  - R33 phase: 8 pilot awards ($20K from grant & $15K from matching funds)
- Application modeled after the NIH R03/R21 application
- Review committee: the MPIs, Core Chairs, and additional experts
- Priority will be given to projects which:
  - address key research priorities identified in the U13 grant
  - have the potential to generate preliminary data for a multicenter study
  - serve as preliminary data for NIH grant applications or cooperative group trials

Aim 3: Support and Guide High-Priority Research Projects

Preliminary Data Sources for New Investigators

- R21 phase: Develop an inventory of data from completed and ongoing studies that could provide opportunities for secondary analyses to be used as preliminary data for collaborative efforts
- MPIs will facilitate a partnership between the investigator and Core 5 (Epidemiology, Biostatistics, and Informatics) to provide feedback on how the data could be used to support new research
- Examples of existing data from geriatric oncology studies available for preliminary studies

Investigators	Studies	Data	Examples of Previous Collaborative Efforts
Hurria, CARG investigators	Developing and validating a chemotherapy toxicity prediction tool (n=750 patients accrued)	Geriatric assessment data; toxicity and health care utilization outcomes; chemotherapy decisions	-Has led to 11 manuscripts by CARG investigators[27,35,58,65,67,69,76-80] -Data used to help power Dr. Mohile's intervention studies below
Mohile, Hurria, Dale	Evaluating if geriatric assessment Improves outcomes of older patients receiving cancer treatment (n>1000 patients, 400 caregivers, and 300 oncologists)	Geriatric assessment data; toxicity outcomes; communication outcomes; audio recordings of clinical encounters; caregiver and oncologists characteristics	-Both Drs. Hurria and Dale are co-investigators -Plan for data to be shared with CARG investigators when mature
Dale, Mohile	SOCARE registry (n>1000 patients who underwent geriatric oncology evaluation at 2 institutions)	Geriatric assessment data linked to medical records	-Data has supported Dr. Mohile's studies[68,81] -Several CARG investigators and mentees have used data to support grant applications

Aim 4: Identify, Cultivate and Mentor Investigators in Aging and Cancer Research

Recruitment

- Foster the career development of mentees in addition to established investigators
  - Travel grants to junior investigators
  - Linking junior and senior investigators

Yearly announcements will be distributed to the following groups:

- Combined geriatric-oncology training programs nationwide
- Mentees of individuals who participated in the John A. Hartford Foundation and ASCO jointly funded geriatric oncology fellowships
- Cancer and Aging Special Interest Groups (AGS, GSA, ACS)
- GEMSSTAR and Beeson recipients with an interest in aging and cancer
- the ASCO Geriatric Oncology Task Force
- Current or prior recipients of cancer and aging-specific career development awards

Aim 5: Dissemination

Disseminate through **effective communication** strategies the **research findings** and **data-sharing** opportunities to the larger community

- Dissemination Core led by John Beilenson from Strategic Communications & Planning (SCP)
- **Dissemination Strategy**
  - Traditional academic mechanisms
  - Policy advocacy
  - Online presence
  - Social media

How This Proposal Will Propel Aging and Cancer Research Forward

This proposal will establish the infrastructure, infused with our current supportive, collaborative culture, needed to:

1) Accelerate high-quality research at the aging and cancer interface
2) Attract and mentor investigators
3) Combine aging and cancer research to form a pipeline of sustainability for the field of geriatric oncology
4) Disseminate these results to a broader community to nationally improve the care of older adults with cancer

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NOVEMBER 14-18, 2018 | BOSTON, MASSACHUSETTS

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Momentum Discussion

Older Adults and Cancer: Building the Research and Clinical Care Infrastructure for an Aging Population

Panel and Audience Discussion

November 17, 2018