You can inform and enrich your nursing practice by applying assessment tools from the geriatric field to the oncology population. In this session, you’ll learn about the key components of the Comprehensive Geriatric Assessment and a newly developed chemotherapy toxicity predictor that is undergoing validation studies. You’ll build on your knowledge with case studies that teach you when you implement these interventions.

Content Area: Clinical Practice

Content Level: Intermediate

Coordinator/Speaker:
Peggy Burhenn, MS, RN, CNS, AOCN®
Professional Practice Leader
City of Hope National Medical Center
Duarte, CA
pburhenn@coh.org

Full Disclosure:
Nothing to Disclose

Speaker:
Arti Hurria, MD
Director, Cancer and Aging Research Program
City of Hope National Medical Center
Duarte, CA
ahurria@coh.org

Full Disclosure:
Nothing to Disclose

Speaker:
Janine Overcash, PhD, GNP-BC
Assistant Professor
Tampa, FL
jovercas@hsc.usf.edu

Full Disclosure:
Nothing to Disclose

Objectives:
At the end of this session, participants will be able to:
1. Identify commonly used assessment tools in geriatrics and describe how they can be applied to an oncology population.
2. Generate ideas for integration of geriatric assessment tools in nursing practice.

Content Outline:

I. Introduction—Peggy Burhenn (5 minutes)
   A. Introduce speakers and topic
   B. Audience Response System (ARS)—Pre-test to assess knowledge

II. Aging and Cancer—Arti Hurria (10 minutes)
   A. Changing demographics of cancer and aging
   B. Introduce case study (ARS)
   C. Life expectancy
   D. Chronological vs. functional age
   E. Treatment decision-making in older adults

III. The Comprehensive Geriatric Assessment (CGA)—Janine Overcash (14 minutes)
   A. How do we assess chronological vs. functional age?
   B. Patient selection for CGA
   C. Components of a CGA
   D. Accessing CGA tools
   E. Apply to patient case study

IV. Merging Geriatrics Into Oncology: Implementing Interventions—Peggy Burhenn (14 minutes)
   A. Case study based application to oncology setting
   B. Results of case study CGA
   C. What does the CGA tell us about this patient?
   D. Collaborative interventions based on CGA results

V. Predicting Toxicity of Chemotherapy in the Older Adult—Arti Hurria (14 minutes)
   A. Can CGA predict chemotherapy toxicity?
   B. Chemotherapy toxicity prediction tools
   C. Apply to case study
   D. Using tools in treatment decisions—team collaboration

VI. Integrating Geriatrics Into an Oncology Team—Janine Overcash and Arti Hurria (14 minutes)
   A. The team concept—getting buy-in from your physicians and interdisciplinary team
   B. Connecting with the interdisciplinary team to address needs in the CGA
   C. Integrating supportive care principles into survivorship for older adults

VII. Applying Geriatrics Resources Into Oncology Practice—Peggy Burhenn (9 minutes)
   A. Community resources for older adults that address needs of patients with cancer
   B. Share list of websites and resources for the oncology nurse
   C. Post test—assess knowledge gained

VIII. Question and Answer (10 minutes)
Bibliography:


Using Geriatric Metrics to Improve Care of the Older Adult with Cancer

Janine Overcash, PhD, GNP-BC
Arti Hurria, MD
Peggy Burhenn, MS, CNS, AOCNS

Objectives

- Explain which assessment tools are commonly used in geriatrics and describe how they can be applied to an oncology population
- Generate ideas for integration of these tools into your practice
- Evaluate how geriatric resources can be utilized in an oncology setting

US Population Age ≥ 65 (millions)

Cancer and Aging

- 60% of cancer occurs in people ≥ age 65

The Older Patient: Key Questions Not Addressed

- Do we need to treat the cancer?
- Who will die of disease vs. with disease?
- If we treat, who is vulnerable to toxicity?
- How to modify therapy based on:
  - their functional status
  - their cognitive status
  - their social situation

Projected Rise in Cancer Incidence from 2010 to 2030

- 67% in patients 65+
- 11% in patients <65

Year

US Census Bureau

Smith et al, J Clin Oncol, 2009

Yancik, International Society Geriatric Oncology 2001
Do We Address the Questions that Patients Want to Know?

Doctor, if I take the therapy…
- what is the quality of my survival?
- will I be functionally impaired?
- will I be cognitively impaired?
- what does my family need to prepare for?

I would rather die than take a treatment that causes:
- functional impairment: 74%
- cognitive impairment: 88%

Fried et al. NEJM 2002: 346 (14): 1061

NCCN Guidelines: Assessing Life Expectancy

- Who is the patient?
- What is her risk for toxicity?
- Are the risk factors modifiable?
- Which treatment is the best option?

Perform a Comprehensive Geriatric Assessment

Filling the Information Gap

Geriatric Assessment

A global assessment that considers many aspects of physical, emotional, and social health of an older person

CGA Provides Specific Attention to Actual and Potential Problems
- Functional Status
- Depression
- Dementia
  - Decision-making capacity
- Caregiver limitations
- Transportation
- Comorbidities
**Functional Status**

- Vital part of the general health assessment
- Provides a picture of capability outside the care setting
- May determine treatment and screening decisions
  - Initiation of treatment or screening
  - Alterations in treatment

**Functional Status Assessment**

- Activities of Daily Living
  - Bathing, dressing, toileting, transferring, continence, and feeding
- Instrumental Activities of Daily Living
  - Telephone, shopping, food prep, housekeeping, laundry, transportation, medications, and finances

**Timed Up & Go**

(Podsiałdo & Richardson, 1991)

- Requires an arm chair
- Ask patient to raise and walk 3 meters turn around and return to chair
- Timed cut-points indicate various aspects of frailty

3 metres

> Chair

Line

**Depression**

GDS Short Form

(Hoyl et al. 1999 JAGS)

- 5 item GDS
  - Sensitivity, specificity, diagnostic accuracy all shown compared to the 15 item GDS.
    - Are you basically satisfied with your life?
    - Do you often get bored?
    - Do you often feel helpless?
    - Do you prefer to stay home rather than going out and doing new things?
    - Do you feel pretty worthless the way you are now?

---

**CIRS-G Score Calculator**

This calculator is based on Miller et al. Cumulative Illness Rating Scale–Geriatric: assessment. Published 1999 JAGS

*Please click on each link to view close help on assigning scores*

Patient: [ ]

Age: [ ]

Date: 2/10/2014

**Geriatric Assessment Co**

<table>
<thead>
<tr>
<th>Item</th>
<th>Possible Answers</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?</td>
<td>0 = severe reduction in food intake</td>
<td>3</td>
</tr>
<tr>
<td>Weight loss during the last 3 months?</td>
<td>0 = weight loss &gt; 3 kg</td>
<td>3</td>
</tr>
<tr>
<td>Mobility</td>
<td>0 = bed or chair bound</td>
<td>0</td>
</tr>
<tr>
<td>Neuropsychological Problems</td>
<td>0 = severe dementia or depression</td>
<td>3</td>
</tr>
<tr>
<td>In comparison with other people of the same age, how does the patient consider his/her health status?</td>
<td>0 = as good</td>
<td>2</td>
</tr>
<tr>
<td>Age</td>
<td>0 = &gt; 85</td>
<td>2</td>
</tr>
<tr>
<td>Total score (0-17)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Linear Decline Of Organ Reserve With Increasing Age

Baker and Martin, Geriatric Medicine, 1996

Can Geriatric Assessment Predict Chemo Toxicity? (PI: Hurria)

Eligibility criteria
- Age 65 or older
- Diagnosis of cancer
- To start a new chemotherapy regimen

Sample size: 500 patients (Chemo alone)
7 participating institutions (Cancer and Aging Research Group)

Predictors of Toxicity

- Age ≥ 72 years
- GI/GU Cancer
- Standard Dose
- Polychemotherapy
- Hemoglobin (male: <11, female: <10)
- Creatinine Clearance (Jelliffe-ideal wt <34)
- Fall(s) in last 6 months
- Hearing impairment (fair or worse)
- Limited in walking 1 block (MOS)
- Assistance required in medication intake (IADL)
- Decreased social activity (MOS)

Risk of Toxicity by Score

Where to get a CGA?

Cancer and Aging Research Group
www.MyCARG.org

Geriatric Assessment Tools
- Geriatric Assessment (Patient)
- Geriatric Assessment (Healthcare Team)

International Society of Geriatric Oncology (SIOG)
www.siog.org

- Practice Guideline Comprehensive Geriatric Assessment (CGA)
- Including G8
- Smartphone App for G8 (in French)
- List of websites and resources for the oncology nurse
**Finding Geriatrics Resources**

- NICHE Nurses Improving Care for Healthsystem Elderly  
  [www.nicheprogram.org](http://www.nicheprogram.org)
- Pain assessments  
  [www.geriatricpain.org](http://www.geriatricpain.org)
- National Comprehensive Cancer Network (NCCN)  
  [www.nccn.org](http://www.nccn.org)
  - Senior Adult Oncology Guidelines
  - Geriatric Assessment parameters and recommendations

**Benefits of Geriatric Assessment in Older Patients with Cancer**

- Predict toxicity to cancer treatment
- Can be performed during any part of the treatment course (from diagnosis to survivorship)
- Predict survival of older patients with cancer
- Uncover problems not detected by routine H&P
- Leads to interventions to:
  - Improve mental health and well-being
  - Improve pain control

- **Hurria et al. JCO 2011**
- **Maione et al. JCO 2005**
- **Repetto et al. JCO 2002**
- **Poon et al. JCO 2011**
- **Extermann et al. Cancer 2011**

---

**Other Resources**

- The Hartford Institute for Geriatric Nursing - Try This Series
- [www.ConsultGeriRN.org](http://www.ConsultGeriRN.org)
  - Katz Index of Activities of Daily Living
  - Lawton Instrumental Activities of Daily Living Scale
  - Cognition tools: Mini-COG and MoCA
  - Geriatric Depression Scale (15 questions)
  - Fulmer SPICES: An Overall Assessment Tool for Older Adults

---

**CRASH Score**

- CRASH Score Calculator
- [http://www.moffitt.org/cancer/CRASHScore](http://www.moffitt.org/cancer/CRASHScore)

---

**References**

- Extermann et al. Cancer, Epub Nov 9, 2011
Geriatric Resources

American Cancer Society (ACS)
www.cancer.org
- Eat Healthy and Get Active recommendations on their website

American Geriatric Society
www.americangeriatrics.org
- Guiding Principles for the Care of Older Adults with Multimorbidity
- Beers list of potentially inappropriate medications in older adults

American Institute for Cancer Research (AICR)
www.aicr.org
- Guidelines for Cancer Survivors
- Healthy Lifestyle Guidelines

Area Agency on Aging
- Elder Locator Resource Center
www.eldercare.gov
- Finding help in your community for a variety of services for older adults

Cancer and Aging Resource Group
www.mycarg.org
- Geriatric Assessment on line

The Hartford Institute for Geriatric Nursing - Try This Series
www.ConsultGeriRN.org
- Katz Index of Activities of Daily Living
- Lawton Instrumental Activities of Daily Living Scale
- Cognition tools: Mini-COG and MoCA
- Geriatric Depression Scale (15 questions)
- Fulmer SPICES: An Overall Assessment Tool for Older Adults

Mini Nutritional Assessment
www.mna-elderly.com

National Cancer Institute
www.cancer.gov/cancertopics/pdq/supportivecare/nutrition/HealthProfessional/page4
- NCI Nutrition in Cancer Care (PDQ)

National Comprehensive Cancer Network (NCCN) Senior Adult Oncology Guidelines
www.nccn.org
- Life Expectancy chart
- Cognition guidelines
- Geriatric Assessment

Society of International Geriatric Oncology
www.siog.org
- Geriatric Assessments including G8
Geriatric Depression Scale (GDS)
MOOD SCALE
(short form)

Choose the best answer for how you have felt over the past week:

1. Are you basically satisfied with your life? YES / NO
2. Have you dropped many of your activities and interests? YES / NO
3. Do you feel that your life is empty? YES / NO
4. Do you often get bored? YES / NO
5. Are you in good spirits most of the time? YES / NO
6. Are you afraid that something bad is going to happen to you? YES / NO
7. Do you feel happy most of the time? YES / NO
8. Do you often feel helpless? YES / NO
9. Do you prefer to stay at home, rather than going out and doing new things? YES / NO
10. Do you feel you have more problems with memory than most? YES / NO
11. Do you think it is wonderful to be alive now? YES / NO
12. Do you feel pretty worthless the way you are now? YES / NO
13. Do you feel full of energy? YES / NO
14. Do you feel that your situation is hopeless? YES / NO
15. Do you think that most people are better off than you are? YES / NO

Answers in **bold** indicate depression. Although differing sensitivities and specificities have been obtained across studies, for clinical purposes a score > 5 points is suggestive of depression and should warrant a follow-up interview. Scores > 10 are almost always depression.

Source: http://www.stanford.edu/~yesavage/GDS.english.short.score.html