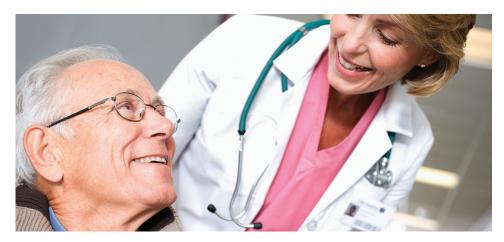


### **About Us**

The Sidney Kimmel Cancer Center at Jefferson established the region's only multidisciplinary, geriatric oncology program in August 2010. A joint effort between the Departments of Medical Oncology and Family and Community Medicine, the Senior Adult Oncology Center provides patients with a comprehensive assessment, usually during a single visit, to identify potential complications related to aging and cancer. Based on this assessment, the team develops a personalized treatment plan, taking in to consideration risks, potential for complications and personal preferences to help ensure autonomy, dignity and greatest quality of life.

The center's core team includes a medical oncologist, geriatrician, registered nurse, pharmacist, social worker and registered dietitian. Additionally, radiation oncologists, physiatrists, and surgeons are available for individualized consultation when needed. Each team member brings a different perspective and knowledge base to the care of this unique population.

# Why Geriatric Oncology?



Research indicates that sixty percent of newly diagnosed cancer patients are over the age of 65 and the current median age of all cancer patients is 71. Common geriatric syndromes, including frailty, depression, cognitive impairment, poor nutrition and fall risk, make the prediction of treatment response and outcomes significantly more complex. Further, for geriatric patients, functional age is more significant in risk assessment, prognosis and treatment decisions compared to chronological age. While routine oncologic assessment includes a basic functional evaluation, usually by the ECOG or Karnofsky Performance Status method, many believe this may not be enough to identify geriatric syndromes such as frailty or cognitive impairment that will influence treatment. Jefferson's Comprehensive Geriatric Assessment is done by a multi-disciplinary team with the specialized expertise to work with older adults and their treating oncologists.



## Welcome Dr. Amy Mackenzie!

Dr. Amy Mackenzie is a board certified geriatrician and trained medical oncologist. Dr. Mackenzie is a graduate of Drexel University's College of Medicine and completed her fellowship at Thomas Jefferson University Hospital. She now serves as an Assistant Professor in the Department of Medical Oncology at Jefferson in the Division of Regional Cancer Care.

## **Patient Navigator**

Jillian Brown • 215-955-7539



As our Patient
Navigator, I function
as the patient's
primary contact.
Building a trusting
relationship and
communicating with
the patient, in order
to facilitate cancer
treatment is essential

to my role as the navigator. Having one contact person, who can explain and help organize the multiple issues related to treatment, not only reduces stress for the patient but also instills confidence that the highest quality, competent care is being received.

70 percent of treatment plans were altered as a result of the interdisciplinary team meeting.

### **Pharmacists**

Ginah Nightingale, PharmD, BCOP Emily Hajjar, PharmD, BCPS, CGP

The geriatric population has several unique challenges including polypharmacy, altered pharmacokinetics, the prescribing cascade and effects on geriatric syndrome.

Over 75 percent of patients have received a recommendation for medication optimization.

### Social Workers Lora Rhodes, MSW, LSW George Theos, MSW

Oncology social workers provide counseling, support groups and community resources which can help to reduce stress for patients and their families throughout their cancer care.

80 percent of all new patients have received some form of social work assistance.



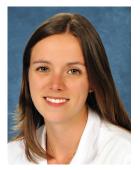
# **Medical Oncology**

Andrew Chapman, DO Vice Chair of Clinical Operations, Co-Director, Jefferson Senior Adult Oncology Center

As a practicing medical oncologist for nearly 20 years, I am amazed at the value of the multidisciplinary evaluation of the elder with cancer. By bringing together each member of the multidisciplinary team in a patient management conference,

we are able to personalize the treatment plan utilizing the expertise of each health care professional. The senior adult oncology patient population is highly complex, necessitating this multidisciplinary approach to fully understand and address their needs and the needs of their caregivers. I can say unequivocally, that the evaluation and management of these patients in the Senior Adult Oncology Center at Jefferson continues to be the most rewarding experience of my career.

# 70 percent of treatment plans were altered as a result of the interdisciplinary team meeting.



Kristine Swartz, MD

## Geriatric Medicine

Kristine Swartz, MD

Assistant Professor, Family and Community Medicine Co-Director, Jefferson Senior Adult Oncology Center

Lauren Hersh, MD

Instructor, Family and Community Medicine

Division of Geriatric Medicine and Palliative Care Department of Family and Community Medicine



Lauren Hersh, MD

A complete geriatric assessment evaluates function, cognition, and comorbidities and considers cancer diagnosis within the context of estimated overall life expectancy. This information helps oncologists develop individualized treatment plans.

Over 80 percent of our evaluations have led to recommendations regarding referrals, medication changes and more.

# Radiation Oncology

Maria Werner-Wasik, MD Professor, Radiation Oncology Voichita Bar-Ad, MD
Associate Professor, Radiation Oncology



Maria Werner-Wasik, MD

As life expectancies continue to increase in western populations, so too does the importance of the care of elderly cancer patients. A professional geriatric assessment helps clinicians decide on the best treatment program for elderly patients. Radiation oncology is an essential part of the multidisciplinary treatment approach and supports the design of clinical trials - studies which will help clarify the correct medicines and treatment schedules for geriatric patients.



Voichita Bar-Ad, MD

Radiation oncology remains a key component of geriatric oncology, one of the youngest disciplines in the medical field.

## Sidney Kimmel Cancer Center at Jefferson

### Recognized as Among the Best in Cancer Care

The Sidney Kimmel Cancer Center at Jefferson is a National Cancer Institute (NCI)-designated clinical cancer center for excellence in cancer care and research. *U.S.News & World Report* recognizes Jefferson as one of the best hospitals in the nation for cancer care. Jefferson is also a Blue Distinction Center for Complex and Rare Cancers. Blue Distinction is a nationwide program of the Blue Cross and Blue Shield Association, recognizing specialty centers that offer the best practices and standards of cancer care.

Since its inception in 2010, the Senior Adult Oncology Center at Jefferson has been recognized both nationally and internationally. The distinguished American Cancer Society of Clinical Oncology (ASCO) and International Society of Geriatric Medicine (SIOG) have invited faculty to their annual meetings to present the rapid advancement of the center as a valuable, multidisciplinary consulting service.

### **Cancer Research and Education**

Sidney Kimmel Cancer Center's world-renowned physicians and scientists have helped pioneer new approaches to cancer treatment by transforming scientific discoveries into improved patient care. Our faculty is conducting important research related specifically to cancer and associated conditions and issues linked with aging. Our physicians are experienced in using the most advanced treatment methods and technologies and are at the forefront of developing new therapies. As a result, qualified patients may have the opportunity to take part in one of our numerous clinical trials.

### **Dietitians**

Monica Crawford MA, RD, LDN Rebecca Scofield, MS, RD, LDN

This center provides a unique opportunity for nutrition assessment and intervention that can help patients and their families handle issues that may arise with cancer and treatment such as decreased appetite, taste changes, weight loss, nausea, vomiting or diarrhea. For those patients with an inability to prepare meals, healthful home-delivered meals can be arranged. Helping patients remain as well-nourished as possible can greatly help them as they navigate through their cancer treatment.

71 percent of our patients screened at risk for malnutrition or malnourishment.

# Convenient Hours and Locations:

The Senior Adult Oncology Center sees patients at two locations:

### **Tuesday Afternoons**

Methodist Hospital – Jefferson Health 1300 Wolf St, 3rd Floor Philadelphia, PA 19148

### **Friday Mornings**

Thomas Jefferson University Hospital – Jefferson Health
Department of Medical Oncology
925 Chestnut St, 4th Floor
Philadelphia, PA 19107

### **Contact Us**

Senior Adult Oncology Center 215-955-8516 Jefferson.edu/GeriatricOncology

## Our Impact On Patient Care

To date we have seen over 435 patients with an average age of 79.9.

Top 3 diagnoses: 1.Breast Cancer 2.Colorectal Cancer 3.Lung Cancer

**24 percent** of patients screened as FIT, defined as having highest level of health and are at the top of their life expectancy tables. These patients should receive standard therapies for their cancer.

**52 percent** of patients screened as VULNERABLE, defined as having some dependence in instrumental activities of daily living have some comorbidities, or mild geriatric syndromes. These patients are at increased risk for side effects and treatment modifications should be considered.

**29 percent** of patients screened as FRAIL, defined as having dependence in activities of daily living, multiple comorbidities or a clinically significant geriatric syndrome. These patients are at high risk for side effects and the decision for cancer treatment should take into consideration patient goals and overall life expectancy.

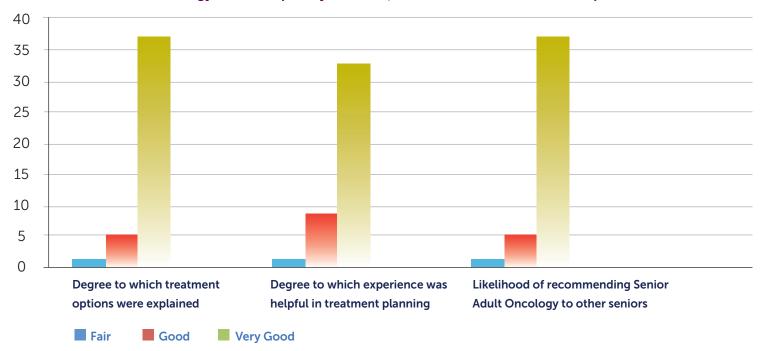
**84 percent** of patients met criteria for polypharmacy increasing the risk of drug-drug interactions and adverse effects.

**27 percent** of patients were determined to have some degree of significant cognitive impairment, six of these had no previous diagnosis of dementia or memory problems.

The information gained from our interdisciplinary complete geriatric assessment allows for the development of ahighly individualized treatment plan that meets the needs and goals of each patient.

# What Our Patients Are Saying

Senior Adult Oncology Multidisciplinary Center | 2015 Patient Satisfaction Responses





## **Expanded Services**

## **Bone Marrow Transplant Program**

We are now assessing all patients who are being evaluated for bone marrow transplant and who are 65 and older. This aids the transplant team in providing the highest quality care.



### Senior Adult Oncology Moves to Telehealth

In September 2015, the Senior Adult Oncology team became the first multidisciplinary cancer care team at Jefferson to provide care through JeffConnect, our telehealth services. Telehealth is a way for patients to be seen by a provider through a video conference. JeffConnect allows us to deliver real-time care and consultation right from the offices of our network providers. Center Co-Director, Dr. Chapman explains, "Telehealth is enabling the Senior Adult Oncology team at Jefferson to bring our unique, world-class multidisciplinary evaluation to seniors across the region that have difficulty traveling to Center City, Philadelphia and might otherwise have not had access to this valuable resource."

"Telehealth is enabling the Senior Adult Oncology team at Jefferson to bring our unique, world-class multidisciplinary evaluation to seniors across the region that have difficulty traveling to Center City, Philadelphia and might otherwise have not had access to this valuable resource."



**Senior Adult Oncology Center** 215-955-8516 Jefferson.edu/GeriatricOncology

#### **Posters**

MacKenzie A.R., Koch L., Williams U., Wolf T., Cocroft J., Keith S.W., Schoppe J., Barsevick A., Myers R., Chapman A.E., Thomas Jefferson University Hospital, Philadelphia, PA; Hospital Israelite Albert Einstein, Sao Paulo, Brazil; Thomas Jefferson University, Philadelphia, PA "Analysis of Standard Versus Non-Standard Treatment in Senior Adult Oncology Patients" (American Society of Clinical Oncology, Annual Meeting, 2014)

Chapman A.E. "Development of a Comprehensive Multidisciplinary Geriatric Oncology Center, the Thomas Jefferson University Experience," (SIOG Poster Walk Presentation, International Society of Geriatric Oncology annual meeting, Copenhagen, October 2013) Encore poster presentation (American Society of Geriatrics, May 2014)

Maggior R.J., Dale W., Buss M.K., Hurria A., Chapman A.E., Dotan E., Klepin H.D., Naeim A., Mohile S.G., on behalf of the Cancer and Aging Research Group and American Society of Clinical Oncology: "Survey of Geriatric Oncology (Geri Onc) Training Among Hematology/Oncology (Hem/Onc) Fellows" (American Geriatrics Society Annual Meeting, May 2014 and the American Society of Clinical Oncology Annual meeting June 2014

Sama A., Chapman A.E., Leiby B., Swartz, K., MacKenzie A., Kraft W., Schoppe J., "A Screening tool to identify "FIT" geriatric oncology patients," e20532 (American Society of Clinical Oncology, May 2015).

#### **Presentations**

Chapman, A.E. "Existing Geriatric Oncology Models: Opportunities And Barriers—Oncologist-Centered Models". 2014. Presentation.

Chapman, A.E., MacKenzie, A.R, Parker, I. "Silver Oncologic Tsunami". 2014. Presentation.

#### **Publications**

Chapman, A.E., MacKenzie, and I. Parker. "Silver Oncologic Tsunami: Quality Issues In The Senior Adult Oncology Population". *Journal of Oncology Practice* 11.3 (April 2015): 190-192.

Gajra, Ajeet et al. "Predictors Of Chemotherapy Dose Reduction At First Cycle In Patients Age 65 Years And Older With Solid Tumors". *Journal of Geriatric Oncology* 6.2 (February 2015): 133-140.

Nightingale, Ginah et al. "A Pharmacist-Led Medication Assessment Used To Determine A More Precise Estimation Of The Prevalence Of Complementary And Alternative Medication (CAM) Use Among Ambulatory Senior Adults With Cancer". *Journal of Geriatric Oncology* 6.5 (2015): 411-417.

Nightingale, G. et al. "Evaluation Of A Pharmacist-Led Medication Assessment Used To Identify Prevalence Of And Associations With Polypharmacy And Potentially Inappropriate Medication Use Among Ambulatory Senior Adults With Cancer". *Journal of Clinical Oncology* 33.13 (2015): 1453-1459.

Williams, Grant R. et al. "Comorbidity In Older Adults With Cancer". Journal of Geriatric Oncology (December 2015).