

Edward Cancer Center

2016 annual report with statistical data from 2015

▶ Introduction

The Edward Cancer Center has made a profound difference in the lives of many cancer patients and their families. Our efforts are far-reaching to provide innovative programming, clinical trials and support groups that educate the community about preventing and treating the disease.

In this annual report, we spotlight achievements and statistical data from 2015. As you'll read, we are many things to many people but more than anything else, we provide hope and promise to fight the battle against cancer.

▶ Psychosocial and Community Outreach

Providing support and education to cancer patients is a key to the success of the Edward Cancer Center. Throughout the year, many community outreach programs were offered to a variety of audiences. The Edward Cancer Center is always trying new ways to increase the community's awareness about the importance of prevention and early detection. This is accomplished through lectures, cooking classes, free screenings, and public awareness programs.

To help cancer patients, the Edward Cancer Center offers support groups for all types of cancers; therapeutic arts and crafts groups; parenting support groups; and a quarterly survivorship group to help patients who are recovering from and surviving cancer. Support groups feature education, complementary therapy and strategies for healthy living. A few of the programs include:

Back on Track

This eight-week exercise class is designed to work with the treatment and management of cancer by enhancing aerobic capacity, muscular strength and flexibility.

American Cancer Society Wig Boutique - Plainfield

Losing your hair is hard; finding a free wig isn't. Brand new wigs are offered at no charge to patients whose insurance does not cover a cranial prosthesis. An American Cancer Society-trained volunteer helps patients choose the "right look" from multiple styles and colors available.

Complementary Therapies: Reiki, CranioSacral, Healing Touch and Massage

These therapies promote balance, relaxation and stress release, and are performed one-on-one by trained practitioners.

▶ **Special Events**

Hoops For Healing

A long standing tradition during Thanksgiving week is the Hoops for Healing Basketball Tournament. The Edward Cancer Center partnered with the Edward Foundation, Naperville North High School and Oswego High School to raise money to support Camp Hope, a camp for kids whose parent or loved one has cancer. Participants in the tournament had a chance to play and gain an awareness of how their efforts can contribute to the good of the community.

Camp Hope

The Edward Cancer Center offered Camp Hope, two, week-long summer camps for kids ages 6-12 whose parent or loved one is facing cancer. Tuition to camp was paid for by donations from the Edward Foundation. Campers participated in traditional summer camp activities and also attended therapeutic sessions including arts and crafts, music therapy/drumming, martial arts, scrapbooking, gardening or yoga. Licensed clinical social workers from the Edward Cancer Center facilitated the sessions and were available throughout each day of camp.

American Cancer Society Sponsorship

The Edward Cancer Center continues to be an active supporter of the American Cancer Society (ACS). Edward had a presence at several ACS Relay for Life events, including South Naperville, North Naperville and Plainfield.

▶ The Evolution of Genetic Testing in Oncology Care

Cancer is the most common genetic disease in humans. It is caused by altered expression of genes leading to uncontrolled cell growth. Genetic abnormalities found in cancer cells, but not normal tissue, are acquired rather than inherited. Oncologists use their knowledge of specific genetic abnormalities present in malignant cells to target them for destruction. Improvements in DNA analysis, specifically next generation sequencing technologies, have dramatically increased our ability to quickly and cheaply analyze large amounts of DNA from a variety of tissues. This technology is being used in the cancer treatment setting to obtain an in-depth study of a tumor's genomic profile with the goal of identifying gene mutations specific to that individual's tumor that predict increased or decreased susceptibilities to available therapies. Prior to next generation sequencing, oncologists were limited in the number of genetic abnormalities that could be tested for in the tumor and the genetic abnormalities used to guide treatment were unrelated to the inherited gene mutations that are the focus of hereditary cancer predisposition testing.

Hereditary cancer predisposition syndromes account for approximately 5-10% of all cancers. Genetic testing for inherited genetic abnormalities associated with cancer predisposition syndromes began in the mid-1990s with rare, high penetrance syndromes such as BRCA1/2-related hereditary breast and ovarian cancer syndrome, Lynch syndrome, von Hippel-Lindau syndrome, and familial adenomatous polyposis. Testing was performed on individuals with a striking personal and family history of early-onset or rare cancer(s). Genetic counseling was typically performed prior to testing. Genetic counseling is a process performed by specially trained professionals who provide education about the genetics of disease(s), estimate the chances for the individual to be affected by or have a child or other family member with a genetic condition, and help the individual make decisions about testing and treatment. Genetic counseling outcomes include identifying what, if any, testing is appropriate given the patient's personal and family medical histories, helping the individual understand the implications of the results, and giving the patient the opportunity to explore their motivations for pursuing or not pursuing testing. In the last two decades our understanding of the level of cancer risk with high-penetrance conditions has improved and the effectiveness of cancer surveillance and prevention in high-risk patients has been proven. This has led to modifications in testing criteria that has dramatically increased the number of individuals eligible for testing for some of these high-risk conditions. It has also changed the genetic counseling-genetic testing paradigm from the early days of predictive cancer testing. Faced with an increased demand from patients for cancer predisposition testing, and equipped with evidence-based guidelines for management of individuals with well-described syndromes, non-genetic medical professionals become more likely to offer genetic testing for a handful of common hereditary cancer predisposition conditions in their office and reserve referrals to genetic specialists for complex cases.

Evolution of Genetic Testing in Oncology Care (*continued*)

In 2012, clinical multigene panel testing for hereditary cancer predisposition syndromes using next generation sequencing was introduced. Prior to multigene panel testing, individuals suspected to have or to be at-risk to have a hereditary cancer predisposition were tested for one or, rarely, two conditions most likely to explain the cancer(s) in the family or individual. When this approach failed to identify a gene mutation, patients were advised that the cancer(s) in them or their relatives may be due to mutations in unknown genes. Outside of research studies, testing for mutations in newly discovered genes or for mutations in genes less likely to explain the cancer(s) in the family was prohibitively expensive. Next generation sequencing in the hereditary cancer predisposition testing arena has virtually eliminated the financial barrier to offering testing for multiple genes. Multigene panels test individuals with a suspected hereditary predisposition for multiple hereditary predisposition conditions simultaneously for a relatively low cost. Instead of focusing on one or two genes, individuals can be tested for mutations in 10, 20, 50, or more genes known to be associated with hereditary cancer predisposition.

Early experience with multigene panels has led to improved understanding of the cause of cancer(s) in some families as well as expanding the phenotype associated with well-known conditions. It has also reinforced the importance of genetic counseling in the cancer predisposition testing arena. In the era of multigene panels, a detailed family history as well as a discussion regarding patient preferences, is vital for determining which gene(s) should be included in testing. Prior to testing, patients need to be educated about the possibility of detecting a mutation in gene(s) for which little information is known and for which there are no medical management guidelines. The selection of the most appropriate genetic test is no longer limited to the patient's personal and family history of cancer but, with the availability of multigene panels, must also consider the patient's desire for information and the patient's tolerance for uncertainty. Genetic counselors specialized in cancer predisposition testing provide valuable information to patients and providers and can clarify which of the myriad genetic tests available is most useful to the patient. In an era when the number of laboratories performing genetic testing has exploded, genetic counselors ensure that their patients have genetic testing at reputable, credentialed, and experienced laboratories. Genetic counselors can also assist patients in understanding negative test results, that is when no causative mutation is identified. Many individuals with negative genetic test results still qualify for increased cancer screening based on their family history alone.

The explosion in our ability to sequence large quantities of tumor DNA has caused the parallel worlds of genetic testing for the purpose of cancer treatment decision-making and genetic testing for hereditary cancer assessment to move closer together. DNA testing on a tumor specimen will detect mutations within that tumor; however, without additional testing, it cannot determine if that mutation is confined to the abnormal cells or if it is also present in normal tissue. The presence of the mutation in normal tissue as well as tumor tissue indicates that the mutation is germline. If genetic testing performed on the patient's tumor identifies a mutation in a gene that, if present in germline tissues, is associated with an inherited genetic syndrome, the patient needs to be offered the opportunity to pursue confirmatory testing. These are patients who underwent testing for the purpose of treatment decision-making and, often, had not considered the possibility that testing would lead to a discussion of hereditary risk factors for cancer. Genetic counseling in this setting helps the patient understand the difference between tumor testing and germline testing, the potential implications of the results for them and their relatives, and the potential benefits and harms that may result from confirmatory testing. As the scope of tumor DNA profiling grows, the need for genetic counseling in oncology care will increase.

Evolution of Genetic Testing in Oncology Care *(continued)*

The Edward Hospital Cancer Center has had a genetic counselor on staff since 2007, making it one of the first community hospitals in Illinois to provide this service. In 2015, 454 oncology-related genetic consultations were performed, a 7% increase compared to 2014. Slightly more than 250 cancer-related genetic tests, more than half of which were multigene panels, were performed in 2015. Genetics regularly attended the breast tumor and gastrointestinal tumor boards and, since its implementation at Edward Hospital in 2013, genetics continues to monitor the results from universal Lynch syndrome screening on cancer-related colorectal resections and report annually to the Cancer Committee.

The increased demand for genetic counseling services due to the expansion of germline testing criteria, a surge in the number genes for which germline testing is available, and, most recently, new indications for hereditary risk assessment such as unexpected results from tumor genomic profiling resulted in Edward Hospital hiring a second part-time genetic counselor in mid-2015 to ensure that our patients and their relatives have access to quality genetic services in the comfort of their own community.

The addition of a second genetic counselor also allows us to support and to improve upon our genetics-related programs in other hospital areas. In 2013, we established a screening program for hereditary breast cancer risk factors for the Mammography Department. This program was intended to increase awareness among providers of the availability of the Genetic Risk Assessment Program and to improve on the identification of woman in our community at potentially increased risk for hereditary breast cancer. Patients presenting for mammography at Edward Hospital who report a suspicious personal or family history of breast or ovarian cancer receive a visual alert in Epic, our electronic medical record system. This alert can be seen by the radiologist reading the patient's exam who can then opt to include a note in the patient's mammography report indicating that the patient may benefit from a Cancer Genetic Risk Assessment. A review of the 2014 data from this program revealed that although the majority of the patients who had a recommendation for a genetic risk evaluation in the mammography report were appropriately flagged, very few of these patients had a documented referral to the Risk Assessment Clinic by the ordering provider. As a result of this data review, beginning in August of this year, Edward genetic counselors began sending letters directly to at-risk patients encouraging them to call for additional information about the Genetic Risk Evaluation Program.

Over the last decade, hereditary risk assessment has become integrated into the care provided at Edward Hospital through multiple care areas including oncology, mammography, pathology, and the multidisciplinary cancer clinics. To find out more about hereditary cancer testing and genetic services and Edward Hospital, visit www.eehealth.org/genetic-counseling or call (630) 646-6167.

▶ Cancer Registry

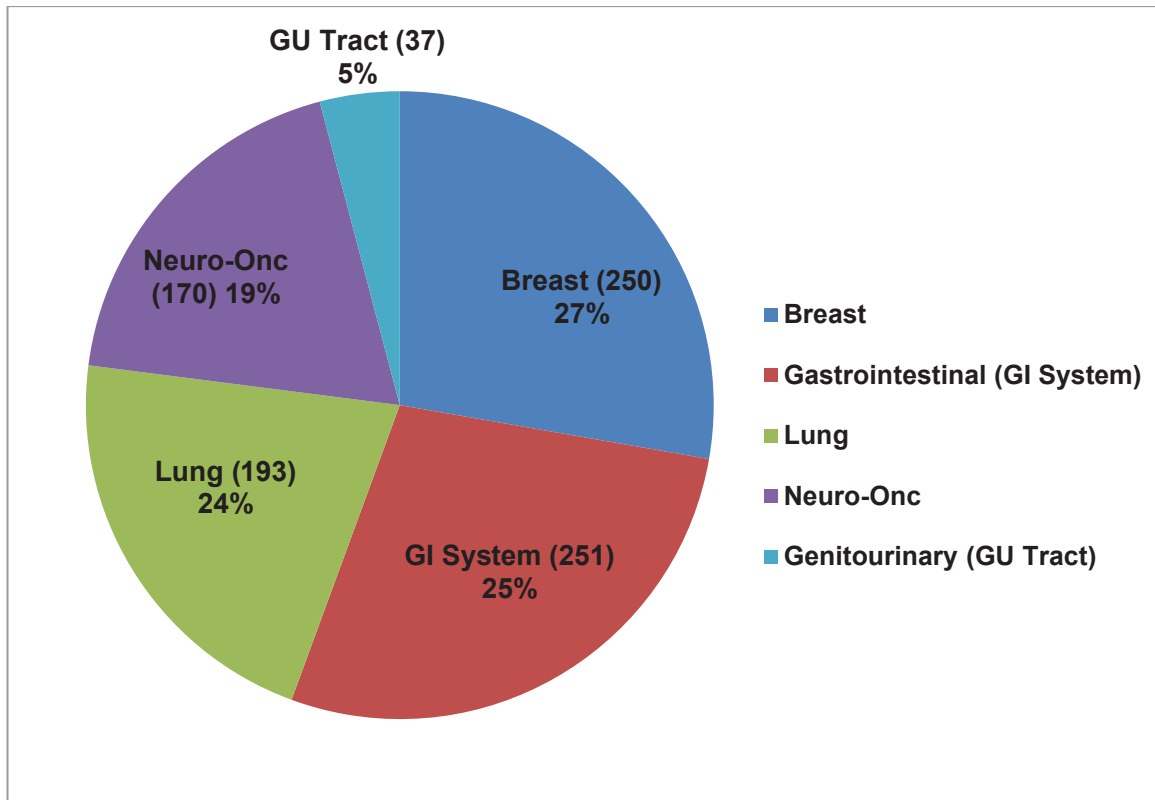
The Cancer Registry at Edward Hospital of Edward-Elmhurst Health Services (EEHS) is a clinical data management system that collects and analyzes all reportable cancers diagnosed and/or treated at Edward Hospital. The database, which includes demographics, diagnosis, state, treatment and survival outcome, is used for research and quality improvement analysis and has a total of 27,148 cases since its inception on January 1, 1982. The Cancer Registry plays an important role in the cancer program by providing data and documentation of the program's activities in order to achieve accreditation as a Comprehensive Community Cancer Program by the American College of Surgeons (ACoS) Commission on Cancer (CoC). The Cancer Registry also provides all data for accreditation by the National Accreditation Program for Breast Centers (NAPBC).

The Cancer Registry is staffed by four full-time Certified Tumor Registrars (CTR) as well as one full-time non-CTR. During 2015, the Cancer Registry activities and achievements included the following:

- Accessioned 1,960 cases of which 1,751 were analytic (diagnosed and/or treated at Edward).
- Maintained a 91% follow-up rate since our reference year of 2004, which exceeds the requirement set forth by ACoS.
- Submitted registry data to ACoS, the American Cancer Society, the Illinois State Cancer Registry (ISCR), and the National Cancer Database (NCDB).
- Participated in data collection for the CoC PCORI Special Study.
- Coordinated weekly Tumor Board Conferences and Breast Cancer Conference.
- Coordinated Cancer Committee meetings quarterly.
- Participated in the successful 3-year re-accreditation survey by the Commission on Cancer achieving full accreditation of our Cancer Center as a nationally recognized Accredited Cancer Program.
- Coordinated Breast Program Leadership meetings quarterly.
- Provided data for various quality improvement projects.

Edward Cancer Center has 4 weekly Multidisciplinary Tumor Conferences and 1 bi-weekly Conference. The Cancer Registry monitors and tracks the activity at each conference.

▶ 2015 Cancer Conference New Cases



The goal of the Cancer Registry is to continue to be the cornerstone of the cancer program at Edward Health Services by providing valuable data to physicians, nurses, administration, and the community it serves.

Judy Babyar, RHIT, CTR
Lead Cancer Registrar

▶ Oncology Conferences

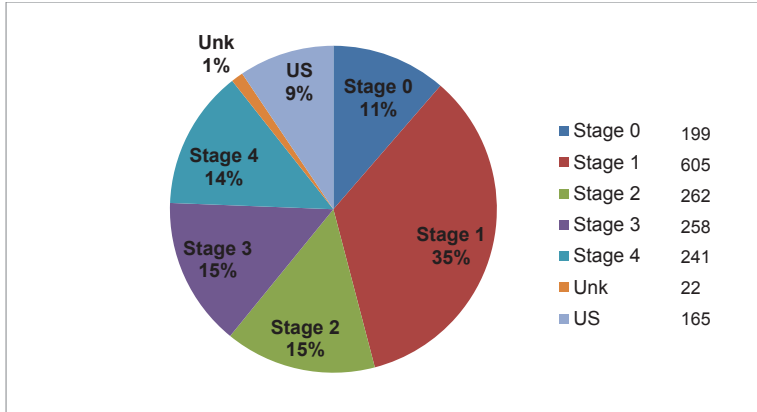
September 4, 2015
Multigene Panel Testing
Genetics
Elyse Weber

October 6, 2015
Oncology Symposium
HIPEC Surgery for Life

Paul H. Sugarbaker, MD, FACS, FRCS
Dr. Alex Hantel, MD, Director Medical Oncology
George Salti, MD, Director Surgical Oncology
Allan Hagggar, MD, Radiology
Linda Conlin, LCSW

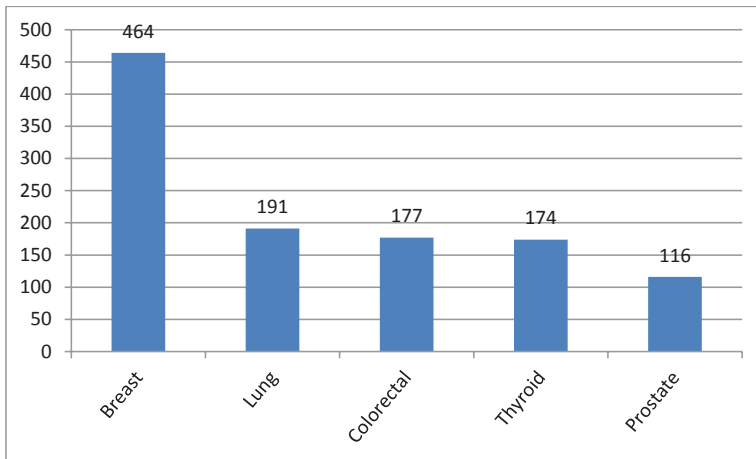
▶ 2015 Stage at Diagnosis -Summary by Body

Chart displays AJCC Stage for the 1,666 analytic cancer cases diagnosed at Edward Hospital in 2015.

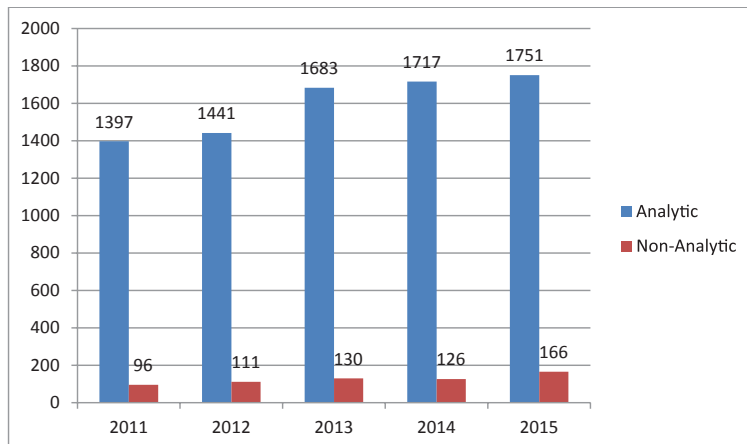


▶ TOP 5 PRIMARY CANCER SITES FOR 2015

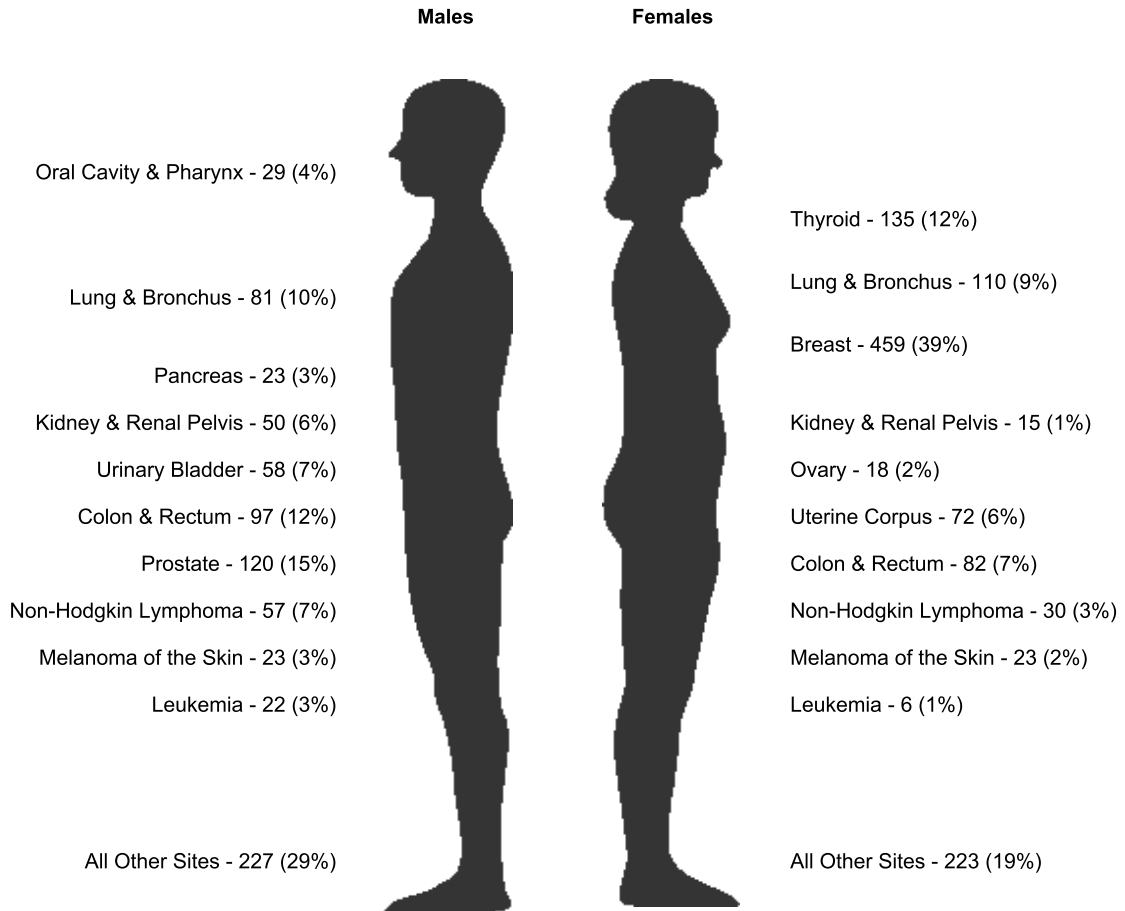
The top 5 primary cancer sites diagnosed/treated in 2015 at Edward Health Services, which account for 1122 cases or 64% of the 1,751 analytic cases.



▶ ANNUAL CANCER CASES 2011 – 2015, EDWARD HEALTH SERVICES



► **Summary by Body System (continued)**



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▶ 2015 Edward Cancer Committee Members

Rameez Alasadi, MD
Gastroenterology

Judith Babyar, RHIT, CTR
Cancer Registrar

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Diagnostic Radiology

F. B. Barhamand, M.D.
Hematology/Oncology

Mansoina Baweja, MD
Cancer Liaison Physician
Hematology/Oncology

Linda Conlin, LCSW
Social Services, Cancer Center

Kathleen Evans, PhD
Pharmacy

Jackie Ford, RN
Manager Inpatient Oncology Unit

Sue Garrard, RTT, BS
Manager Radiation Oncology

Cathryn Goldberg, MD
Director Pathology

Alexander Hantel, MD
Hematology/Oncology
Medical Director of Oncology Services

Elizabeth Harvey, MD
Surgery

Charles Kim, MD
Anesthesiology/Palliative Care

Vasudha Lingareddy, MD, FACRO
Radiation Oncology

Amy Phalen, RN, BSN, OCN, CBCN
Clinical Educator/Quality Coordinator

Kimberly Rohan, RN, CNS, ACON, APN
Hematology/Oncology

George Salti, MD
Director Surgical Oncology

Kathy Seymour, RN, BSN, OCN, CCRP
Mngr, EEH Cancer Center Research

Samir Undevia, MD
Chairman, Cancer Committee/Assoc
Medical Director
Hematology/Oncology

Jenna VanGilder, RN, BSN, OCN
Director, Cancer Services

Elyse Weber, MS, CGC
Genetic Counselor

Beverly Wendell, NP
Palliative Care

Jill Wozny, RN, BSN, OCN
Breast Program Navigator

Alternates:

Joseph Kash, MD
Hematology/Oncology

Sharon Kelleher, LCSW
Social Services, Cancer Center

Mohammed Khan, MD
Anesthesiology

Oh-Hoon Kwon, MD
Radiation Oncology

Barbara Merek, RN
Oncology

Dwight Morrow, MD
Pathology

Karen Pekelder, CTR
Cancer Registrar

Peter Petratos, MD
Surgery

Jessica Schnase, RN
Research