


Innovations in Cancer Care

BRYN MAWR HOSPITAL

CANCER PROGRAM

Annual Report Based on
2004 STATISTICS



The mission of Main Line Health is to provide a comprehensive range of health services, complemented by related educational and research activities, that meets community needs and improves the quality of life in the communities we serve.

Main Line Health

Cancer Center
Bryn Mawr Hospital

Message from the Chairman of the Cancer Committee

The Bryn Mawr Hospital Cancer Program significantly enhanced its efforts in cancer prevention, treatment and research in 2004.

Bryn Mawr Hospital provided diagnosis and/or treatment to 1108 patients in 2004. This is a slight increase compared to 2003. Approximately one-quarter of our patients had breast cancer, a proportion nearly twice the national average, making our breast cancer program among the largest in the metropolitan area. Our cancer program recently received full accreditation by the American College of Surgeons with numerous commendations.

The Cancer Center now includes a state-of-the-art Comprehensive Breast Center with breast diagnostic services led by a team of breast health experts. The Center includes digital mammography, breast ultrasound and MRI. Biopsy options include stereotactic, US and MRI. The team is led by Medical Director, Thomas Frazier, MD breast surgeon and John Stassi, MD, Director of Breast Imaging. Key elements in making this the most comprehensive breast center include dedicated breast imagers, a nurse coordinator, high risk assessment program, weekly multidisciplinary breast cancer conference reviewing every breast cancer case, genetic counseling and patient education, all in a beautiful new facility.


The Cancer Center is also comprised of an inpatient unit, operating suites for specialized cancer surgery (including laparoscopic, thoracoscopic and cryosurgery) and new state-of-the-art facilities for radiation therapy, including High Dose Rate Brachytherapy, 3-D conformal radiotherapy and partial breast radiation. Also provided are areas for outpatient chemotherapy administration, complete diagnostic and therapeutic radiology services (including chemoembolization facilities), fertility counseling for chemotherapy recipients and endoscopic laser surgery. A team of more than 40 specialists, oncology nurses, technicians, research, nutrition and psychosocial specialists provide care for patients.

The primary focus in 2004 continued to be clinical cancer research. Bryn Mawr Hospital, along with Lankenau and Paoli

Hospitals, is in the third year of our third National Cancer Institute Community Clinical Oncology Program (CCOP) research grant. Bryn Mawr Hospital's Cancer Program continued its participation with the National Cancer Institute's major cooperative research groups, including the Eastern Cooperative Oncology Group (ECOG), National Surgical Breast and Bowel Project (NSABP), Radiation Therapy Oncology Group (RTOG), Gynecology Oncology Group (GOG), and the Fox Chase Cancer Center shortly. In 2004 we experienced a very successful clinical research year with 26 patients enrolling in one of the CCOP research protocols.

Other activities included the seventh year of a joint Bryn Mawr/Lankenau Breast and now Colorectal Cancer Risk Assessment program. One hundred fifty women participated in the free wig program at Bryn Mawr Hospital. Main Line Health entered into its sixth year of a comprehensive breast cancer initiative to enhance the care and education of breast cancer patients and undertook several community education programs. In addition, a new multidisciplinary lung cancer program has been initiated with bi-weekly case conferences. A dedicated certified colorectal surgeon has just joined our staff and we will be acquiring PET/CT capabilities for stereotactic radiosurgery shortly.

The Bryn Mawr Hospital Cancer Program, through its facilities and available resources, is able to provide virtually every cancer support service to cancer patients and their families along Philadelphia's Main Line.



Steven C. Cohen, MD
Chief, Hematology-Oncology
Chair, Cancer Committee

Main Line Health CCOP

The clinical trials program of Main Line Health was awarded the designation of Community Clinical Oncology Program (CCOP) by the National Cancer Institute in 1994, and has consistently met the high standards of the NCI. The CCOP designation is a prestigious one, as there are only 50 CCOPs across the country. The goal of a CCOP is to bring clinical trials to the community, rather than having patients leave their community to receive state-of-the-art cancer care. Medical, surgical and radiation oncologists and our research staff accrue patients to both prevention and treatment studies provided by four research bases: M.D. Anderson Cancer Center; Eastern Cooperative Oncology Group; National Surgical Adjuvant Breast and Bowel

Project; Fox Chase Research Base and Radiation Therapy Oncology Group.

As a research center, we also participate in multiple pharmaceutical research endeavors, as well as clinical trials sponsored by other professional organizations, such as the American College of Surgeons Oncology Group and the Gynecologic Oncology Group. All studies continue to accrue patients with the assistance of the medical and research staff.

*Rosemarie A. Tucci RN, MSN, AOCN
Manager, MLH Oncology Research & Data Services*

Report on Colorectal Cancer – 2004

Colorectal cancer (CRC) accounts for 10% of all cancers per year in the United States and, approximately 11% of cancer mortality in the United States.

Age impacts strongly in colorectal cancer incidence. Sporadic cases begin to increase above the age of 45 to 50 for both men and women. However, worldwide incidences seem to be lower for women. In 1990 colorectal cancer developed in 19.4 out of 100,000 men and in only 15.3 per 100,000 women. Usually the life-long risk of colorectal cancer is higher in women by 2.5%. This is likely accounted for by the longer life expectancy for women.

In the United States the age standardized incidence and mortality has decreased over the last ten years, reflecting better screening and treatment modalities.

At Bryn Mawr Hospital disease specific survival rates for colorectal cancer, between 1994 and 1999, revealed that the majority of the patients were diagnosed at ages 70 to 90. Thirty-two percent of the women diagnosed were between ages 70 and 79 and 40% of women were between 80 and 89 years. For males, 35% of the patients were diagnosed between 70 and 79, whereas only 27% were diagnosed between 80 and 89. These were at all stages combined together. Bryn Mawr Hospital statistics compare well with the national and the state data base.*

The etiology of colorectal cancer is complex, likely including ethnicity, genetics, and environmental factors. A family history of colorectal cancer has been known to increase the risk of developing the disease. Having a first-degree relative with colorectal cancer may double the risk. These risks may even be further enhanced if this relative was less than 60 years of age at diagnosis. Multiple familial cancer risks have been identified giving us insight into potential mechanisms including cell proliferation, differentiation and apoptosis. The Familial Adenomatous Polyposis (FAP) syndrome accounts for 1% of all cases of colorectal cancer. Hereditary Non-Polyposis Colorectal Cancer (HNPCC) accounts for up to 3% of all cases. These entities are autosomal dominant with an average of 80 and 100% penetrance. It is estimated that approximately 20 to 30% of CRC cases worldwide are secondary to an inherited predisposition. However, many specific genes have yet to be identified. At Bryn Mawr Hospital, cancer risk assessment and genetic programs have been instrumental in identifying patients and families at risk and guiding them to participate in prevention trials or early detection studies.

Other environmental factors may also play a role. Red meat has been associated with an increased risk, whereas fibers, vegetables, and fruits are believed to have a protective benefit against CRC.

Recent data has shown a possible decreased risk of developing colorectal cancer in patients using aspirin and non-steroidal agents. A recent trial at Bryn Mawr Hospital also included the role of Cox-2 inhibitors as a preventive agent.

Diagnosing colorectal cancer (CRC) is often based on clinical symptoms such as lower GI bleeding, change in bowel habits, or weight loss. Examination should include a thorough physical exam with evaluation of stool for occult blood. Laboratory data identifying an anemia, often iron deficient, or abnormal liver functions, may help. Further evaluation, however, should include a personal and family history.

Screening for colorectal cancer has become an integral part of most health maintenance recommendations. As the risk of developing CRC is predominantly over age 50 in the average risk patient, the recommendations for screening over age 50 include fecal occult blood testing (FOBT), flexible sigmoidoscopy, or colonoscopy. Optical colonoscopy is probably the most sensitive screening method. Advantages of this include direct visualization and access to removal or biopsy of any suspicious lesions. The disadvantages of optical colonoscopy include the bowel preparation and the risks of perforation in 1% of patients. Other options for screening may include flexible sigmoidoscopy. The advantages of this include the lack of sedation; however this procedure does not visualize the entire bowel. Therefore, double-contrast barium enema in conjunction with the flexible sigmoidoscopy is an option. Again, however, the disadvantages of this include the two-step evaluation and the inability to biopsy any identified lesions higher than the sigmoid colon.

Virtual colonoscopy or magnetic resonance colonography are evolving modalities. These are potential diagnostic tools for the future.

The treatment of colorectal cancer is a multimodality approach. The anatomic location directs the type of surgical intervention. Surgery is the most common approach in Stage I, II and III diseases and is often used in Stage IV disease. Again the location may reflect the approach. Exploratory laparotomy is the most common approach; however, laparoscopic surgery is being introduced into treatment of colorectal cancers. Postoperative therapy becomes dependent upon the pathological stage as well as performance status. Stage I tumors commonly undergo surgical intervention and are followed with careful screening mechanisms. Formal management of Stage II tumors continues to evolve. Many patients with Stage II disease have a good prognosis. The benefits and treatments of postoperative therapy may not outweigh the risks. However, several prognostic

*National Cancer Database Benchmark Reports



indicators may identify certain cohorts at higher risk in Stage II disease. These are bowel obstruction, bowel perforation and identification of certain genetic markers. Therefore, these subpopulations may benefit from postoperative chemotherapy.

On the other hand, patients with Stage III colon cancer are felt, as a group, to benefit from postoperative chemotherapy. The standard of care includes a three-drug regimen based with 5-FU/Leucovorin. The most common recommendation is the addition of Oxaliplatin (i.e. FOLFOX). However, the Saltz regimen using Camptosar (FOLFIRI) may also be recommended.

At Bryn Mawr Hospital, approximately 88 patients were diagnosed with colorectal cancer in 2004. In 90% of these patients surgical intervention was part of the primary treatment modality. Postoperative chemotherapy was offered in 62% of patients with Stage III disease and approximately 38% of patients with Stage II disease. The average three-year survival statistics for patients at Bryn Mawr Hospital diagnosed between 1994 and 1999 was 85% for Stage II disease, 75% for Stage III disease, and 20% for Stage IV disease. The statistics are somewhat higher than the national and state data bases.

Exciting new techniques and modalities for treatment for colorectal cancer are now evolving. Vaccine strategies are under investigation. New chemotherapy agents are available, such as Capcetabine. Newer surgical techniques to include the laparoscopic approach and sentinel node biopsy are being investigated. Perhaps even more exciting are new categories of therapy that are emerging including humanized monoclonal antibody therapy such as Bevacizumab, and Chimeric monoclonal antibody therapy such as Cetuximab. These antibody therapies are available at Bryn Mawr Hospital.

Colorectal cancer continues as a major force in oncology. Screening methods will hopefully decrease the risk and/or diagnose cases earlier. More surgical, chemotherapy and radiation modalities will hopefully improve survival with decreasing toxicity. The emergence of genetic evaluation may also identify patients at risk. At Bryn Mawr Hospital we will continue to maintain our commitment to provide optimal care to patients with ongoing community education and progressive interventions.

Sandra F. Schnall, MD
Medical Oncology

Oncology Data Services

During 2004, the Cancer Registry at Bryn Mawr Hospital accessioned 1108 cancer cases. Among these cases, 882 were analytic (diagnosed and/or treated at BMH) and 226 were non-analytic (diagnosed and/or treated elsewhere). The Registry maintains a database of 11,046 cases with a reference date of January 1, 1992. Lifetime follow-up continues to be performed on all of our analytic patients. It directly benefits patients by reminding attending physicians and patients that routine medical examinations are encouraged. It is also used for evaluation of quality patient care and comparison of patient outcomes against regional and national data.

As an approved program of the American College of Surgeons (ACoS) Commission on Cancer (COC), the registry is responsible for continuity and quality of the database, coordinating the Tumor Board/Cancer Conferences, Cancer Committee meetings and quality improvement and outcome analysis studies.

Registry data is submitted annually to the National Cancer Data Base (NCDB) where it is used for comparative analysis with similar facilities and national organizations, and to the Facility Information and Profile System (FIPS) of the American Cancer Society for use in tracking trends in cancer research. Direct monthly reporting of registry data is mandated by the Pennsylvania Cancer Registry (PCR) Department of Health and Statistics.

The registry staff at Bryn Mawr Hospital is credentialed in the management of oncology patient data. To keep up-to-date with the latest innovations in registry management, annual educational programs for maintenance of these credentials are mandatory, and are provided on local, regional and national levels.

Karen Dysleski, RHIA, CTR
Cynthia Linsinbigler, RHIA, CTR
Jane Palumbo, CTR

Site Distribution Report – AJCC Staging Bryn Mawr Hospital

Study Group: 2004 Analytic Cases (newly diagnosed)		AJCC Stage											
Primary Site	Cases	0	1	2	3	4	Unk	N/A	B/B	Male	Female	% BMH Database	ACS Est. Figures*
Bladder	47	23	10	9	0	4	0	1	0	35	12	5%	
Brain	11	0	0	0	0	0	0	8	3	4	7	1%	
Breast	267	66	117	59	17	6	2	0	0	3	264	30%	16%
Colon/Rectum	88	4	20	22	20	21	1	0	0	38	50	10%	11%
Esophagus	7	0	1	1	1	0	4	0	0	4	3	1%	
Kidney	32	1	22	2	4	3	0	0	0	20	12	4%	
Larynx	7	2	3	0	0	2	0	0	0	7	0	1%	
Leukemia/Hematopoietic	5	0	0	0	0	0	0	5	0	4	1	1%	
Liver	4	0	2	0	1	0	1	0	0	4	0	1%	
Lung	77	0	18	8	25	24	1	1	0	36	41	9%	13%
Lymphoma	33	0	13	9	5	5	1	0	0	15	18	4%	
Melanoma	52	25	20	1	4	0	2	0	0	27	25	6%	4%
Mesothelioma	1	0	0	0	0	0	1	0	0	1	0	0%	
Myeloma	4	0	0	0	0	0	0	4	0	0	4	1%	
Oral Cavity	11	1	2	4	1	3	0	0	0	6	5	1%	
Other	20	3	4	0	0	1	3	8	1	11	9	2%	
Ovary	4	0	2	0	0	2	0	0	0	0	4	1%	
Pancreas	10	0	1	1	2	6	0	0	0	6	4	1%	
Prostate	145	0	2	132	8	2	1	0	0	145	0	16%	17%
Stomach	5	0	1	0	2	1	1	0	0	3	2	1%	
Testis	7	0	6	0	0	0	0	1	0	7	0	1%	
Thyroid	10	0	6	0	1	1	2	0	0	2	8	1%	
Unknown Primary	16	0	0	0	0	0	0	16	0	9	7	2%	
Ureter	4	2	0	0	1	1	0	0	0	2	2	1%	
Uterus	15	0	10	3	0	0	2	0	0	0	15	2%	
Total	882	127	260	251	92	82	22	44	4	389	493	100%	61%

The most frequent cancer sites for 2004 are highlighted in the above table and represent the percentage of cancer incidence seen at Bryn Mawr Hospital as compared to the American Cancer Society's national estimates. They are, in descending order, Breast, Prostate, Colorectal, Lung and Melanoma.

In addition, 226 patients were diagnosed in physician offices or elsewhere and received ongoing treatment at Bryn Mawr Hospital for a total of 1,108 newly diagnosed cases.

* American Cancer Society Cancer Facts and Figures 2004

Bryn Mawr Hospital Cancer Committee – 2004/2005

Steven Cohen, MD
Chairman, Medical Oncology

Thomas Frazier, MD
ACoS Liaison, General Surgery

Abigail Silvers, MD
Clinical Research

Alice Spengel
Women's Board

Arthur Martella, MD
Cardiothoracic Surgery

Bradley Hayward, MD
General Surgery

Brenda DeFeo, MBA
Administration

Catherine Hayward, MD
General Surgery

Catherine Sargent, MS, AOCN
Nursing

Cynthia Linsinbigler, RHIT, CTR
Cancer Registry

Diana Vidlak
Chaplain

Eileen Morgans, RN
Comprehensive Breast Center

Erik Assarsson, MD
Radiation Oncology

Gail Wright, MS
Community Services

James Paulson, MD
Pathology

Jane Palumbo, CTR
Cancer Registry

Joan Zeidman, MD
Gynecology

Karen Dysleski, RHIA, CTR
Cancer Registry

Leigh Bergmann, MD
Urology

Lisa Lucker, MSS
Social Services

Lynne Quinn CRNP, AOCN
Radiation Oncology

Marchello Barbarisi, MD
Radiology

Margie Arnone, MS, RD
Nutrition

Maureen O'Connell, RN, BSN
MLH CCOP Administrator

Mary Schwartz, RN
Community Services

Mary Beth Flynn, RN
Comprehensive Breast Center

Melissa Shaw
Pharmacy

Richard Carella, MD
Radiation Oncology

Rosemary Wiggins, RN, OCN
MLH CCOP

Sandra Schnall, MD
Medical Oncology

Stephanie Moore, DPT
PM&R

Susan Condi, OTR/L
PM&R

Susan Graham
Public Relations/Marketing

Suzanne Tucci, BSN
Nursing

Theresa McGrath
ACS Representative

Tracy d'Entremont, MD
Medical Oncology



Breast Prosthesis Program

1-888-227-5445

Free breast prosthesis program co-sponsored by the American Cancer Society.

Cancer Risk Assessment and Genetic Testing Program

610-645-8150

Offers genetic assessment, counseling and testing for high-risk individuals.

Clinical Trials and Cancer Prevention Research

610-526-3686

Provides patients access to NCI-sponsored clinical research and prevention trials.

Community Education and Screening

610-526-8720

Provides educational programs and cancer screenings to the community.

"Look Good, Feel Better"

1-866-225-5654

American Cancer Society sponsored program, providing cosmetic instruction for women during and after cancer treatment.

Lymphedema Management Program

610-526-3360

Provides early and continuing treatment for patients with Lymphedema.

Nutritional Services

610-526-3205

Registered Dietician counsels individuals and support groups during cancer care.

Oncology Data Services/ Cancer Registry

610-526-3727

Comprehensive data management system for the collection of malignant or neoplastic disease. Registrars' provide monitoring, analysis and lifetime follow-up of patients diagnosed with cancer.

Physical Medicine and Rehabilitation

610-526-3360

Advice and instruction concerning exercises and/or ambulation for patients undergoing treatment.

Radiation Oncology

610-526-3370

Advanced, comprehensive, state-of-the-art management of cancer in the community setting.

Social Services

610-526-3594

Social workers provide psychosocial support and counseling for patients and their families.

Support Groups

610-526-3594

Information, education and support for patients recovering from cancer.

Wig Program

610-526-8720

Free wig program for women who are anticipating or experiencing a change in their physical appearance.

Women's Health Source

1-888-876-8664

A free membership club offering information on a wide variety of health care issues important to women.

Main Line Health

Cancer Center
Bryn Mawr Hospital