

JOAN KARNELL CANCER CENTER

at Pennsylvania Hospital



2011

A N N U A L R E P O R T





A Message from the
JOAN KARNELL CANCER CENTER
at Pennsylvania Hospital

We are pleased to present the 2011 Annual Report of the Joan Karnell Cancer Center at Pennsylvania Hospital. We offer a special thank you to those patients, families and friends who made donations to the Cancer Center. The bi-annual fundraiser, Together We Can 2011, was a great success this past April and we are most grateful to all who participated in the event. Much of the supportive care offered to our patients comes from the generosity of our donors and advocates. Memorial gifts were received from families and friends in honor of their loved ones and in gratitude for the care they received. An amazing team of volunteers helps in big and small ways, giving selflessly of their time and talent to help others. Several donors helped raise funds through events, contributed to endowments and funded specific programs. In addition, the Cancer Center received several grants from local and national foundations for specific projects.

In this report, you will find data on the types of cancer treated at Pennsylvania Hospital in the past year, and in comparison to national averages. This year, we look specifically at our Lung Cancer Program in depth. You will also find information on supportive care programs, outreach and clinical research. At the Joan Karnell Cancer Center, we continue to focus our efforts on cutting edge treatments and research along with compassionate supportive care programs for patients and families living with, through and beyond a cancer diagnosis.

Arthur P. Staddon, MD
MEDICAL DIRECTOR

Mary Pat Lynch, CRNP, MSN, AOCN
ADMINISTRATOR

Mission STATEMENT

We are committed to providing excellent cancer care in a supportive setting. We offer an interdisciplinary approach to diagnosis, treatment, research and education to help our patients and their families achieve the best quality of life.

Values:

- Patient and Family Centered
- Interdisciplinary
- Supportive
- Caring
- Committed



WALKABOUT

Walkabout is a survivorship program for cancer patients and their caregivers, both during and after treatment. Participants use digital photography to help them cope with challenges they transition from treatment to survivorship. Led by Caroline Peterson, MA, ATR-BC, LPC, who teaches mindfulness meditation to help individuals reduce stress and manage their energy resources. An artist and art therapist, she has developed innovative ways to combine mindfulness skills and creativity to support the well-being of persons diagnosed with cancer. Each session includes mindfulness meditation skills training and practice, mindful movement and walkabout, digital photography, collage-making using photos they have taken, and a group dialogue to close. To view the group's photographs, visit PennMedicine.org/Karnell/Walkabout.

The artwork in the Annual Report is from the participants in Walkabout, used with permission.

STATISTICAL SUMMARY

At Pennsylvania Hospital in 2010, there were 1,551 newly diagnosed (analytic) cancer cases and 758 cases with recurrent or disease progression (non-analytic) for a total of 2,309 new cases.



Analytic Cases

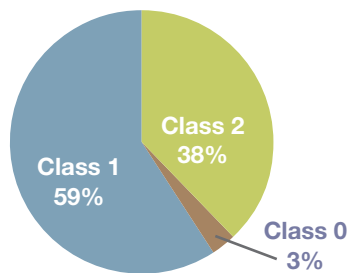
Class 0 – Cases diagnosed at Pennsylvania Hospital and went elsewhere for treatment.

Class 1 – Cases which were diagnosed and received all or part of their first course of treatment at Pennsylvania Hospital.

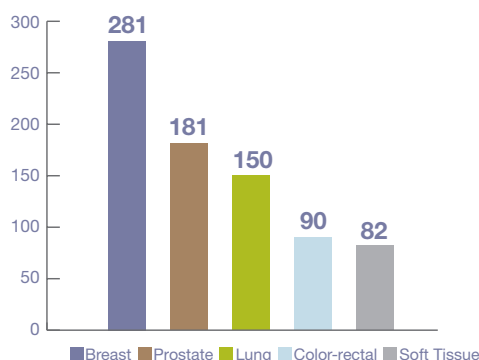
Class 2 – Cases diagnosed elsewhere and came to Pennsylvania Hospital for part or all of their first course of treatment.

Non-Analytic Cases

Class 3 – Diagnosis and all of their first course of treatment elsewhere.



2010 Top Five Analytic Sites



Oncology Data Services

Data from the American Cancer Society's Facts and Figures for 2010 estimated that there will be over 1,506,070 new cancer cases in 2010 and 75,260 will be diagnosed in Pennsylvania. Of those new cases in Pennsylvania, 2 percent were diagnosed and/or treated at Pennsylvania Hospital.

The gender distribution was 53 percent males and 47 percent females. Race distribution was reported as being 71 percent Caucasian; 22 percent African American; 2 percent Asian/Oriental and 5 percent other.

Private insurance was the primary insurance coverage for 51 percent of patients followed by Medicare at 39 percent and Medicaid at 4 percent.

2010 Analytic and Non-Analytic Cases by Site and Gender

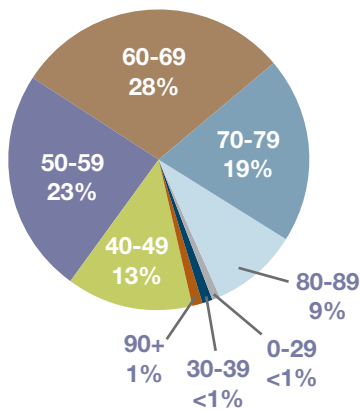
Primary Site	Total	%	Male	%	Female	%
Oral Cavity & Pharynx	79	3.4%	55	5.2%	24	1.9%
Digestive System	241	10.4%	136	1.8%	105	8.4%
Respiratory System	237	10.3%	106	10.0%	131	10.5%
Bones & Joints	34	1.5%	22	2.1%	12	1.0%
Soft Tissue	126	5.5%	65	6.1%	61	4.9%
Skin Excluding Basal and Squamous	88	3.8%	56	5.3%	32	2.6%
Basal and Squamous Skin	3	0.1%	3	0.3%	0	0.0%
Breast	422	18.3%	3	0.3%	419	33.7%
Female Genital System	159	6.9%	0	0.0%	159	12.8%
Male Genital System	263	11.4%	263	24.7%	0	0.0%
Urinary System	173	7.5%	120	11.3%	53	4.3%
Eye & Orbit	1	0.0%	0	0.0%	1	0.1%
Brain and Other Nervous System	101	4.4%	47	4.4%	54	4.3%
Endocrine System	96	4.2%	35	3.3%	61	4.9%
Lymphoma	115	5.0%	60	5.6%	55	4.4%
Myeloma	31	1.3%	16	1.5%	15	1.2%
Leukemia	49	2.1%	31	2.9%	18	1.4%
Mesothelioma	1	0.0%	1	0.1%	0	0.0%
Kaposi Sarcoma	13	0.6%	13	1.2%	0	0.0%
Miscellaneous	77	3.3%	32	3.0%	45	3.6%
Total	2,309	100%	1,064	100%	1,245	100%



STATISTICAL SUMMARY (CONTINUED)

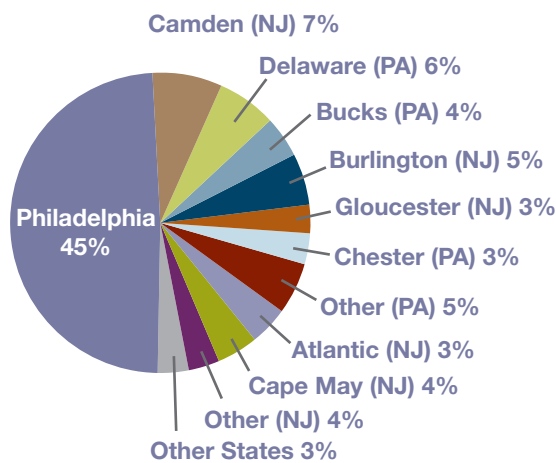
Age at Diagnosis

At diagnosis, 29 percent of patients were over the age 70, 28 percent of patients were age 60-69 and 23 percent were aged 50 to 59.



Patients' County at Diagnosis

Patients come to the Cancer Center from throughout the Philadelphia region. At diagnosis, the majority of patients were from Philadelphia County while 23 percent of patients were from in New Jersey.



Incidence Comparison with the American Cancer Society

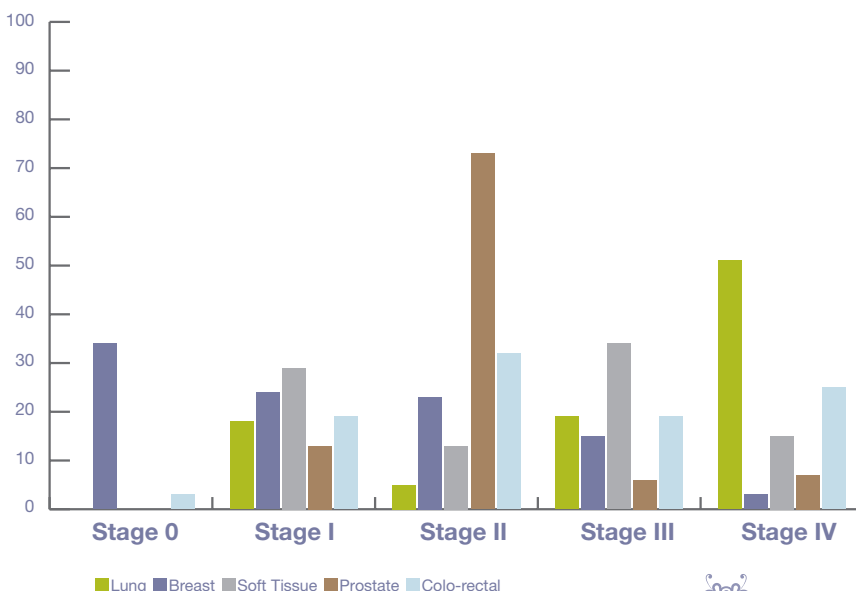
The following charts compare Pennsylvania Hospital's incidence by site and gender with the American Cancer Society (ACS). The incidence of prostate cancer at Pennsylvania Hospital is slightly lower compared to the ACS, as is lung cancer. Soft tissue and kidney incidence, however, were higher than ACS.

Male – 2010 (N=1,064)

	PAH	ACS
Prostate	25%	28%
Lung	9%	15%
Colorectal	6%	9%
Soft Tissue	6%	<1%
Kidney	5.6%	4%

Top 5 Analytical Sites by Stage

For "unknown" stages, Pennsylvania Hospital did not exceed 10 percent as required by The American College of Surgeons.



For women the incidence of breast cancer at Pennsylvania Hospital is higher than that of ACS while Pennsylvania Hospital saw less lung and colo-rectal cancers in comparison with ACS rates.

Female – 2010 (N=1,245)

	PAH	ACS
Breast	34%	28%
Lung	10%	14%
Uterus	8.5%	6%
Colorectal	5.6%	10%
Soft Tissue	4.6%	<1%

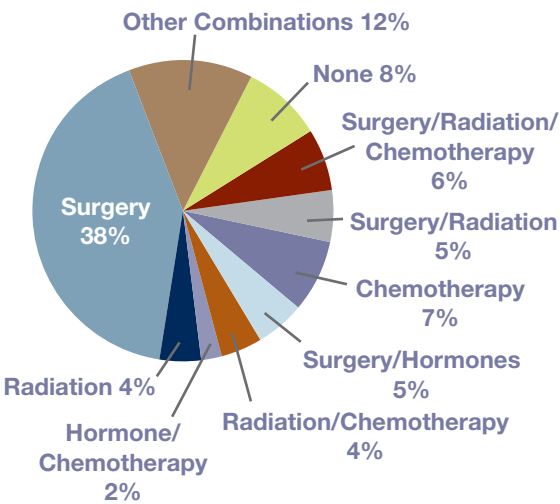




NON-SMALL CELL LUNG CANCER

First Course of Treatment

The following chart presents a breakdown of first course of treatment. The majority of Pennsylvania Hospital patients received surgery as part of their first course of treatment followed by any combination of multimodality treatments such as chemotherapy and radiation therapy.



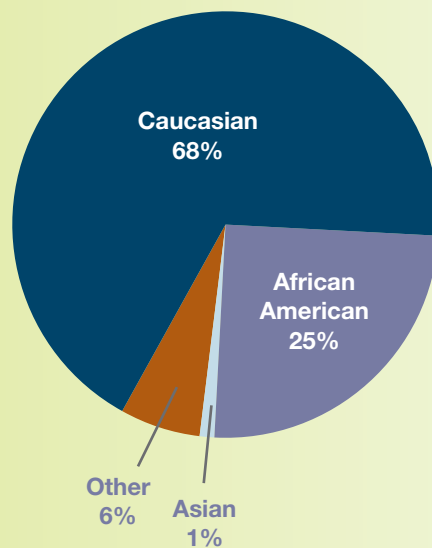
Lung cancer is the second most common cancer in the United States and causes 28 percent of cancer-related deaths. Nationally, an estimated 222,520 cases of lung and bronchus cancer are expected. The American Cancer Society estimates that of the 75,260 new cancer cases expected in Pennsylvania, 10,520 will be lung and bronchus cancer.

At Pennsylvania Hospital, non-small cell lung cancer is the third most common site, following breast and prostate cancer comprising 9 percent of new cases in 2010. At Pennsylvania Hospital there were 139 new cases in 2010 with an additional 60 patients presenting with persistent or recurrent non-small cell lung cancer (NSCL).

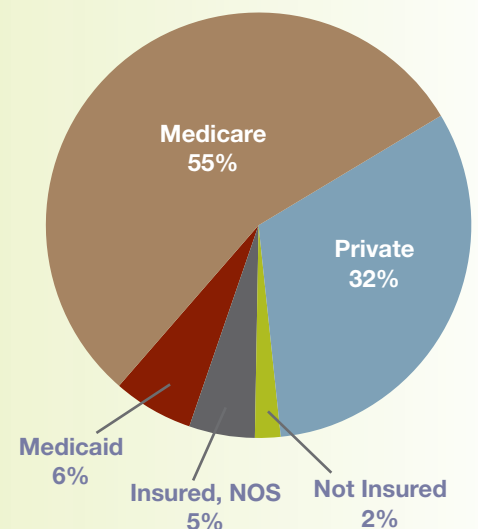
Rationale:

- Comparison of populations and treatment for non-small cell lung cancer patients at Pennsylvania Hospital with the National Cancer Database (NCDB).
- Trending of 2009 and 2010 non-small cell lung cancer at Pennsylvania Hospital

Demographics

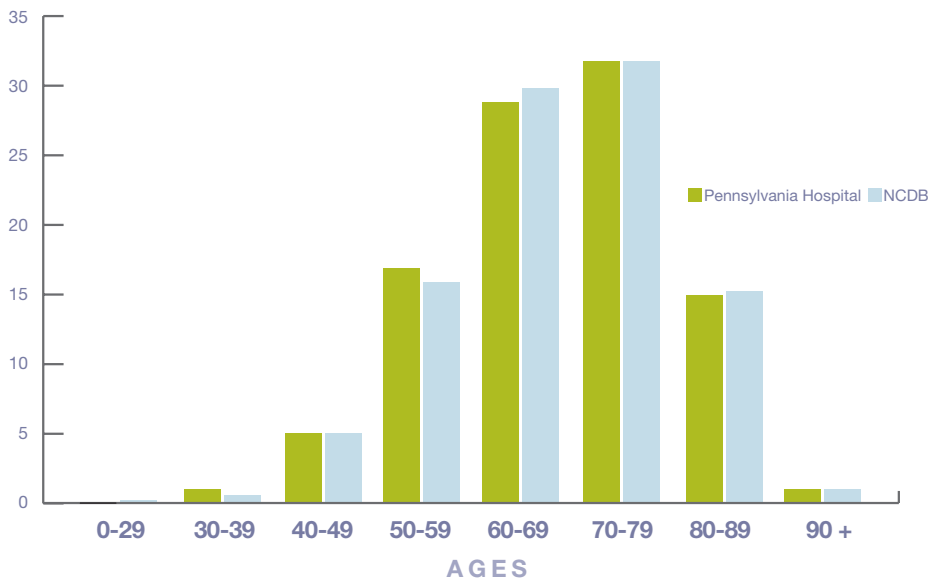


Primary Payer at Diagnosis



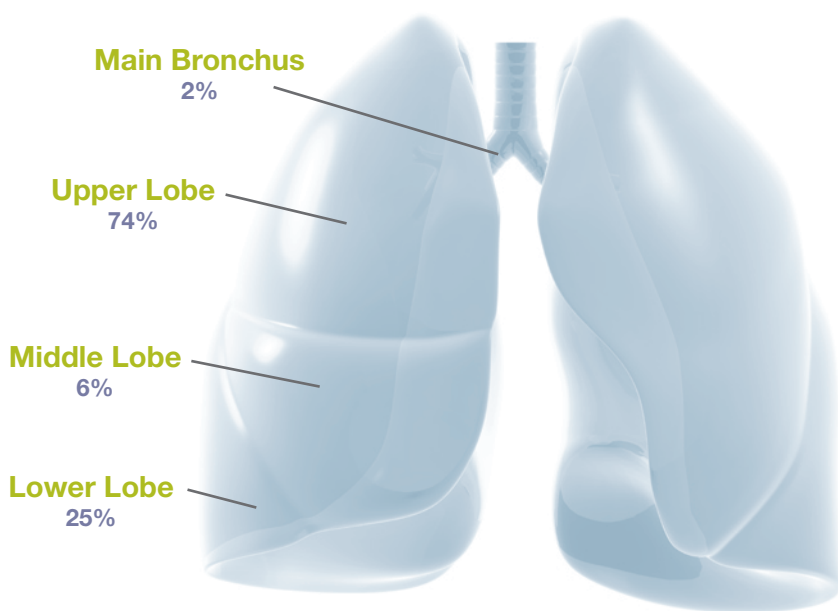
Age at Diagnosis in Comparison with the National Cancer Database

Age ranged from 38 to 91 with an average of 68, consistent with NCDB data. Fifty one percent reported an active or former smoking history.



Tumor Information

The top histologies included non-small cell carcinomas, squamous cell carcinomas and adenocarcinomas.



Lung, NOS 32%



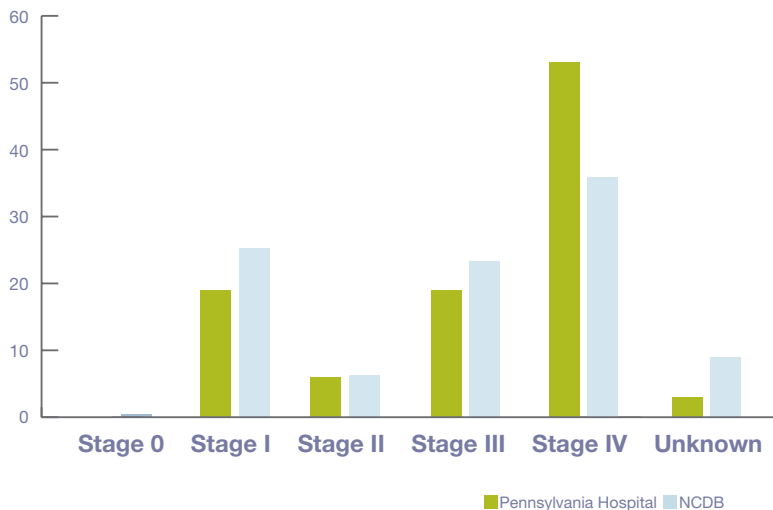
“Lung cancer was the third most common tumor treated at Pennsylvania Hospital in 2010. The distribution of cases by age, stage, and histologic subtype is consistent with what is seen nationally. A multidisciplinary thoracic tumor board meets each week to review all new and suspected cases with input from physicians from pulmonary, thoracic surgery, radiation oncology and medical oncology. Diagnostic and staging evaluations may include x-ray, computed tomography (CT) scanning, positron emission tomography (PET) scanning, pulmonary function testing and bronchoscopy, amongst others. Endobronchial ultrasound and interventional endobronchial procedures are done in collaboration with Interventional Pulmonology colleagues within Penn Medicine. Lung cancer treatment commonly combines a variety of modalities to optimize outcomes for patients being treated with both curative and palliative intent. Surgical therapy can be done with a minimally invasively technique (VATS), when appropriate. Molecular diagnostic studies are routinely performed on tissue samples to evaluate for the most appropriate newer, effective targeted systemic therapies. Participation in clinical trials with investigational agents may be an option for some patients, if desired. In addition to expertise in standard radiation therapy techniques, Pennsylvania Hospital now offers CyberKnife®, stereotactic radiosurgery, for use in selected cases.”

-David M. Mintzer, MD

CHIEF, SECTION OF HEMATOLOGY/
ONCOLOGY, PENNSYLVANIA HOSPITAL

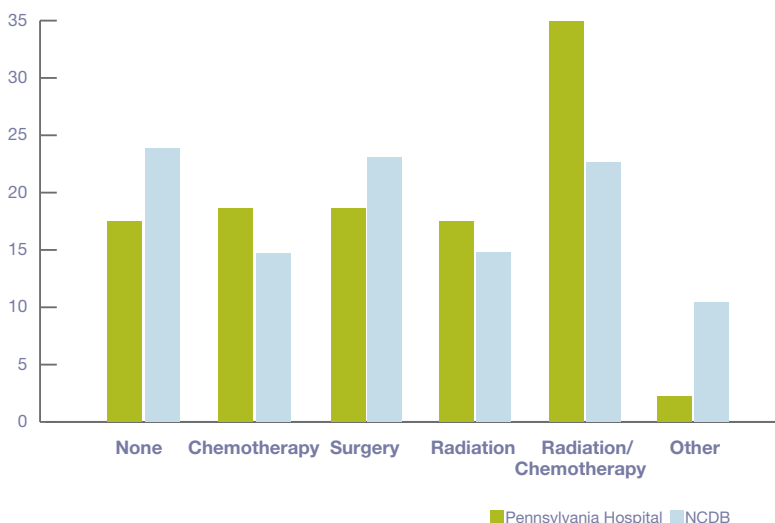
Stage at Presentation

The following graph combines both the clinical and pathological elements available for Pennsylvania Hospital and the National Cancer Data Base (NCDB). A total of 202, 662 cases were included in the 2008 sample from the NCDB, the most current database available.



Treatment

The following graph compares Pennsylvania Hospital treatment with data from the National Cancer Database (NCDB) for 2008, the most current database available. Treatment received is consistent with NCDB data.



“The lung cancer overall new cases have stayed relatively stable comparing 2009 and 2010 with a very slight increase. Almost one third of patients with newly diagnosed lung cancer elsewhere received their first treatment at Pennsylvania Hospital (PAH). A very small percentage of patients newly diagnosed at PAH received their first treatment elsewhere. This represents the quality and reputation for lung cancer treatment at PAH. Almost one third of the patients seen at PAH were diagnosed outside of Philadelphia. This also demonstrates the far reaching reputation of PAH. There are multiple centers that treat lung cancer in Pennsylvania and New Jersey whose location would be much more convenient, however, the patients chose to travel to PAH for their care. Most patients with lung cancer present in advanced stage, however, with advances in chemotherapy and radiation there is still treatment they can receive. Combined treatments increased at PAH in 2010. The standard surgical treatment, if possible, is formal lobectomy with extended lobectomy if needed.”

-Vincent E. Lotano, MD

CLINICAL ASSISTANT PROFESSOR
OF SURGERY
PENNSYLVANIA HOSPITAL





Clinical RESEARCH

Clinical research remains a priority and an area of excellence at the Joan Karnell Cancer Center at Pennsylvania Hospital. Clinical trials accrual at JKCC is at 9 percent which is significant compared to the national average of 2 percent.

Participants enrolled in clinical research trials in 2010:

Gynecologic Oncology Group

3 patients enrolled

Eastern Cooperative Oncology Group

6 patients enrolled

Pharmaceutical Trials

93 patients enrolled

CTSU

6 patients enrolled

AIDS Malignancy Consortium

2 patients enrolled

Other research studies

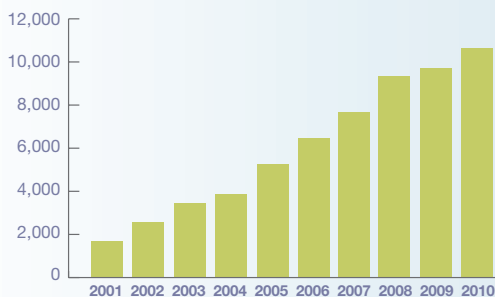
65 patients enrolled

Supportive Care Consults

AT THE JOAN KARNELL
CANCER CENTER 2001 - 2010

(Total referrals=10,653)

Referrals to social work, nutrition, psychology, music therapy, art therapy, spiritual counseling, bereavement, palliative care and genetic counseling.



Cancer Committee REPORT

Co-Chairs, Cancer Committee: Arthur P. Staddon, MD and David M. Mintzer, MD

The Cancer Committee is a multidisciplinary committee established to coordinate and oversee all cancer-related activities at Pennsylvania Hospital. The Cancer Committee meets quarterly to review ongoing clinical and research efforts and strategize for future programmatic development. This committee provides oversight to the site specific tumor boards and the tumor registry. They coordinate community outreach, educational and supportive care programming as well.

ACCOMPLISHMENTS:

- **Achieved National Accreditation Program for Breast Centers (NAPBC) for the Integrated Breast Center at Pennsylvania Hospital**
- **Commission on Cancer accreditation in process, survey anticipated for Fall, 2011**
- **Supportive Care**
 - 46 educational and support programs offered with 1,260 participants, a 5 percent increase in participation from a prior year
 - 10,653 individual supportive care consults provided, a 10 percent increase from a prior year
 - Expanded Survivorship Program, Geriatric Oncology Program and Palliative Care Program
- **Community outreach**
 - Oral, head and neck cancer, prostate cancer and breast cancer screenings provided
 - Lung, colorectal and uterine cancer awareness programs provided
 - Staff involvement in health fairs, community programs, advocacy groups continues
- **Quality Improvement Projects**
 - Assessing the Subjective Experience of Emotional Distress in Older Oncology Patients
 - Transitions in care/goals of care at end of life – improvement in staff education and resources and development of a Supportive Care Clinic led to a 25 percent increase in hospice referrals for patients at end of life
 - Improved referral process for ovarian cancer patients to Cancer Risk Evaluation Program
 - Collaborative Action Plan with American Cancer Society
 - Promote and monitor AJCC staging at Cancer Conferences and on charts

Special THANKS

The Joan Karnell Cancer Center at Pennsylvania Hospital offers *our thanks*

- to Pennsylvania Hospital administrators for their support and enthusiasm,
- to our donors, supporters and volunteers, without whom we would be unable to do all we do,
- to our physicians, nurses and staff for their untiring efforts on behalf of our patients,
- and to our patients and families for entrusting us with their care.