

Huntington Hospital Cancer Center *2012 Annual Report*





HUNTINGTON HOSPITAL CANCER CENTER

Mission

Our mission is to excel at the delivery of healthcare to our community.

Vision

To become the finest community-based regional medical center in Southern California.

Core Values

Respect-Integrity-
Stewardship-Excellence
(RISE)

Our Commitment to You

Our goal is to provide you with the best possible experience at Huntington Memorial Hospital. We strive to exceed your expectations, and we encourage you to be an active participant in your care. We will treat you with courtesy and respect. We will listen carefully to you. We will address your needs. We will respond to your concerns. We will answer your questions to keep you informed. We will provide a safe and clean environment. We will include you and your family in your Plan of Care. We will be sensitive to your cultural needs. We will work together as a team to care for you.



CANCER DATA CENTER TEAM

Cancer Committee

The Cancer Committee is comprised of representatives from each of the medical departments caring for cancer patients, as well as all the allied health professionals involved in supportive care of cancer patients. The committee is responsible for overseeing the cancer program activities, cancer conferences, and the Cancer Data Center.

PHYSICIAN MEMBERS

Steven Applebaum, MD
Co-Chair, Cancer Committee
Medical Oncology

Robbin Cohen, MD
Thoracic Surgery
Medical Director,
Lung Program

Christopher Hedley, MD
Radiology
Medical Director, Radiology

Lawrence Jones, MD
Urology

Howard Kaufman, MD
Chair, Cancer Committee
General Surgery
Medical Director,
Cancer Center

Max Lehfeldt, MD
ACoS Physician Liaison
Plastic Surgery

Paul Lin, MD
Gynecologic
Oncology Surgery

Cynthia Martel, MD
Medical Oncology

Susan Murakami, MD
Pathology

James Recabaren, MD
General Surgery

Daniel Spurgeon, MD
Hospice and
Palliative Medicine

Ruth Williamson, MD
Radiation Oncology
Medical Director,
Radiation Oncology

NON-PHYSICIAN MEMBERS

Cindy Bacon, RN
Lung Navigator

Ann Brady, RN
Symptom Management

Sharon Carrillo, CTR
Manager, Cancer Data Center

Mays Chua, RN
Prostate,
Head and Neck Navigator

Christine Conti, RN
Lung Navigator

Lisa Corbisiero, RN
Symptom Management

Nancy Cushing, RN
Breast Navigator

Saskia deKoomen, RN
Colorectal, GYN Navigator

Leah Kurihara, RD
Clinical Dieticians

Edna DeLeon, RN
Director,
Quality Management

Tina Ivie, RN
Breast Navigator

Maury Kulwin
Executive Director,
Ambulatory and Cancer
Services

Bernadette Merlino, VP
Non-Physician Members
VP, Clinical Strategy and
Physician Development

Susie Nakao, RN
Clinical Research

Martin Perez, PhD
Non-Physician Members

Barbara Perry, LCSW
Social Services

Gloria Tango, RN
Manager, 6 West

Huntington Hospital Cancer Center – 2012 Year in Review

For decades, Huntington Hospital Cancer Center has delivered personalized, compassionate care to patients drawn from across the San Gabriel Valley and beyond.

Far surpassing the traditional community hospital in both its quality and its scope, our cancer center is accredited – with commendation – by the American College of Surgeons Commission on Cancer. The center continues to receive excellent patient satisfaction ratings: In 2012, its outpatient cancer services were rated in the 95th percentile by the nationwide Press Ganey Patient Satisfaction Survey. (Inpatient satisfaction ratings are consolidated with hospital-wide data.)



Howard Kaufman, MD
*Chair, Cancer Committee,
General Surgery, Medical Director, Cancer Center*

EXCELLENCE IN CANCER CARE

Huntington Hospital Cancer Center provides comprehensive screening, diagnosis and treatment for the most prevalent cancers affecting our community – including breast, lung, prostate, head and neck, colorectal and gynecological tumors. The center’s high-quality outpatient services are located in the beautiful Huntington Pavilion.

Huntington Hospital Cancer Center’s care team includes an array of specially trained professionals including physicians, cancer nurse specialists, social workers and dietitians with specialized oncology certification, radiation oncology professionals, nurse specialists, and a licensed cosmetologist. Nurse navigation services help coordinate the potentially complex array of services needed by patients and their families and provide vital education and other supports. Palliative care professionals offer a weekly clinic, co-located with the center’s other outpatient services. As a result, even patients with the most serious conditions can remain as comfortable as possible throughout the course of their care.

Individual patient cases are reviewed during regular multidisciplinary tumor boards, further promoting multidisciplinary collaboration and best practices. A Cancer Committee, comprised of members of Huntington Memorial Hospital’s medical, administrative, nursing and key support staff, meets quarterly to review the entire program. The committee identifies strategies to satisfy all 34 standards established by the American College of Surgeons Commission on Cancer. Annual goals for the program are set and reviewed, and quality indicators are discussed to identify opportunities for improvement.

As part of ongoing quality review, the committee utilizes quality measures developed by the National Quality Forum. These measures are accepted by the Commission on Cancer, which in turn publishes data regarding hospital performance. Statistics for 2011 were made available in 2012 and showed Huntington Hospital Cancer Center significantly outperforming other California hospitals (consolidated data) with regard to several important quality measures.

THE CANCER DATA REGISTRY CENTER — SUPPORTING CONTINUOUS QUALITY IMPROVEMENT

Huntington Hospital's Cancer Data Registry Center collects, maintains and effectively reports tumor data — allowing Huntington Hospital Cancer Center to identify community and nationwide trends. Our cancer physicians and cancer nurse specialists also utilize these data to identify opportunities for further quality enhancements in caring for cancer patients at Huntington Hospital. Our Cancer Data Registry Center regularly participates in studies mandated by the American College of Surgeons Commission on Cancer.

PROVIDING SUPPORT FOR PATIENTS AND THEIR LOVED ONES

Patient support is an essential component of Huntington Hospital Cancer Center's work. We host support groups for breast, lung, prostate and colon cancer patients, as well as those receiving radiation therapy. Patients who are interested can also be matched with a cancer survivor for mentorship, emotional support and guidance. The cancer center also provides a variety of monthly workshops, including Return to Wellness workshops — specially designed for cancer patients — in exercise and yoga, and a Write to Heal workshop that includes not only writing, but also art and music therapy. A grief group is available for those who have lost a loved one to cancer.

REACHING OUT TO OUR COMMUNITY

Huntington Hospital Cancer Center places great emphasis on community outreach and education. Through these efforts, we seek to ensure that local and regional residents are aware of cancer risk factors and symptoms, understand how to reduce their risk for cancer, and know how they can access high-quality cancer-related services.

Annual screening events (often held in collaboration with the American Cancer Society) provide screenings for colorectal, prostate and lung cancer. Informative lectures involve cancer physician specialists from Huntington Hospital and other invited national experts, who provide information that emphasizes preventive lifestyle choices and early detection. These lectures are offered regularly throughout the year.

In 2012, Huntington Hospital Cancer Center continued to build on our valuable partnership with the Herald Cancer Association. This community organization addresses the healthcare needs of Chinese communities in the greater Los Angeles area. Our partnership helps enhance access to cancer care among members of these communities in Huntington Hospital's service area.

Continued outreach to and communication with referring physicians helped us maintain physician satisfaction. In our lung and colorectal programs, for example, 100 percent post treatment follow-up was achieved. By ensuring that information regarding diagnosis, treatment and outcomes is swiftly communicated to patients' primary care physicians, Huntington Hospital Cancer Center promotes continuity of patient care and further strengthened physician relations community-wide.

CLINICAL LEADERSHIP — MINIMALLY INVASIVE SURGERY

Our minimally invasive surgery programs for colorectal, prostate, lung and gynecologic cancers continued to grow throughout 2012, with our advanced daVinci robotic system increasingly used in treating such cancers. Huntington Hospital remains ahead of the curve with regard to minimally invasive (laparoscopic) surgery for colon cancer. Several years ago, The Health Care Advisory Board predicted that 65 percent of patients who require colon resection for cancer would undergo a laparoscopic procedure by 2014. However, just one third of these procedures in the United States to date are performed laparoscopically. In contrast, in 2012, Huntington Hospital surgeons performed 88 percent of elective colon cancer surgeries laparoscopically, putting us far ahead of the national average. The benefits of laparoscopic surgery can include smaller incisions and reduced scarring, less pain, shorter hospital stay, lower rates of surgical-site infection, and a more rapid return to presurgical activity for the patient.

Minimally invasive surgery is only one component of improving care for patients with colon and rectal cancer. In 2012, a multidisciplinary team was established to develop an accelerated care pathway for patients undergoing colon and rectal surgery. Using evidenced-based data and guidelines, we were able to reduce length of stay by one full day without any increase in readmission rates. More than half of our patients undergoing minimally invasive colon and rectal surgery now go home on postoperative day 2 or 3.

RESEARCH — EXPANDING KNOWLEDGE, ENHANCING CARE

Huntington Hospital Cancer Center offers patients significant opportunities to participate in clinical trials in areas as diverse as prevention of cancer to treatment of advanced disease.

The cancer center receives early information regarding new clinical trials in both the United States and Canada. After careful review, our physician investigators select the most promising of these to be offered through our San Gabriel Valley Clinical Oncology Research Program. Adult cancer patients in our service region who meet eligibility requirements and are interested in taking part in a clinical trial can enjoy significant benefits — and help to advance research in ways that may also impact thousands of other cancer patients in the future.

Trials open to enrollment are phase-III randomized trial regarding lobectomy versus sublobular resection for small (less than two-centimeter) peripheral non-small-cell lung cancer, and a phase-II study regarding clinical outcomes following accelerated partial breast irradiation with a strut-adjusted volume implant.

Huntington Hospital Cancer Center's medical staff also worked with surgical residents — from both the hospital's Graduate Medical Education program and our affiliated academic centers — on a variety of research initiatives in 2012. This work contributes to improved delivery of cancer care at Huntington Hospital and beyond.

UPDATE ON 2012 CANCER CENTER GOALS:

Huntington Hospital Cancer Center is proud to have accomplished all goals established for 2012, as follows:

Clinical Goal: *Purchase Nurse Navigator Software*

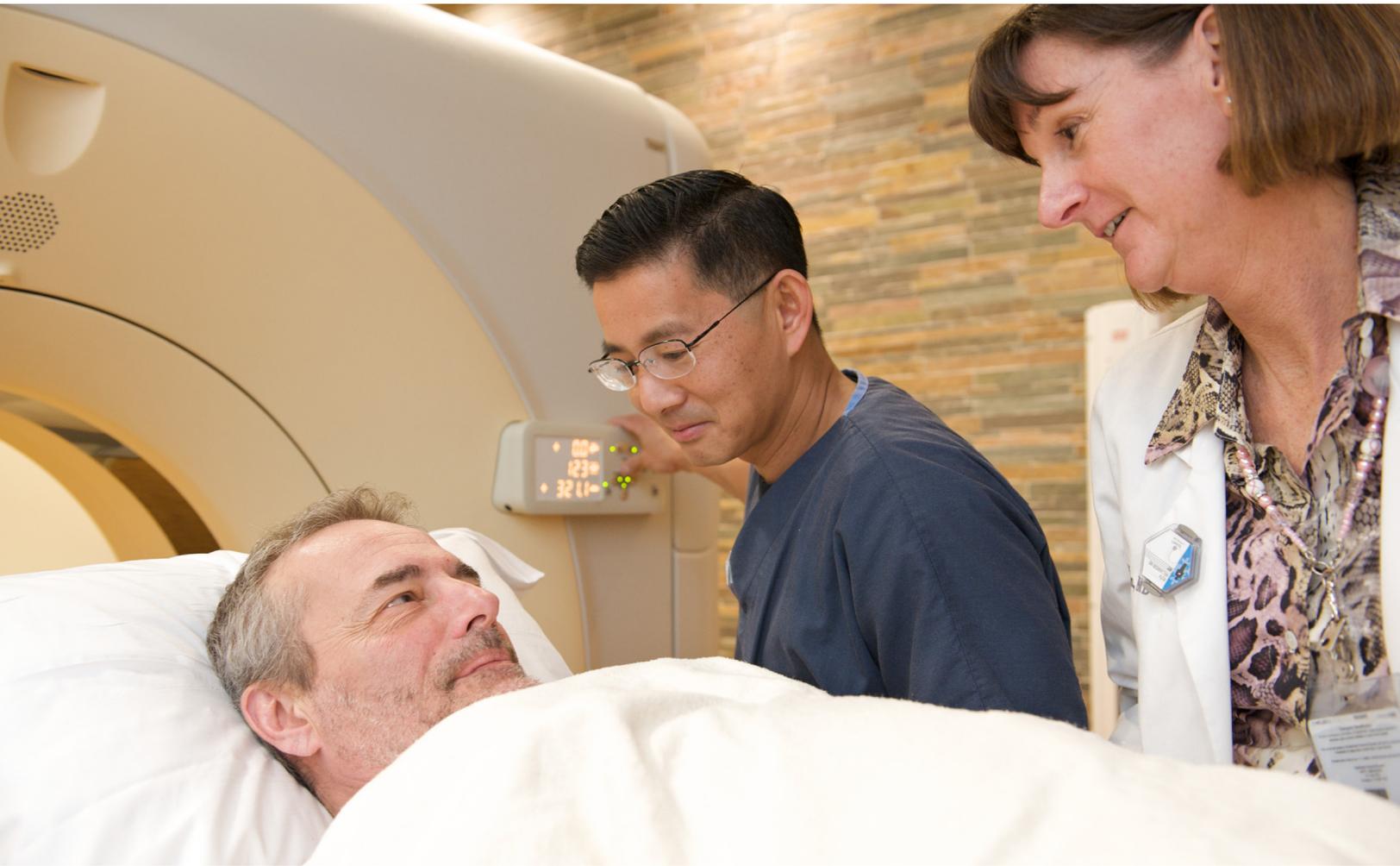
Our cancer center is proud to offer 5 nurse navigators to support patients throughout their journeys in cancer treatment. However, the work of our dedicated navigators does not stop with direct patient care during treatment. As more and more patients successfully overcome a diagnosis of cancer, long term planning, including surveillance, becomes increasingly important. The American College of Surgeons Commission on Cancer will initiate additional standards in 2014 that will require our Cancer Center to be responsible for helping patients develop and understand a survivorship plan. We have approved the purchase of a software package to facilitate these improvements in care.

Programmatic Endeavors Goal: *Move all non-emergent outpatient cancer surgeries from the hospital, and if feasible, Huntington Outpatient Surgery Center to the Huntington Ambulatory Surgery Center (HASC). Extend the current Huntington Hospital Cancer Center services to HASC.*

The beautiful new 22,000 square foot Huntington Ambulatory Surgery Center (HASC), located on the third floor of the Huntington Outpatient Pavilion, houses 6 state of the art outpatient operating rooms and perioperative support services for seamless patient care. HASC is licensed and accredited by both Medicare and the Accreditation Association for Ambulatory Health Care (AAAHC) and opened for business on April 2, 2012. Shortly thereafter, cancer cases from the hospital and the Huntington Outpatient Surgery Center began to move to HASC with full cancer services support from the Huntington Hospital Cancer Center.

Huntington Hospital Cancer Center continues to rely on charitable contributions from the community it serves. We are deeply grateful for the more than \$3 million in donations designated to the center in 2012. These gifts supported essential services and programs, including — for example — the work of our nurse navigators. Gifts designated by the donor to a specific aspect of the cancer center's work are used strictly for that purpose.

Howard S. Kaufman, MD, MBA,
Medical Director, Huntington Hospital Cancer Center



Cancer Program Highlights

The cancer program received three-year approval with commendation from the Commission on Cancer in 2011 and at the same time the Huntington-Hill Breast Center was recognized as a “Center of Excellence” and accredited as a National Program for Breast Centers (NAPBC). Only facilities that are committed to providing the highest quality of care to their patient receive this accreditation.

CANCER PATIENTS BENEFIT FROM BEING TREATED AT AN ACCREDITED FACILITY. A FEW OF THE BENEFITS INCLUDE:

- Multidisciplinary team approach to coordinate care
- Comprehensive care with state-of-the-art services and equipment
- Assessment of treatment planning based on evidence-based national treatment guidelines
- The highest quality of care
- Ongoing monitoring and improvement of care
- Information about clinical trials
- Options of palliative care services

Cancer Program Highlights

OUR MULTIDISCIPLINARY TEAM INCLUDES:

Surgeons with expertise in cancer surgeries.

Radiologists with superlative skills in the application of radiologic technology for cancer screening and diagnosis. Our radiologists are also experts in the diagnostic use of PET scans, which indicate cancer-related cellular changes before they are visible with CTs or MRIs.

Medical Oncologists expert in the diagnosis and treatment of cancer.

Radiation Oncologists, trained physicians who oversee the treatment of cancer patients at the Center, using the latest radiation therapy techniques, including linear-accelerator radiation and intensity-modulated

Specialists, physicians with specialized training in the treatment of many diseases and conditions. Through extensive training and experience in the field, these physicians have become leading experts in the diagnosis of cancer.

Pathologists with extensive training and experience in the analysis of body tissue to confirm or rule out a diagnosis of cancer – and to help identify any special considerations that may influence treatment decisions. Several of our pathologists received their training at the renowned Mayo Clinic and Memorial Sloan-Kettering Cancer Center. All biopsy results are analyzed by at least two pathologists at the Center, ensuring the very highest degree of accuracy.

Dietitians with far-reaching knowledge of the nutritional needs of cancer patients - including special considerations during radiation or chemotherapy treatment. These professionals consult regularly with our medical team to ensure patients' needs are met.

Oncology Social Workers, who understand the emotional and psychosocial pressures faced by cancer patients, and who are available to assist with a comprehensive range of referrals and support services.

RN Nurse Navigator, a registered nurse who is responsible for streamlining and coordinating the entire, often-complex diagnosis, treatment and follow-up process for cancer patients. This may include advocacy with insurance companies, assistance with scheduling, and much more. For patients who require hospital admission, inpatient care coordinators are also available to assist with discharge and post-hospitalization services. The care-coordination program at Huntington Cancer Center is unique in our region and provides significant benefits and peace of mind to our patients and their families.

Symptom-Management Care Coordinator who assists patients experiencing cancer-related side effects or pain. This registered nurse helps assess the patient's need for symptom-management services, works with each patient's physician to ensure that appropriate pain management is provided, and coordinates appropriate complementary therapies.

Oncology Research Coordinators who, with our physicians and patient-care coordinator, assess patients' eligibility for participation in available clinical trials. Our research coordinators are also responsible for ensuring proper documentation and patient follow-up regarding the trials available at the Center - and for referring patients as appropriate to other clinical trials around the United States and Canada.

Nursing Staff specially prepared to provide both inpatient and outpatient care to cancer patients in the area of radiation oncology, nurses help assess patients' needs and work closely with physicians to provide exceptional cancer care.

Our inpatient oncology nurses are all expert in the administration of chemotherapy, and are rigorously trained in all other aspects of cancer care.

Pharmacists, who collaborate extensively with our physicians to design appropriate drug therapies for patients.

Cancer Program Highlights

APPEARANCE CENTER

The Constance G. Zahorik Appearance Center, located in the Huntington Pavilion, assists patients in dealing with the cosmetic side effects of their cancer treatment. The following services are provided in a private setting by a licensed cosmetologist:

- Skin and make-up consultation
- A selection of attractive wigs
- Personalized fitting and styling of wigs
- Referral to We Care, providers of custom human-hair prostheses
- Scarves and hats
- Sun-protective clothing

SUPPORT SERVICES

Cancer Pain and Symptom Management

The Palliative Care Program at Huntington Hospital provides treatment for the relief of cancer symptoms such as pain and treatment-related side effects. The program is led by specially trained registered nurses who work closely with the patient's physician to improve the patient's comfort and quality of life during their cancer treatment.

Lymphedema Review Class

Early diagnosis and treatment for lymphedema is important to help reduce symptoms and prevent the condition from progressing. Huntington Hospital offers a patient education class to review the signs, symptoms and risk factors of lymphedema, and to provide information on managing lymphedema and the associated side effects. There is no charge to attend the class.

Genetic Counseling

Over the past several years, inherited factors, or genes, have been identified that can contribute to the development of some forms of breast, ovarian, colorectal and other types of cancer. The Huntington Hospital Cancer Center offers hereditary cancer risk assessment and genetic counseling to people who are concerned about their personal and/or family history of cancer and risk to other family members.

Outpatient Ostomy Clinic

Established in 2009, the Huntington Hospital outpatient ostomy clinic provides preoperative and postoperative ostomy services to our patients and their families. Specially trained and certified wound, ostomy and continence nurses, provide education on daily maintenance of temporary and permanent stomas, ensuring both patients and their families are comfortable and secure with every aspect of ostomy care. In addition, they assist patients in dealing with the emotional issues surrounding life with an ostomy.

SOME OF THE INPATIENT AND OUTPATIENT OSTOMY SERVICES WE PROVIDE INCLUDE:

- Preoperative counseling and stoma site marking
- Post-operative teaching
- Product selection
- Hygiene management
- Stoma Care
- Evaluation and treatment of skin and/or stomal problems
- Referral for medical supplies
- Lifestyle adaptation

Cancer Program Highlights

Our outpatient ostomy clinic is located on the first floor of the La Vina building (west campus) in the outpatient rehabilitation department.

We offer an ongoing ostomy support group, held the third Thursday of each month.

Below is a list of the upcoming support group meetings.

REHABILITATION SERVICES

Huntington Hospital's 24-bed, acute rehabilitation facility provides comprehensive, state-of-the-art inpatient rehabilitation services. Through a variety of therapeutic and rehabilitation programs, our expert staff help patients return to the fullest possible level of activity, independence and self-sufficiency.

The Rehabilitation Services team carefully designs each rehabilitation program based on the patient's individual needs. Rehabilitation programs typically provide the patient with two or more hours of combined therapy each day.

Rehabilitation specialties include; occupational therapy, physical therapy, speech pathology, audiology and recreational therapy.

EDUCATION AND LEARNING

The Health Sciences Library (HSL) serves the entire HMM Medical Staff, hospital employees, research personnel, volunteers and the general public by providing health information and educational programs which meet their clinical, research and educational needs.

SUPPORT GROUPS

Patient, families, and caregivers can attend a variety of free, monthly support groups.

Breast Cancer Support Group	Write to Heal
Lung Cancer Support Group	Transitions Support Group for Grief & Loss
Pink Ribbon Exercise	Savi-Sisters
Eating Well Through Cancer Therapy	Lymphedema Group
Community Outreach, Prostate Educational Group	Look Good Feel Better
Therapeutic Yoga for Cancer Patients	Smoking Cessation Classes
Ostomy Support Group	

CANCER CONFERENCES

Multidisciplinary conferences are held to discuss the management of cancer patients. The AJCC clinical stage and national evidence-based treatment guidelines are used in the patient's treatment plan.

General Multidisciplinary Conference Every Tuesday	Thoracic Conference 1st & 3rd Thursday each month
Genitourinary Conference 1st & 3rd Wednesday each month	Breast Conference Every Friday

Cancer Program Highlights

PROFESSIONAL EDUCATION

Physicians, nurses and allied health professionals have the opportunity to earn CME credit by attending an educational activity.

Offered in 2012:

Advances in the Treatment of HER2+ Breast Cancer

Speaker: Evangelia Kirimis, MD

New Developments in Prostate Cancer

Testing and Treatment

Speaker: Roger Satterthwaite, MD

Update on Testicular Cancer;

Diagnosis and Treatment

Speaker: Elia Skinner, MD

Breast Reconstruction

Speaker: Max Lehfeldt, MD

Advances in Breast Cancer Treatment

Speaker: Ruth Williamson, MD
and Jeannie Shen, MD

*Applying New Endobronchial Technology
in the Management of Thoracic Malignancies*

Speaker: Daniel S. Oh, MD

*Improving End-Of-Life Care
for Chinese Americans*

Sandy Chen Stokes, RN, MSN

PREVENTION AND SCREENING PROGRAMS

- The Signs, & Symptoms, Risk Factors, Do's and Don'ts for Managing Lymphedema & It's Side Effects
- Freedom from Smoking
- Scope It Out, Colon Cancer Awareness
- How Can You Prevent It? (Colon Cancer)
- Breast Cancer Prevention and Treatment
- Mind, Body and Spirit for Health
- Breast Health
- Employee Breast Health Fair
- Prostate Cancer Prevention & Screening
- Low-Cost Mammograms
- Smoking Stinks

COMMUNITY OUTREACH EVENTS

- Love Notes, from around the world
- Colon Cancer Awareness
- Flintridge Sacred Heart Academy Student Tour of Cancer Center
- The Silent Killer: Colon Cancer
- Everything You Wanted to Know About Breast Cancer Prevention & Treatment
- Mind, Body and Spirit for Health and Acupuncture
- Breast Health Seminar, Overseas Chinese Business Exchange
- Breast Cancer Awareness for Huntington Hospital Employees
- Breast Health Fair
- Urinary Incontinence, Overactive Bladder

STUDIES OF QUALITY

"Incidence of Up-staging to Carcinoma In-Situ or Invasive Carcinoma in Patients found to have atypia on percutaneous, vacuum-assisted core needle biopsy using Intact-specimen breast biopsy device"

Benjamin Godwin, MD, Jon Foran, MD, Jeannie Shen, MD

"Alvimopan use is associated with reduced length of stay and hospital costs at Huntington Hospital"

Aaron Lewis, MD, Troy Maynor, Lisa Arnot, Vernice Palestina, John Goeders, Howard Kaufman, MD

Cancer Program Highlights

QUALITY IMPROVEMENTS

Breast, Colon and Rectal Cancer-monitoring quality of care utilizing Cancer Data Center database and Cancer Program Practice Profile Reports (CP3R)

Develop and implement “Enhanced Recovery” (ERAS) pathway for colorectal cancer patients

Implement an “Integrative Oncology Program” for East-West medicine

Implemented “Six Sigma Project” to reduce the rates of incomplete documentation of clinical stage, which may affect patient care and outcomes

Move all non-emergent outpatient cancer surgeries from the hospital to the Huntington Outpatient Surgery Center.

PATIENT IMPROVEMENTS

“The Use of Alvimopan in Open Bowel Resections Reduces Post-Operative Ileus and Length of Stay”

Pharmacy, Therapeutics and Diet Committees

“Learn to Cope positively with the Impact of Breast Cancer” A ten-week cognitive-behavioral stress management therapy group study on breast cancer patients who have recently completed treatment.

Martin Perez, PhD

The Cancer Data Center submits data to the National Cancer Database where the data is used to measure the hospital’s concordance with the National Quality Forum (NQF) standards of care measures for breast, colon and rectal cancers.

The table below shows the performance rates on measures for year 2011.

Breast & Colorectal Measures		State of California	Comprehensive Community Cancer Programs	Huntington Hospital
B R E A S T	Radiation therapy is administered within 1 year (365 days) of diagnosis for women under age 70 receiving breast conserving surgery for breast cancer	87%	91.8%	97.4%
	Combination chemotherapy is considered or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1c N0 M0, or Stage II or III ERA and PRA negative breast cancer	87.4%	92.6%	96.2%
	Tamoxifen or third generation aromatase inhibitor is considered or administered within 1 year (365 days) of diagnosis for women with AJCC T1c N0 M0, or Stage II or III ERA and/or PRA positive breast cancer	80.9%	89.3%	99.5%
C O L O N	Adjuvant chemotherapy is considered or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC Stage III (lymph node positive) colon cancer	82.9%	90.3%	100%
	At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer	86.6%	87.4%	95.2%
R E C T A L	Radiation therapy is considered or administered within 6 months (180 days) of diagnosis for patients under the age of 80 with clinical or pathologic AJCC T4 N0 M0 or Stage III receiving surgical resection for rectal cancer	90.3%	93.2%	100%

Spotlight on Colon Cancer

Color cancer remains one of the most common malignancies seen in oncology practices, with roughly 140,000 new cases and more than 50,000 deaths in the U.S. in 2010.

While these are daunting numbers, there is significant optimism, as over the last decade we have made significant progress, with the introduction of multiple new agents. These include traditional cytotoxic chemotherapy drugs, but also drugs with unique mechanisms of action to attack the cancer, so called targeted therapies. This review will briefly review the progress made and update the reader on the current state of the art in colon cancer.

Until relatively recently, the only active agent in patients with advanced disease was 5-fluorouracil. It was first patented in 1957, and remains a critical drug in our armamentarium. It is generally given with folinic acid (leucovorin) which helps it bind to its target for toxicity, thymidylate synthase. In metastatic disease, it offers modest benefits, with a roughly six month benefit in survival over supportive care only. For patients with stage III disease, taking six months of post-operative 5-FU based treatment lowers development of metastatic disease by about 40%. While these benefits are significant, clearly there has been room for improvement, which has come with the introduction of four drugs in the last 15 years.

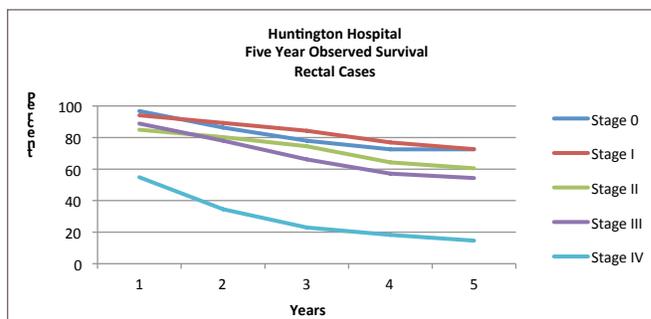
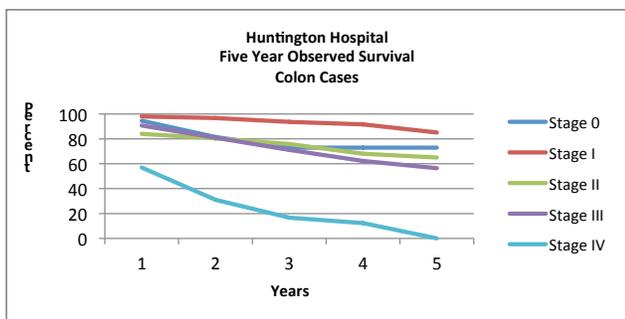
Two new cytotoxic drugs were approved in the U.S. for use in the metastatic colon cancer roughly eleven years ago, Irinotecan and then Oxaliplatin. Both of these drugs showed a survival advantage over 5-FU based therapy alone in large phase III trials. Irinotecan acts by inhibiting topoisomerase I, is given intravenously, and its main toxicities tend to be diarrhea and myelosuppression. Oxaliplatin is an analogue of the heavy metal platinum drugs (such as cisplatin), is also given intravenously, but has an interesting toxicity profile, with the most common dose-limiting toxicity being a peripheral neuropathy. Once these drugs were proven effective in the metastatic setting, we quickly set out to see if they could also improve survival if given in the adjuvant setting, i.e. to those patients with stage II and III disease. Interestingly, three different trials failed to show a benefit in this setting for adding Irinotecan to traditional 5-FU regimens. On the other hand, large studies did show that adding Oxaliplatin does improve survival over 5-FU, and thus our current standard for patients with stage III disease is a regimen incorporating 5-FU, leucovorin and Oxaliplatin. In stage II patients, there does remain some controversy regarding their benefit to adjuvant chemotherapy in general, but for those with high-risk features, Oxaliplatin-based therapy can be considered, balancing the risks and benefits.



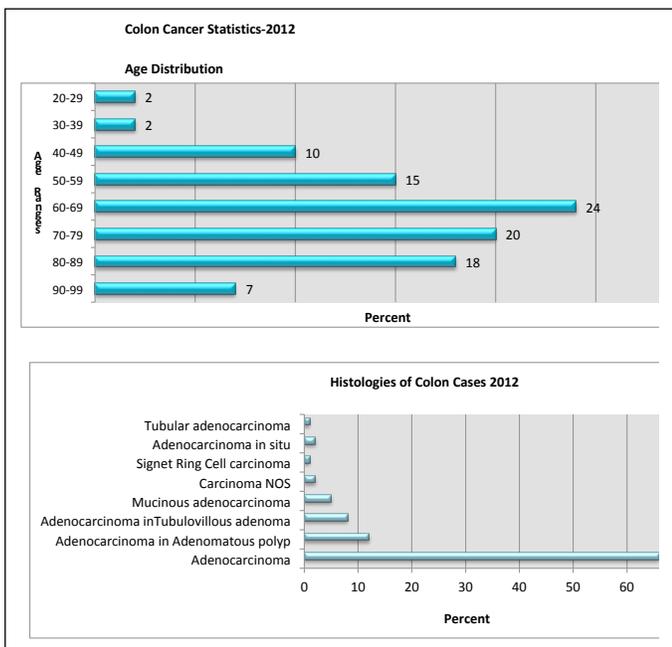
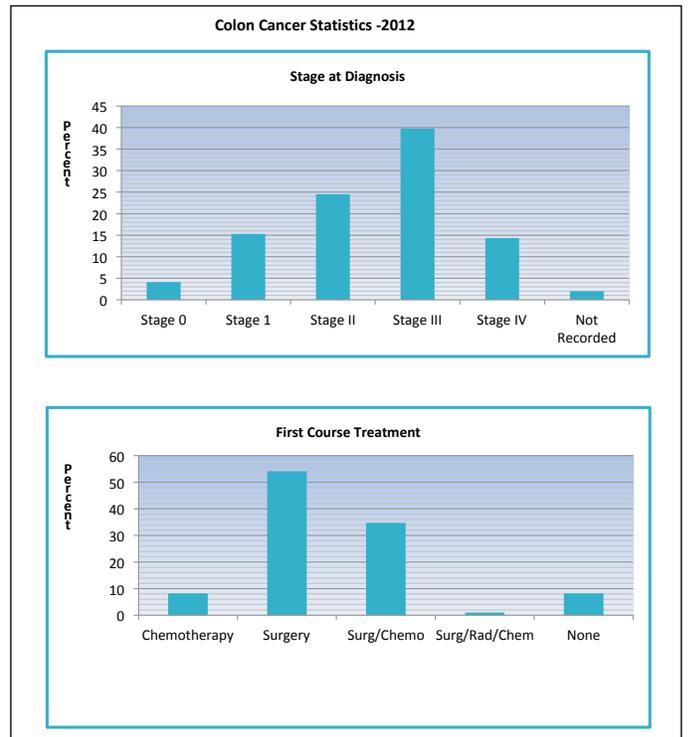
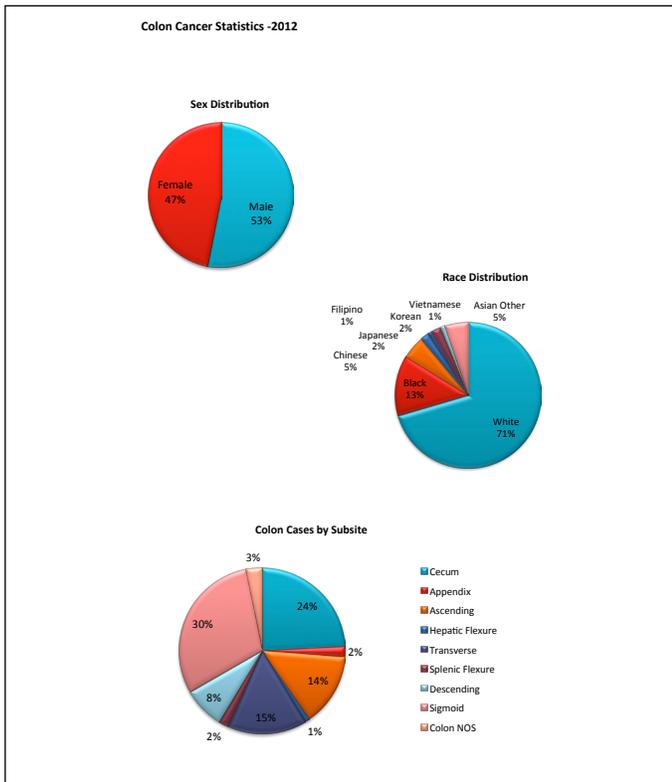
Steven Applebaum, MD
*Co-Chair,
Cancer Committee, Medical Oncology*

In oncology, our goal has not just been to come up with new chemotherapy agents, but to uncover “targets” on the cancer cells, and then develop drugs with less toxicity to attack those targets. In colon cancer, we have used this model to develop two distinct targets, and now have monoclonal antibodies against these targets that have proven to improve survival in patients with stage IV disease. The first of these looked at the role of angiogenesis in colon cancer, and targeted the vascular endothelial growth factor (VEGF) receptor. Bevacizumab is a humanized antibody against VEGF and in multiple trials in patients with stage IV disease, its addition to standard chemotherapy showed an improvement in response rates and overall survival. It has unique toxicities, mainly thromboembolic issues, hypertension, and usually mild bleeding such as epistaxis. Somewhat surprisingly, trials have been conducted in the adjuvant setting adding bevacizumab to standard chemotherapy, and it did not improve outcomes, so is only given in patients with stage IV disease.

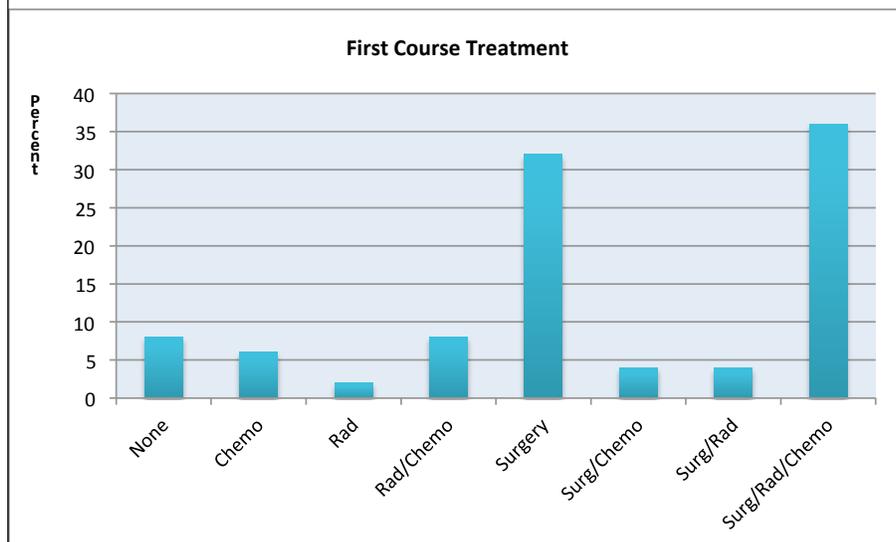
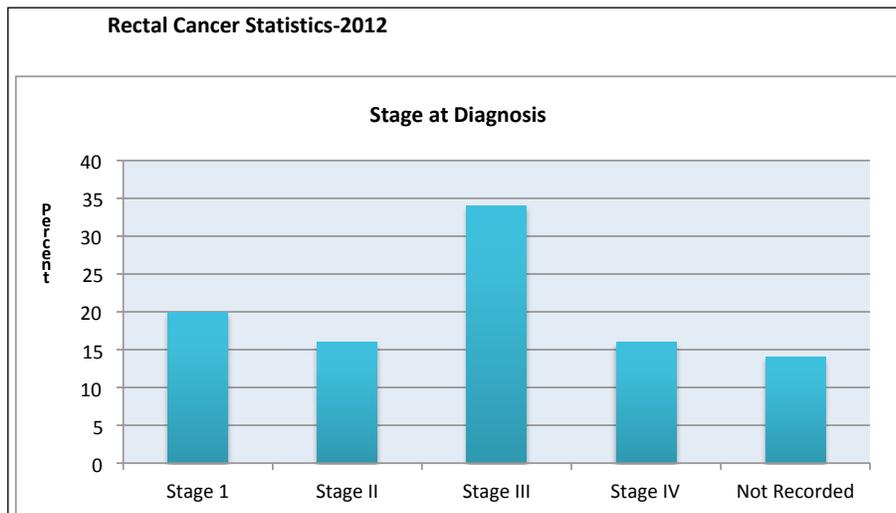
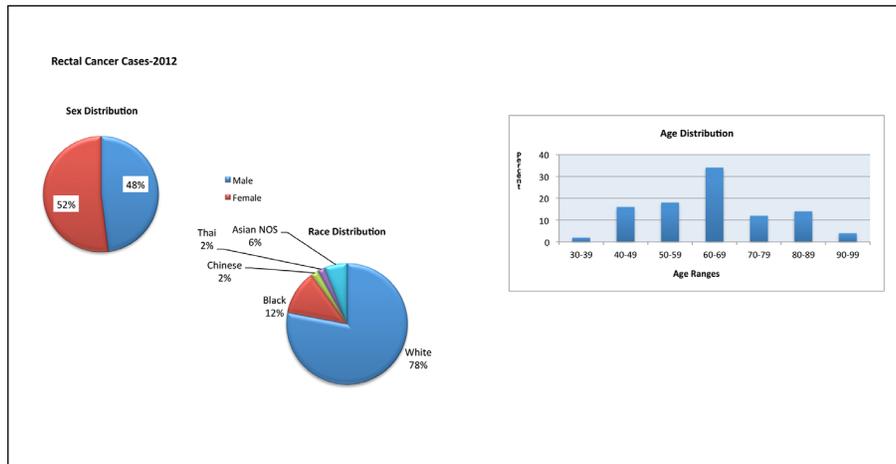
Lastly, another targeted therapy approach has been developed with the target being the epidermal growth factor receptor (EGFR). Studies with cetuximab, and later panitumumab, both antibodies targeting the EGFR receptor, have shown improved survival in stage IV disease. Further studies have been done to better select patients who would not benefit from these agents, and it was found that a mutation in the k-ras domain of the tumor predicts against to these drugs working, so they are currently only offered to patients without this mutation. Toxicities with these agents are most commonly diarrhea and a rash. Similar to bevacizumab, trials in the adjuvant setting failed to show a survival benefit, so their use is restricted to the metastatic setting.



Colon Cancer Data



Rectal Cancer Data



2012 Primary Site Table

PRIMARY SITE TABLE YEAR 2012												
Site	Total	Class			Sex			Stage				
Group	Cases	Analytic	NonAn	M	F	Other	Stage 0	Stage I	Stage II	Stage III	Stage IV	
ALL SITES	1978	1731	247	754	1224	0	191	504	394	227	194	
TONGUE	3	1	2	2	1	0	0	0	0	0	1	
SALIVARY GLANDS, MAJOR	5	5	0	3	2	0	0	0	1	1	2	
FLOOR OF MOUTH	2	2	0	1	1	0	0	0	0	1	0	
MOUTH, OTHER & NOS	2	2	0	0	2	0	0	0	0	1	0	
TONSIL	3	3	0	2	1	0	0	0	0	0	2	
OROPHARYNX	1	0	1	0	1	0	0	0	0	0	0	
NASOPHARYNX	4	4	0	3	1	0	0	1	1	1	0	
HYPOPHARYNX	1	1	0	1	0	0	0	0	0	0	1	
PHARYNX & ILL-DEFINED	1	0	1	0	1	0	0	0	0	0	0	
ESOPHAGUS	16	12	4	11	5	0	0	1	1	5	1	
STOMACH	34	29	5	21	13	0	1	7	3	6	8	
SMALL INTESTINE	9	6	3	6	3	0	0	0	4	2	0	
COLON	118	101	17	61	57	0	4	15	24	39	16	
RECTUM & RECTOSIGMOID	50	43	7	24	26	0	0	10	8	15	5	
ANUS,ANAL CANAL,ANORECTUM	3	2	1	0	3	0	0	0	0	0	0	
LIVER	24	20	4	14	10	0	0	5	3	0	3	
GALLBLADDER	5	5	0	0	5	0	0	0	1	1	3	
BILE DUCTS	12	9	3	9	3	0	0	1	3	0	1	
PANCREAS	56	46	10	30	26	0	3	4	13	4	14	
RETROPERITONEUM	1	1	0	1	0	0	0	1	0	0	0	
PERITONEUM,OMENTUM,MESENT	3	2	1	0	3	0	0	0	0	2	0	
NASAL CAVITY,SINUS,EAR	1	1	0	0	1	0	0	0	0	0	0	
LARYNX	7	7	0	7	0	0	1	4	0	1	0	
LUNG/BRONCHUS-SMALL CELL	6	6	0	5	1	0	0	0	0	1	5	
LUNG/BRONCHUS-NON SM CELL	137	114	23	61	76	0	1	29	6	19	55	
PLEURA	2	2	0	1	1	0	0	1	0	1	0	
LEUKEMIA	16	7	9	9	7	0	0	0	0	0	0	
MYELOMA	16	8	8	10	6	0	0	0	0	0	0	
OTHER HEMATOPOIETIC	21	9	12	8	13	0	0	0	0	0	0	
BONE	3	2	1	2	1	0	0	1	1	0	0	
SOFT TISSUE	11	9	2	9	2	0	0	4	2	2	0	
MELANOMA OF SKIN	37	31	6	24	13	0	8	15	2	4	2	
KAPOSIS SARCOMA	1	0	1	0	1	0	0	0	0	0	0	
OTHER SKIN CA	3	3	0	3	0	0	0	0	0	1	0	
BREAST	601	576	25	3	598	0	120	204	170	48	14	
CERVIX UTERI	28	24	4	0	28	0	0	11	2	7	4	
CORPUS UTERI	71	67	4	0	71	0	0	44	6	8	7	
UTERUS NOS	2	1	1	0	2	0	0	1	0	0	0	
OVARY	37	31	6	0	37	0	0	9	2	8	10	
VAGINA	2	0	2	0	2	0	0	0	0	0	0	
VULVA	11	9	2	0	11	0	1	6	0	1	1	
OTHER FEMALE GENITAL	3	3	0	0	3	0	1	0	0	1	0	
PROSTATE	199	159	40	199	0	0	0	19	113	21	6	
TESTIS	15	14	1	15	0	0	0	11	1	2	0	
PENIS	4	3	1	4	0	0	0	1	0	0	2	
BLADDER	85	81	4	62	23	0	50	15	6	3	5	
KIDNEY AND RENAL PELVIS	69	65	4	45	24	0	1	40	6	8	6	
URETER	3	2	1	2	1	0	0	1	1	0	0	
OTHER URINARY	2	2	0	2	0	0	0	0	0	0	0	
EYE	3	3	0	0	3	0	0	0	0	0	0	
BRAIN	35	30	5	17	18	0	0	0	0	0	0	
OTHER NERVOUS SYSTEM	33	28	5	11	22	0	0	0	0	0	0	
THYROID	43	39	4	7	36	0	0	25	2	7	5	
OTHER ENDOCRINE	16	16	0	9	7	0	0	0	0	0	0	
HODGKIN'S DISEASE	5	4	1	4	1	0	0	1	3	0	0	
NON-HODGKIN'S LYMPHOMA	61	50	11	30	31	0	0	17	9	6	15	

Page 15

Cancer Data Center

The Cancer Data Center is an integral part of the hospital's cancer program and a basic requirement for an approved cancer program by the Commission on Cancer (CoC).

The Cancer Data Center is charged with the collection of data on cancer, benign CNS tumors, and hematopoietic diseases. Data is collected on every cancer patient seen at Huntington Hospital, Huntington-Hill Breast Center, and the Huntington Outpatient Surgery Center. The data collected provides the whole picture of the patient's disease. Data maintained includes, but is not limited to, patient demographics, date of diagnosis, primary site, and histology, stage of disease, treatment, and lifetime follow-up.

The Cancer Data Center is staffed by three certified Cancer Registrars, one case-finder, one department assistant, and one follow-up clerk. In recent year's higher education and certification standards for Cancer Registrars are mandated to ensure the accuracy of the collected data. All staff members participate in ongoing cancer-related educational events at the local, state, regional and national levels to continually increase their knowledge and skills.

The Quality Control Coordinator reviews at least 10% of the analytic caseload each year. A full report on the findings is provided quarterly to the Cancer Committee. The report includes; timeliness of abstracting, patient follow-up rates, documentation compliance with College of American Pathologists protocols, clinical staging at conferences, and treatment planning using evidence-based treatment guidelines.

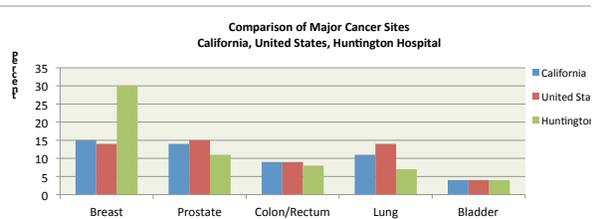
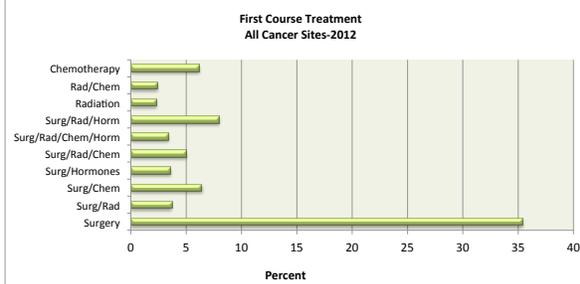
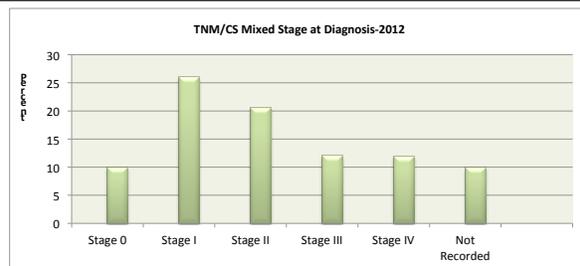
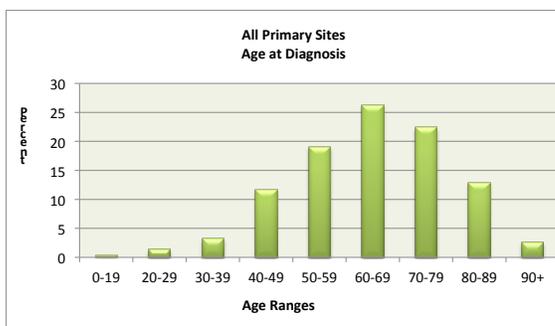
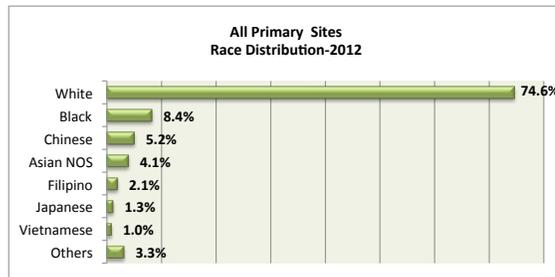
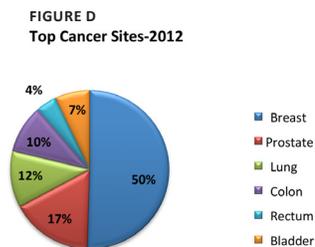
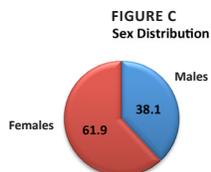
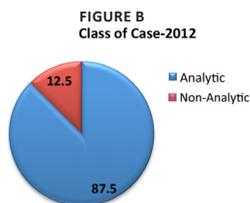
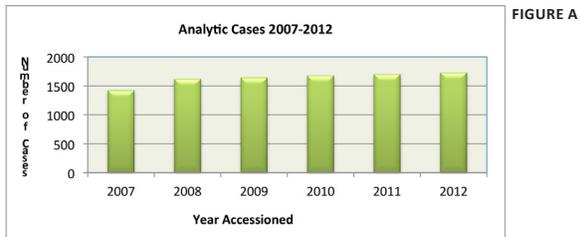
A total of 1,978 cases were accessioned into the database in 2012. The number of cancer cases seen at Huntington Hospital has increased over the last five years. (Fig A) Of those cases accessioned in 2012, 87.5% were analytic cases and the remaining 12.5% were non-analytic cases (Fig B). Males accounted for 38.1% and females 6.19% (Fig C). The major cancer sites accessioned were; breast 36.8%, prostate 12.2%, colorectal 10.3%, lung 8.4% and bladder 5.2% (Fig D) Breast cancer continues to be the number one cancer site diagnosed and treated at Huntington Hospital. Race and age distribution, TNM stage at diagnosis of all analytic cases, and first course of treatment on all anatomic cancer sites are demonstrated on the following pages. Huntington Hospital has a higher incidence of breast cancer when compared to California and the United States.

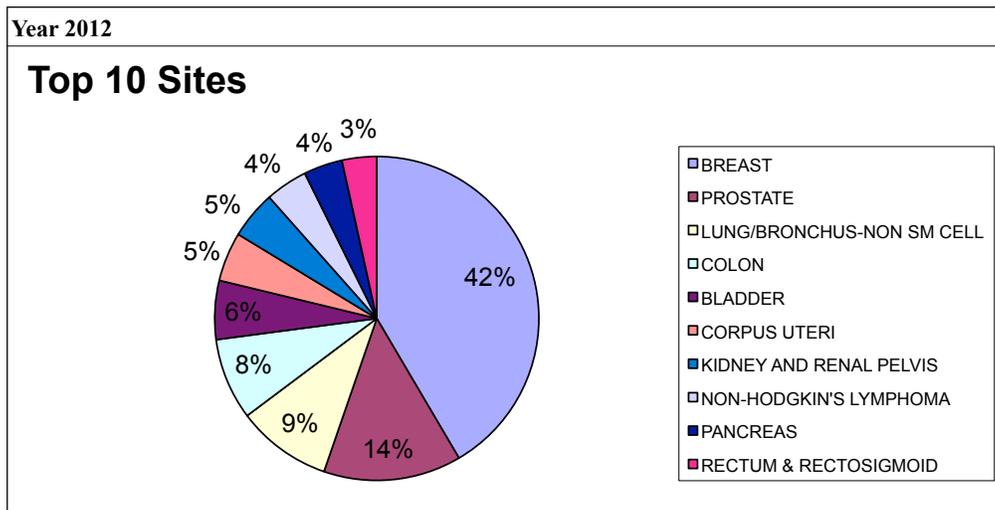
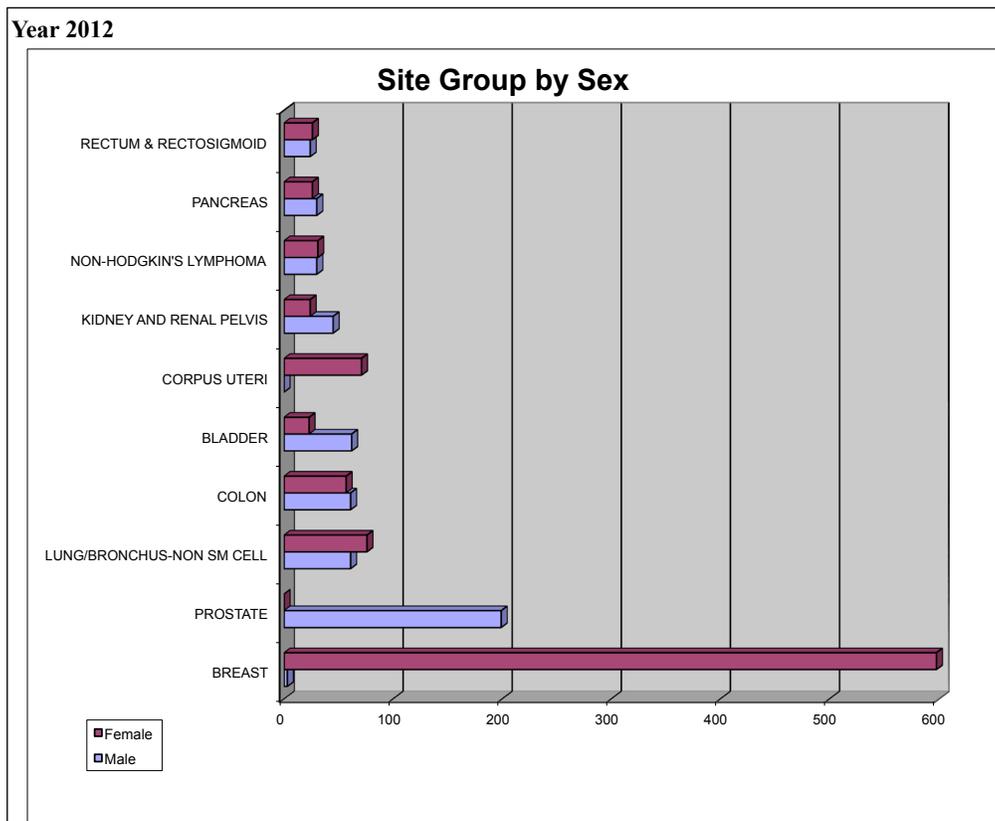
CANCER DATA CENTER ACCOMPLISHMENTS FOR 2012:

- Submitted required data to the National Cancer Database timely and free of errors
- Reported required incidence of cancer cases to the California Cancer Registry within six months from date of first contact
- Maintained on-going quality review of 10 percent analytic cases via the Quality Control Coordinator
- Maintained patient follow-up rates ensuring compliance with mandated standards
- Maintenance of continued education of Cancer Data Center staff

Physicians, residents and other healthcare professionals are encouraged to utilize the data collected. For request, call 626-397-5119.

ALL SITES







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