Addressing the Adverse Consequences of Cancer Treatment— Older Survivors

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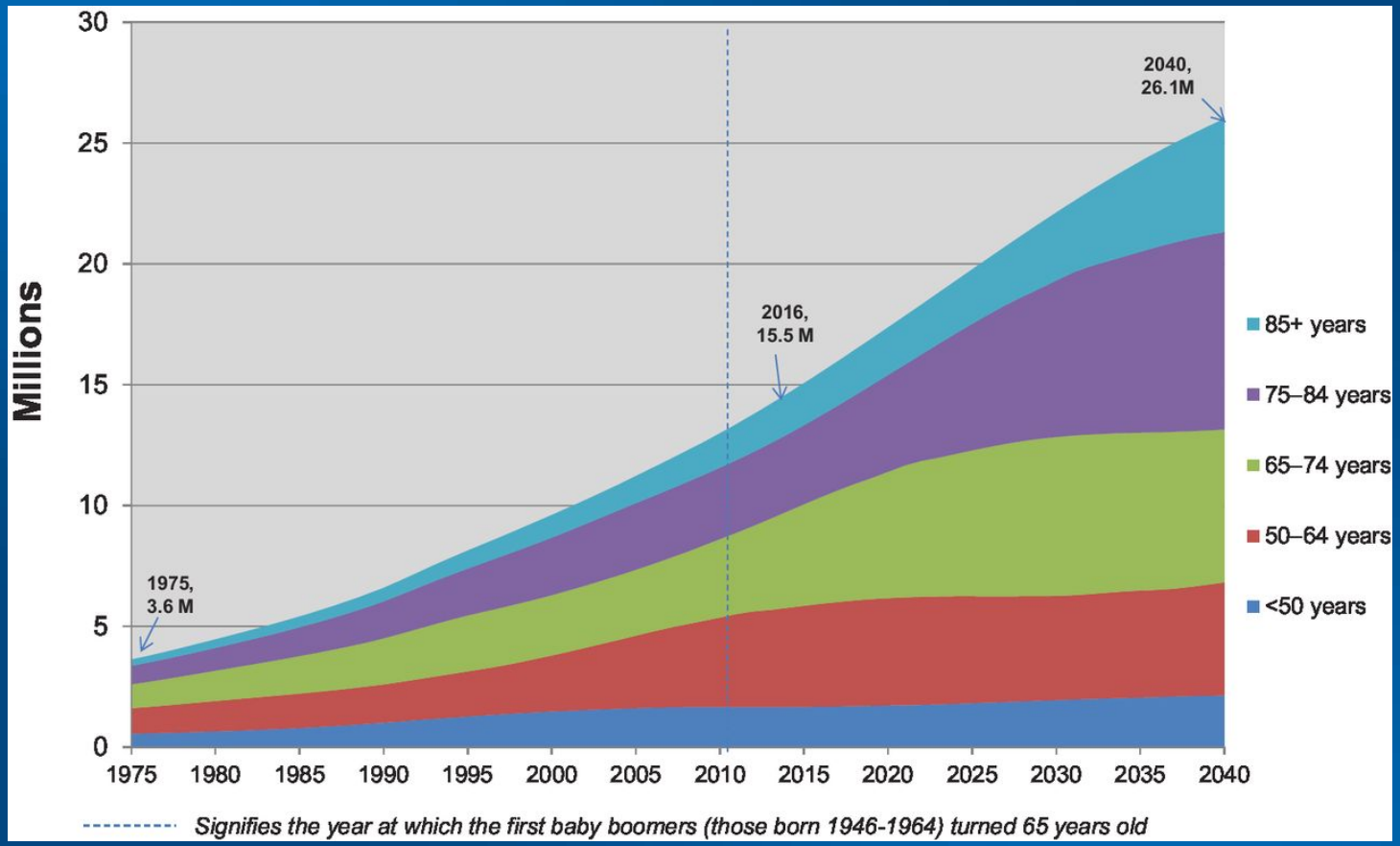
Aging of Cancer Survivors



Bluethmann SM et al.; Cancer Epi Biomarkers & Prevention, 2016

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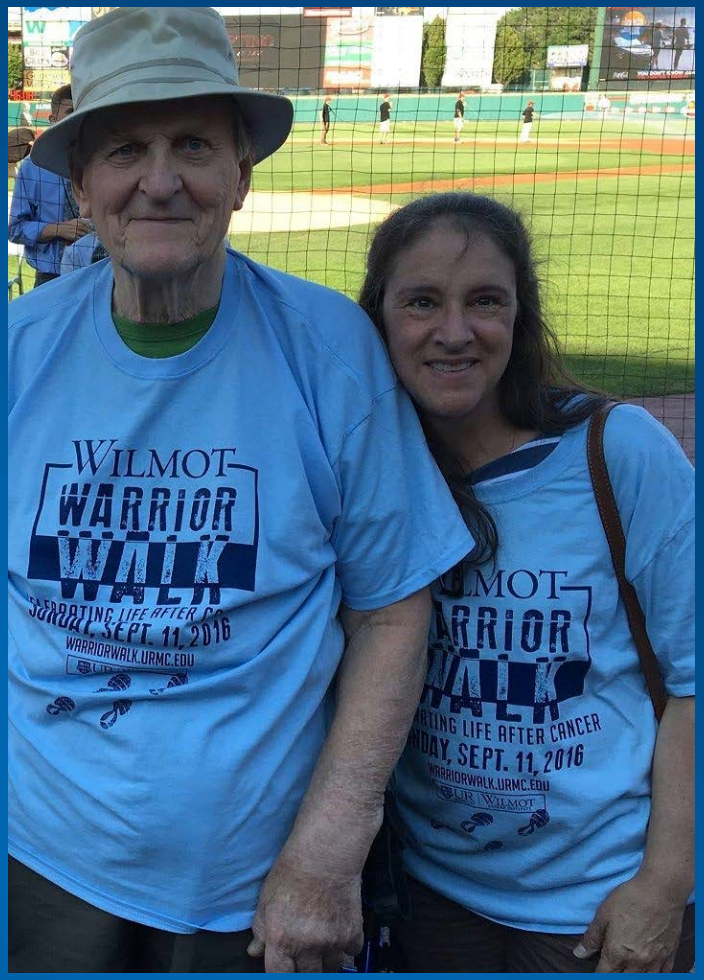
Outline

- Survivorship needs of older adults with cancer
- Geriatric Assessment: A care delivery interventions for older survivors?
- GAPS: How can we improve care delivery and outcomes?

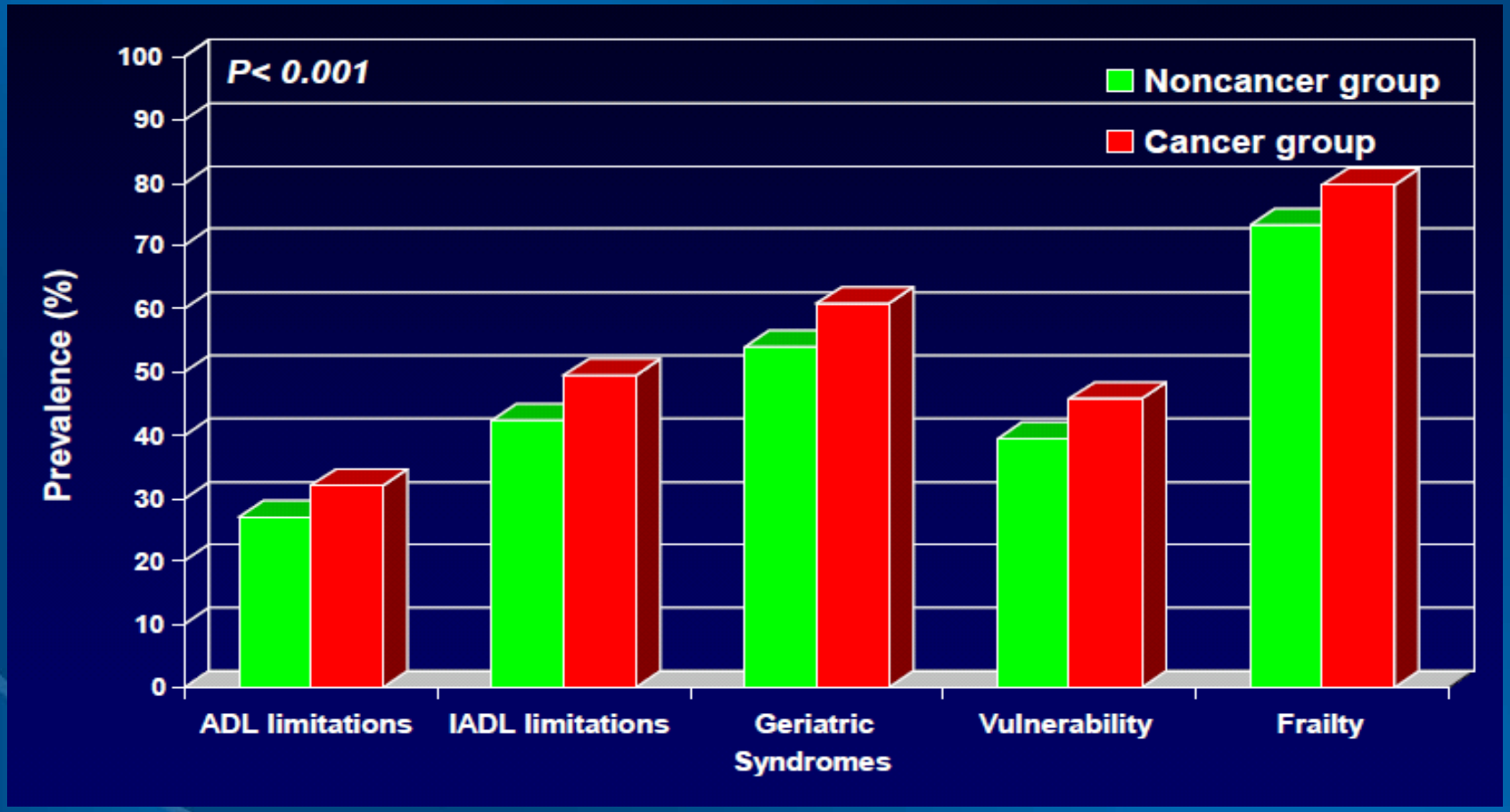
Common Concerns for Older Survivors

- Needs assistance with daily activities
- Multiple comorbid medical conditions
- Mild cognitive impairment
- Limited social support
- Lives alone
- Transportation issues
- Polypharmacy
- Frailty



Likely Did Not Participate in Registration & Cooperative Group Studies

Prevalence of Aging-Related Conditions in Older Cancer Survivors



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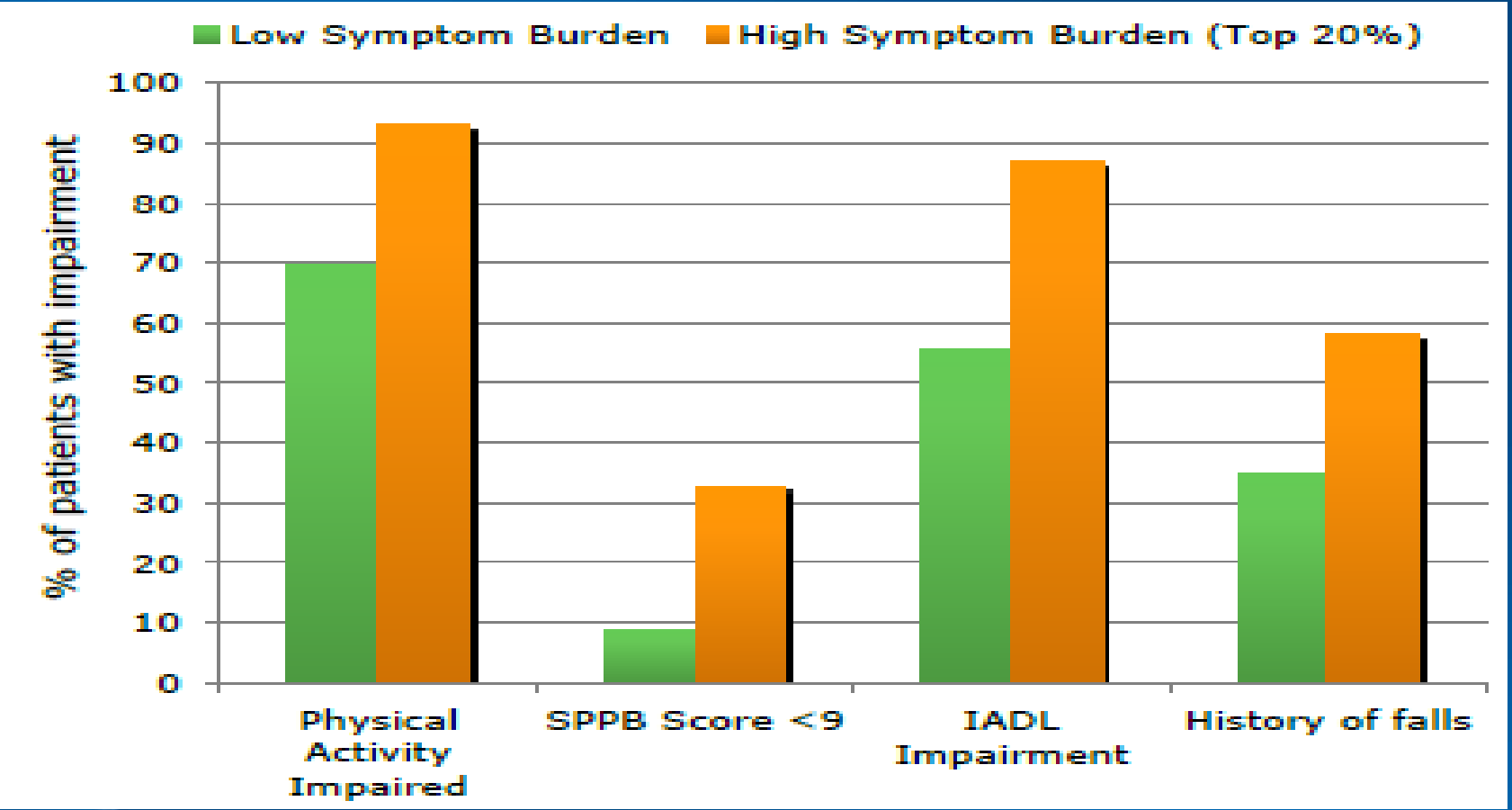
Mohile et al.; JNCI, 2009

Symptom Burden and Functional Outcomes



*SPPB=Short Physical Performance Battery; IADL=Instrumental Activities of Daily Living

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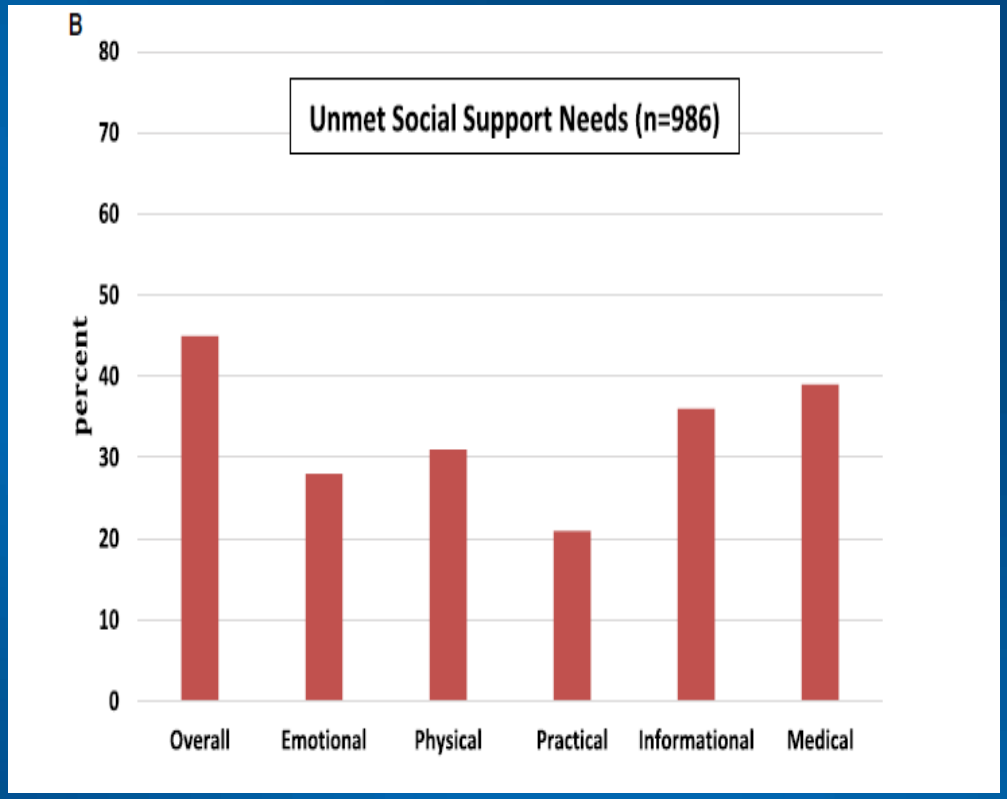
Pandya et al.; JAGS, 2018

High Prevalence of Unmet Social Support Needs in Older Adults with Cancer

- 67.5% reported having at least one need.
- Patients who were non-white, not married, or had a high symptom burden were at the greatest risk of having unmet social support needs.



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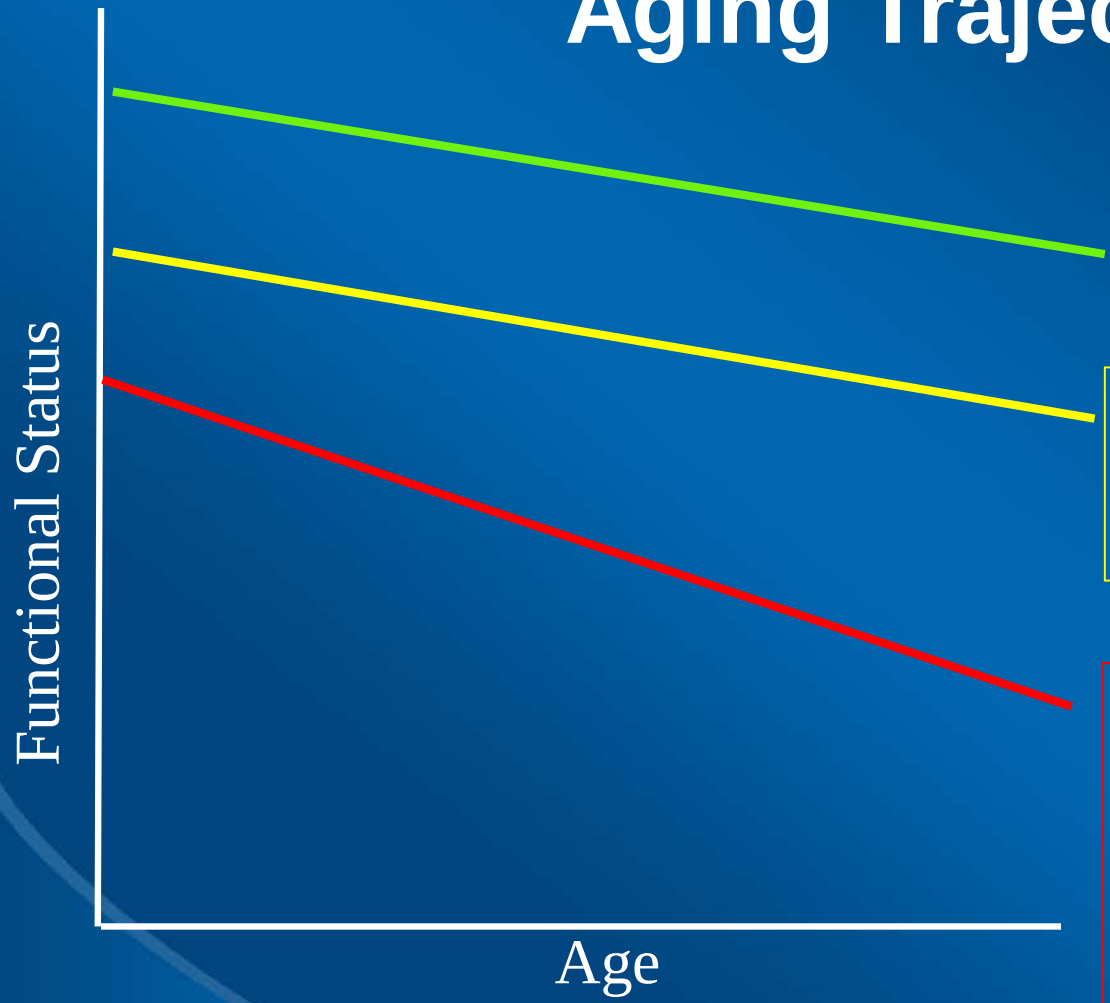
Williams et al.; Cancer, 2019

How Does Cancer Impact the Aging Trajectory?



Normal Aging

The trajectory of functional decline parallels (same slope) normal aging

Accelerated Aging Hypothesis: The trajectory of functional decline is accelerated (increased slope) in comparison to normal aging

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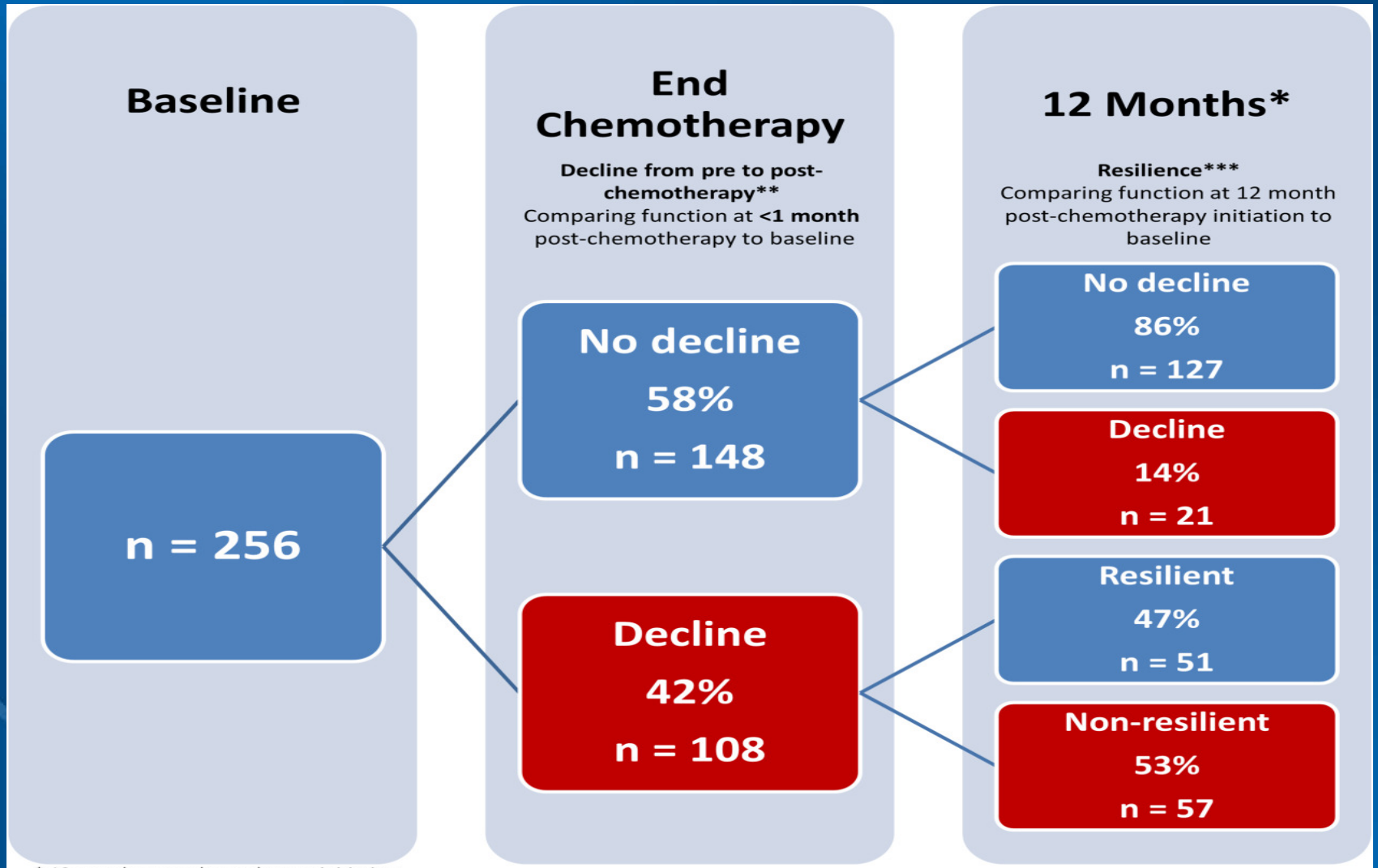
Guida et al.; JNCI, 2020

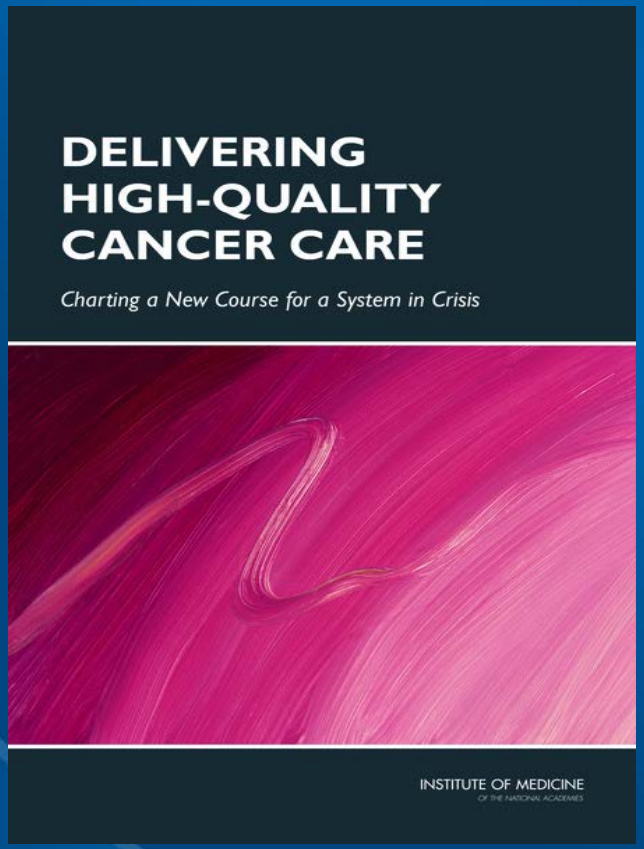
Resilience—Return to Baseline Function



* 12 months post-chemotherapy initiation
** **Decline**: ≥ 10 point decrease in EORTC physical function subscale
*** **Resilience**: Return to within 10 points of pre-chemotherapy EORTC physical function subscale result at the 12 month post-chemotherapy initiation timepoint. Only patients with a decline in physical function from pre to post-chemotherapy were included in this analysis.

Hurria et al; JAGS, 2018

IOM Report: Cancer Care System "in Crisis"



- 60% of cancer survivors 65+
- "One problem among many"
- Limited (but growing) evidence on care of older adults
- Workforce with little geriatric training
- Support for caregivers is lacking

http://jama.jamanetwork.com/article.aspx?articleid=1764058#jvp130139r1

http://www.iom.edu/Reports/2013/Delivering-High-Quality-Cancer-Care-Charting-a-New-Course-for-a-System-in-Crisis.aspx

GAP: Need for Improved Survivorship Care for Older Adults

- **Survivorship Care Plans**
  - "I never had a survivorship meeting or plan. I didn't even know there was such a thing."
- **Communication and Coordination**
  - "And even if they give you a paper, someone needs to go over it and say, 'This and this and this is what this is for,' because so much is going on, you're not going to remember that anyways!"
- **Recommendations for Improvements**
  - Information on physical activity and nutrition
  - Coordination with PCPs
  - Health education and coaching
- **PCPs suggestions** included regular communication with oncologists, delegation from oncologists regarding roles, and mutual understanding of each other's roles.

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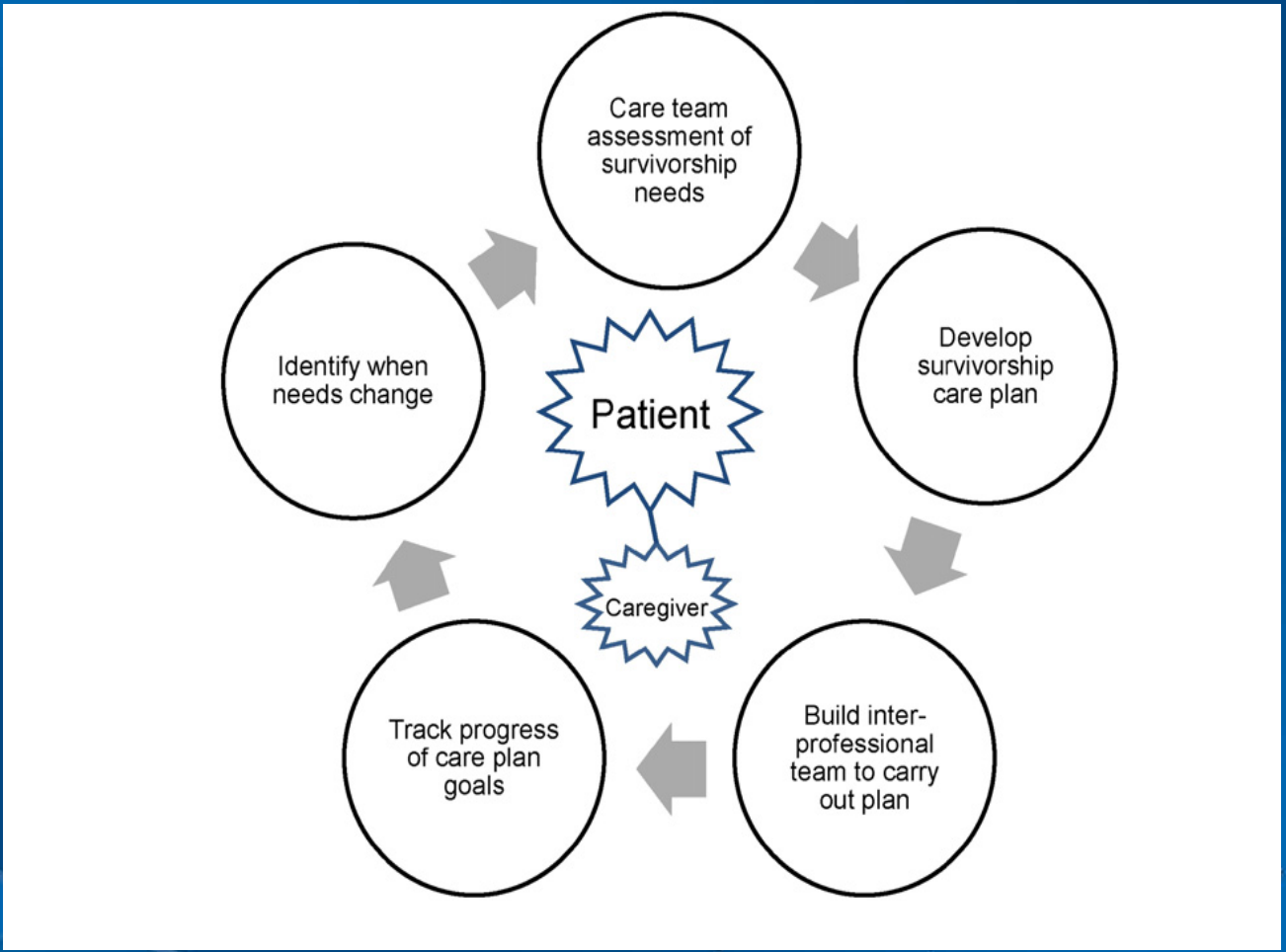
Krok-Schoen et al; Cancer Control, 2020
Krok-Schoen et al; Supportive Care in Cancer, 2018

Survivorship Care Model for Older Adults with Cancer: Cancer and Aging Research Group U13 Conference Report



Guerard et al.; JGO, 2016

Geriatric Assessment as a Care Delivery Model for Older Cancer Survivors

- Geriatric assessment (GA) is an approach to the evaluation of the older patient, leading to the early identification and treatment of areas of vulnerability.
- The GA evaluates the following domains:
  - Functional and physical status
  - Objective physical performance
  - Comorbid medical conditions
  - Cognition
  - Nutritional status
  - Psychological status
  - Social support
- Each domain is an independent predictor of morbidity and mortality in older patients with cancer

Mohile, Dale, Hurria and Panel. ASCO Guidelines in Geriatric Oncology. JCO; 2018.

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Mohile et al.; JCO, 2018

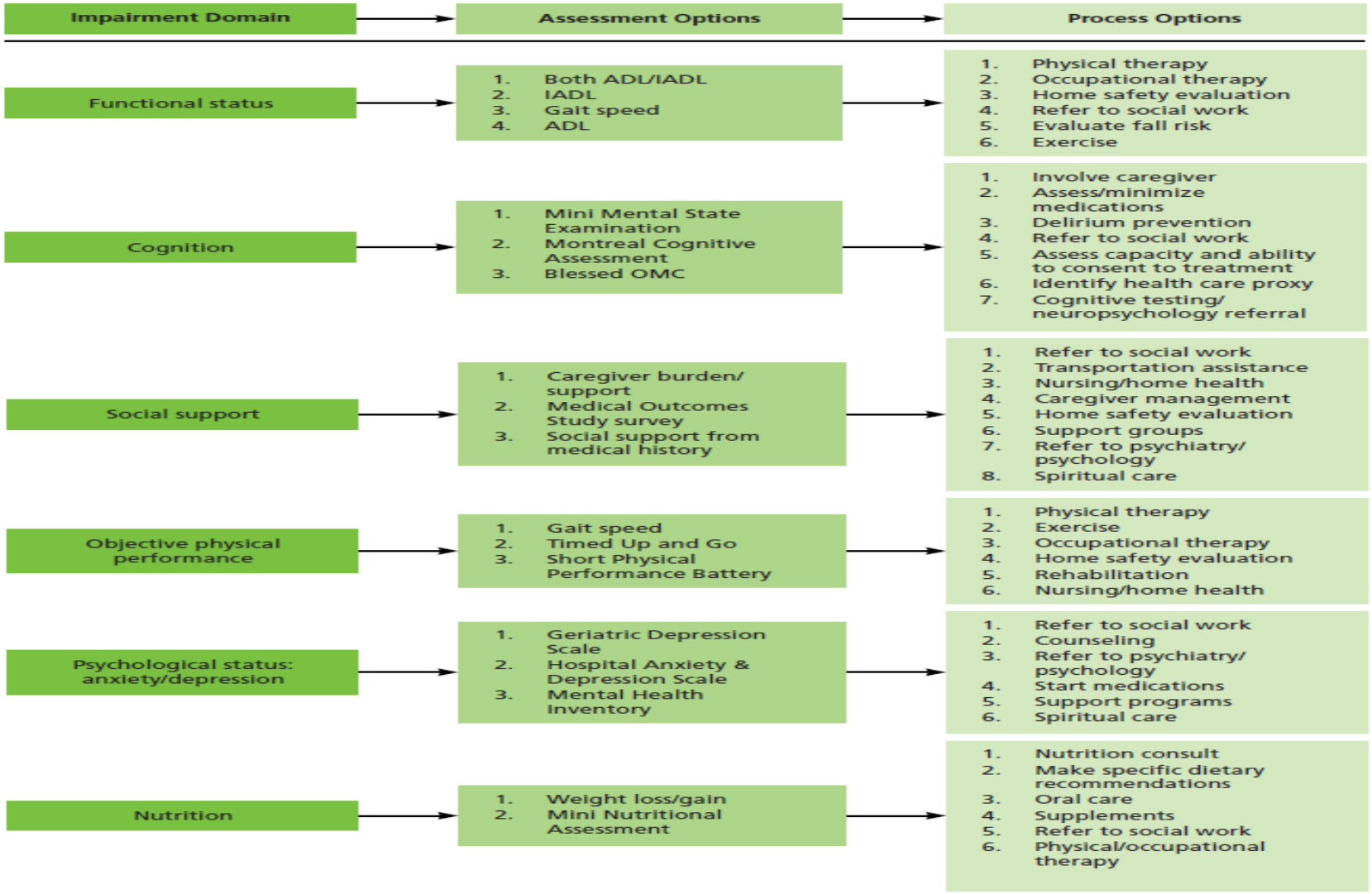
JOURNAL OF CLINICAL ONCOLOGY | ASCO SPECIAL ARTICLE

Practical Assessment and Management of Vulnerabilities in Older Patients Receiving Chemotherapy: ASCO Guideline for Geriatric Oncology

Supriya G. Mohile, William Dale, Mark R. Somerfield, Mara A. Schonberg, Cynthia M. Boyd, Peggy S. Burhenn, Beverly Canin, Harvey Jay Cohen, Holly M. Holmes, Judith O. Hopkins, Michelle C. Janelsins, Alok A. Khorana, Heidi D. Klepin, Stuart M. Lichtman, Karen M. Mustian, William P. Tew, and Arti Hurria

- Recommendation:
  - In patients age 65 and older receiving chemotherapy, geriatric assessment should be used to identify vulnerabilities or geriatric impairments that are not routinely captured in oncology assessments.

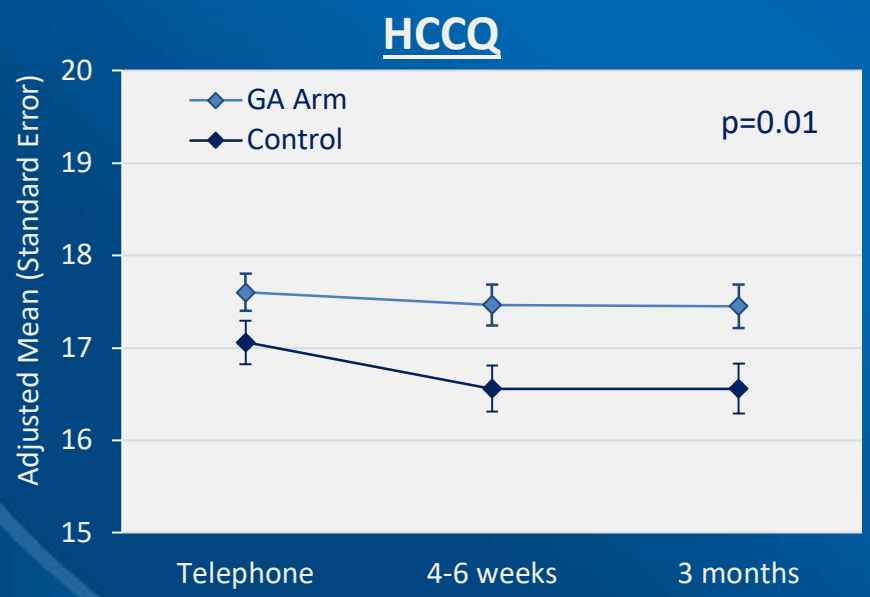
Evidence-based, benefits outweigh harms
Evidence Quality: High
Strength of Recommendation: Strong

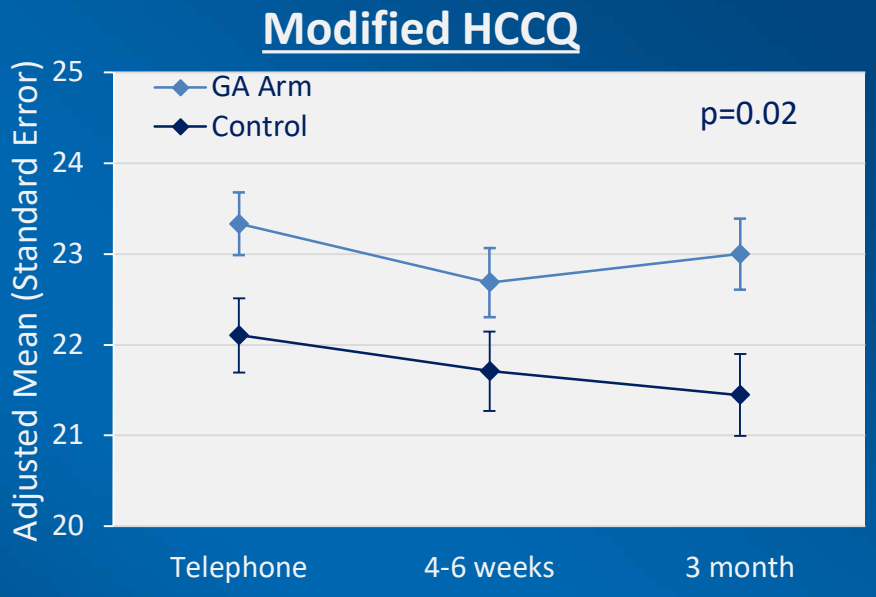


Mohile et al.; JNCCN, 2015

GA Improves Patient and Caregiver Satisfaction with Communication

-Health Care Climate Questionnaire
(5 questions, scale: 0-20)
-Health Care Climate Questionnaire modified for age-related concerns (modified)
(7 questions, scale: 0-28)





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Mohile et al.; JAMA Onc, 2019

ASCO 2020;
Geriatric Assessment Comes of Age

Reference	Interventions	Patients	Outcomes
GAIN **Li et al.** **N=600** JCO 38(15_suppl):12010	**GA intervention** **vs usual care**	**Age ≥65** **Solid tumors** **All stages** **Starting chemotherapy**	**Decreased chemotherapy toxicity** **(50 vs 60%, p = 0.02).** **Increased advance directive completion**
GAP-70 **Mohile et al.** **N=718** JCO 38(15_suppl):12009	**GA intervention** **vs usual care**	**Age >70** **>1 impaired GA domain** **Incurable solid tumors or lymphoma** **Starting new treatment**	**Decreased chemotherapy toxicity** **(50 vs. 71%, p<0.01)** **No differences in six month survival**
INTEGRATE **Soo et al.** **N=154** JCO 38(15_suppl):12011	**GA Intervention group: co-managed by a geriatrician during treatment.** **vs Usual care**	**Age ≥70** **Solid tumors and lymphoma** **Candidates for systemic therapy**	**Quality of life better in the intervention group at 6 months** **Reduced hospitalizations (41% less) and ER visits (39% less)**
Qian et al. **N=160** JCO 38 (15_suppl):12104	**Intervention group: peri-operative GA** **vs Usual care group**	**Age ≥65** **surgery for GI cancer** **Any functional status** **All stages**	**Per-protocol analysis:** **Decreased hospital stay** **(8.2 vs 7.3 days, p =.02)** **Decreased ICU admissions** **(32 vs 13%, p =.05)**

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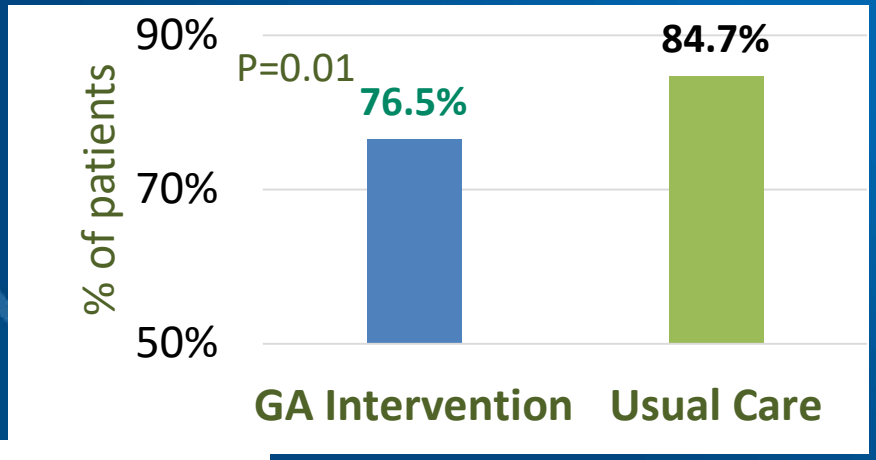
c/o Hy Muss

NCI Tolerability Consortium: Results: Grade ≥ 2 Symptomatic Toxicities (PROCTCAE): Moderate, Severe, Very Severe

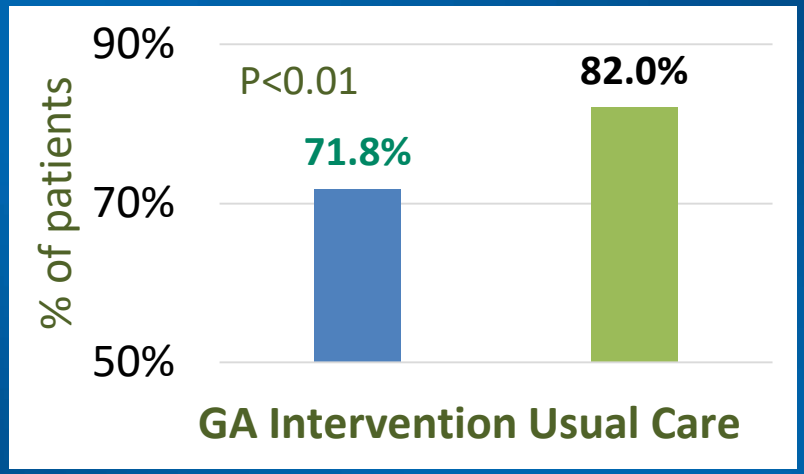
- Adjusted Risk Ratio=0.91
  95% CI: (0.83-1.00)
  P=0.05

All 24 symptoms



- Adjusted Risk Ratio=0.88
  95% CI: (0.81-0.95)
  P<0.01

11 core symptoms



GAP 70+ A BRIDGE TO REDUCE TOXICITIES GERIATRIC ASSESSMENT FOR PATIENTS 70+

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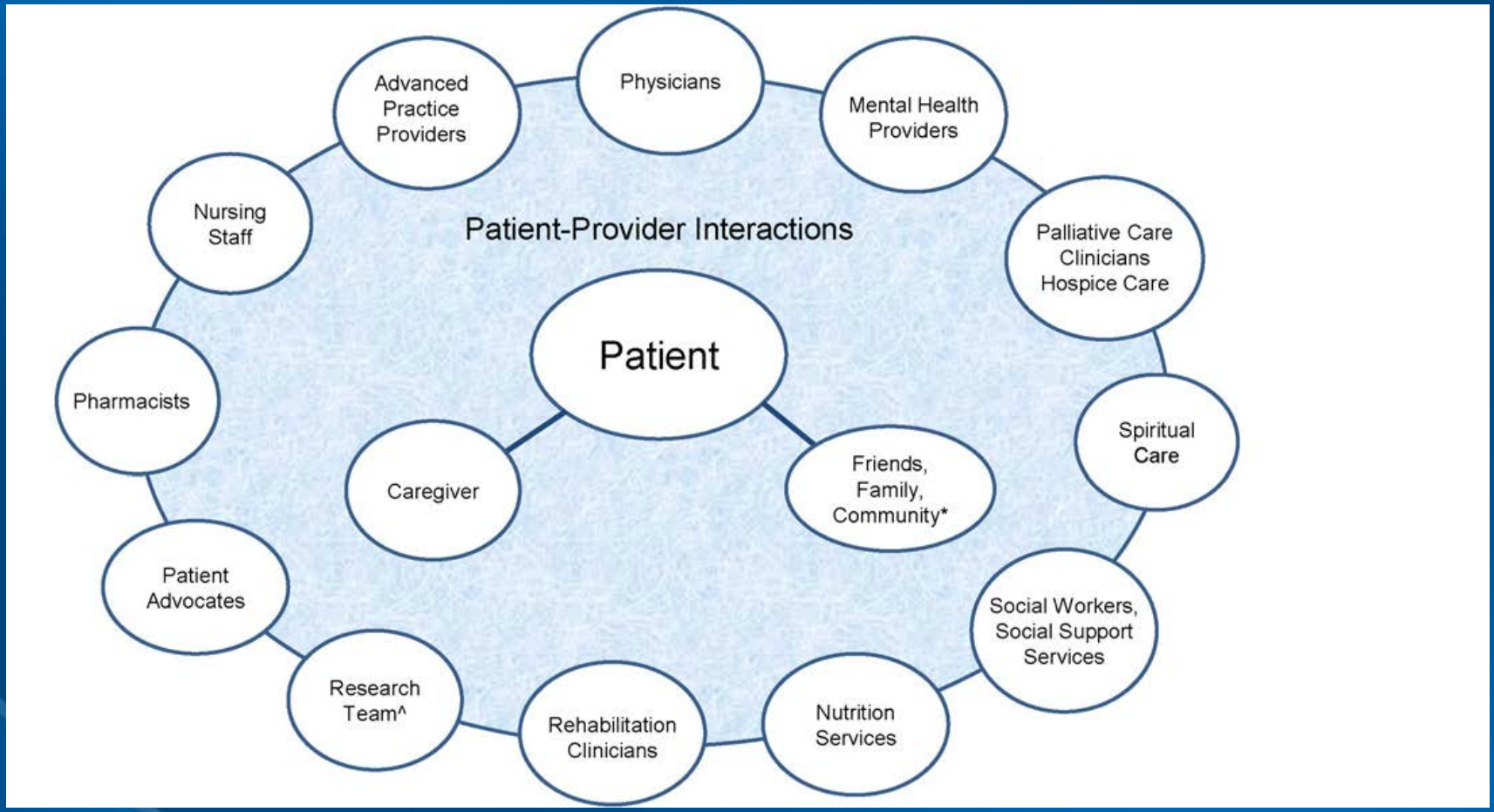
Eva Culakova; ASCO QUAL, 2020

GAP: Care Coordination for Older Cancer Survivors



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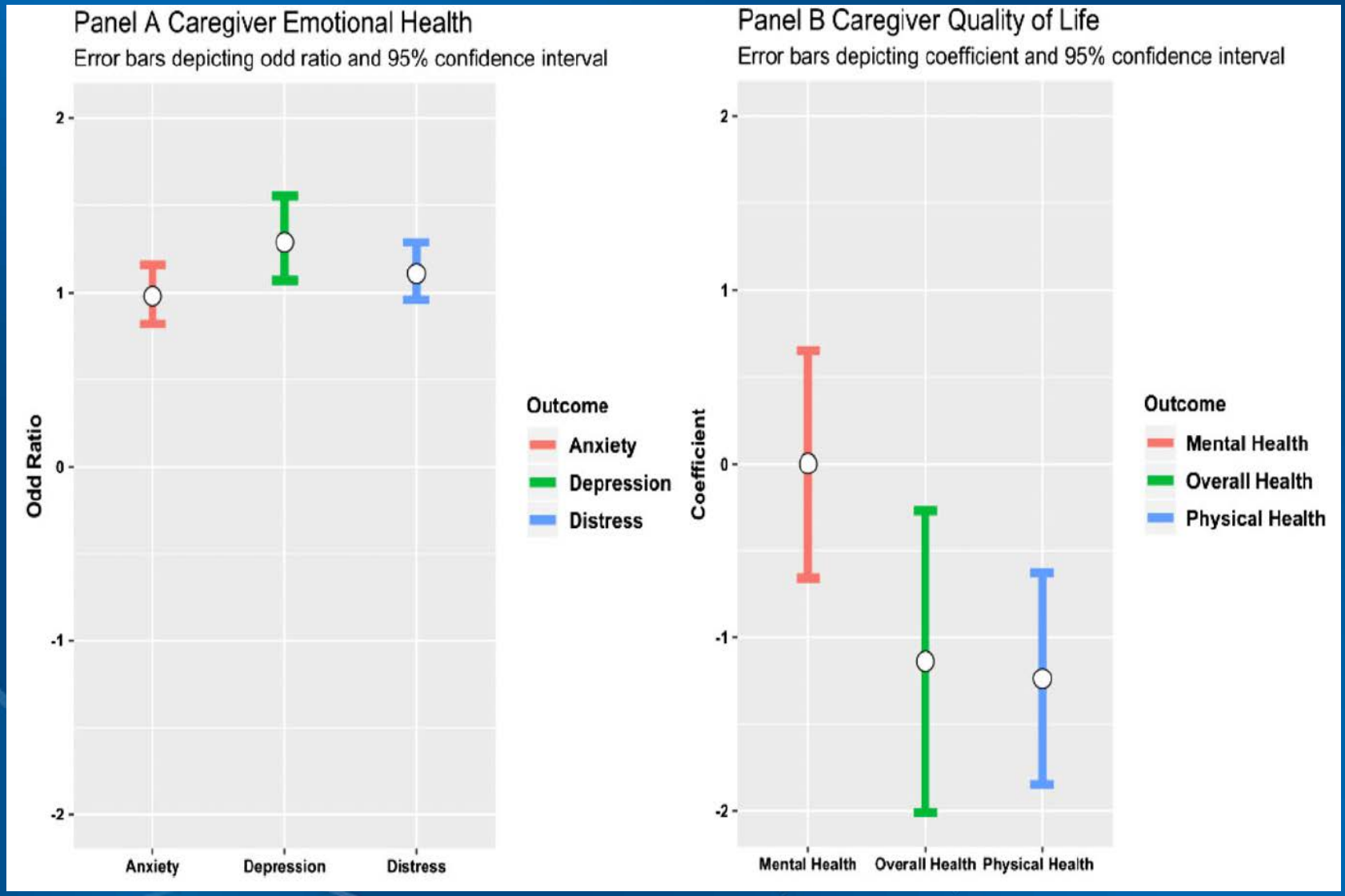
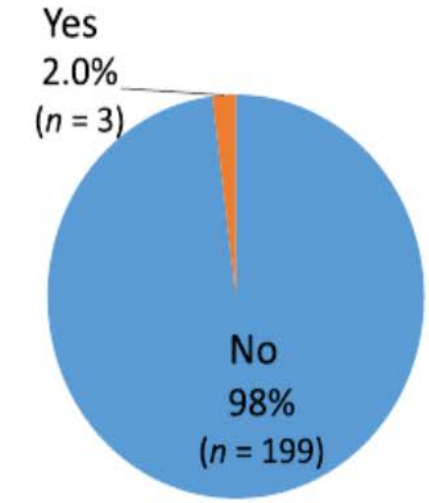
Guerard et al.; JGO, 2016

GAP: How Do We Help Caregivers?: Patient Health Influences Caregiver Health

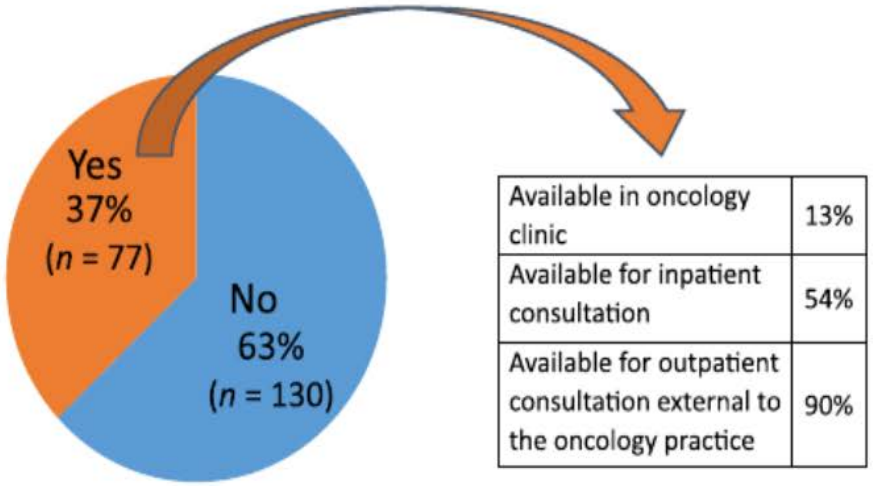


Kehoe et al.; JAGS; 2019

GAP: Availability of Geriatric-trained Providers in Community Oncology Clinics in US



Availability of geriatric oncology providers at site?



Available in oncology clinic	13%
Available for inpatient consultation	54%
Available for outpatient consultation external to the oncology practice	90%

Availability of geriatricians for consultation or comanagement at site?

Williams et al.; the Oncologist, 2020

GAP: Implementation of Geriatric Assessment in Oncology Care

- 61% of healthcare professionals did not feel confident about helping older adult's return to baseline function after treatment (Puts et al. JGO, 2020)
- <25% use standard GA measures in practice (Mohile et al. JNCCN, 2018)
- Knowledge about the American Society of Clinical Oncology Geriatric Oncology Guidelines was associated with using measures (figure below)

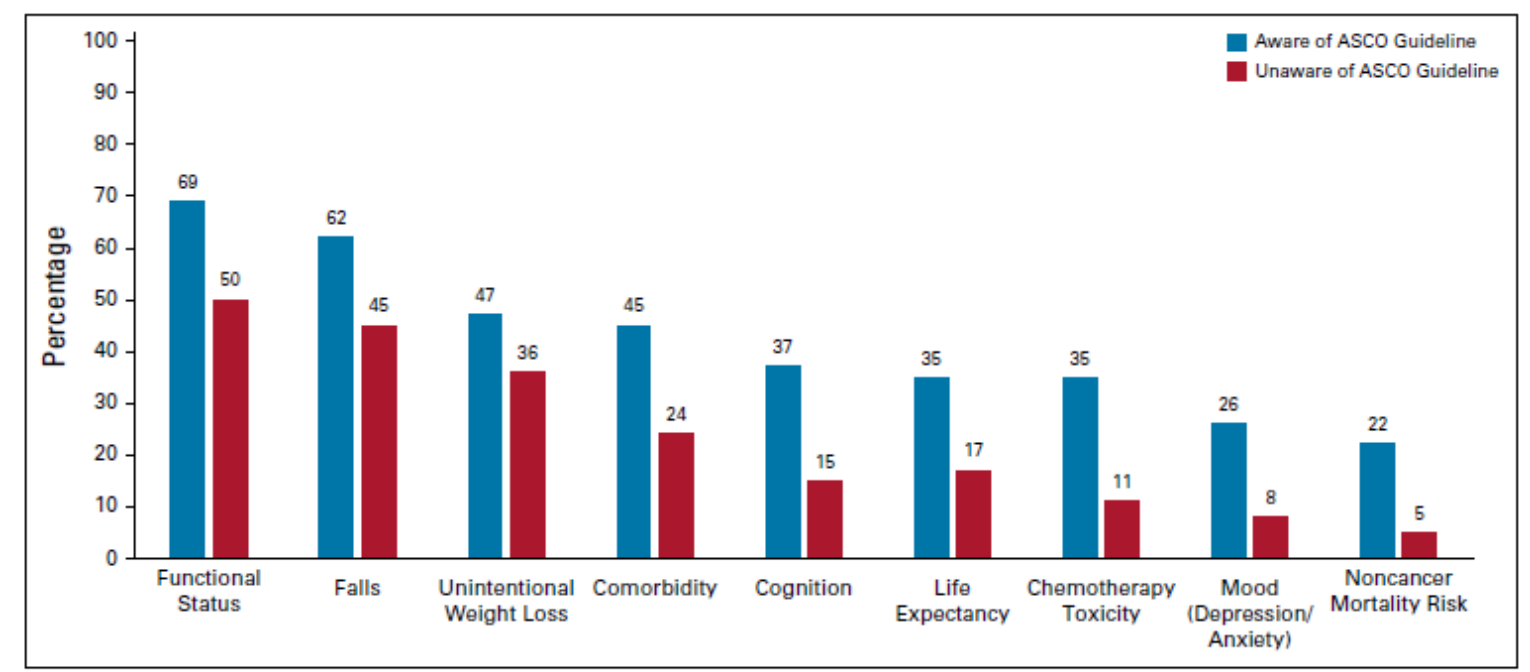


FIG 2. Use of validated tools to assess domains in older adults with cancer, comparing those aware of ASCO guidelines with those who are not: percentage responding "yes" to each domain. $P < .001$ for all domains.

Dale et al.; JOP, 2020

GAP: Reimbursement for Value-Based Care (Geriatric Assessment)

- Worked with UNC Financial Experts, Check with your own financial team (c/o Dr. Hy Muss)

Cpt	Cpt description	wRVU in 2020
99201	Office/outpatient visit new	0.48
99202	Office/outpatient visit new	0.93
99203	Office/outpatient visit new	1.42
99204	Office/outpatient visit new	2.43
99205	Office/outpatient visit new	3.17
99354	**Add on code, for prolonged evalu & management beyond the typical services time of the primary office service, requiring direct patient contact. List separately in addition to code for office exam.**	**2.33** **Document more than 30 minutes**

GAP: Perceptions of Care Coordination among Older Adult Cancer Survivors

Coordination: Talk about prescription drugs; help managing care among different providers/ Services; did personal doctor seem informed and up to date about care from specialists

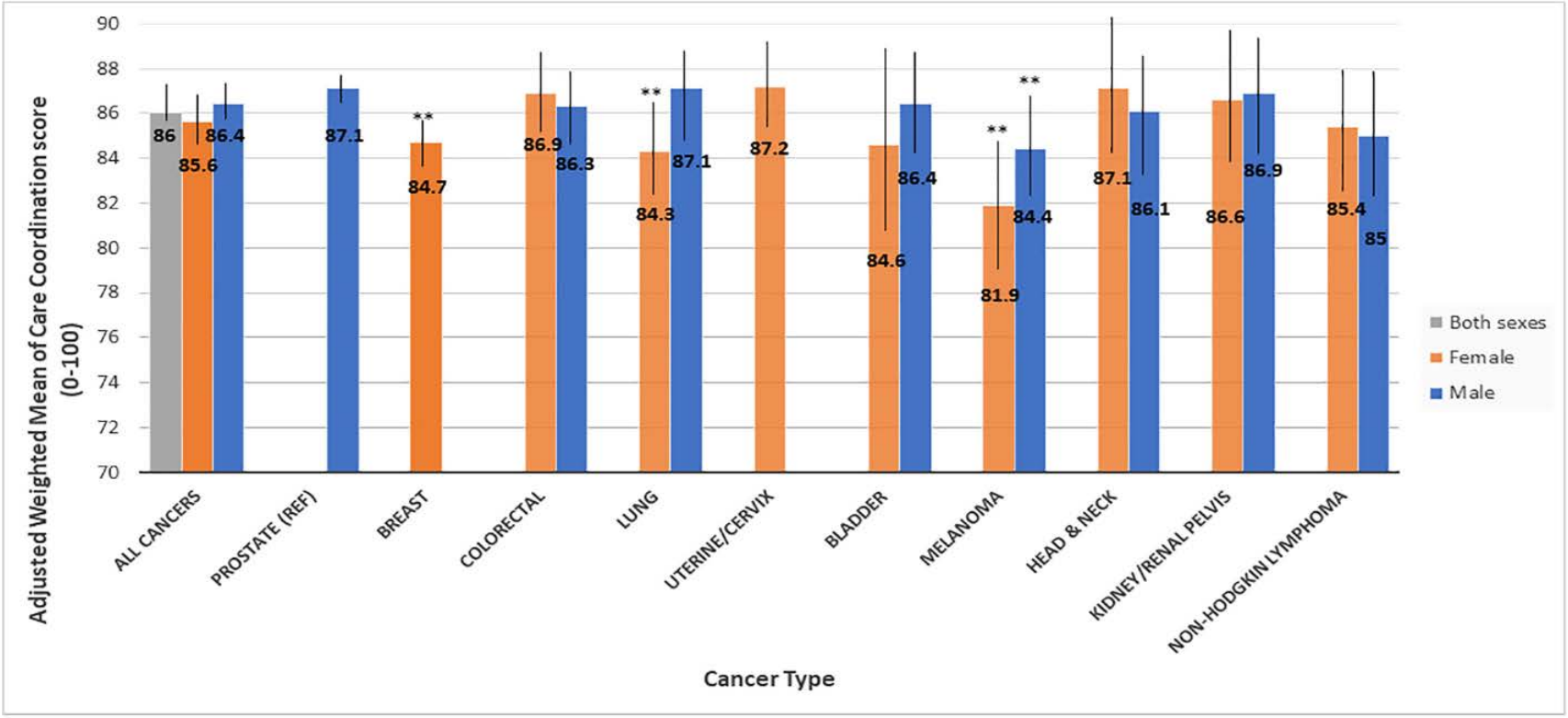


Fig. 2. Adjusted * Weighted Means and 95% confidence intervals for care coordination composite. ** indicates a a significant difference between the cancer type and sex as compared with the reference group (men with prostate cancer).

Mollica et al.; JGO, in press

Recommendations for Survivorship Research in Older Adults

- The percentage of older adults enrolled in standard clinical trials should reflect the percentage of patients in the general population
- Need to better understand how cancer and treatment interact with vulnerabilities, which impacts understanding of safety and efficacy of interventions
- Learn from existing research focused on aging population without cancer
- Partner with stakeholders
- Consider community settings and cost

Mohile et al.; Cancer, 2016

SCOREBoard Members: Improving our Understanding of Stakeholder Engagement

- I've been highly critical of PI's who say they have patient advocates as collaborators or partners in their study, when they've really only been tokens. At times I wondered if it was even possible to establish real partnerships between researchers and patients/patient advocates. Now I know it is possible.
- I have found that what resonated with me perhaps more than any single part of this experience was the critical importance of *authentic communication* among ALL stakeholders.

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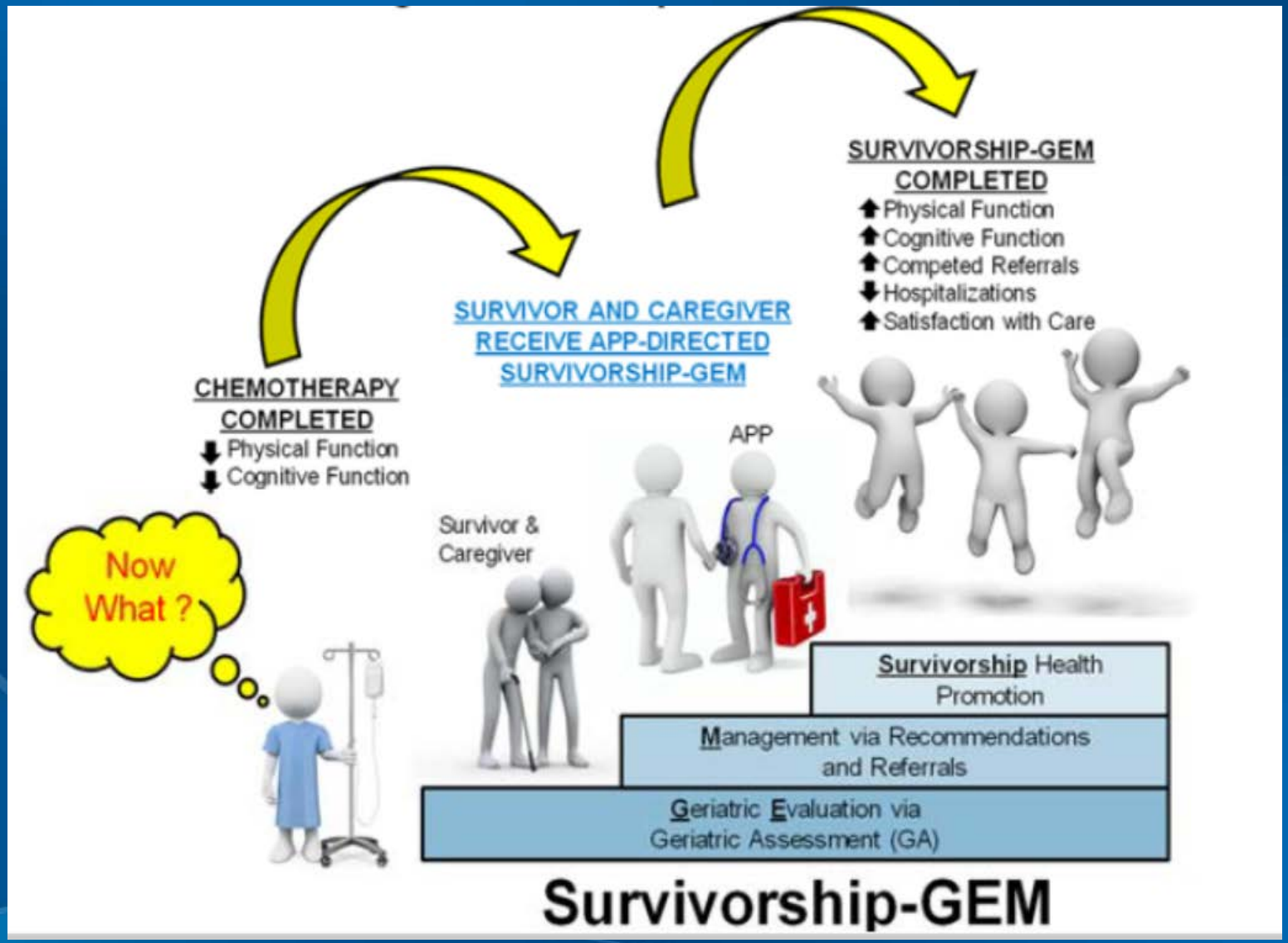
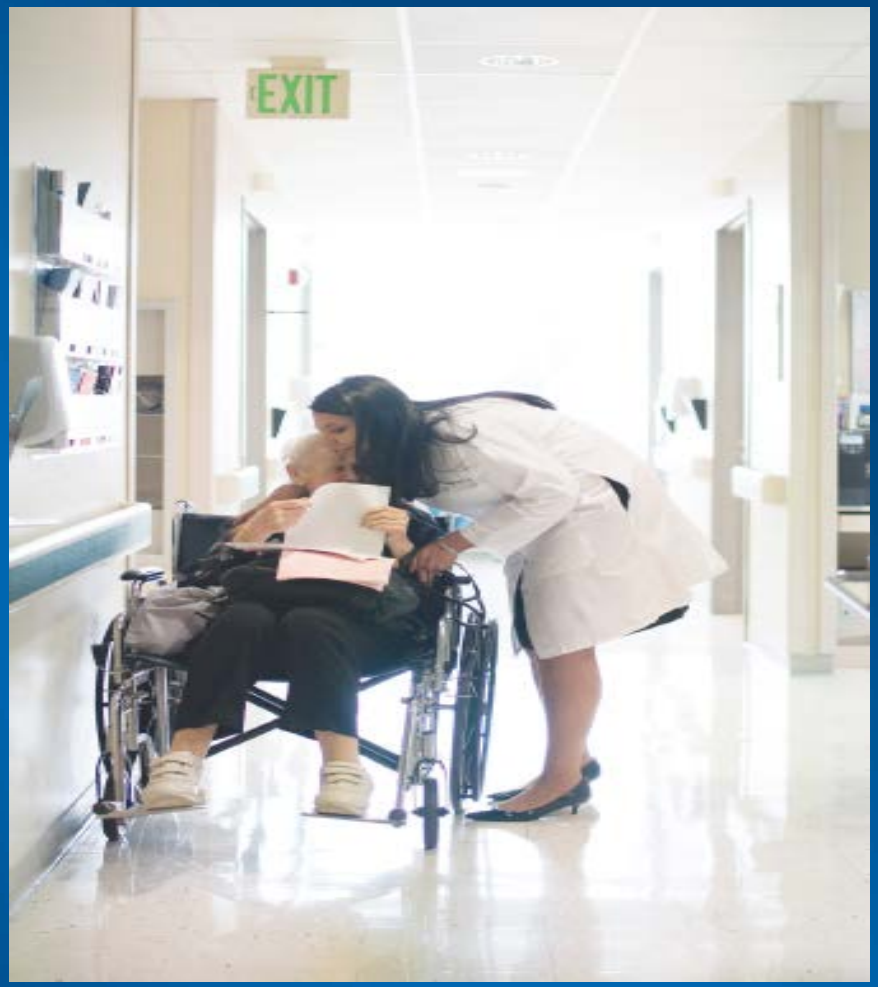
Gilmore et al., Cancer; 2019

Optimizing Function in Older Cancer Survivors after Chemotherapy



- "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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