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Dealing with cancer is obviously an ordeal for patients and their families. It also can be emotionally trying for those of us who share in our patients’ triumphs and setbacks. Health care professionals can choose where to spend their careers. I firmly believe that our staff, which has elected to be in this emotionally charged environment, are among the most compassionate and selfless individuals the health system has to offer. I am immensely proud of them and their work to better the lives of our patients.

This is my third decade as a hematologist and medical oncologist. I have never seen a more exciting time to be in the discipline. After years of experimentation with conventional chemotherapy, new concepts and therapies have emerged over the past few years that are now gaining traction in day-to-day treatments. There remains a substantial role for what I call “conventional” chemotherapy. Historically, these drugs were given intravenously for cancer and had a rather nonspecific killing effect on malignant cells. In addition, two relatively new concepts of treatment have become particularly relevant over the past few years.

The first is targeted therapies, which are manufactured cancer treatments specifically aimed at overcoming unique molecular abnormalities of the cancer cell applicable to that drug. The second is immunotherapy, a series of medications meant to harness the body’s own immune system to fight cancer cells and reduce tumor burden. I am proud to say that the St. Francis Cancer Center has been heavily involved in previous and ongoing research to evaluate these new classes of drugs. Thanks to our robust portfolio of research trials, we have a relationship with the Guardian Research Network with our collaborators at the Gibbs Cancer Center in Spartanburg. We anticipate that this relationship, as part of a nationwide consortium, will attract more research opportunities and provide added molecular testing capabilities for our patients.

As we continue to expand programatically, we also expect to see some new construction in the New Year. Our radiation unit (linear accelerator) has exceeded its capacity. We are in the process of submitting plans to the state for the construction of another pod to house a second radiation unit adjacent to the original. Plus, funding is approved for the permanent installation of a PET scanner to replace the mobile unit we currently use. This will provide more opportunities for scanning and minimize wait times in scheduling. Finally, based on a sizable grant and the generous donations of our community, we will construct a special unit on the oncology floor at St. Francis Downtown. This unit will be specifically configured for our Adolescent and Young Adult (AYA) population, which has unique needs during cancer care. By design, this unit provides an environment to meet those needs optimally.

Since our mindset at the St. Francis Cancer Center is to be both high tech and high touch, I will share some of our less technologically driven accomplishments. In September 2018, we presented data at the American Society of Clinical Oncology (ASCO) Quality Care Symposium. This presentation dealt specifically on the rising cost of chemotherapy and the significant out-of-pocket expense associated with cancer care. Many individuals find that the financial burden of treatment results in suboptimal adherence to treatment and worse outcomes. We committed to either connect patients with grant money or ask for free drug for patients who had no or inadequate insurance. We retrieved $3.5 million in either copay assistance or free drugs. This helped minimize the financial burden for our patients and provided needed medications that they might not otherwise have been able to afford.

Finally, our Palliative Care service, which has played a significant role in patient symptom management, has seen its patient care numbers increase substantially. Over the past year, this service had more than 700 patient visits and proved invaluable to our patients and their physician providers.

We, as a staff, hope you find this annual report enlightening. It is our honor and privilege to serve the residents of Greenville and the Upstate.

Sincerely,

Robert D. Siegel, MD, FACP
Medical Director, St. Francis Cancer Center
CANCER REGISTRY

The Cancer Registry at Bon Secours St. Francis is the reporting arm of the cancer program, required to submit data annually to the National Cancer Data Base and to the South Carolina Central Cancer Registry, and at least quarterly to the Rapid Quality Reporting System of the NCDB for breast and colon cancer cases. The registry compiles all data about a patient’s cancer from diagnosis through treatment and codes this information into an abstract data base according to rules set by various standard-setting organizations.

Once a patient is deemed analytic for the facility through a process of case finding, the case is abstracted. Information includes patient demographics, cancer history, diagnosis, tumor histology, extent of disease, and all treatment given during the first course of therapy. Patients are followed and the survival and cancer status updated annually with recurrence and metastases as long as they are alive or until they reach 100 years of age. The information in the Cancer Registry database may be used by physicians, administrators and clinical services to analyze the cancer experience and make changes to services or screenings offered. Various audits review the accuracy of data submitted and adherence to National Comprehensive Cancer Network Guidelines for treatment. With reference year of 2000 for the registry, the database for Bon Secours St. Francis contains 16,056 total cases with a follow-up rate of 80.81 percent since the reference year and 90.84 percent for cases diagnosed in the last five years.

Registry staff coordinate and attend at multidisciplinary primary site-based cancer conferences where patient cases are presented and discussed by surgeons, oncologists and other physicians involved in the diagnosis, decision-making and treatment of the patient. Bon Secours St. Francis currently runs 15 conferences per month with participation from providers at St. Francis Cancer Center, St. Francis Downtown and St. Francis Eastside.
Standard 4.6 Monitoring Compliance of Evidence-Based Guidelines

Every year, a physician member of the Bon Secours St. Francis Cancer Care Committee performs a study assessing whether patients within the program are evaluated and treated according to evidence-based national treatment guidelines. The study must determine that the diagnostic evaluation is adequate and the treatment plan is concordant with a recognized guideline.

1. Source (first course therapy is concordant with evidence-based national treatment guidelines and prognostic indicators): Review of Stage 4 lung non-squamous lung cancer cases for years 2016 and 2017 for EGFR & ALK alterations studies.

2. A determination that EGFR and ALK alteration studies are completed in concordant with an Evidence-Based National Treatment Guidelines and/or prognostic indicators: NCCN (version 5.2018) Non-Small Cell Lung Cancer.


4. Assessment: The pathology and treatment notes were reviewed for all 66 cases. Fifty-eight cases had EGFR and ALK alteration studies completed. Eight cases did not have EGFR and ALK alteration studies done. Reasons for no testing were
   - Four had insufficient material for testing and patients declined repeat biopsy.
   - Two refused workup and treatment
   - One was not a chemo candidate, therefore testing not ordered
   - One expired days after diagnosis

The review also found that one case had insufficient material for EGFR testing but was ALK negative and one had insufficient material for ALK testing but was EGFR neg.

Of the 58 cases that had testing, six did not receive any treatment:
   - Three had treatment planned but comorbidities cancelled treatment
   - Two expired before treatment could be started
   - One declined treatment

Overall, for year 2016 testing was done 96 percent of the time and for 2017 testing was done 97 percent of the time in accordance with NCCN guidelines. No recommendations are warranted with the high rate of compliance.
Top 10 Cancers*

- Breast 22%
- Lung 12%
- Urinary systems 11%
- Prostate 9%
- Colon 7%
- Lymphoma 5%
- GYN Cancer 5%
- Hematological 4%
- Pancreas 3%
- All Other 22%
Re-accredited in 2018. The National Accreditation Program for Breast Centers holds these centers to the highest standards of care for patients with diseases of the breast. [website](www.facs.org/quality-programs/napbc)

Considered the “gold standard” in medical imaging, the St. Francis Cancer Center received accreditation in oncology from the American College of Radiation Oncology in 2017. [website](www.acraccreditation.org)

Commission on Cancer accreditation “recognizes cancer care programs for their commitment to providing comprehensive, high-quality, and multidisciplinary patient-centered care.” Reaccredited in 2018 [website](www.facs.org/quality-programs/cancer/coc)

“The Quality Cancer Care Recognizing Excellence certification process creates a culture of excellence and self-examination that helps practices deliver the best care to their patients. By becoming QOPI-certified, a practice demonstrates its commitment to quality to patients, payers and the medical community.” Reaccredited in 2018 [website](practice.asco.org/quality-improvement/quality-programs/qopi-certification-program)

The College of American Pathologists (CAP) Laboratory Accreditation Program accredits the entire spectrum of laboratory test disciplines with the most scientifically rigorous customized checklist requirements.

The CAP’s peer-based inspector model provides a unique balance of regulatory and educational coaching supported by the most respected worldwide pathology organization. [website](www.cap.org/about-the-cap)

AABB accreditation focuses on the quality and safety of collecting, processing, testing, distributing, and administering blood and blood products. [website](www.aabb.org/sa/Pages/default.aspx)

Cellular therapy accreditation is a rigorous, voluntary process that demonstrates an organization’s commitment to providing patients with the highest quality care. The St. Francis Cancer Center has held FACT accreditation for autologous hematopoietic stem cell transplant since 2011* and currently is working towards allogeneic accreditation. [website](www.factwebsite.org/Inner.aspx?id=351)

HEMATOLOGISTS & ONCOLOGISTS

ROBERT SIEGEL, MD, FACP

Medical School
Columbia University College of Physicians and Surgeons - New York, N.Y.

Internship and Residency
Barnes Hospital, Washington University School of Medicine - St. Louis, Mo.

Fellowships
Medical Oncology: Dana-Farber Cancer Institute
Hematology: Brigham and Women’s Hospital Harvard Medical School - Boston, Mass.

Board Certification
American Board of Internal Medicine, Hematology and Medical Oncology

Professional Memberships
American Association of Cancer Research
American College of Physicians (Fellow)
American Medical Association
American Society of Clinical Oncology
American Society of Hematology

STEPHEN DYAR, MD

Medical School
Medical University of South Carolina - Charleston

Internship and Residency
Carolinas Medical Center - Charlotte, N.C.

Fellowship
Mayo Clinic - Jacksonville, Fla.

Board Certification
American Board of Internal Medicine, Hematology and Oncology

HOWLAND CROSSWELL, MD

Medical School
Medical University of South Carolina - Charleston

Internship and Residency
University of Louisville (Ky.) Kosair Children’s Hospital

Fellowship
Pediatric Hematology/Oncology: Emory University, Children’s Healthcare of Atlanta

Board Certification
American Board of Pediatrics, Pediatric Hematology/Oncology

Specialties
Adolescent and Young Adult Oncology, Personalized Medicine, Rare Leukemias, Solid Tumors, Survivorship, Thrombosis

SHARIF KHAN, MD

Medical School
Baqai Medical College - Karachi, Pakistan

Internship and Residency
Coney Island Hospital - New York, N.Y.

Fellowships
Hematology: Coney Island Hospital - New York, N.Y.
Bone Marrow Transplantation: Vancouver General Hospital - British Columbia

Board Certification
American Board of Internal Medicine

Specialty
Bone Marrow Transplantation (Blood and Marrow Transplantation)

FAHD QUDDUS, MD

Medical School
Allama Iqbal Medical College - Lahore, Pakistan

Internship and Residency
Englewood (N.J.) Hospital and Medical Center, Mount Sinai School of Medicine

Fellowship
University of Nebraska Medical Center – Omaha

Board Certification
American Board of Internal Medicine (Hematology and Oncology)

ALEX YANG, MD

Medical School
China Medical University - Shenyang

Residency
Georgetown University Hospital Medical Center Program – Washington, D.C.

Fellowships
Clinical: Georgetown University Hospital, Lombardi Cancer Center - Washington, D.C.
Postdoctoral: National Cancer Institute – Bethesda, Md.
Research: National Cancer Institute – Bethesda, Md.

Board Certification
American Board of Internal Medicine
J. ASIA GRABSKA, MD

Medical School
St. George's University - Grenada, West Indies

Residency
University of Connecticut

Fellowship
Hematology/Oncology: Moffit Cancer Center - Tampa, Fla.

Specialties
Oncology and Hematology

RADIATION ONCOLOGISTS

DANIEL B. FRIED, MD, PHD

Medical School
University of North Carolina - Chapel Hill

Residency
University of North Carolina - Chapel Hill

Board Certification
The American Board of Radiology (Radiation Oncology)

JEREMY KILBURN, MD

Medical School
East Carolina University Brody School of Medicine – Greenville, N.C.

Residency
Wake Forest (N.C.) Baptist Health

Fellowship
Carolinbas Medical Center – Charlotte, N.C.

Board Certification
The American Board of Radiology (Radiation Oncology)

GYNECOLOGIC ONCOLOGISTS

DAVID GRIFFIN, MD, PHD

Medical and Postgraduate School
Vanderbilt University School of Medicine - Nashville, Tenn.

Internship and Residency
East Carolina University School of Medicine, Pitt County Memorial Hospital - Greenville, N.C.

Fellowship
University of South Florida - Tampa Bay

Board Certification
American Board of Obstetrics and Gynecology

Specialty
Gynecologic Oncology

CARLTON SCHWAB, MD

Medical Education
Louisiana State University Health Sciences Center – New Orleans

Residency
Medical University of South Carolina - Charleston

Fellowship
Yale School of Medicine – New Haven, Conn.
RESEARCH

INNOVATIVE CLINICAL TRIALS: PERSONALIZED AND COMPREHENSIVE

This year presented a remarkable achievement with 14 percent of all cancer patients enrolling in a clinical trial. Adult oncology programs typically enroll 2 percent to 3 percent. Drs. Stephen Dyar and Sharif Khan launched a nationally recognized radiopharmaceutical program for neuroendocrine tumors and acute myeloid leukemia. Because of this research involvement with radiopharmaceuticals, the St Francis Cancer Center was the first such center in the Carolinas to offer Lutathera when it became commercially available in January 2018. The St Francis Cancer Center is expanding its radiopharmaceutical therapies to investigational radioisotopes in the treatment of advanced solid tumors with Alex Yang, MD serving as the principle investigator. Patients from across the East Coast travel to Bon Secours St. Francis to receive these new investigational therapies.

Radiopharmaceuticals are made by attaching an antibody (that targets a specific cancer cell) to a radiation molecule. The radiation goes directly to the cancer cell so that the healthy tissues have minimal injury. These services have moved from St. Francis Downtown to the cancer center enabling patients to receive their radiopharmaceutical therapies under the same roof where they receive other oncology/hematology-related outpatient services.

Efforts continue in the field of precision medicine to offer patients the option to find specific genetic drivers and variations that can be matched to specific investigational therapies.

This year, our patients contributed to the approval of several immunotherapies that empower the body’s immune system to fight cancer cells. Principal Investigators Drs. Alex Yang, Robert Siegel and Stephen Dyar, are combining different types of immunotherapy and immunotherapy with traditional chemotherapy. The St. Francis Cancer Center now offers Immunotherapy through FDA approvals or clinical trials for most types of cancer, including, but not limited to, cancers of the lung, bladder, head and neck, and melanoma.

More than 200 Bon Secours St. Francis patients and their family members have volunteered to participate on a screening trial to detect cancer in the blood. The tests will determine where the cancer is and potentially how much is in the body. The sponsoring company, GRAIL, developed the test to “detect cancer early, when it can be cured.”

The center’s National Cancer Institute program continues to flourish through our collaborative NCORP (NCI Community Oncology Research Program) relationship. More than 50 clinical trials have been activated through this federally sponsored research initiative, providing the community access to academically driven drug development and clinical trial design. Dr. Yang represents our NCORP community on the designated Gastrointestinal Steering Committee. In this role, he has contributed to the pioneering efforts of immunotherapy including a newly designed early stage esophageal cancer trial that may lead to a decreased chance of cancer recurrence.

Our Adolescent and Young Adult (AYA) program, under the direction of Howland Crosswell, MD is the only AYA program in the Southeast. With the addition of a new AYA research coordinator, Amy Adams, the program has been able to expand AYA-focused trials and grow the program through our SCOR (Southeast Clinical Oncology Research Consortium)/NCORP relationship. Historically, study participation by this population has been significantly lower than other older adult and pediatric populations. Dr. Crosswell is the chair of the AYA SCOR Committee which works to break down barriers to AYA enrollment on clinical trials, encourage more collaboration between pediatric and oncology SCOR research sites, and increase enrollment of AYA patients onto clinical trials. Our studies focus on leading-edge treatment and on the challenges this population faces after treatment such as labor force participation, occupation, educational attainment, and financial toxicities.

Drs. Sharif Khan and Fahd Quddus lead the hematological malignancy clinical trial program. They continue to contribute to advancing the care of bone marrow transplant patients and those with complex blood cancers. Some of their work this year has included broader immunotherapy utilization and BiTE™ technology expansion.
PSYCHOSOCIAL SERVICES

Oncology patients are unlike most patient populations. The care team at the St. Francis Cancer Center dedicates its time and talents to ensure treatment of the whole person, not just the disease. This year, we were fortunate to add a licensed clinical social worker to our program to enhance further the high quality care we provide.

Our Approach
We view each patient as a person, not a diagnosis or disease, providing “care of the whole person.” We see each individual as a human being with biological, psychological, social and spiritual strengths and characteristics. Our staff works together to maintain each patient’s dignity and integrity offering:

- Consultation to assess each patient’s specific needs
- Group psychotherapy
- Individual psychotherapy
- Marriage and family therapy
- Open support groups
- Resource assistance

Whether it is emotional support or connection to a community resource, we address the concerns of our patients and their families.

Patient-Centered Assessment
Upon diagnosis and throughout treatment, patients complete a brief assessment at each appointment, which helps our staff identify potential spiritual, psychological and social issues. This information enables us to provide customized care to promote the well-being of each patient.

Support Groups
Support groups are an important way to help patients cope better and adjust to the challenges patients encounter throughout their cancer diagnosis and treatment. Group sessions give patients an opportunity to share common thoughts, feelings and experiences about cancer. These meetings also provide an opportunity for participants to share information about helpful community resources.

Psychotherapy Groups
Our clinical support staff offers a weekly psychotherapy group open to patients who are living with cancer, cancer survivors and their family members.

Individual Psychotherapy
Our clinical psychologist offers one-to-one, couple, or family-centered psychotherapy sessions. Therapists use research-backed treatment models that look at the patient’s thoughts, feelings and stressors. Other methods tailored for specific situations, such as recall healing and clinical hypnosis, also are available.

Support staff help patients cope with a diagnosis, deal with anger and depression, and manage stress and anxiety. Psychological testing assists with emotional and cognitive symptom diagnosis and recommendations for further treatment. Our evidence-based approach is customized to address patient needs, provide support, and strengthen the relationships that will sustain patients through diagnosis and treatment. For those unable to travel to the St. Francis Cancer Center for these services, referrals can be made to a therapist closer to home.

COMMUNITY-BASED SUPPORT
Clinical social work services are a critical aspect of the treatments and services we offer our patients, blending our services with those in the community.

Our licensed social worker meets with patients during appointments to assess their needs. We work closely with local agencies to ensure each patient receives support whether at home or at the cancer center. The social worker is available to provide rapid support to patients experiencing emotional distress during a visit with a provider, and can connect patients and their families with outside services to help with utility bills, medication costs, and transportation needs.
In 2018, the Adolescent & Young Adult Cancer Care and Blood Disorders Program at Bon Secours St. Francis continued in its mission to be of “good help” to this unique patient population. The team expanded to include critical components that address unmet needs in cancer patients aged 15-39 years, who historically have been overlooked in terms of developmentally appropriate psychosocial support and access to adequate clinical research studies. The themes of 2018 are collaboration and teamwork across multiple disciplines to support our patients and their families.

The AYA Team is led by Director Howland E. Crosswell, MD and the AYA coordinator and nurse, Kaitlin N. Bomar, RN, BS who has been with the program since it began. The AYA coordinator position was made possible through gracious support from Clement’s Kindness in 2015, that recognized the special needs of adolescents and young adults and the special role the Bon Secours St. Francis AYA program plays to meet our patients’ needs. Kaitlin has more than ten years of oncology nursing experience combined in pediatrics and adolescent/young adults. She collaborates with the multidisciplinary team caring for patients aged 15-39 years within the Bon Secours St. Francis Oncology program. Caring for AYA patients and their family members requires frequent, consistent and thorough communication. The AYA coordinator must establish trust and rapport to aid in patient’s compliance, education and management, and among others in the team, is vital to implementing appropriate family-oriented, patient-centered care. To foster these efforts, she recently completed AYA-tailored training earning a postgraduate certificate in Teenage/Young Adult Cancer Care from Coventry University.

The creation of the program coordinator position has been critical in continuing to move AYA care forward with programmatic endeavors to serve AYA patients better during and after a cancer diagnosis. For example, in her role as program coordinator, Kaitlin helped develop relationships and programs through Bon Secours St. Francis (such as AYA Activities Group, Flashes of Hope, Let There Be Mom, Kate’s Crates and First Descents, along with other national and local resources/support services). The program coordinator helped develop and implement the outpatient AYA Activity Center and designated waiting room in the cancer center. She was integral in the developmental collaboration of the AYA Life Specialist position, considered the first of its kind in the United States. With the support of the St. Francis Foundation, Teen Cancer America and First Citizens Bank, the team has developed a dedicated inpatient AYA unit on the medical oncology floor at St. Francis Downtown, with construction planned to begin in 2019. The AYA program coordinator also has supported this project, organizing patient and caregiver advisory board meetings assure that the patient’s voice is heard during the developmental phase.

AYA CANCER CARE IN THE NATIONAL SCENE

Articles in two publications highlight the work of the AYA Team and the St. Francis Cancer Center’s efforts to support and impact patient outcomes.

Presented in abstract form in the Journal of Clinical Oncology, the article “Targeting tumors and financial toxicity in AYAs: Exceptional response to dual immunotherapy in an uninsured young adult with soft tissue sarcoma,” highlights the comprehensive patient assistance program that enabled a young adult with metastatic sarcoma to gain access to life-saving immunotherapy, with remarkable results. The AYA population utilized the free drug recovery portion disproportionately more than other patient groups possibly because more of these patients are without insurance compared to their adult counterparts. Because of the comprehensive financial assistance program, a patient was able to obtain access to dual immunotherapy for metastatic sarcoma, and has had a complete response lasting more than 14 months.

Figure 1 Computed tomography prior to and after dual checkpoint inhibition

![Image of CT scan](image)

The second publication highlights the malignant hematology program and AYA Cancer Care. Collaborating with Dr. Khan and Dr. Quddus, Dr. Crosswell shared the Bon Secours St. Francis AYA experience at the American Society of Hematology conference in San Diego December 2018 in his presentation: The Adolescent and Young Adult Leukemia and Lymphoma Care Delivery in the Community: Metrics and Outcomes of a Community-Based, Immersive AYA Program.
Total = 107

- 20.56% Hodgkin Lymphoma
- 14.02% AML
- 10.28% Non Hodgkin Lymphoma
- 8.41% ALL
- 7.48% Bone Sarcoma
- 6.54% Brain Tumor
- 9.35% Soft Tissue Sarcoma
- 3.74% GI Cancer
- 4.67% Myelodysplastic Syndrome
- 5.61% Germ Cell Tumor
- 1.87% GU Cancer
- 0.93% Melanoma
- 2.80% Thyroid CA
- 1.87% Chronic Leukemia
- 1.87% Other
COMMUNITY EVENTS SPONSORSHIP/PARTICIPATION

American Cancer Society:
- Strides Against Breast Cancer
- Moonlight and Magnolias
- Couture for a Cause

Camp Kesem: Seed funding

Cancer Society of Greenville County:
- Hope Ball Sponsor
- Greenery Sale
- Prevention Palooza Sponsors

Cancer Survivors Park Alliance:
- Annual donor
- Cancer Survivors Day sponsor

Canterbury Counseling Center: Ongoing partnership

Leukemia & Lymphoma Society: Light the Night sponsor

Ronald McDonald House: Holiday Gala sponsor

S.C. Ovarian Cancer Foundation: Handbags for Hope Sponsor

Susan G Komen Foundation: Race for the Cure sponsor

Tackling Lungs (lung cancer education/awareness): Event sponsor
BON SECOURS WELLNESS FAIR
October 23, Bon Secours Wellness Arena

Oral, head & neck screenings
Breast cancer risk assessments
Onsite mammogram scheduling
Colorectal cancer risk assessment with onsite colonoscopy scheduling & Cologuard® ordering

RESULTS
• 20 oral, head & neck screenings; one referral to ear, nose & throat specialist for further exam
• Nine screening mammograms scheduled; two diagnostic mammograms scheduled
• Seven colonoscopies scheduled
• Seven referrals to primary care providers

CAMP KESEM