Center for Cancer Care

2017 ANNUAL REPORT

St. Luke's HOSPITAL

Our specialty is you.

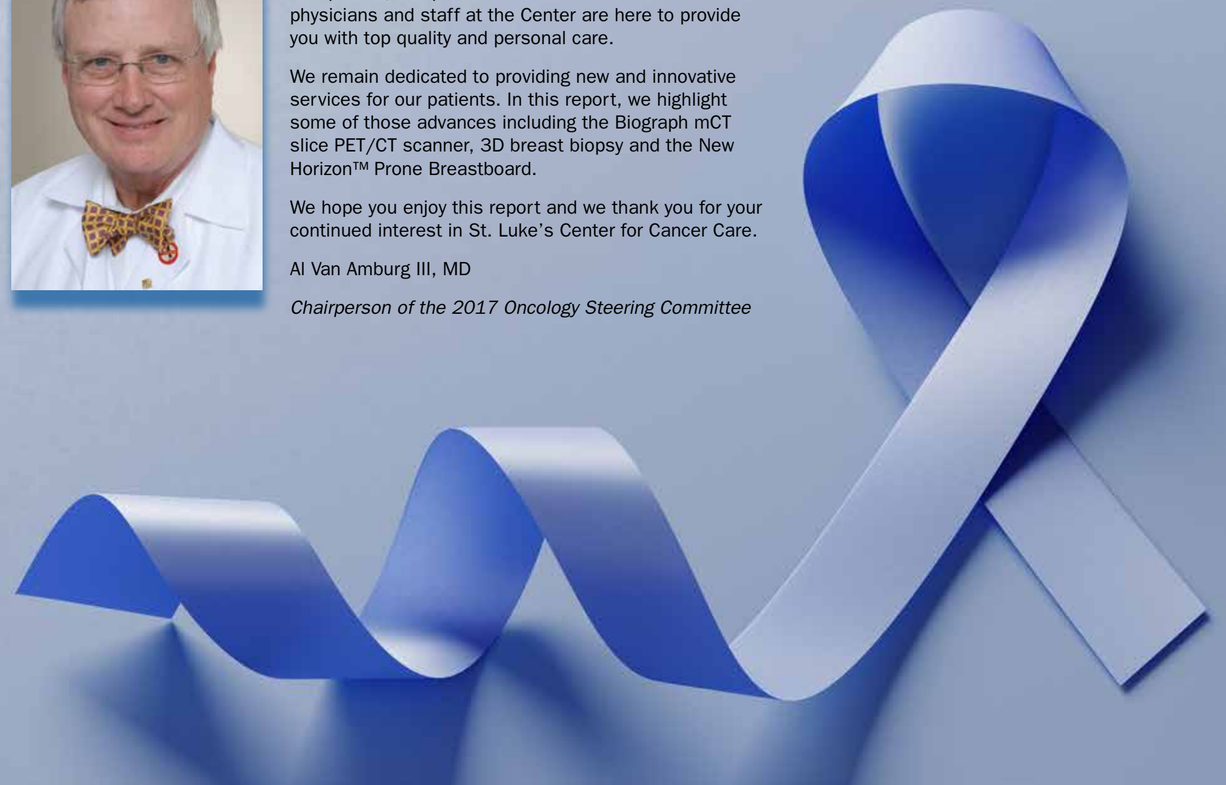
St. Luke's Center for Cancer Care is a Commission on Cancer (CoC) accredited center that has served thousands of patients and their families annually with exceptional, compassionate and individualized care. The physicians and staff at the Center are here to provide you with top quality and personal care.

We remain dedicated to providing new and innovative services for our patients. In this report, we highlight some of those advances including the Biograph mCT slice PET/CT scanner, 3D breast biopsy and the New Horizon™ Prone Breastboard.

We hope you enjoy this report and we thank you for your continued interest in St. Luke's Center for Cancer Care.

Al Van Amburg III, MD

Chairperson of the 2017 Oncology Steering Committee



Services at St. Luke's Hospital

St. Luke's Hospital offers world-class cancer care and treatment. With our medical expertise, unsurpassed technology and comprehensive support programs, we're proud to offer the full spectrum of cancer care to our patients. Our continued investment to bring new cancer-fighting facilities, technologies and distinguished oncology specialists to our region has allowed us to offer the following services to our community.

DIAGNOSTIC & TREATMENT SERVICES

Computerized Axial Tomography Scan CT / PET Scans
Digital Breast Imaging
Magnetic Resonance Imaging (MRI) / Magnetic Resonance (MR) Mammography
Mediastinoscopy
Nuclear Medicine
Screening Lung CT
Sentinel Lymph Node Biopsy
State-of-the-Art Diagnostic Imaging
Stereotactic Guided Biopsy
SonoCiné/Ultrasound

INTERVENTIONAL RADIOLOGY SERVICES

Imaging Guided Biopsy
Thoracentesis / Paracentesis
Chest Tubes / Pleurodesis
Tunneled Drainage Catheters (Aspira Catheter)
Kyphoplasty / Vertebroplasty
Vascular Access
Celiac Plexus Block
Embolization

MEDICAL ONCOLOGY SERVICES

Chemotherapy/Targeted Therapies
Oncology Clinical Research Trials
Outpatient Infusion Center

PSYCHOSOCIAL, SUPPORT CARE, COMMUNITY OUTREACH SERVICES

American Cancer Society Support Services
Breast Cancer Support Group
Case Management and Patient Navigation Services
Community Resource Coordination
Financial Counseling
Genetic Counseling
Hospice
Individualized Counseling
Integrative Therapies
Lung Cancer Screening Program
Nutritional Counseling
Pain Management
Palliative Care Program
Patient Resource Center
Pastoral Care
Smoking Cessation Program
Survivorship Program
Wellness Program

RADIATION ONCOLOGY

3D Conformal Radiation Therapy
Brachytherapy-High Dose Rate (HDR) / Brachytherapy-Low Dose Rate (LDR)
Electron Beam Radiation Therapy
External Beam Radiation Therapy
High Dose Rate (HDR) MammoSite®
Image-Guided Radiation Therapy (IGRT)
Intensity Modulated Radiation Therapy (IMRT)
Trilogy Linear Accelerator
Radioimmunotherapy
Stereotactic Radiation Therapy (SRT)

REHABILITATION SERVICES

Rehabilitation Program
Lymphedema Program

SURGICAL ONCOLOGY SERVICES

Catheter-based Partial Breast Irradiation
Cryosurgery
Intraoperative Radiation Therapy
Minimally-invasive and Robotic Assisted Surgery
Ultrasonic Surgical Aspiration

Cancer Registry of St. Luke's Hospital

The Cancer Registry of St. Luke's Hospital is staffed by four Certified Tumor Registrars (CTRs). All staff members participate in ongoing oncology related continuing education annually by attending local and regional association meetings, as well as State Cancer Registry sponsored meetings and others sponsored by the Commission on Cancer.

Registry Statistics

In 2016, there were 1,376 cases accessioned to the St. Luke's Hospital Cancer Registry. Of this number, 1,301 were analytic incidences of cancer with initial diagnosis and/or first course treatment at St. Luke's Hospital and 75 were cases considered non-analytic or cases of recurrent/persistent disease.

Based on 1,301 analytic primary cancers accessioned into the Cancer Registry's database, the top primary sites represent breast, lung, colorectal, corpus uterus, melanoma skin and prostate. These primary sites represent 64 percent of the overall total number of analytic cases that were treated at St. Luke's Hospital.

Monitoring Patient Outcomes: Follow-up

Lifetime follow-up is performed on every cancer patient that is diagnosed and treated at St. Luke's Hospital. Follow-up information provides documentation of residual disease or its spread, recurrences, subsequent therapy and vital status of the patient. Follow-up information is comprehensive and must be maintained to produce survival data. Outcomes are compared with national, regional and state statistics.

In 2016, the Cancer Registry consistently met and exceeded the requirements of the Commission on Cancer for following cancer patients.

Survivorship Care Plans

Another component of compliance with the Commission on Cancer's program requirements is implementation of a process to disseminate a comprehensive care summary and follow-up plan to patients with cancer who are completing cancer treatment. Survivorship Care Plans have been developed to address this need. The Survivorship Care Plan would help cancer survivors who may otherwise get "lost" in the transitions from the care they received during treatment through the phases of their life or stages of their disease course.

The Center for Cancer Care coordinates the completion of the survivorship care plans to patients who are completing their first course of active therapy.

Rapid Quality Reporting System (RQRS)

The Commission on Cancer has developed RQRS to facilitate quality improvement by encouraging evidence-based care for select quality measures. RQRS enables accredited cancer programs to report data on patients concurrently, receive notifications of treatment expectations and presents year-to-date concordance rates for each measure as compared to the state, other hospital groups and hospitals at the national level.

Promotion of evidence-based cancer care is of key importance to improving the quality of care and patient outcomes. St. Luke's Hospital Cancer Registry is in compliance with participation in this very important program of the Commission on Cancer.

St. Luke's Offers Advanced 3D Breast Biopsy To Patients

The Hologic Affirm™ breast biopsy guidance system provides patients 3D biopsies in an upright or reclined position.

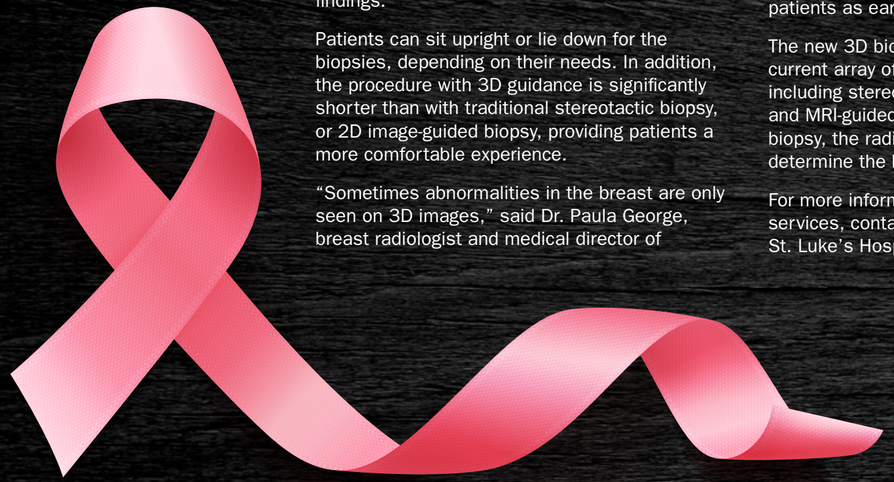
St. Luke's Hospital now offers 3D breast biopsy to patients for diagnosing breast cancer. The Hologic Affirm™ breast biopsy guidance system – the first in west St. Louis County – provides 2D and 3D image-guided biopsies for use as a follow-up to mammograms with suspicious findings.

Patients can sit upright or lie down for the biopsies, depending on their needs. In addition, the procedure with 3D guidance is significantly shorter than with traditional stereotactic biopsy, or 2D image-guided biopsy, providing patients a more comfortable experience.

"Sometimes abnormalities in the breast are only seen on 3D images," said Dr. Paula George, breast radiologist and medical director of mammography for St. Luke's Women's Center and St. Luke's CDI-Midwest Breast Care. "And with this new technology, we are able to perform breast biopsies on a wider spectrum of patients with suspicious lesions, including those whose lesions are not accessible to traditional 2D biopsy and patients with an inability to lie prone. We are pleased to begin offering this leading edge technology during National Breast Cancer Awareness Month to help detect breast cancer in patients as early as possible."

The new 3D biopsy option adds to St. Luke's current array of breast biopsy techniques, including stereotactic-guided, ultrasound-guided and MRI-guided breast biopsies. For each breast biopsy, the radiologist will work with the patient to determine the best imaging technique to utilize.

For more information on 3D breast biopsy services, contact St. Luke's Women's Center at St. Luke's Hospital at 314-205-6267.



New Prone Breastboard Offers Increased Benefits to Patients

In the field of radiation oncology, we target tumors with radiation using computers and linear accelerators. In addition to targeting tumors in patients with cancer, a large part of our job is to avoid treatment of critical tissues and organs. Patients with left-sided breast cancers have traditionally been treated while lying on their back. This positioning can cause the breast to fall to the side of the body and treat a small portion of the lung and heart. Treating the lung and heart can lead to a low-risk of long term side effects. While uncommon, they can be severe when they occur.

Many techniques can be used to decrease the risk of these side effects. One such technique is treating patients while they lie on their stomach in the prone position. The Center for Cancer Care is utilizing the New Horizon™ Prone Breastboard, which allows the breast tissue to fall away from the chest wall. We can treat patients with early stage breast cancer in this fashion and minimize the dose to the heart and lung. This ensures patients live a long and full life without long-term side effects from their breast cancer treatment. Other benefits include:

- Patient -friendly by offering more accessible, comfortable and safer design
- Options for many prone breast set-up challenges, allowing customized patient set-ups and meeting clinical needs for treatment
- Easy verification of the positioning of the patient
- Records and reproduces each patient's settings

Our mission is to effectively treat patients with cancer to ensure they live a full and rich life. To accomplish this, we will continue to evolve our treatment techniques and algorithms to increase the effectiveness of therapy while decreasing side effects.

Patients Can Benefit from New PET/CT Imaging With Biograph mCT

St. Luke's now provides molecular imaging with Biograph mCT 64 slice PET/CT scanner at our new, state-of-the-art PET/CT Department at Desloge Outpatient Center – Building A. This technology offers increased image quality with high resolution and fast scan times allowing for advanced diagnostic confidence and better patient care.

Biograph mCT:

- Features advanced applications for oncology (and cardiology and neurology)
- Provides fast exams, including the ability to perform whole-body PET as little as 10 minutes*
- Offers an improved patient experience through increased scan speeds, while using as little exposure as possible
- New technology allows a much lower dose to the patient
- Delivers increased image quality with less noise for greater image clarity
- Accommodates patients up to 500 lb with a large 78 cm bore and a wide table

** For normal BMI. Other patients will experience significantly faster scan speeds than previously possible.*

Using MRI Technology To Detect Rectal Cancers More Effectively

An accurate diagnosis of rectal cancer is critical for attaining the best possible outcomes for patients and minimizing the debilitating side effects of treatment.

At St. Luke's Hospital, Magnetic Resonance Imaging (MRI) as an option for detecting and locating cancer. An MRI creates a detailed cross-sectional image of the body's internal organs, and shows how much of an organ, and/or nearby tissues, have been affected by disease.

This allows more accurate staging of the primary tumor as well as delineation of regional extension. This information is crucial in determining the type of treatment for the patient.

Cancer Research: Today's Questions...Tomorrow's Answers

Research is the foundation for progress in cancer care. Our cancer clinical research team strives to understand the complexities of various forms of cancer in the effort to help develop new, viable treatment options. Promising new therapies or diagnostic approaches must be validated in real world conditions before they can be approved for general use.

Patients who participate in clinical trials are among the first to receive novel treatments before they become commonly available. As part of the process, patients are carefully screened for eligibility, including type of disease and its stage, as well as the participant's age and general health. Accepted eligibility criteria help assure trial results accurately answer the research question and identify individuals who will benefit from the approach studied. In addition, the clinical research team follows enrolled patients for up to 20 years after their treatment is complete. This allows researchers to assess both the short and long-term risks and benefits of the new therapy.

St. Luke's is proud to partner with well-respected local and national clinical trial groups including the National Cancer Institute (NCI). St. Luke's broad-based program of clinical research includes about 20 trials at any given time. We are an active participant in the Alliance for Clinical Trials in Oncology, through our affiliation with Washington University School of Medicine. We are able to access trials from the Eastern Cooperative Oncology Group, the Southwest Oncology Group and NRG Oncology (formerly known as the National Surgical Adjuvant Breast and Bowel Project) through our participation in the NCI Clinical Trial Support Unit. Currently, our medical oncologists, breast surgeons and radiation oncologists are active participants in this effort.

In addition to overseeing patients on protocol, we are responsible for complying with federal guidelines regarding patient safety, efficacy and privacy. This regulatory function involves the oversight of the St. Luke's Institutional Review Board during the initial protocol review, annual review and amendment process.

The St. Luke's oncology program is accredited by the American College of Surgeons Commission on Cancer and was reviewed by the Commission on Cancer in 2016. Whether treated in house or referred to another institution, our investigators are committed to helping our patients achieve the best possible research experience.

"It is our hope that this team-based approach will accelerate the pace of medical progress against cancer," says Donald Busiek, MD, who serves as St. Luke's Oncology Principal Investigator responsible for overseeing the oncology research program. "Each patient's contribution will lead to better outcomes in the future."

Information regarding available clinical trials (including eligibility and treatment) can be found by calling the Oncology Research Office at 314-205-6936. Discuss participating in a clinical trial with your physician and learn as much as you can about your options. There will always be unknowns, but your St. Luke's clinical research team will be here for you every step of the way.

The Life & Hope Fund of St. Luke's Hospital Supports Genetic Testing For Community

The Life & Hope Fund of St. Luke's Hospital was established to help patients with cancer or malignant blood disorders have access to medically necessary care and services that support their treatment and recovery. Contributions to the Life & Hope Fund have an immediate impact in patients' lives.

The Life & Hope Fund assists in covering genetic counseling for individuals in the community who may be at risk for cancer. Genetic counseling provides assessment of a patient's family medical history in order to assess the chance of hereditary-related diseases such as cancer. Program participants receive education about the risk of disease inheritance and information regarding testing, care management, prevention and research.

Genetic counselors will:

- Review family history and explain risks for cancer
- Discuss candidacy for gene testing and describe the benefits and limitations of testing
- Facilitate appropriate testing
- Interpret results and explain what they mean
- Discuss how to manage your cancer risk and provide recommendations for you and your doctor for follow-up care

For information regarding giving opportunities and events to support the Life & Hope Fund, call the Office of Development at 314-576-2345.

For more information about genetic counseling, call the referral coordinator at 314-205-6100, ext. 5618.

St. Luke's Low Dose CT Lung Cancer Screening Program

St. Luke's Lung Cancer Screening Program continues to be listed as a Center of Excellence by the Lung Cancer Alliance, the leading organization dedicated to saving lives and advancing research by empowering those living with and at risk for lung cancer. In 2017, we were able to administer 517 screenings with findings of three confirmed lung cancer cases.

Lung cancer remains the leading cause of cancer death for both men and women in the United States. Our comprehensive lung cancer program focuses on all aspects of lung cancer including prevention, screening, early diagnosis, staging and individualized treatment.

Newer technologies at St. Luke's Hospital have also allowed us to diagnose patients at much earlier stages. Electromagnetic navigation bronchoscopy allows us to create 3-D virtual maps of the lungs and sample smaller nodules. The same technology also allows us to help the radiation oncologist plan radiation treatment with the placement of markers around smaller tumors.

As we move forward with prevention, early diagnosis and less invasive techniques for staging, our mulitdisiciplinary oncology team has continued to help develop focused and more individualized treatment plans that continue to evolve with our understanding of lung cancer genetics.

As a recognized exam that can save lives, Medicare and some insurances continue to fully reimburse under the preventative benefits for the cost of this yearly exam as long as the following criteria are met. Other insurance companies do have cost-sharing for this exam.

Who should consider having the screening?

- Current or former smokers age 55 to 77
- Cigarette smoking history of 30 pack/year (meaning one pack a day for 30 years; 2 packs a day for 15 years, etc.)
- If a former smoker, smoked cigarettes within past 15 years
- Has seen physician and discussed the pros/cons of this yearly exam and has no signs or symptoms of lung cancer present

To learn more about the lung cancer screening program at St. Luke's Hospital, please contact our lung navigator at 314-205-6550 or visit stlukes-stl.com.

2017 St. Luke's Hospital Community Screenings and Prevention Programs

Screenings

The cancer committee provides at least one cancer screening program targeted toward decreasing the number of patients with late-stage disease. The screening program is based on community needs and is consistent with evidence-based national guidelines and interventions. All positive findings require a follow-up phone call or written letter to ensure the patient is informed and to provide assistance with any physician referral or service needed for care.

Program Total Participants

Skin Cancer Screening	116
Lung Cancer Screening (numbers through Sept.)	378
Breast Cancer Screening for the uninsured or underinsured (numbers through Oct.)	84

Education and Prevention

The cancer committee provides at least one cancer prevention program targeted to meet the needs of the community and designed to reduce the incidence of a specific cancer. The education/prevention programs are free or low-cost opportunities for people to talk to physicians and healthcare professionals about cancer prevention, screenings and treatments.

Program Total Participants

Girl Talk	140
Day of Dance	1000
Ribbons and Bows	130
Express Your Emojis	100
Prego Expo	400
All Decked Out	300
Optimal Aging	30

Patient and Family Support Services Total Participants

Cancer Exercise Program	14
Yoga for Those by Cancer	400
Skin Analyzer/Sun Protection/ Skin Cancer Prevention and Awareness	347
Nutrition and Cancer Prevention	42
Healthy Weigh (weight loss program)	68
Supermarket Tours and Cooking Classes	20
Stress Management	203
Smoking Cessation Counseling	
inpatients	55
outpatients	5
Lung Cancer Prevention	66

Cancer Patient Appreciates The Normal Life Thanks To New Clinical Study

Joan knows what it means to have children. And grandchildren. And great-grandchildren. Her four children have produced 10 grandchildren. And those grandchildren have given her 17 great-grandchildren. When she's not going to their school activities and having family time with them, she likes to go camping, tend to her flower beds and read novels.

She also knows how it feels to be normal. So when she started to feel "off", she knew something wasn't right.

"The only thing I noticed is that I could not walk straight, so I knew something wasn't right," says Joan. "I went to see my primary care doctor, Dr. David McCrary."

"When I went to see him, I told him something was not right," says Joan. "He sent me to get tests right away because he knew I didn't have any other medical problems. Dr. McCrary treated me exceptionally well. He didn't let me go home."

"I remember seeing Joan on the day of her diagnosis," says Dr. McCrary. "She came with her family to see me with facial numbness. She is normally very healthy, so I knew something was likely seriously wrong. The rest of her amazing story and road to recovery can be attributed to our amazing staff at St. Luke's hospital, and the graciousness and providence of God."

When the results came back, Joan could not believe what she was hearing.

"The emergency room doctor came in and told me I had a malignant tumor on the brain and that it was secondary," says Joan. "The primary source was somewhere else. They then found stage-four lung cancer on my lungs. I was shocked."

Joan underwent surgery to remove the brain tumor followed by radiation treatments and chemotherapy and was referred to her medical oncologist.

Her medical oncologistrecognized Joan would be a proper candidate for a new clinical study and asked her if she would like to participate. Joan agreed and immediately saw the benefits.

"This drug helps me," says Joan. "It has enabled me to carry on with my life, pretty much as it was prior to my diagnosis. I am now able to take myself to the grocery store, do my yard work and maintain my house. I also feel more independent and do things for myself rather than have someone do everything for me."

"Prior to taking this drug, I had fluid on my lungs, shortness of breath, difficulty walking and weakness in my legs," says Joan. "Within a week to 10 days, my shortness of breath was gone. They said a couple tumors on my liver have completely disappeared. There are no side effects."

Joan is grateful for her doctors and her new treatment plan. She is also happy her life is as close to normal as possible.

"I am thankful for each day that I am able to live a normal life," says Joan. "From the beginning, everyone has been wonderful. And I would certainly recommend St. Luke's and their doctors."

ONCOLOGY STEERING COMMITTEE 2017

Physician Members

Albert Van Amburg, MD, Chair
Elliot Abbey, MD
John Buettner, MD
Donald Busiek, MD
Jason Edwards, MD
Mari Fahrner, MD
Guillermo Gonzalez-Araiza, MD
Labib Haddad, MD
Robert Kanterman, MD
David Krajcovic, MD
David Kuperman, MD
Andrew Labelle, MD
Ann Leathersich, MD
Carl Mazzola, MD
Jeffrey Melnick, MD
Jill Oberle, MD
Bobby Shah, MD
Nanette Wendel, MD

Ancillary Members

Barbara Beckermann, LCSW
Sue Bunch, RN
Millie Cavalier, PharmD
Rod Henning, RN
Christine Hinden, RN
Julia Kang, CTR
Becky Lasater, LCSW
Judith Link, RN
Mary Pfenning, RN
Valerie Prashad, PharmD
Lori Schweppe, RN

Invited Guests

Nida Ali, MD
David Bryan, MD
Lola Brand, RN
Traci Burcham
Mari Chollet
Cordie Coordes, MD
Ann DiCarlo, RN
Gale Dollar
Neil Ettinger, MD
Mike Fox
Gregory Genova, MD
Paula George, MD
Jayme Hart
Lisa Heisserer
Jan Hess
John Hoff, MD
Farzana Hoque, MD
Hameem Kawsar, MD
Peggy Kurlandski, RN
Patricia Limpert, MD
Alan Lyss, MD
Tammy Maher, NP
John Meyer, MD
Daniel Potts, MD
Janet Pulliam
Melissa Rooney, MD
Thomas Scully, MD
Jeff Skjerseth
Renata Sledge, MSW, LCSW
Shanna Straatmann, RD
Heather Thompson, RN
Dinah Witherspoon
Katie Wrenn
Francisco Xynos, MD
Andrew Youkilis, MD

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