

OSF HEALTHCARE SAINT FRANCIS MEDICAL CENTER



2019

CANCER PROGRAM
ANNUAL REPORT



OSF[®]
HEALTHCARE

2019 Cancer Committee



James McGee, MD, SM
Radiation Oncology, Chairman

Richard Anderson, MD
Surgery, Vice Chairman and Physician Liaison

Joseph Evans, MD, PhD
Radiation Oncology

Paul Fishkin, MD
Medical Oncology/Genetics

Francois Geoffroy, MD
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Interventional Oncology

Nguyet Le-Lindqwister, MD
Hematology/Oncology

Mackenzie McGee, MD
Radiation Oncology

Sonia Orcutt, MD
Surgery

James Siebert, MD
Pathology

Steven Tsoraides, MD
Surgery

Chandler Wilfong, MD
Surgery

Mandi Arnold, RN
Quality Improvement Coordinator

Kayla Clark, BSN, MS, CTR
Cancer Registry

Kathi Copelen, RDMS, RTR
Cancer Conference Coordinator

Tom Cox, MS, RT(N)
Director of Radiology/Medical Imaging

Jan Donlan, RN
Cancer Registry

Vicki Funcannon, PT
Rehabilitation

Keren Greenawalt, BSN, MS, CTR
Cancer Registry Quality Coordinator

Catherine Guebert, MSW, LCSW
Oncology Social Work/Case Manager

Courtney Heiser, BS
American Cancer Society

Cassandra Horack, BSN, MS
VP Quality/Safety

Rhonda Johnson, PhD
Psychosocial Services Coordinator

Kathy Kalbacken, BSN
Hospice

Marsha Kutter, CCRP
Clinical Research Coordinator

Mary Jo Myers, BSN, CTR
Cancer Registry

Tenille Oderwald, BSN
Supervisor Cancer Services

Jennifer Seils, RN
Inpatient Oncology Nurse

Michele Settelmyer, APRN
Genetic Counselor

Susie Smith, BSN
Community Outreach Coordinator

Jodi Stoner, APRN
Cancer Services





James McGee, MD, SM

CANCER COMMITTEE CHAIRMAN

In 2019, OSF HealthCare began planning in earnest toward a Ministry program in oncology. A steering committee and an advisory group of OSF HealthCare medical staff members from around the Ministry were convened to begin work toward that program. As the medical center in the Ministry providing a variety of tertiary services in oncology, OSF HealthCare Saint Francis Medical Center and its medical staff have provided a substantive foundation for the program's formulation.

Over the last year, the goal of analyzing each of the major tumor disease sites by region was formulated, with the intent of developing teams from around the Ministry to coordinate the data gathering, analysis and recommendations for improvement in patient care, disease site by disease site. Neuro-oncology and rectal cancer were chosen as the first pilot disease sites, and preliminary analyses were completed. Over the next year, we will develop teams to evaluate all of the major cancer disease sites, adding breast and lung cancer in the first quarter of 2020.

Some over-arching programmatic goals will have work teams that cross the boundaries of the common cancer disease sites in order to improve the overall patient and physician experience with OSF oncology services. Some of the work will involve technology assessments; other issues involve engagement of the patient and general populations in more productive ways than before. An important component of many of these efforts will be innovation backed by personal engagement of the communities we serve. Important emerging themes for our cancer program are:

1. OPTIMIZING COMMUNICATION BETWEEN THE PATIENT AND THE CANCER CARE TEAM

Communications between clinicians and patients in oncology need to be optimized to reduce both patient anxiety and cost. Self-reporting of symptoms by cancer patients and their families can provide a mechanism for the clinicians to provide an immediate response to patient concerns. In many circumstances, this can add to the quality of care by alerting physicians to a developing crisis. This self-reporting concept also can inform clinical research since data is collected from the unchanging perspective of the patients themselves. As patient engagement increases, we will be better able to understand patient and family motivation as it relates to cancer control activities, namely screening and prevention.

2. STANDARDIZING CANCER PATIENT CARE

Traditionally, cases presented at multidisciplinary tumor boards have their imaging and pathology studies summarized along with their clinical factors in a tumor board summary document. Such a document is meant to form the basis for the patient's treatment course and documents the

recommendations of the tumor board members. In developing a Ministry oncology program, we will strive to ensure that every patient coming to OSF Saint Francis for cancer care receives quality care, regardless of where they enter our health care system. In collaboration with industry, our goal is to have the tumor board summary become a vibrant document that grows as the patient progresses through life. We will start with annotated medical images and pathology slides taken from the tumor board presentations. The compliance of the patient's treatment course with National Comprehensive Cancer Network Guidelines will be monitored for deviations to avoid patient mistreatment. Artificial Intelligence can be applied to build the clinical and research information needed to inform treatment and follow-up options throughout the patient's course. The tumor board summary document will be the starting point from which we will continuously develop a reservoir of patient data drawn from the myriad sources that generate a patient's data set in the course of cancer care. As data about the patient's radiomic and genomic characteristics emerge, the data will allow earlier interventions to preserve the patient's quality of life.



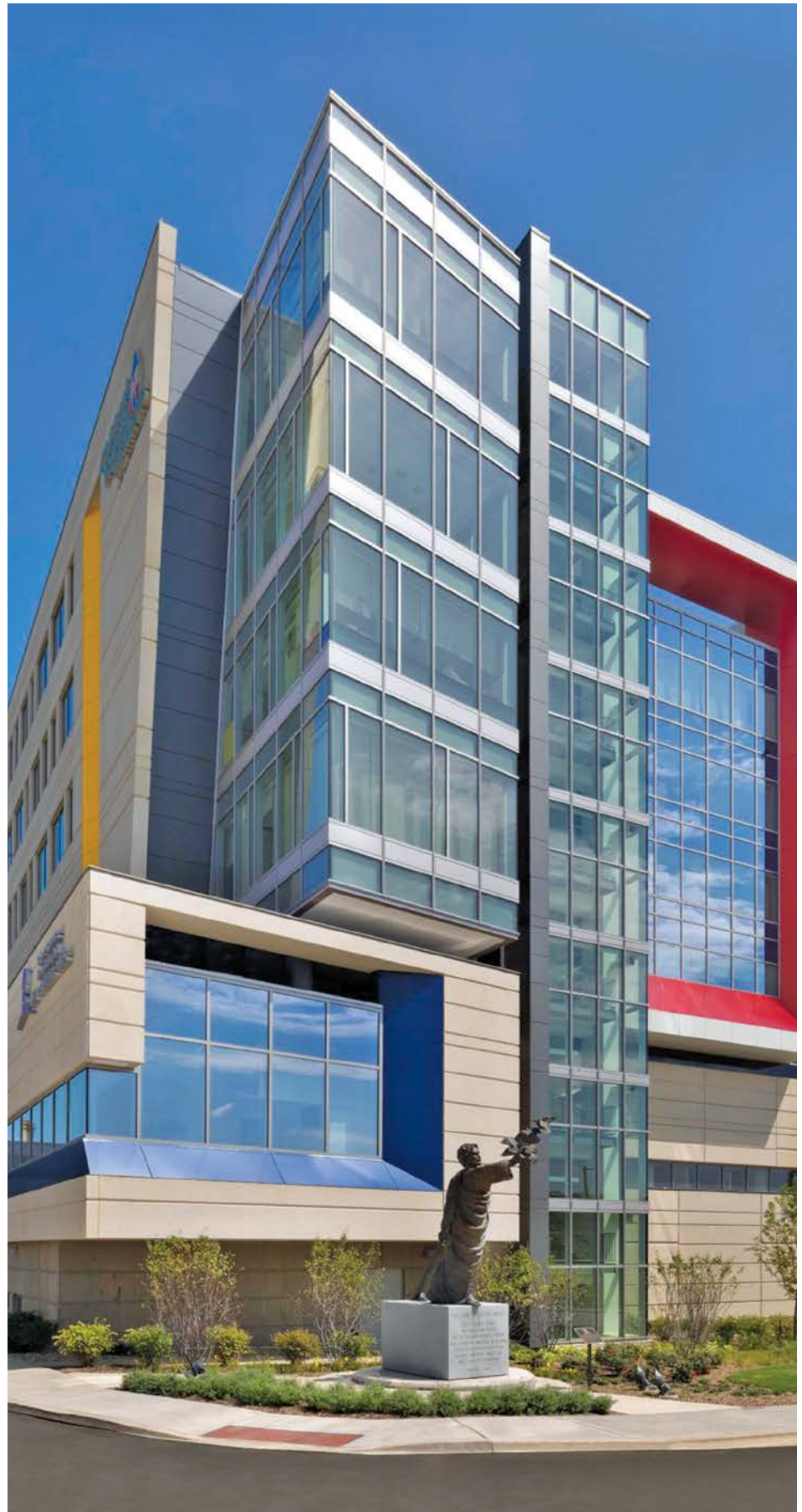
3. PERSONALIZING CANCER CONTROL ACTIVITIES

Many of the counties and communities served by OSF Saint Francis have exceptionally high incidence rates of common malignancies such as lung, breast and colorectal cancer. To date, we lack granularity in the determination of the risk factors that lead to the development of specific cancers in our patient populations. Much is said about personalized cancer treatment to prolong life and reduce side-effects, but effective personalized cancer control can prevent cancers from developing at all and minimize the impact of those cancers that do develop. In cancer screening, there often is debate about what age is appropriate to begin screening for a specific cancer. Certainly, individual factors matter in answering that question, and wise management of resources demands more use of individual factors in recommending screening activities. A more robust gathering of information from the electronic medical record will be needed, particularly in the area of family history. Many cancer risks have a genetic component to consider, and those are often manifest in the family history. The environment in which the patient has grown and lived can be equally informative, and we need to document those factors more consistently. We see evidence that towns on rivers and in industrial settings have high cancer incidence rates, but health care providers have not gone beyond broad assumptions about such risks, hence, there is not great value in their consideration for the individual person or family. Combining population health and oncology perspectives with innovation could begin to better define cancer risk in communities, families and individuals. Once we can do that, individuals may find the motivation needed to become involved in appropriate screening and prevention activities to bring healthier lifestyles to their communities and families.

I look forward to the months ahead, as the oncology program takes shape for the Ministry and the many communities we serve at OSF HealthCare Saint Francis Medical Center.

James L. McGee, MD, SM

James L. McGee, MD, SM
Radiation Oncology, Chairman



Cancer Experience

OSF HEALTHCARE SAINT FRANCIS MEDICAL CENTER

The Cancer Registry staff recorded and abstracted 2,791 cases during 2018. Of these cases, 2,469 were either diagnosed here or received at least part of their initial treatment here. These cases are referred to as analytic. The graphs and tables in this report were compiled from analytic cases unless otherwise indicated.

In 2018, lung was the No. 1 primary site of cancer (435 cases reported), followed by breast (432), prostate (246) and colon (121). The top 10 most frequent cancer sites account for over 70% of the total cases for the year. The ethnic mix of cancer patients was 92% white, 6% African-American and 2% other ethnicities. Seventy-four percent of cancer patients diagnosed in 2018 were between the ages of 50 and 79.

Of the 2,469 analytic cases diagnosed in 2018, 58% reside in the Tri-County region

of Peoria, Tazewell and Woodford counties. An additional 16% of the analytic cases reside in LaSalle, Fulton and Knox counties. The remainder come from various counties throughout Illinois.

Stage 0 or in-situ cancers accounted for 5% of the cases. Stage 1 cancers comprised 31%, and Stage 2 comprised 11% of the cases. Stage 3 accounted for 11% of cases, and Stage 4 accounted for 17%. The stage of cancer was unknown for 8% of patients. No applicable staging systems existed for the remaining 17% of cases.

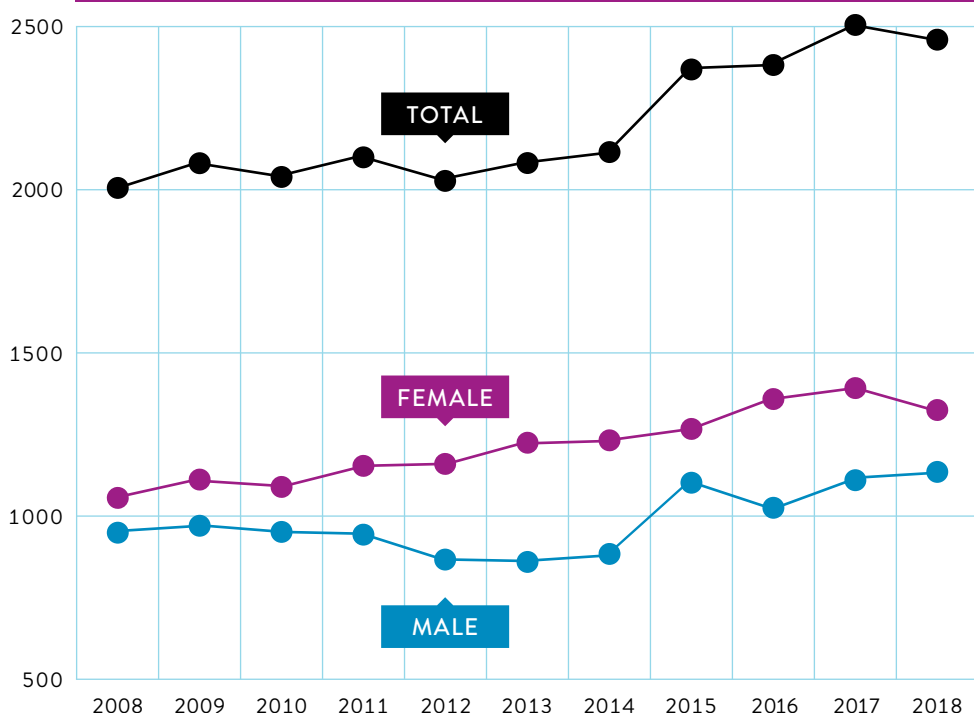
Cancer-directed surgery comprised the only treatment for 25% of the cases in 2018. Radiation therapy alone was received by 5% of patients. Chemotherapy alone was received by 4% of patients. The two highest multimodality therapies – either surgery, hormone and radiation, or surgery and

hormone therapy – accounted for another 11% of patient treatments. The remainder received some other form of treatment, multimodality treatment or palliative care as their first course of treatment.

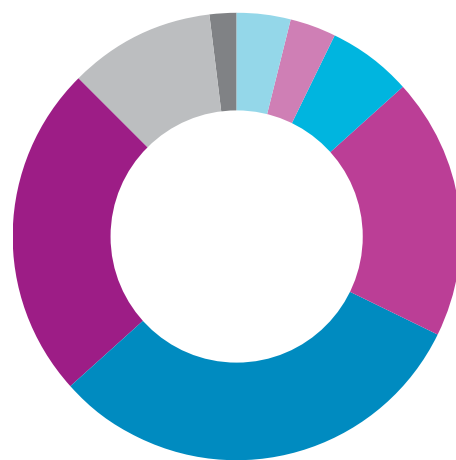
The importance of multimodality treatment is stressed at the multidisciplinary cancer conferences and tumor boards. All conferences include multidisciplinary physician attendance and have become an excellent forum for decision-making relative to individual patient treatment, as well as for the dissemination of information relative to progress in cancer management. A total of 1,567 prospective cancer cases were discussed in 2018, representing 63% of the newly diagnosed cancer cases.

CANCER CASES, 2008–2018

OSF HEALTHCARE SAINT FRANCIS MEDICAL CENTER



AGE AT DIAGNOSIS, 2018



AGE	PERCENT
0–29	3.93%
30–39	3.44%
40–49	6.12%
50–59	18.75%
60–69	31.27%
70–79	24.18%
80–89	10.49%
90+	1.82%
TOTAL	100.00%

BODY SYSTEM SITES, 2018

SITE	COUNT (N)	PERCENT
Acute lymphocytic leukemia	12	0.49%
Acute monocytic leukemia	2	0.08%
Acute myeloid leukemia	29	1.17%
Anus, anal canal and anorectum	11	0.45%
Appendix	9	0.36%
Ascending colon	23	0.93%
Bones and joints	9	0.36%
Brain	57	2.31%
Breast	432	17.50%
Cecum	27	1.09%
Cervix uteri	25	1.01%
Chronic lymphocytic leukemia	2	0.08%
Chronic myeloid leukemia	4	0.16%
Corpus uteri	82	3.32%
Cranial nerves other nervous system	58	2.35%
Descending colon	4	0.16%
Esophagus	30	1.22%
Floor of mouth	2	0.08%
Gallbladder	7	0.28%
Gum and other mouth	3	0.12%
Hepatic flexure	4	0.16%
Hodgkin – nodal	13	0.53%
Hypopharynx	5	0.20%
Intrahepatic bile duct	12	0.49%
Kaposi sarcoma	1	0.04%
Kidney and renal pelvis	114	4.62%
Large intestine, NOS	5	0.20%
Larynx	10	0.41%
Liver	41	1.66%
Lung and bronchus	435	17.62%
Melanoma – skin	52	2.11%
Mesothelioma	2	0.08%
Miscellaneous	46	1.86%
Myeloma	13	0.53%
Nasopharynx	1	0.04%

NHL – extranodal	22	0.89%
NHL – nodal	65	2.63%
Nose, nasal cavity and middle ear	1	0.04%
Oropharynx	7	0.28%
Other acute leukemia	1	0.04%
Other biliary	3	0.12%
Other buccal cavity and pharynx	1	0.04%
Other digestive organs	1	0.04%
Other endocrine including thymus	26	1.05%
Other female genital organs	5	0.20%
Other non-epithelial skin	7	0.28%
Other urinary organs	1	0.04%
Ovary	28	1.13%
Pancreas	84	3.40%
Penis	3	0.12%
Prostate	246	9.96%
Rectosigmoid junction	6	0.24%
Rectum	63	2.55%
Retroperitoneum	1	0.04%
Salivary glands	5	0.20%
Sigmoid colon	30	1.22%
Small intestine	25	1.01%
Soft tissue (including heart)	11	0.45%
Splenic flexure	5	0.20%
Stomach	26	1.05%
Testis	9	0.36%
Thyroid	53	2.15%
Tongue	14	0.57%
Tonsil	13	0.53%
Trachea, mediastinum and other respiratory organs	1	0.04%
Transverse colon	15	0.61%
Ureter	6	0.24%
Urinary bladder	82	3.32%
Vagina	7	0.28%
Vulva	14	0.57%
TOTAL	2,469	100.00%



Cancer Registry

OSF HEALTHCARE SAINT FRANCIS MEDICAL CENTER

The Cancer Registry is part of the cancer program at OSF HealthCare Saint Francis Medical Center and functions under the guidance of the Cancer Committee in accordance with standards set by the Commission on Cancer (CoC), a program of the American College of Surgeons. Cancer registries are information systems designed for the collection, storage and management of data on persons with cancer. The registry assures that complete and accurate data is collected and maintained for each cancer patient. The Cancer Registry is responsible for reviewing records of all patients with active malignant disease and benign central nervous system tumors and for maintaining a database of all newly diagnosed and treated cancers. The Cancer Registry database contains patient identifiers and characteristics (age, race, sex, marital status and occupation), cancer and tumor characteristics (site, histology and AJCC stage of disease at diagnosis), treatment received and follow-up information. The Cancer Registry database serves as a vital tool for programmatic and administrative planning, research and monitoring patient outcomes.

Since its reference date of January 1, 2002, there have been 40,289 cases accessioned into the registry. The registry follows all analytic patients on an annual basis and maintains a follow-up rate of 80% or greater for patients accessioned into the registry since 2002 and 90% or greater for patients accessioned into the registry in the last five years. The current follow-up rate for patients since 2002 is 89%, and the follow-up rate for the last five years is 97%. The registry fulfills data requests from physicians and other cancer-related organizations while maintaining strict patient confidentiality. Data requests are welcomed and encouraged. Nineteen data requests were completed in 2018.

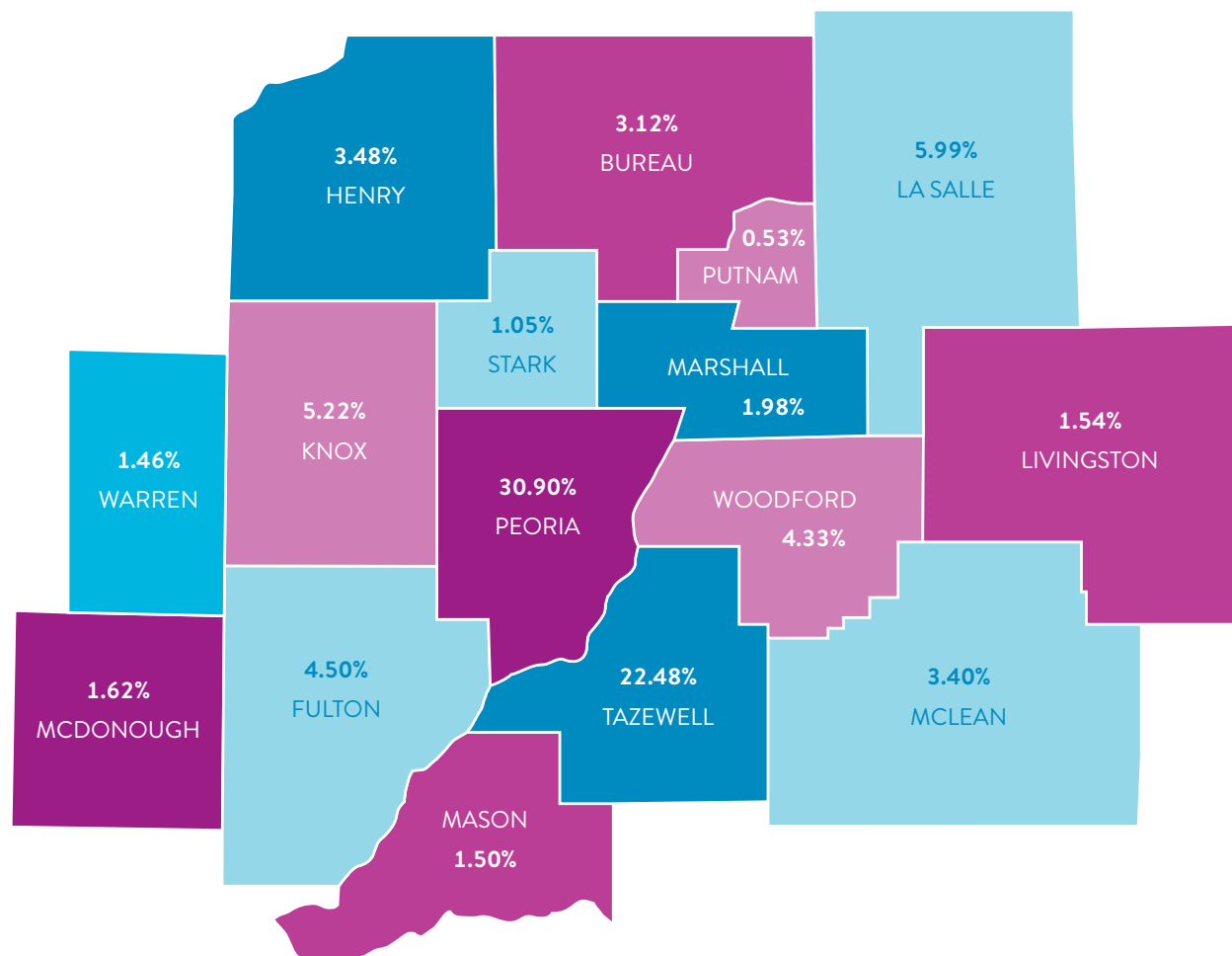
The registry coordinates the Weekly System Specific and Prospective Breast Cancer Tumor Boards. OSF Saint Francis also holds weekly multidisciplinary cancer conferences for lung, GI and GU cancers. Monthly conferences are held for liver, gynecologic and CNS cancers. The Cancer Committee meets every other month to discuss and work toward accomplishing the standards

required of an accredited Commission on Cancer program. Registry staff hold the committee positions of certified tumor registrar and Cancer Registry quality coordinator. The registry staff work closely with the chairman of the Cancer Committee and the cancer liaison physician in planning Cancer Committee meetings and agendas.

The Cancer Registry submits monthly data to the Illinois State Cancer Registry and the Commission on Cancer's Rapid Quality Reporting System. Data is reported annually to the Commission on Cancer's National Cancer Data Base. Staff includes four registrars: Keren Greenawalt, BSN, MS, CTR; Kayla Clark, BSN, MS, CTR; Mary Jo Myers, BSN, CTR, and Jan Donlan, RN. Data requests can be made by contacting registry personnel at (309) 655-3734 or (309) 655-2421.



COUNTY AT TIME OF DIAGNOSIS, 2018

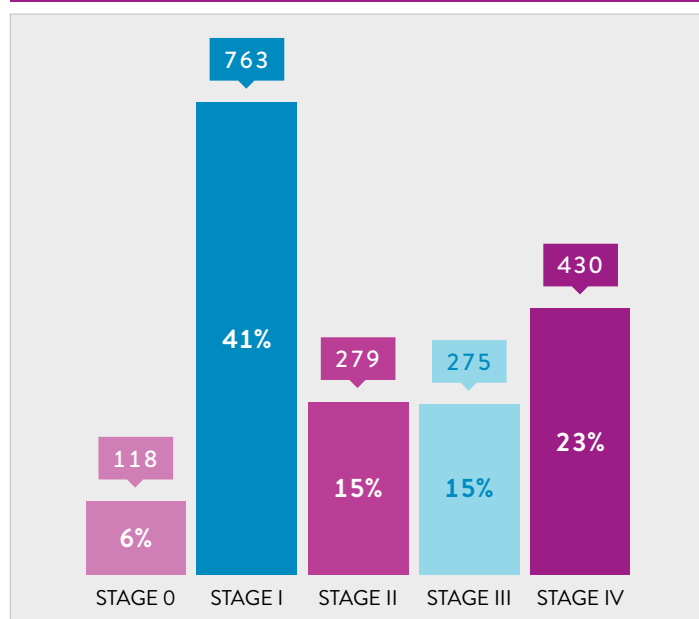


TOP 10 SITES BY SEX, 2018

SITE	WOMEN	MEN
Bladder	24	58
Breast	428	4
Bronchus and lung	217	222
Colon	64	57
Corpus uteri	82	0
Hematopoietic and reticuloendo system	36	38
Kidney	45	62
Lymph nodes	34	42
Pancreas	46	38
Prostate gland	0	246
TOTAL	976	767



AJCC AT DIAGNOSIS, 2018



Cancer Program Services

OSF HEALTHCARE SAINT FRANCIS MEDICAL CENTER

629 ACUTE MEDICAL/SURGICAL BEDS • 19 SPECIALTY CANCER CARE UNIT BEDS • WEEKLY SITE SPECIFIC • PROSPECTIVE BREAST AND CENTRAL NERVOUS SYSTEM CANCER CONFERENCES • MONTHLY PEDIATRIC CANCER CONFERENCE • WEEKLY CANCER MULTIDISCIPLINARY CONFERENCE • CERTIFIED BY AMERICAN COLLEGE OF SURGEONS COMMISSION ON CANCER • CERTIFIED BY NATIONAL ACCREDITATION PROGRAM FOR BREAST CENTERS

BOARD-CERTIFIED PHYSICIAN ONCOLOGY SPECIALISTS

- Medical Oncologists
- Radiation Oncologists
- Gynecologic Oncologists
- Pediatric Oncologists
- Specialists in Pathology, Hematology, Endocrinology, Urology, Pulmonology, Breast Imaging, Thoracic Imaging, Pediatric Surgery, Thoracic and General Surgery

OTHER ONCOLOGY SPECIALISTS

- Certified Oncology Nurses
- Certified Pediatric Oncology Nurses
- Cancer Psychosocial Counselor
- Clinical Case Manager
- Medical Physicist
- Registered Radiotherapy and Mammography Techs
- Certified Tumor Registrars
- Palliative Care Team
- Navigators
- Clinical Dietitian

CANCER CARE UNIT

- Certified Oncology Nurses
- Chemotherapy Administration
- Pastoral Care
- Home Healthcare Planning
- Sun Patio
- Pain Management
- Symptom Management
- Case Management
- Bedside Tablet
- Aromatherapy Patches
- Collaboration with OSF Cancer Service
- Collaboration with Illinois Cancer Care
- Summer Volunteers
- Pet Therapy

RADIATION ONCOLOGY

- TrueBeam XLT Linear Accelerator with IMRT and IGRT Including Body Stereotactic RT and Body Radiosurgery
- Stereotactic Body Radiosurgery
- RIT-Radioimmunotherapy
- PET-CT Radiotherapy Simulator
- Computerized Four-Dimensional Dosimetry and Treatment Planning
- Linear Accelerator: IMRT, IGRT, Respiratory Gating, Triggered Imaging
- Gamma Knife Perfexion Radiosurgery
- Complete Brachytherapy Service:
 - High Dose Rate Brachytherapy to Breast, Prostate, GYN and Skin Cancers
 - Low Dose Rate Iridium Treatments
 - Accelerated Partial Breast Brachytherapy

INPATIENT SURGERY FACILITIES

- da Vinci® Xi Robotic Surgery System
- iMRI – Intraoperative MRI for Brain Tumor Resection
- Thoracic Center of Excellence
- Pediatric Surgery
- Specialty Acute and Tertiary Care Services

PHARMACY

- St. Jude Satellite Pharmacy
- Laminar Flow Bio Safety Cabinet for Prep of Chemotherapy Agents
- Pharmacokinetic Drug Monitoring
- Adverse Drug Event Screening/Monitoring
- Drug Interaction/Antibiotic Review
- Drug Culture/Sensitivities Review
- Patient Controlled Analgesic Program
- Pharmacist Available 24 Hours a Day
- Pharmacist Consult and Monitoring
- Renal Function Screening
- Chemotherapy Dose Verification
- Oncology Pharmacist Specialist

LABORATORY

- Oncotype DX - Cancer Genetic Assays
- Prolaris Prostate Cancer Genetic Assay
- Carcinoembryonic Antigen
- CA 125, CA 15-3 and CA 19-9
- PSA and Other Tumor Markers
- Flow Cytometry
- Her2/Neu Protein
- Estrogen/Progesterone Receptor
- Surgical Pathology/Cytology
- Automated Hematology and Coagulation
- Microbiology, Parasitology, Mycobacteriology
- Blood Bank Transfusion Service
- Automated Blood Chemistry Analysis
- Automated Electrophoresis
- TEG (Thromboelastography)
- DNA Mismatch Repair Proteins

MULTIDISCIPLINARY CANCER CONFERENCES

- Prospective Breast Cancer
- Pediatric Cancers
- Lung Cancer
- GU (Prostate and Bladder) Cancers
- GI (Gastrointestinal) Cancer
- Central Nervous System Cancers
- Liver Cancer
- Weekly Site Specific (rare cancers)
- Gamma Knife Clinic
- Spine Cancer Clinic
- Gynecological Cancer

OUTPATIENT SURGERY/ SPECIALTY SERVICES

- SIR-Spheres for Liver Cancer
- Bone Marrow Biopsies
- Paracentesis, Thoracentesis
- Laser Surgery
- Incisional and Excisional Biopsies
- Major and Minor Procedures
- Fine Needle Aspirations

HOSPICE

- Richard L. Owens Hospice House
- Pain Management
- Symptom Control
- Personal Care
- Social Worker
- Spiritual Support
- Volunteer Services
- Grief Support
- Registered Nurses
- Registered Dietitian

REHABILITATION AND ANCILLARY SERVICES

- Nutrition and Dietary Services
- Occupational Therapy
- Pastoral Care
- Physical Therapy
- Speech Therapy
- Lymphedema Clinic
- Enterostomal Teaching
- Lymphedema Therapy

DIAGNOSTIC IMAGING

- Angiography
- Preoperative Embolization/Devascularization of Tumors
- Ultrasonography
- Interventional Intrarterial Chemotherapy of Tumors
- Magnetic Resonance Imaging
- Nuclear Medicine
- Multidetector Spinal Computerize Tomography with Multiplanar and 3-D Reconstruction Capabilities
- Radiology-Directed Needle Biopsies
- Interventional Radiologic Techniques for Relief of Biliary and Urological Obstruction
- Localization and Drainage of Neoplastic and/or Infected Fluid Collections
- Tag Monoclonal Antibodies for Imaging Ovarian and Colorectal Cancers
- Functional MRI Brain Studies for Tumor Resection
- Positron Emission Tomography
- CT/MR Perfusion Studies
- Board Certified, Fellowship Trained, Subspecialties in Nuclear Medicine, Body Imaging, IR, Neuroradiology, Musculoskeletal, Breast Imaging and Pediatric Radiology
- Percutaneous and Open Cryoablation and Radiofrequency Ablation of Primary and Metastatic Neoplasms

COMMUNITY SERVICES

- Smoking Cessation Program
- Public Cancer Education Programs
- Nutrition Classes at RiverPlex

RIVERPLEX RECREATION AND WELLNESS CENTER

- Medically Based Exercise Program
- Combating Fatigue Program
- Weight Loss Center
- Personalized Health Risk Assessment with Clinical Testing
- Individual Consults with Health Professionals

CANCER SCREENINGS

- Low Dose CT Lung Cancer Screenings
- Colonoscopy
- Virtual Colonoscopy
- Sigmoidoscopy
- Fecal Occult Blood Test
- 3D Mammography
- Tomosynthesis
- Skin Cancer Screening

SERVICES AVAILABLE

- Navigation
- Palliative Care
- Social Services
- Dietitian
- Financial Assistance
- Smoking Cessation
- Pulmonary Rehabilitation
- Pastoral Care
- Community Services
- Community Education
- Community Awareness

AMERICAN CANCER SOCIETY SERVICES

- (800) 227-2345 Available 24 Hours a Day, 7 days a week, 365 Days a Year
- cancer.org – Nationwide Website
- Road to Recovery for Free Transportation Services
- Free or Reduced-Cost Lodging Services
- Reach to Recovery, Peer One-On-One Support Services for Breast Cancer Patients
- Free Local Wig Boutique for Women Facing Hair Loss
- Assistance with Insurance, Financial Questions, Questions Regarding Your Diagnosis

OSF SAINT FRANCIS MEDICAL CENTER CANCER SUPPORT SERVICES

- Individual Counseling
- Family Counseling
- Support Groups
- Individual Nutrition Counseling
- Healthy Living Classes
- Therapeutic Massage

CENTER FOR BREAST HEALTH

- NAPBC Accredited Breast Center
- Dedicated MQSA Accredited Mammography Center
- Breast Imaging Center of Excellence Awarded by the American College of Radiology
- Digital Mammography/Tomography
- Breast Ultrasound
- Needle Core Biopsies
- Breast MRI
- Certified Mammography Technologists
- Fellowship Trained Radiology Physician Breast Imaging Specialists
- Registered Nurses Certified as Breast Cancer Patient Navigators
- Comprehensive Breast Center
- Pre-Operative Breast Surgery Class
- Beyond Breast Cancer Support Group
- Survivor for Life Program
- Family Education and Support Group
- Clinical Trials

PATIENT SUPPORT RESOURCES

- Breast Cancer Support Group
- Family Support Group for Leukemia, Lymphoma, Myeloma
- Patient-Family Library
- Just Breathe Support Group, a joint effort with UnityPoint Health, for people affected by lung cancer
- Connections Colorectal Cancer Support Group
- Cancer Support Services
- Survivorship
- Counseling
- Financial Counseling
- Dietitian
- Exercise Classes
- Cancer Survivor Retreats

Call (309) 308-0202 for more information on any of the support resources.



2016 DATA

Supervised by
Richard Anderson, MD
Cancer Liaison Physician
September 2019

Cancer Program Practice Profile Reports (CP3R)

These Commission on Cancer's (CoC) Cancer Program Practice Profile Reports (CP3R) demonstrate that improvements in data quality and patient care are possible when the entire cancer committee supports system-level enhancements to ensure complete and precise documentation.

CP3R currently reports estimated performance rates of 23 quality measures from 10 primary sites including breast, colon, rectum, lung, cervix, gastric, ovary, endometrium, bladder and pediatric kidney cancer.

BLADDER

- At least two lymph nodes are removed in patients under 80 undergoing partial or radical cystectomy.

CoC standard: n/a
OSF Saint Francis: 100%

- Radical or partial cystectomy; or tri-modality therapy (local tumor destruction or excision with chemotherapy and radiation) for clinical T2-4N0M0 patients with urothelial carcinoma of the bladder, first treatment within 90 days of diagnosis.

CoC standard: 90%
OSF Saint Francis: 100%

- Neoadjuvant or adjuvant chemotherapy is recommended or administered for patients with muscle invasive cancer undergoing radical cystectomy.

CoC standard: 90%
OSF Saint Francis: 100%

BREAST

- Radiation is administered within 365 days of diagnosis for women under 70 receiving breast-conserving surgery for breast cancer.

CoC standard: 90%
OSF Saint Francis: 92%

- Tamoxifen or third generation aromatase inhibitor is recommended or administered within 365 days of diagnosis for women with AJCC T1c or stage IB-III with positive hormone receptors.

CoC standard: 90%
OSF Saint Francis: 95%

- Combination chemotherapy is recommended or administered within 120 days of dx for women under 70 w/ AJCC T1cN0 or stage IB-III hormone receptor negative breast cancer.

CoC standard: n/a
OSF Saint Francis: 100%

- Radiation therapy is recommended or administered following mastectomy within 365 days of diagnosis of breast cancer for women with \geq four positive regional lymph nodes.

CoC standard: 90%
OSF Saint Francis: 92%

- Breast conserving surgery rate for women with AJCC clinical stage 0, I or II breast cancer.

CoC standard: n/a
OSF Saint Francis: 67%

- Image or palpation guided needle biopsy (core or FNA) is performed to establish diagnosis of breast cancer.

CoC standard: 80%
OSF Saint Francis: 100%

CERVIX

- Radiation therapy is completed within 60 days of initiation of radiation among women diagnosed with any stage of cervical cancer.

CoC standard: n/a
OSF Saint Francis: 85%

- Use of brachytherapy in patients treated with curative intent in any stage of cervical cancer.

CoC standard: n/a

OSF Saint Francis: 90%

- Chemotherapy is administered to cervical cancer patients who received RT for stages IB2–IV cancer or with positive pelvic nodes, positive surgical margin and/or positive parametrium.

CoC standard: n/a

OSF Saint Francis: 88%

COLON

- Adjuvant chemotherapy is recommended or administered within 120 days of diagnosis for patients under age 80 with Stage III (lymph node positive) colon cancer.

CoC standard: n/a

OSF Saint Francis: 100%

- At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.

CoC standard: 85%

OSF Saint Francis: 99%

ENDOMETRIUM

- Chemotherapy and/or radiation therapy are administered to patients with stage IIIC or IV endometrial cancer.

CoC standard: n/a

OSF Saint Francis: 80%

- Endoscopic, laparoscopic or robotic are performed for all endometrial cancer, for all stages except stage IV.

CoC standard: n/a

OSF Saint Francis: 96%

GASTRIC

- At least 15 lymph nodes are removed and pathologically examined for resected gastric cancer.

CoC standard: 85%

OSF Saint Francis: 0%*

KIDNEY (PEDIATRIC)

- At least one regional lymph node is removed and pathologically examined for primarily resected unilateral nephroblastoma.

CoC standard: n/a

OSF Saint Francis: 100%

LUNG

- Systematic chemo is administered within four months preoperatively or six months postoperatively, or it is recommended for surgically resected cases with pathologic LN positive (pN1 or pN2) NSCLC.

CoC standard: 85%

OSF Saint Francis: 89%

- Surgery is not the first course of treatment for cN2, M0 lung cases.

CoC standard: 85%

OSF Saint Francis: 94%

- At least 10 regional lymph nodes are removed and pathologically examined for AJCC stage IA, IB, IIA and IIB resected NSCLC.

CoC standard: n/a

OSF Saint Francis: 16%

OVARY

- Salpingo-oophorectomy with omentectomy, debulking/cytoreductive surgery or pelvic exenteration in stages I–IIIC ovarian cancer. Additionally, for stages I–IIIB, at least one regional lymph node was examined.

CoC standard: n/a

OSF Saint Francis: 50%

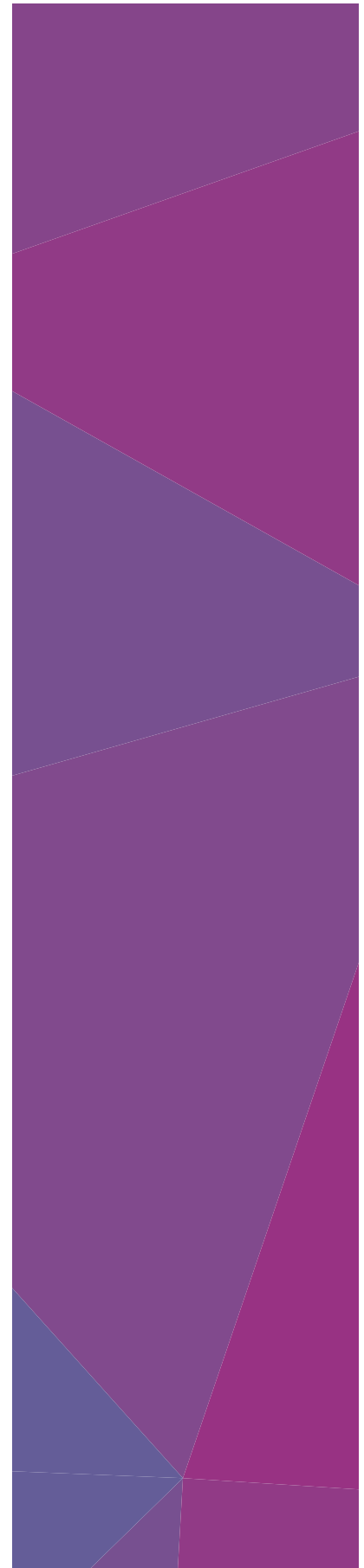
RECTUM

- Preoperative chemo and radiation are administered for clinical AJCC T3N0, T4N0 or Stage III; or postoperative chemo and radiation are administered within 180 days of diagnosis for clinical AJCC T1–2N0 with pathologic AJCC T3N0, T4N0 or Stage III; or treatment is recommended, for patients under the age of 80 receiving resection for rectal cancer.

CoC standard: 85%

OSF Saint Francis: 100%

*Percentage based on only two eligible cases in 2016. An action plan was created by the Cancer Committee to remind surgeons and pathologists of the G15RLN quality measure requirement for lymph node removal during presentation of gastric cancers at multidisciplinary cancer conference. Preliminary reports from the cancer registry show percentages for this measure are improving for 2017–2019.





Robert King, MD

VASCULAR AND INTERVENTIONAL RADIOLOGY

Interventional radiology has developed into a mature medical specialty in its short, 55-year lifespan. Dr. Charles Dotter, known as the father of interventional radiology, performed the first percutaneous transluminal angioplasty in 1964. Since that time, interventional radiology (IR) has become synonymous with minimally invasive, image-guided surgical procedures that treat patients referred from a wide breadth of medical specialties. The latter part of this era has seen great strides in the research, development and implementation of minimally invasive procedures aimed at treating cancer. In light of these advances over the past couple of decades, a subspecialized field within IR has emerged known as interventional oncology.

Interventional oncology includes advanced procedures, such as percutaneous thermal ablation, that once were used solely in the palliative setting and now are considered first-line therapy in select patients with primary liver cancer. In addition to percutaneous treatment, catheter-directed therapies, including conventional transarterial chemoembolization and radioembolization, are now used regularly in primary and metastatic malignancies in the liver. The goal of these therapies is not only to treat the disease primarily, but also to bridge patients to other treatment options, such as surgical resection or in some cases transplantation. We currently have two retrospective studies underway evaluating our experience with catheter-directed therapies for primary and secondary liver cancer, as well as our percutaneous cryoablation experience in treating renal cell carcinoma. Our cryoablation study likely will be the largest

cohort ever published on the subject. We are proud to serve our patients here at OSF HealthCare Saint Francis Medical Center by offering a full range of interventional oncology services including:

- CT and ultrasound-guided microwave and cryoablation for lung, liver and renal cancer
- Transarterial chemoembolization
- Transarterial drug-eluting bead chemoembolization
- Transarterial radioembolization therspheres and SIRS-spheres
- Radiofrequency ablation with or without osteoplasty for palliation of painful bony metastasis

These services are provided in close collaboration with our hepatology, medical oncology, surgical oncology and radiation oncology colleagues. As interventional oncologists, we participate in weekly GI and bimonthly liver multidisciplinary tumor boards. We staff a biweekly interventional oncology clinic, where we evaluate and counsel patients on the treatment options as recommended by the specific tumor boards.

An exciting new collaboration is underway involving Interventional Oncology, Surgical Oncology and Medical Oncology. OSF Saint Francis is in the process of acquiring a nonthermal ablation device called irreversible electroporation (IRE). In contrast to many ablation devices that use thermal methods to induce cell death, IRE employs the use of an electric field to cause irreversible permeability of the cell membrane, thus inducing apoptosis. The crucial advantage of IRE compared with other devices employing thermal ablation is the safety around vital structures, such as vessels and ducts. This is especially important in the pancreas, due to the close proximity of multiple major vascular structures, biliary ducts and adjacent gastrointestinal organs. This will allow us to participate in a multicenter clinical trial

looking at combination therapy with IRE and surgery for Stage III pancreatic cancer. The preliminary data for patients with locally advanced pancreatic malignancy treated with IRE plus surgery looks promising. We hope to further delineate the role of this new multimodality therapy with participation in this trial to expand treatment options for our patients in Central Illinois.

Our robust Interventional Oncology and Radiology practice includes academic appointments to the University of Illinois College of Medicine Peoria. In addition to teaching our diagnostic radiology residents (16 total residents), we have been approved by the ACGME to participate in the new IR residency paradigm. In this setting, we have funding for up to two residents per year to partake in "Early Specialization in IR." The residents that are selected for early specialization complete their diagnostic radiology training in three years, then go on to focused training in IR during their fourth and fifth years. After successfully graduating from this training program, they are then eligible to sit for the American Board of Radiology combined certificate in Diagnostic and Interventional Radiology exam.

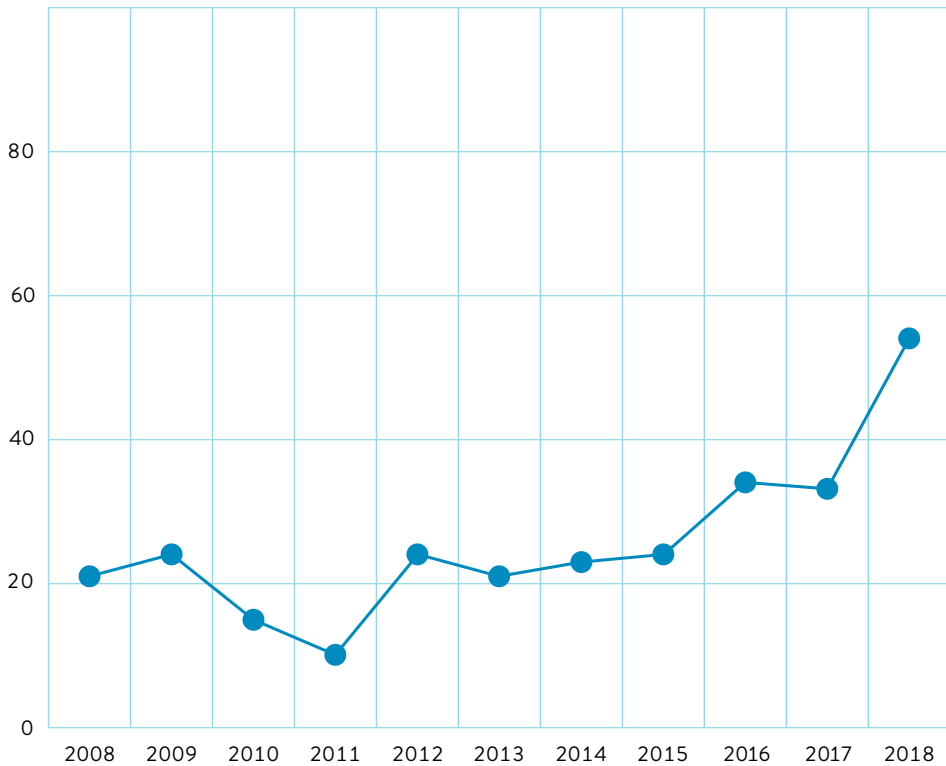
We are proud to be an integral part of the multidisciplinary cancer team at OSF HealthCare Saint Francis Medical Center. Through our clinical service, education and research, we strive for excellence as we seek to improve the health outcomes and lives of the people we treat.

Robert King, MD

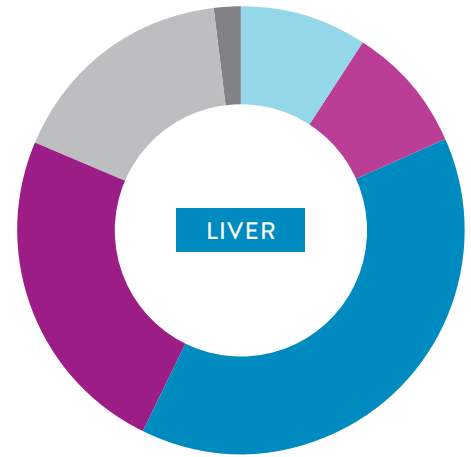
Vascular and Interventional Radiology, CIRA

Assistant Professor of Clinical Radiology,
University of Illinois College of Medicine Peoria

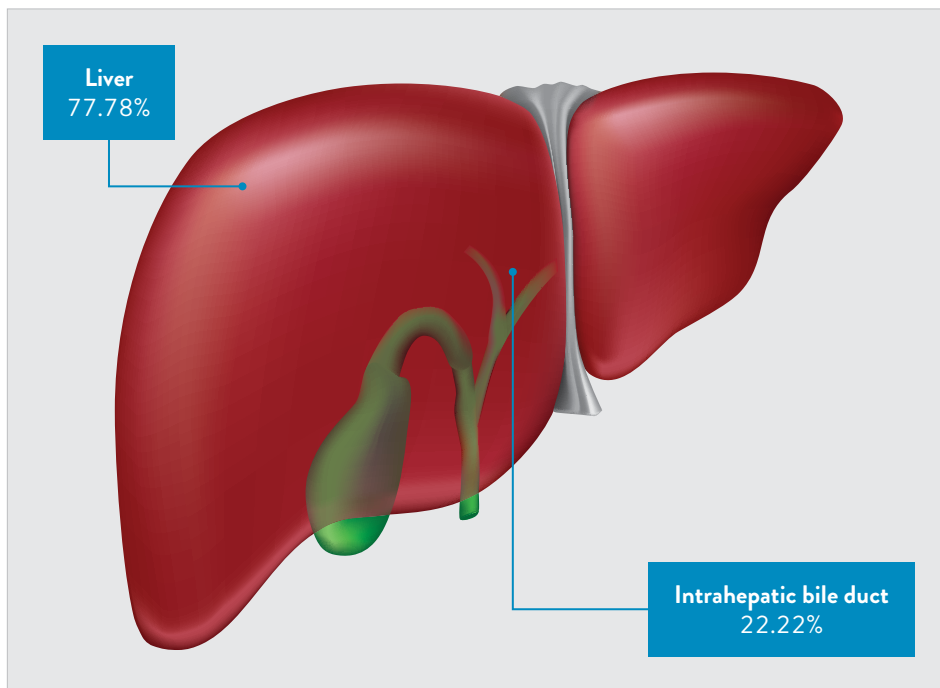
LIVER CANCER CASES, 2008–2018



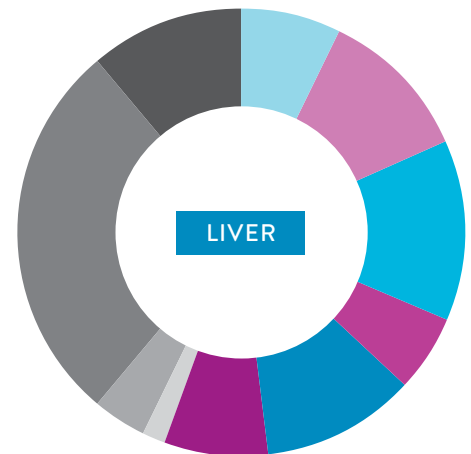
AGE AT DIAGNOSIS, 2018



AGE	PERCENT
0–29	9.26%
30–39	0.00%
40–49	0.00%
50–59	9.26%
60–69	38.89%
70–79	24.07%
80–89	16.67%
90+	1.85%
TOTAL	100.00%



AJCC AT DIAGNOSIS, 2018



STAGE	PERCENT
Stage IA	7.41%
Stage IB	11.11%
Stage II	12.96%
Stage IIIA	5.56%
Stage IIIB	11.11%
Stage IV	7.41%
Stage IVA	1.85%
Stage IVB	3.70%
N/A	27.78%
Unknown	11.11%
TOTAL	100.00%

LIVER SITES, 2018

SITE	COUNT (N)	PERCENT
Intrahepatic bile duct	12	22.22%
Liver	42	77.78%
TOTAL	54	100.00%



Chandler Wilfong, MD

FOREGUT AND HEPATOPANCREATICOBILIARY SURGERY

OSF HealthCare Saint Francis Medical Center employs a multidisciplinary approach to care for patients with complex cancers involving the esophagus, stomach, pancreas, liver and bile ducts in order to provide the highest quality comprehensive cancer care available. Our team involves specialists from these disciplines:

- Oncologic and hepatopancreaticobiliary (HPB) surgery
- Hematology and oncology
- Radiology
- Interventional radiology
- Radiation oncology
- Pathology

At OSF Saint Francis, we are proud to work closely with Illinois CancerCare and treat patients with both neoadjuvant and adjuvant therapies. Current and progressing technologies include:

- Advanced minimally invasive surgery techniques for esophagus, stomach, liver, biliary and pancreatic malignancies
- da Vinci robotic surgery
- Percutaneous directed therapies with interventional radiology
- Immunotherapies

New patients are seen expeditiously and have access to two dedicated oncology nurse navigators for multidisciplinary assistance. We employ stacked testing to obtain an accurate diagnosis and treatment plan efficiently, with one day of testing, minimizing the need for multiple visits. The tertiary level care available at OSF Saint Francis in Peoria rivals that available in major metropolitan areas, with a focus on patient-centered care. As treatment plans grow increasingly complex, providing multidisciplinary, patient-centered, world-class care will continue to be our focus.

Chandler Wilfong, MD
Foregut and Hepatopancreaticobiliary Surgery



2019 OSF PHILANTHROPY SYMPOSIUM

The 2019 OSF Philanthropy Symposium was held Thursday, October 24. The nature of the symposium was collaborative, not competitive, which created a thought-provoking, valuable synergy among OSF HealthCare leadership, keynote speakers and attendees.

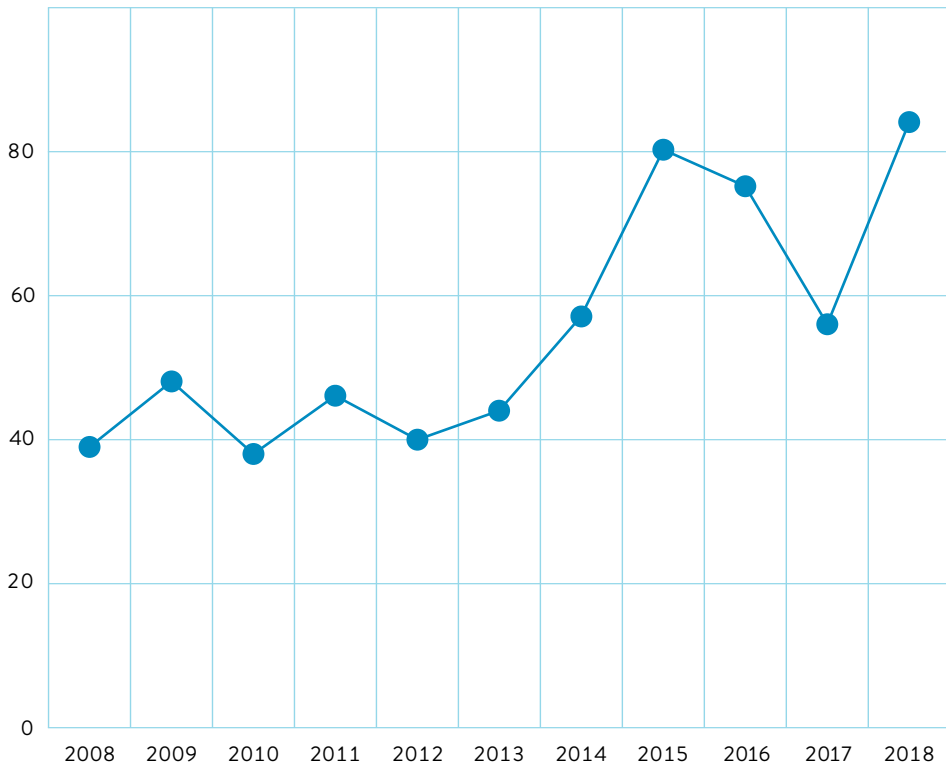
Dr. James McGee (left), chairman of the Cancer Committee and director of Radiation Oncology, was asked to speak on the One OSF strategy for cancer care: Proton Beam Therapy Center at OSF HealthCare Saint Francis Medical Center. Proton beam therapy offers the opportunity to both dramatically reduce the side effects of radiation therapy as well as to expand the number and types of cancers that may be treated with curative intent. The addition of proton beam therapy to its existing resources would enable OSF Saint Francis to join the ranks of the few distinguished institutions dedicated to providing cancer care at the highest attainable level for both its adult and pediatric patient populations.

By virtue of the OSF HealthCare Mission and Values, we continue to make substantive strides in the evolution of cancer care. Proton therapy is an addition to the One OSF quest to improve the lives of patients with cancer.

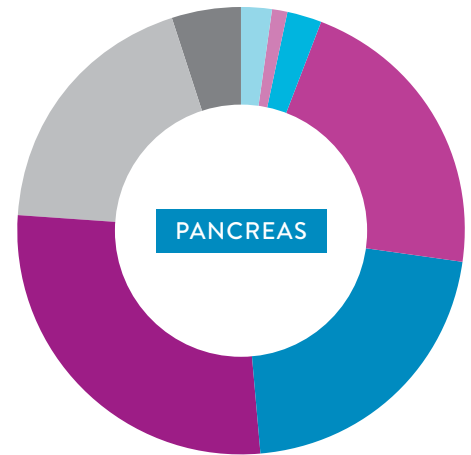


To learn more about the OSF Philanthropy Symposium, please go to osfhealthcarefoundation.org/philanthropysymposium

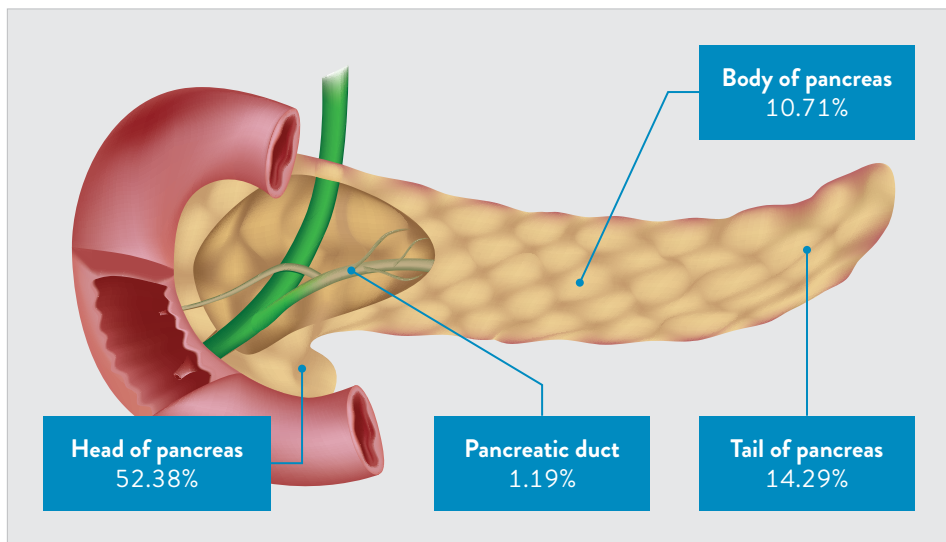
PANCREAS CANCER CASES, 2008–2018



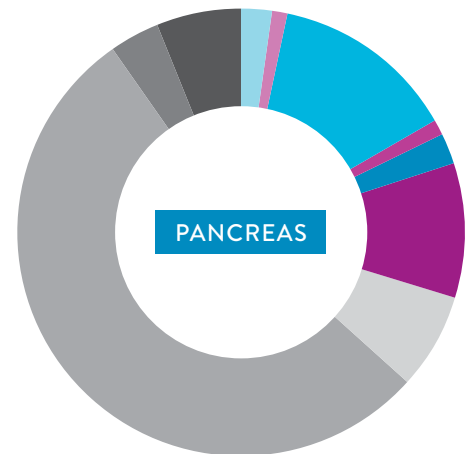
AGE AT DIAGNOSIS, 2018



AGE	PERCENT
0–29	2.38%
30–39	1.19%
40–49	2.38%
50–59	21.43%
60–69	21.43%
70–79	27.38%
80–89	19.05%
90+	4.76%
TOTAL	100.00%



AJCC AT DIAGNOSIS, 2018



STAGE	PERCENT
Stage 0	2.38%
Stage IA	1.19%
Stage IB	13.10%
Stage II	1.19%
Stage IIA	2.38%
Stage IIB	9.52%
Stage III	7.14%
Stage IV	53.57%
N/A	3.57%
Unknown	5.95%
TOTAL	100.00%

PANCREAS SITES, 2018

SITE	COUNT (N)	PERCENT
Pancreas, body of	9	10.71%
Pancreas, head of	44	52.38%
Pancreas, NOS	12	14.29%
Pancreas, other specified parts of	1	1.19%
Pancreas, overlapping lesion	5	5.95%
Pancreas, tail of	12	14.29%
Pancreatic duct	1	1.19%
TOTAL	84	100.00%



Sonia Orcutt, MD, FACS

SURGICAL ONCOLOGY

OSF HealthCare Saint Francis Medical Center over the last several years has been developing into a regional cancer center, able to provide top-notch cancer care to patients of Central Illinois in their own backyard, without the need to travel long distances. This goal has been realized through the commitment and collaboration of many individuals within the hospital and within other organizations in Peoria, including Peoria Surgical Group, Illinois CancerCare and the University of Illinois College of Medicine Peoria (UICOMP).

Comprehensive cancer care is provided to patients via a multidisciplinary team approach. While the traditional pillars of cancer care are surgical oncology, radiation oncology and medical oncology, several other specialties are critical to the diagnosis and treatment of patients with cancer, including interventional radiology (with the ability to provide targeted therapies), pathology, radiology and gastroenterology. In addition, support services, including nutrition and cancer navigation, all aid in the overall treatment of patients and help improve the patient's experience while going through what for many is the most trying and vulnerable time of their life. At OSF Saint Francis, our multidisciplinary tumor boards, of which there is one dedicated to gastrointestinal cancers and a second dedicated specifically to tumors of the liver, bring all these specialists together to collaborate and reach a consensus on each individual patient's care, tailored to his or her cancer and goals in cancer care.

One of the areas where significant strides have been made in the last year is the focus on reducing the time to diagnosis and treatment. We now have stacked testing at

OSF HealthCare for pancreatic and some liver cancers, wherein patients can have their CT scans and endoscopies the same day, which is especially helpful for patients who travel from afar. In addition, the recently established Comprehensive Cancer Center, a collaboration between Peoria Surgical Group and Illinois CancerCare, allows patients to see physicians from colorectal surgery, surgical oncology and medical oncology together, especially at times when critical treatment decisions need to be made. This ensures timely and up-to-date management for patients without the delay of individual appointments days to weeks apart, similar to what is provided at other major cancer centers around the country.

Surgical treatment of liver and pancreas cancers has advanced tremendously over the last several years, owing to improvements not only in surgical technique, but also in anesthesia and care in the surgical intensive care unit. As a major trauma center, OSF Saint Francis excels in both anesthesia services and surgical intensive care unit care, which has elevated the types of surgeries we can provide. In addition, surgical treatment of these advanced cancers has improved secondary to the simultaneous advancements in chemotherapy, advanced gastroenterology and interventional radiology. While surgical resection is the goal for patients with liver and pancreas tumors, it is not always feasible up front. Not uncommonly, we enlist the aid of our colleagues to help us reach the goal of surgery, with tools such as stents placed by gastroenterology, or portal vein embolization or ablation by interventional radiology, or chemotherapy by medical oncology. Once in the operating room, tools that can be offered to patients at OSF Saint Francis include the use of minimally invasive surgery, such as laparoscopy or use of the da Vinci robot. In addition, for complex tumors, we work closely with engineers at Jump Trading Simulation & Education Center (a collaboration between OSF Saint Francis and UICOMP) to create models

of patients' tumors in virtual reality prior to surgery, aiding us in the operating room to identify the tumors and ensure resectability prior to operating, an area in which I am actively researching. This has proven especially helpful for patients with liver and pancreas tumors, and is a technology to which few hospitals and medical schools have access around the country. In addition, on behalf of interventional radiology and the Department of Surgery at UICOMP, OSF HealthCare is actively working to obtain additional therapies that can be targeted to patients with locally advanced pancreas cancers and are only offered at a few centers around the country, to improve survival over the standard options that are currently provided.

Our aims as surgeons treating patients with cancer, especially those with cancers as complex as pancreas and liver cancers, are not only to be able to provide quality operations to patients, but also to know where surgery lies in the overall cancer treatment of patients. As the first and only surgeon board certified in Complex General Surgical Oncology in Central Illinois outside of the metropolitan area of Chicago and its suburbs, I am proud to add to the already excellent care provided at OSF Saint Francis. With the continued collaboration between surgical oncology, medical oncology, radiation oncology, interventional radiology, gastroenterology, pathology and radiology, we all can continue to strive to push the envelope and provide top-notch care to the patients of Central Illinois close to home.

Sonia Orcutt, MD, FACS
Surgical Oncology, Peoria Surgical Group

Assistant Professor of Surgery,
University of Illinois College of Medicine Peoria

OSF HealthCare Saint Francis Medical Center Directory

Cassy Horack
Vice President of Quality and Safety

James McGee, MD, SM
Radiation Oncology
(309) 655-3258

Cancer Care Unit
(309) 655-7191

Cancer Registry
(309) 655-3734

Center for Breast Health
(309) 683-5522

Home Health Services
(309) 683-7700

Hospice
(309) 683-7700

Cancer Multidisciplinary Clinics
Cancer Support Services
(309) 308-0200

Lymphedema Services
(309) 624-8575

Pastoral Care
(309) 655-2084

Rehabilitation
(309) 624-8575

Social Work Services
(309) 308-0200

St. Jude Midwest Affiliate
(309) 624-4945

Wellness Services
(309) 282-1607



2019 CANCER PROGRAM ANNUAL REPORT

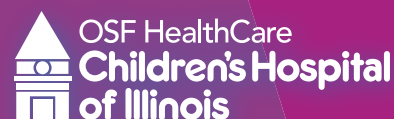
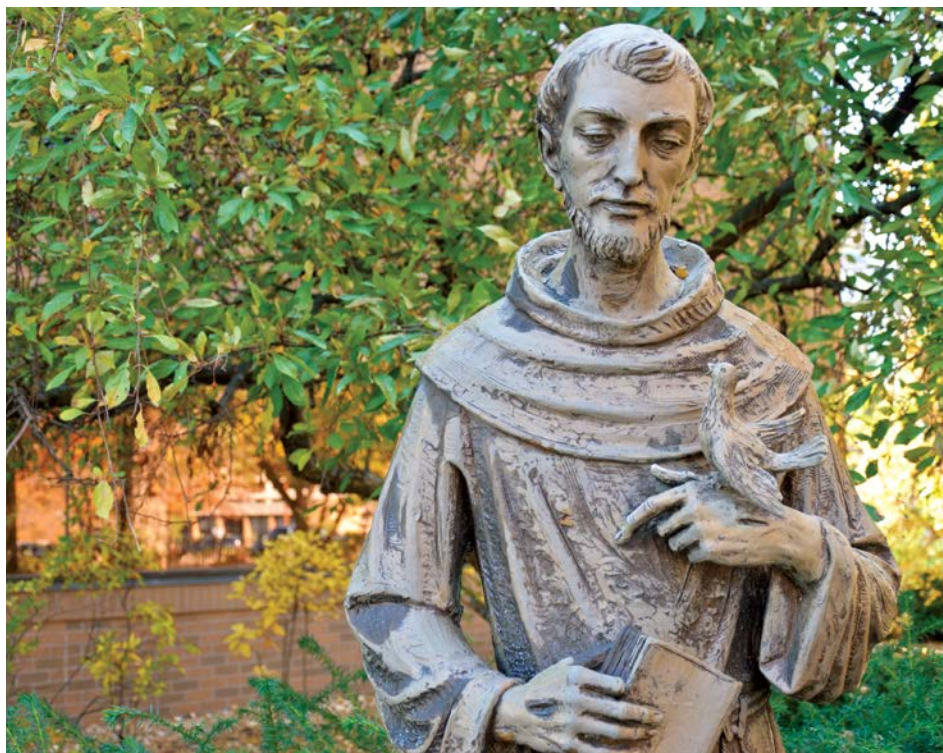
Special thanks to:
James McGee, MD, SM

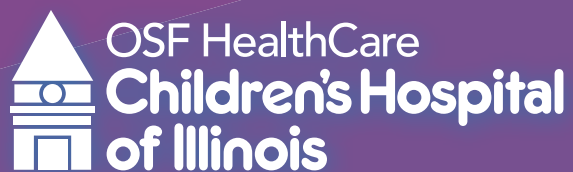
- References:**
- OSF HealthCare Saint Francis Medical Center Cancer Registry
 - American College of Surgeons Commission on Cancer, National Cancer Data Base

This report is available online:
osfsaintfrancis.org

This report prepared by
Cancer Committee members:
Kathi Copelen, RDMS, RTR
Keren Greenawalt, BSN, MS, CTR

For more information about
cancer services and programs at
OSF HealthCare Saint Francis Medical Center:
(309) 624-4505





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