

**Fox Chase Virtua Health Cancer Program**  
**2005 Annual Report**  
*Message from the Medical Directors*

The Fox Chase Virtua Health Cancer Program and its Cancer Committees proudly present the 2005 Oncology Program of Excellence Annual Report for 2005. The program is a unique collaborative effort between Virtua Health, which is the market leader for cancer diagnosis and treatment in Southern New Jersey, and the National Cancer Institute-approved Fox Chase Cancer Center in Philadelphia. Our program has been distinguished by the American College of Surgeons' Commission on Cancer with an Outstanding Achievement Award for 2004. Virtua Health is the only hospital system in the tri-county area, and one of only three dozen cancer programs across the United States, with this distinction.

Our affiliation with Fox Chase Cancer Center continues to benefit our community, through our continued offerings of local, regional and national clinical trials for cancer treatment. We are excited about future plans to expand these research efforts into cancer prevention and control trials for high-risk and general populations, as a research affiliate of the Fox Chase Research Base.

To assist in translating clinical research findings into the community medical setting, the Fox Chase Virtua Health Cancer Program expanded its cancer conferences to include site-specific prospective case reviews, while also inviting guest lectures from nationally-recognized academic institutions. Several continuing medical education programs were well-received by our medical staff, on topics related to colorectal cancer, the role of genetics in breast and ovarian cancers, and breast cancer. To reinforce the importance of prevention and early detection, numerous community education events were offered throughout the year on topics related to breast, gynecological and prostate cancers. In Fall, 2005, we also welcomed Patricia McLaughlin, RN, MSN, AOCN, CCRP as Protocol Coordinator at Virtua Memorial.

Caring for the cancer patient includes not only the diagnosis, treatment and cure, but also focuses on the patient's holistic needs around psychological, spiritual and social issues. Fox Chase Virtua Health Cancer Program takes tremendous pride in the variety of supportive care offered, such as site-specific care coordinators, oncology social workers, rehabilitation and professionally-lead support groups. To address transitions of care issues, an inpatient hospice center was established in 2005 at Virtua Memorial, which has been embraced by the general public and professional communities alike.

Douglas Marshall, MA, RN, OCN, Coordinator of Community Oncology Services, is to be commended for the development of Virtua's "Prostate Cancer Handbook: a guide to healing and recovery", which was published this year as a definitive aid for newly diagnosed patients with prostate cancer. This year, the guide was won a gold MarCom Creative Award. This is an international award honoring the excellence in marketing and communications. It is a complement to our very successful "Breast Cancer Handbook: a

guide to healing and recovery”, for patients and families with these diseases. Virtua remains actively involved with early detection and treatment of underserved populations through the New Jersey CEED, a grant-funded screening program, as well as other efforts.

Included in this Annual Report is an excellent review of Breast Cancer at Virtua Health. We congratulate Dr. Diane Gillum, Dr. Eric Miller, Colleen Merrell, RN, BSN, OCN, and Judy Neuman, BA, CTR, for an informative and provocative report on this serious health condition, which eventually afflicts over more than 10 percent of women in their lifetimes. We wanted to recognize all the contributors to this annual report, but that would require mention of more than one hundred staff and physicians at Virtua Health. We would like to single out special recognition and thanks to Judy Neuman, BA, CTR, and the staff of our Cancer Registry, which gathers much of the data needed to evaluate cancer care and benchmark it against state and national standards. The medical directors congratulate the Cancer Committees and the Oncology Program of Excellence at Virtua Health for their continued excellent work, and for future endeavors to help make cancer prevention, diagnosis and treatment the best it can be for the communities we serve.

Sincerely,

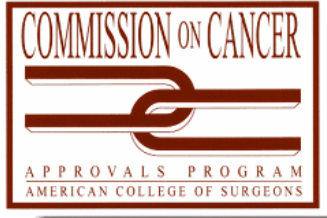


**Louis L Keeler, III, MD, FACS**  
Chairman, Cancer Committee  
Oncology Medical Director  
Program of Excellence  
Virtua West Jersey Hospitals



**Alan S. Weinstein, MD, FACP**  
Chairman, Cancer Committee  
Oncology Medical Director  
Program of Excellence  
Virtua Memorial Hospital

***Cancer Program Awards***  
***Recognition for providing outstanding oncology care***



*The Commission on Cancer, established by the American College of Surgeons, presented the Fox Chase Virtua Health Cancer Program with the **2004 Outstanding Achievement Award for Excellence in Cancer Care.***

*Cancer Program Approval from the Commission on Cancer is recognition of quality comprehensive patient care and commitment to patient access to medical specialists involved in diagnosing and treating cancer at Virtua Health. Only one in four hospitals that treat cancer receives approval from the Commission on Cancer and fewer receive the Outstanding Achievement Award. Virtua Health, is one of 39 approved hospitals in the country and the only hospital in southern New Jersey to receive the distinction of the Outstanding Achievement Award.*

**AWARDS**

**Kevin Barry, M.D.** of the Department of Radiology received a 2005 SuperSTAR Award for Physician Excellence. While Dr. Barry is greatly respected for the way he cares for his patients, his compassion extends beyond Virtua. He donates his time to HOPE worldwide, a nonprofit organization which provides medical care in developing countries.

The **Breast Cancer Handbook: a guide to healing and recovery** and the **Prostate Cancer Handbook: a guide to healing and recovery** each received a Gold Award for the brochure/handbook category at the 2005 MarCom Creative Awards. In addition the **Breast Cancer Handbook** received a Bronze Award at the 22<sup>nd</sup> Annual Health Care Marketing Awards in 2005.

**Maurice Cairoli, M.D.** medical oncologist, was the 2005 Local Hero Award recipient from the Susan G. Komen Breast Cancer Foundation and BMW of North America. The award honors a local hero in the fight against breast cancer.

**Pat Harris, RN, BS, CRNI, OCN, Protocol Coordinator, and Joan Lombardi, RN, BSN, Coordinator NJ CEED Program and Community Outreach,** received the Nurse of the Year Award for Fox Chase Virtua Health Cancer Program.

**Kathy Koerner, Director of Workforce Development at Virtua Health,** received the Celebrate Life Award from the Susan G. Komen Breast Cancer Foundation – Philadelphia Affiliate. She received this community service award at the 7<sup>th</sup> Annual Celebrate Life! Survivors Luncheon for her tireless efforts in spreading breast cancer awareness to the community.

**Joan Lombardi, RN, BSN and Mary Paul, Outreach Assistant for the NJCEED program** at Fox Chase Virtua Health Cancer Program at Virtua West Jersey Voorhees received a STAR award for High Performing Team category for exceeding their program goals and their tireless efforts to reach and provide cancer screening to the uninsured in Camden County.

**Joan Lombardi, RN, BSN** received the distinguished award of 2005 Nurse of the Year for Virtua Health for outstanding achievements in the Cancer Education and Early Detection program and dedication to the nursing profession.

**Doug Marshall, RN, MA, OCN, Community Oncology Services Coordinator,** received an Honorable Mention at the First Annual Prostate Net "In the Know" Awards recognizing individuals who have made significant contributions towards eliminating health disparities within medically underserved communities. Nominations were received from around the country for this award.

**Pat McLaughlin, RN, MSN, AOCN, CCRP, Protocol Coordinator,** was selected by the Oncology Nursing Society, to receive a scholarship to the Oncology Nursing Society's Institute of learning to be held in November 2005.

**Judy Neuman, BA, CTR, Manager of Oncology Data Services & Clinical Research,** received the Oncology Registrars Association of New Jersey 2005 Distinguished Service Award for outstanding service.

The **Voorhees 5<sup>th</sup> Floor Oncology Nursing** staff received a 2005 SuperSTAR Award for Caring. The staff of the oncology cluster unit was recognized for exemplifying understanding, empathy and compassion in interactions with patients, families and co-workers. This staff organized a 50<sup>th</sup> wedding anniversary celebration on their unit for a woman whose husband feared she would not last the few weeks until their anniversary.

### **PUBLICATIONS**

**Marshall, D.,** (2005). *The Prostate Cancer Handbook: A guide to healing and recovery.* The Fox Chase Virtua Health Cancer Program. [Patient Education book].

**Merrell, C.,** (2005). *Healthcare Careers: Rewards, Challenges and Opportunities, Private Colleges and Universities,* Carneige Communications, New York (*publication 2005 – Health and Medicine Edition*).

Enkhtsetseg Purev, Dewei Cai, **Eric Miller,** et al, Immune Responses of Breast Cancer Patients to Mutated Epidermal Growth Factor Receptor (EGF-RvIII,  $\Delta$ EGF-R, and de2-7 EGF-R) Journal of Immunology, Nov 2004; 173: 6472 - 6480.

S. Manne, J.Ostroff, G. Winkel, K. Fox, G. Grana, **Eric Miller**, et al, Couple-Focused Group Intervention for Women with Early Stage Breast Cancer, Journal of Consulting and Clinical Psychology, 2005; 73: 634-646.

### **GRANTS**

**Virtua Health** received \$180,000 from The New Jersey Cancer Education and Early Detection (NJCEED) Program, funded by the Centers for Disease Control and Prevention, the State of New Jersey and the New Jersey Department of Health and Senior Services. The funding provides breast, cervical, prostate and colorectal cancer outreach, education and screening services to eligible Camden County residents who have limited incomes and are uninsured or underinsured, with an emphasis on disadvantaged racial and ethnic groups.

The **Breast Care Program** received \$31,371 from the Susan G. Komen Breast Cancer Foundation Central and South Jersey Affiliate to support programs and services for women with breast cancer and to provide community education and outreach about breast cancer awareness.

### **PROFESSIONAL PRESENTATIONS**

**Ellen Feinstein, Assistant Vice President, Oncology**, presented “From ‘Job to Career’: The Know-How to Succeed” at the Oncology Registrars Association of New Jersey Annual Conference in Atlantic City, NJ in September 2005.

**Barbara Francks, RN, Breast Care Program Coordinator**, presented “An Update on Breast Cancer and Early Detection” to staff members and home health aides at Samaritan Hospice in Marlton, NJ in September 2005.

**Diane Gillum, M.D. Medical Director for the Breast Care Program**, presented “Breast Cancer: Now and the Future” at the New Jersey Obstetric and Gynecology Annual Meeting in Atlantic City, NJ in June 2005.

**Bridget LeGrazie, RN, MSN, AOCN, APN.c, Manager, Family Risk Assessment Program**, presented “Establishing a high-risk assessment program in the community” at the Fox Chase Cancer Center Advanced Genetics Course for Nurses in Philadelphia, P.A. in March 2005.

**Douglas Marshall, RN, MA, OCN** presented “Smoke Free Life – educating nurses on helping patients quit smoking” at the Advance for Nurses Conference at the Philadelphia and Southern NJ Conference held in Philadelphia, P.A. and New York City, N.Y.

**Pat McLaughlin, RN, MSN, AOCN, CCRP**, presented a poster at the 2005 Oncology Nursing Society Congress on “Hair changes associated with cetuximab.”

**Judy Neuman, BA, CTR**, presented “The Commission on Cancer’s Cancer Program Standards” at the intermediate cancer registrar training program at the Department of Health and Senior Services, Trenton, N.J. in April 2005.

**Monika Rivera, RHIT, CTR, Team Leader Cancer Registry**, presented “Breast Cancer Overview: Disease, Treatment and Staging” at the education training for novice cancer registrars at the Department of Health and Senior Services, Trenton, N.J. in April 2005.

### **PROFESSIONAL APPOINTMENTS**

**Patricia Harris, RN, BS, CRNI, OCN**, continues her appointment as the Programming Chairperson of the South Jersey Chapter of the Oncology Nursing Society. Pat is responsible for developing the nursing education component of the monthly chapter meetings including content, speakers, continuing education credits and sponsorship.

**Pat McLaughlin, RN, MSN, AOCN, CCRP**, was elected to serve as coordinator of the Oncology Nursing Society’s Clinical Trials Nurses SIG effective April 2006. She will be responsible for directing the activities of the SIG at the national level including developing the strategic plan, working on clinical research programming for future Oncology Nursing Society Congress meetings and developing new project teams.

**Pat McLaughlin, RN, MSN, AOCN, CCRP**, was selected to serve as a member of the Bristol Myers Squibb Nursing Advisory Board in 2004 and 2005.

**Colleen Merrell, RN, BSN, OCN, Director for the Breast Care Program**, was elected to a three-year term as an Advocate Reviewer for the National Research Grant Fund for the Susan G. Komen Breast Cancer Foundation. The Foundation grants approximately 22 million dollars each year to breast cancer research and is the largest private fund dedicated to breast cancer research. Hundreds of research proposals are reviewed by a national peer review system of scientists and experts in the breast cancer and advocacy. Grants are awarded based on their scientific merit and their potential to have an impact on breast cancer. Advocates are appointed to represent the voice and needs of breast cancer patients who have tirelessly raised this funding to support and advance breast cancer research.

**Judy Neuman, BA, CTR**, served as the 2005 Co-Chair of the Oncology Registrars Association of New Jersey Education Committee. The Committee was responsible for planning and holding two one-day educational meetings in Princeton, N.J. and a two day annual meeting in Atlantic City, N.J.

**Judy Neuman, BA, CTR**, was elected to a two year term as a National Cancer Registrars Association Council on Certification Representative. The Council on Certification

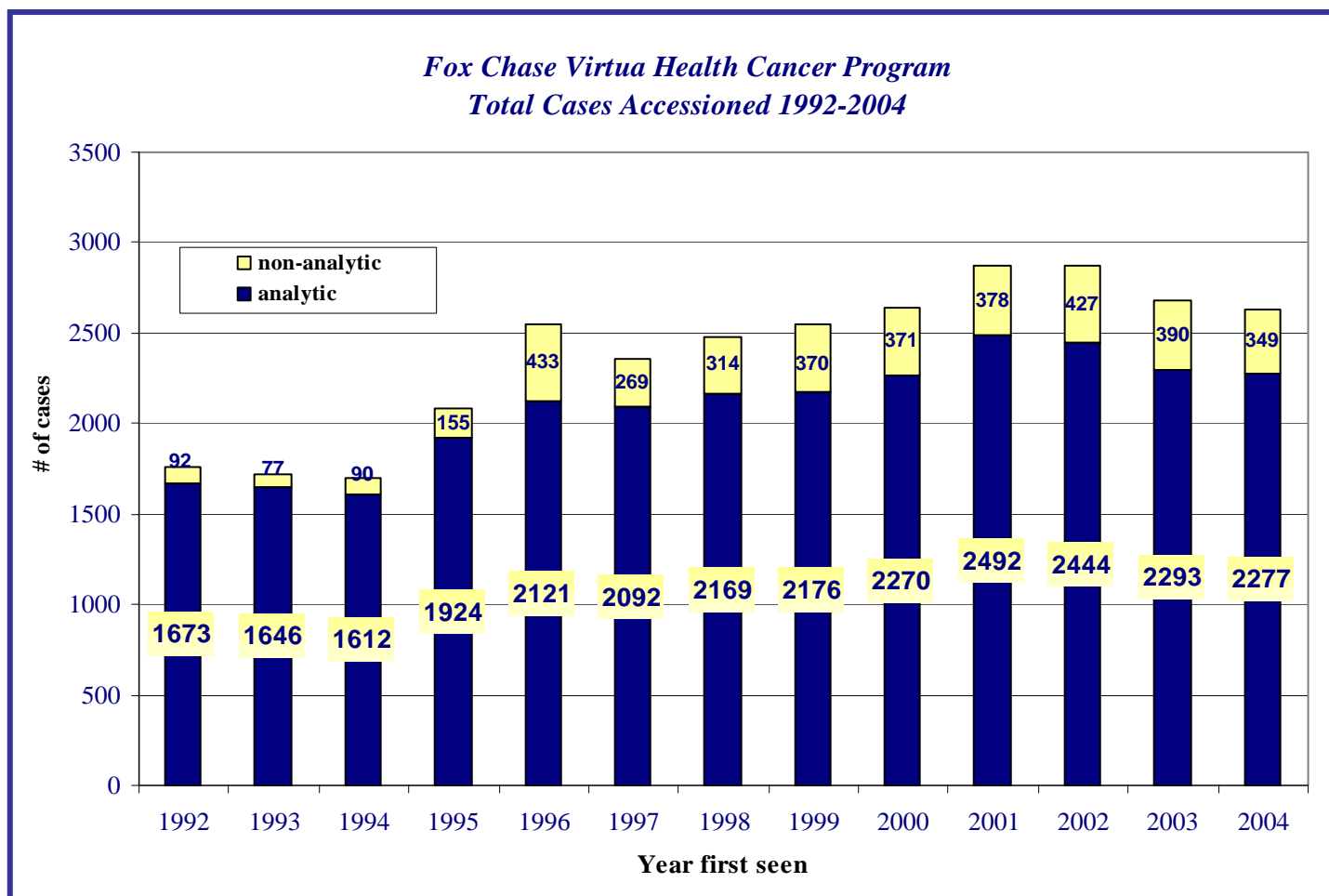
promotes standardization in the collection and use of cancer data through examination and certification of Cancer Registrars and other cancer data specialists.

**Alan Weinstein, M.D. Medical Director Oncology Program of Excellence Virtua Memorial Hospital**, has been appointed Chairperson for the Cancer Programs Guidelines Committee of the Association of Community Cancer Centers for 2005-2006.

## *Fox Chase Virtua Health Cancer Program 2005 Annual Report Cancer Registry Report*

The Cancer Registry plays an integral part in ensuring that the Fox Chase Virtua Health Cancer Program meets the standards of the Commission on Cancer of the American College of Surgeons. During 2005, we were awarded the Outstanding Achievement Award by the ACOS. Virtua Health, is one of 39 approved hospitals in the country and the only hospital in southern New Jersey to receive this distinction.

The Cancer Registry plays a vital role in improving the detection, prevention and treatment of cancer. The primary role of the Cancer Registry is the collection and management of cancer data, both demographic and clinical, beginning at diagnosis and continuing throughout the cancer patient's lifetime. The collected data is an invaluable tool in the fight against cancer. During 2004, data was collected on more than 2600 new cancer cases that were diagnosed and/or treated at Virtua Health. Since 1992, Virtua has seen a 49% increase in the number of cancer patients treated here.



**For oncology data requests from the Cancer Registry at Fox Chase Virtua Health Cancer Program ,  
call 1-888-Virtua-3 and ask to speak with the manager or team leader.**

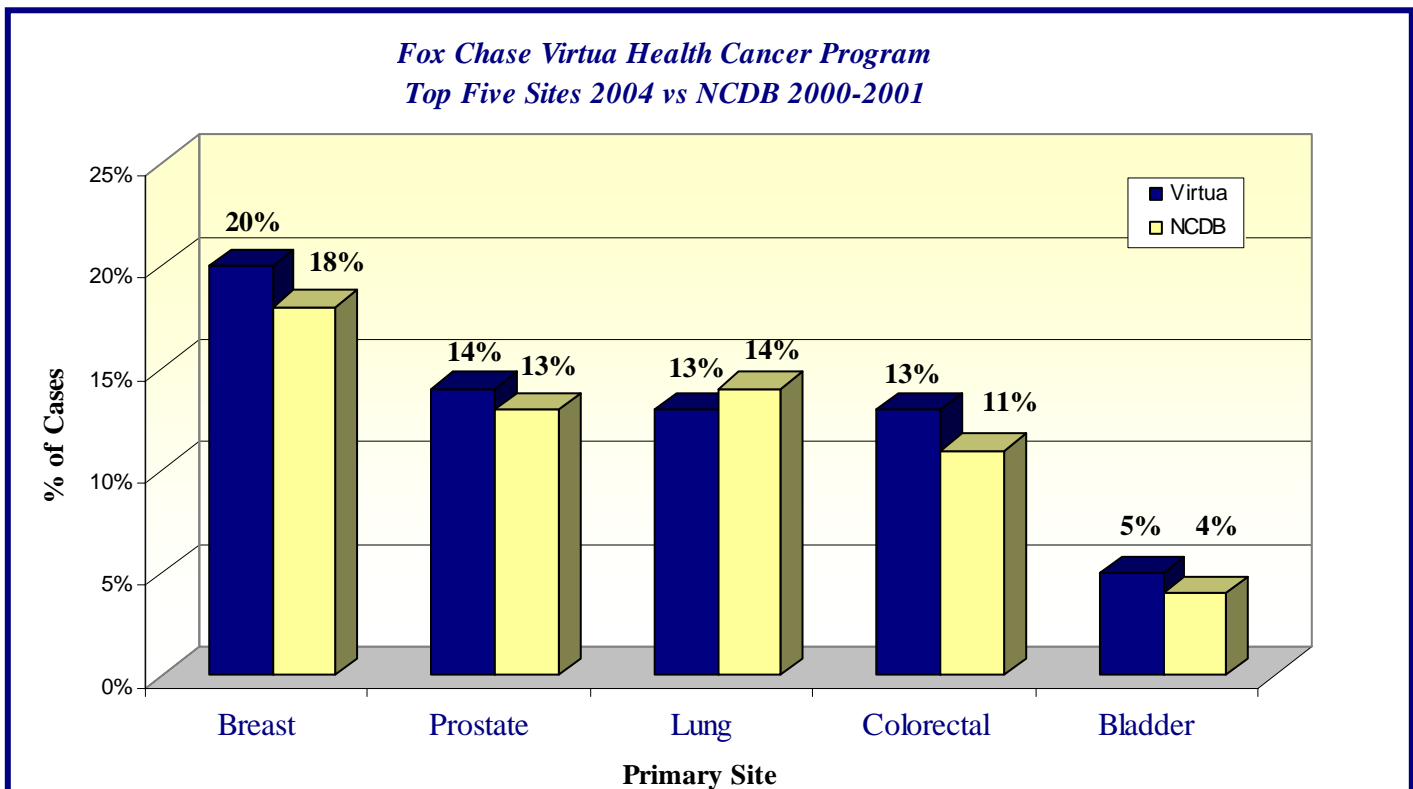


Each Cancer Registry is staffed by a team leader and two cancer registrars. Five of the six cancer registrars are certified (CTR) by the National Cancer Registrars Association. The Cancer Registry answered thirty-five requests for registry data from physicians, administrators and other cancer caregivers throughout the year. Nationally, cancer data collection standards continued to undergo major changes. Collaborative staging fields are now required to be collected for all cases diagnosed as of January 1, 2004. These fields contain a significant amount of new coding rules. In order to prepare for this change and to ensure the new fields are collected accurately, the cancer registry staff attended multiple training sessions sponsored by the New Jersey State Cancer Registry, the Oncology Registrars Association of New Jersey and the National Cancer Registrars Association.

Medical oncologists, radiation oncologists, pathologists and surgeons perform quality data review throughout the year. More than 10 percent of the analytic cases accessioned into the Cancer Registry database are reviewed for accuracy and completeness. In addition, the Cancer Registry staff meets on a monthly basis to review abstracts for accuracy, completeness and consistency.

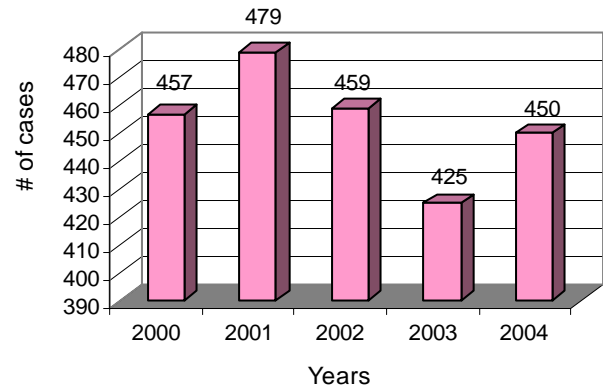
Weekly Cancer Conferences are held at the Virtua Memorial and Virtua West Jersey campuses. Cases are discussed in a multi-disciplinary format with the overwhelming majority presented for consensus treatment decisions. Guest speakers from Fox Chase Cancer Center participate in cancer conferences on both campuses. Site specific breast, colorectal, urology and gynecologic oncology cancer conferences are held at Virtua.

Breast, prostate, lung, colorectal and bladder remain the most frequently seen sites at Fox Chase Virtua Health Cancer Program comprising 66% of the cases accessioned into our database. The individual breakdown was as follows: breast 20%, prostate 14%, lung 13%, colorectal 13% and bladder 5% (*see chart below*). Breast and prostate cancer continue to have the highest incidence at Virtua, which is in line with National Cancer Data Base incidence rates.

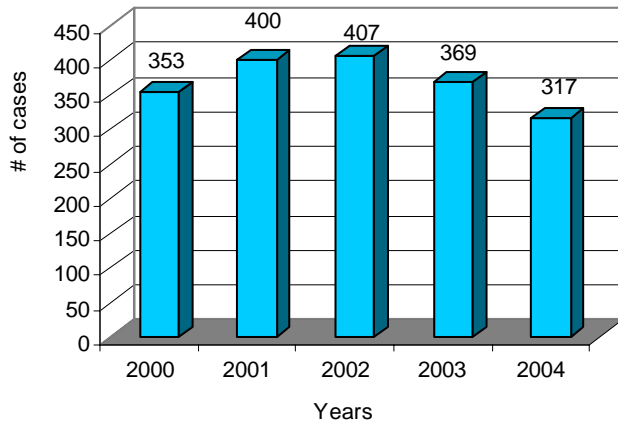


**Fox Chase Virtua Health Cancer Program  
Five Year Incidence by site  
2000-2004**

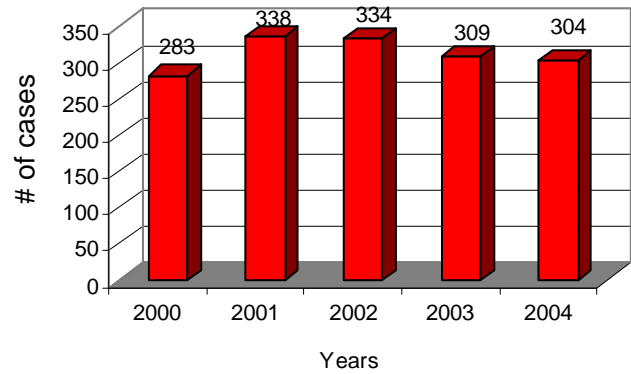
**Breast Cancer**



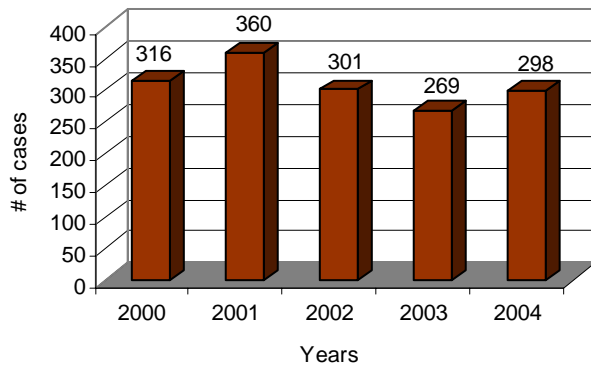
**Prostate Cancer**



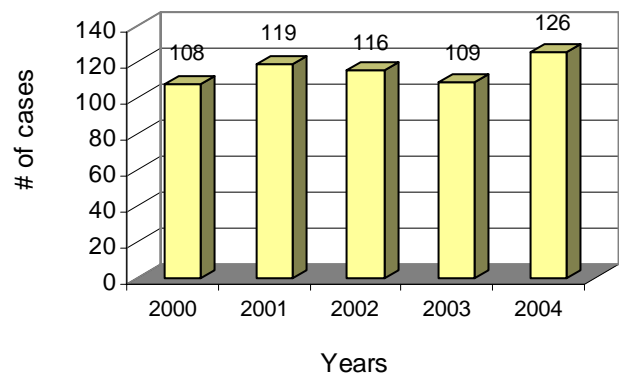
**Lung Cancer**



**Colorectal Cancer**

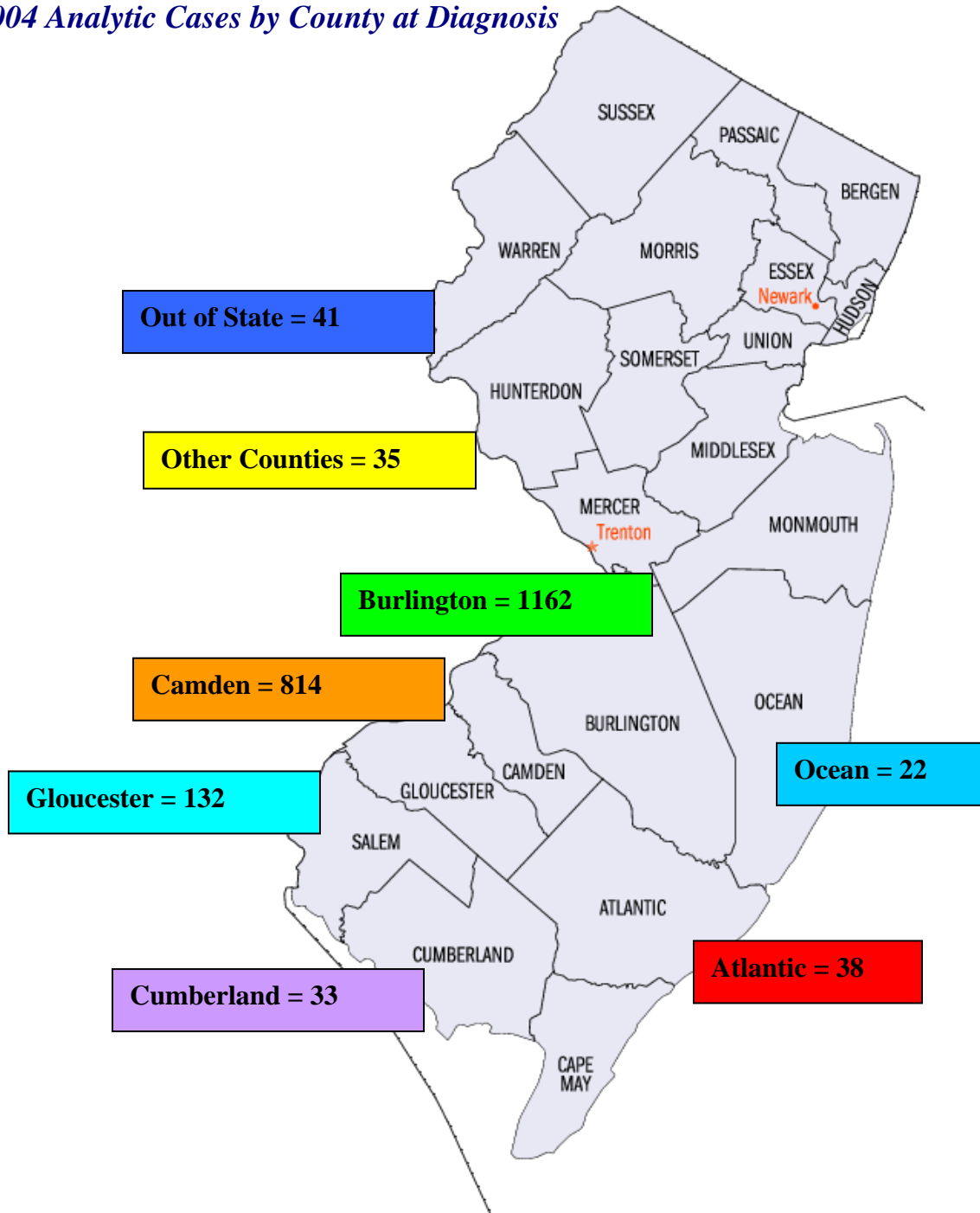


**Bladder Cancer**



The majority of our patients reside in Burlington and Camden counties, but some patients came from other states including Pennsylvania, Delaware and New York (*see map below*). Fifty three percent of our patients were women and 47% were men, which is consistent with 2003 (*see chart on next page*).

***Fox Chase Virtua Health Cancer Program  
2004 Analytic Cases by County at Diagnosis***



# Fox Chase Virtua Health Cancer Program

Analytic <sup>1</sup> Cases - 2004				AJCC <sup>2</sup> Stage						
Primary Site	Total Cases	Male	Female	0	1	2	3	4	UNK	N/A
<b>TOTAL:</b>	<b>2277</b>	<b>1058</b>	<b>1219</b>	<b>169</b>	<b>595</b>	<b>573</b>	<b>280</b>	<b>340</b>	<b>117</b>	<b>203</b>
<b>Oral Cavity &amp; Pharynx</b>	34	25	9	0	4	8	7	9	4	2
<b>Digestive</b>										
Esophagus	11	8	3	0	1	1	1	6	2	0
Stomach	24	15	9	0	4	3	1	10	6	0
Small Intestine	11	3	8	1	1	0	1	2	0	6
Colorectal	298	151	147	15	62	77	77	45	14	8
Anus, Anal Canal	9	3	6	1	2	1	2	1	2	0
Liver/Biliary	19	10	9	0	2	4	3	4	6	0
Gallbladder	6	2	4	0	1	2	0	1	2	0
Pancreas	51	29	22	0	2	3	4	39	3	0
Other Digestive	2	1	1	0	0	0	0	0	0	2
<b>Respiratory</b>										
Larynx	7	6	1	0	4	0	1	0	2	0
Heart, Medias & Pleura	13	13	0	0	2	5	1	5	0	0
Lung/Bronchus	304	163	141	0	53	15	70	134	23	9
<b>Soft Tissue/Skin</b>										
Soft Tissue	11	4	7	0	2	2	2	2	2	1
Melanoma	29	17	12	4	14	3	2	2	4	0
Other Skin	5	3	2	0	0	0	0	0	1	4
<b>Retro- &amp; Peritoneum</b>	8	3	5	0	2	0	1	1	0	4
<b>Breast</b>	450	3	447	80	198	101	42	17	10	2
<b>Female Genital</b>										
Cervix	17	0	17	0	10	2	1	2	2	0
Corpus	79	0	79	0	56	3	5	2	8	5
Ovary	31	0	31	0	2	2	7	11	0	9
Vagina	1	0	1	0	0	1	0	0	0	0
Vulva	9	0	9	3	3	1	1	1	0	0
Other Female Genital	1	0	1	0	0	0	0	0	0	1
<b>Male Genital</b>										
Prostate	317	317	0	0	0	293	14	5	5	0
Testis	12	12	0	0	12	0	0	0	0	0
Penis	1	1	0	0	1	0	0	0	0	0
Other Male Genital	0	0	0	0	0	0	0	0	0	0
<b>Urinary</b>										
Bladder	126	88	38	63	33	15	5	7	3	0
Kidney	60	38	22	1	35	7	7	9	1	0
Ureter/Renal Pelvis	5	1	4	1	1	1	1	0	1	0
Other Urinary Organs	1	1	0	0	0	0	0	0	1	0
<b>Blood/Marrow</b>										
Multiple Myeloma	22	11	11	0	0	0	0	0	0	22
Leukemia	31	23	8	0	0	0	0	0	0	31
<b>Lymphoma</b>										
Non-Hodgkins	82	43	39	0	28	15	16	20	3	0
Hodgkins	4	3	1	0	3	0	1	0	0	0
<b>Central Nervous System</b>	18	9	9	0	0	0	0	0	0	18
<b>Thyroid &amp; Other Endo</b>	91	14	77	0	57	7	7	5	12	3
<b>Other/Unknown/Uncertain Malignant</b>	77	38	39	0	0	1	0	0	0	76

<sup>1</sup>Analytic: Newly dx and/or 1st treated at this institution

<sup>2</sup>AJCC: American Joint Committee on Cancer

<sup>3</sup>Incl bones/joints & ill defined sites

## *Fox Chase Virtua Health Cancer Program 2005 Annual Report Clinical Research Report*

Clinical Research has experienced significant growth within the Fox Chase Health Cancer Program. The affiliation with Fox Chase Cancer Center has enhanced the clinical research program with projects such as the Community Clinical Oncology Program (CCOP) and the Family Risk Assessment Program. In addition, by affiliating with outside physicians to increase accrual rates to clinical trials, we have been able to strengthen the program's ties to community oncologists and surgeons.

The research department is staffed by numerous professionals. This dynamic healthcare team works collaboratively to increase accrual to clinical trials and to ensure the protection of human subjects. In 2005, the program successfully passed audits by the American College of Surgeons Oncology Group (ACOSOG) and STAR Prevention Trial through the National Surgical Adjuvant Breast and Bowel Project (NSABP).

The staff also attends educational seminars and Cooperative Group annual/semi-annual meetings. In 2005, Virtua was represented at a multitude of national meetings, including RTOG, NSABP, CCOP, ECOG and the Oncology Nursing Society Congress and Institutes of Learning.

### **Services**

- There are currently 94 oncology trials open at the Fox Chase Virtua Health Cancer Program.
- During 2004, 6% of Virtua Health cancer patients were accrued to clinical trials. Nationally, less than 2% of adult cancer patients participate in clinical trials. As part of the American College of Surgeons Commission on Cancer accreditation, Fox Chase Virtua Health Cancer Program continues to meet commendation level of the Commission's standard of enrolling 4% of oncology patients annually. From January 1, 2005 to November 1, 2005, 122 oncology patients have enrolled in clinical trials available at Fox Chase Virtua Health Cancer Program.
- We participate in multiple national cooperative groups including: Eastern Cooperative Oncology Group (ECOG), Radiation Therapy Oncology Group (RTOG), American College of Surgeons Oncology Group (ACOSOG), Clinical Trials Support Unit (CTSU), Gynecology Oncology Group (GOG) and the Community Clinical Oncology Program (CCOP).
- The Family Risk Assessment Program is designed to help women learn more about risk factors associated with breast and ovarian cancer. Through collaboration with Fox Chase Cancer Center, eligible individuals receive the opportunity to participate

in a variety of studies such as new screening methods, genetic testing for research purposes and cancer prevention trials.

- The clinical research staff is dedicated to keeping current through continuing education. In the past year, we have attended numerous educational workshops to enhance our knowledge of oncology clinical trials. Moreover, we have taken that information and developed education sessions for the staff throughout Virtua Health.

We participated in Fox Chase Virtua Health Cancer Program's Office Manager's breakfast, which educated physician office staff and clinicians on programs and services including the importance of clinical trials and about studies Virtua Health has to offer the oncology community. We are now in the process of developing a standard education tool for all patients undergoing clinical trials. Additionally, we are in the process of developing educational programs for patients and physicians. Information is available for patients and staff on Virtua's oncology clinical trials on the Virtua web site ([www.virtua.org](http://www.virtua.org)) and on New Jersey Cancer Trial Connect. Finally, this year we have developed a database to manage all aspects of clinical trials including accrual tables and financial aspects associated with trials.

### **Prevention Trials**

- Recently, two major prevention trials that Virtua Health have participated in have successfully closed. The SELECT trial (Selenium and Vitamin E Prevention Trial), was a large Phase III trial evaluating the impact of selenium and vitamin E on prostate cancer incidence. The STAR Trial (Study of Tamoxifen and Raloxifene), one of the largest breast cancer prevention trials ever undertaken, enrolled 19,000 postmenopausal women at high-risk of breast cancer nationwide. Fox Chase Virtua Health Cancer Program enrolled twenty three women in this landmark study.

**To learn more about clinical trials or find out about open prevention and treatment studies available at Fox Chase Virtua Health Cancer Program, call 1-888-Virtua-3 and ask to speak with a protocol coordinator.**

## *Fox Chase Virtua Health Cancer Program's Education and Community Outreach Report*

The Fox Chase Virtua Health Cancer Program works closely with the Virtua Cancer Committees, cancer advocacy organizations and community partners to improve and enhance cancer education, prevention and supportive services throughout the region. The committees continually review cancer incidence and prevalence within the region and develop resources and services to augment existing programs while identifying the future direction for cancer education and prevention efforts. Programs are designed across the continuum of care, from prevention to risk reduction and supportive services. This report will detail all of the activities of our oncology program staff and physicians held from January to October 2005.

A comprehensive database was created in 2005 to enable comprehensive reporting of all activities sponsored and supported by the cancer program. This tracking program details programs, events, speakers, counties served, number of participants and target audiences. Reports are shared with the cancer committee, physician leadership, grantors and cancer advocacy groups. This database will enable us to quantify activities, benchmark against our previous data and assist in developing future programming.

### ***Oncology Lectures given in the community***

Many of our oncology physicians and staff are active members of the Virtua Health Speakers Bureau. These experts travel throughout our surrounding counties fulfilling many speaking engagements on cancer related topics for lay and professional audiences.

Experts have been interviewed and featured in many Virtua Health publications and local newspapers, magazines and television programs discussing many aspects of oncology care from prevention to survivorship.

We offer access to a range of speakers (including physicians, nurses, therapists, educators and executives) on a variety of topics. Lectures are given free of charge as a community service. Requests for lectures are made through Virtua's speaker's bureau and through community contacts that the Fox Chase Virtua Health Cancer Program has made. The Fox Chase Virtua Health Cancer Program strives to fulfill speaker requests for organizations within Burlington, Camden and Gloucester counties.

The most common requested lectures for 2005 were Breast Cancer Awareness, High School Breast and Testicular Self Exam, Prostate Cancer and Colon Cancer.

<b>Lecture Topics</b>	<b>Total Lectures Jan-Oct</b>	<b>Total Attendance</b>
Breast Cancer Awareness	23	1160
Prostate Cancer Awareness	13	440
Colon Cancer Awareness	10	239
High School TSE/BSE	14	2,225
Other Oncology Topics	11	760
<b>TOTAL LECTURES</b>	<b>71 Lectures</b>	<b>4824</b>

### ***Cancer Screenings Events***

In addition to the New Jersey Cancer Education and Early Detection Program (NJCEED) screening program, Fox Chase Virtua Health Cancer Program offers lectures and free cancer screenings in our community. Physicians volunteer their time offering site-specific cancer screenings. Participants receive education, screening examinations and referrals for follow-up care for suspicious findings. Patients and their primary care physician receive all results and follow-up post screening.

<b>Type of Screening</b>	<b>Attendance</b>
Skin Cancer	28
Prostate Cancer	16
<b>Total Screened</b>	<b>44</b>

### ***Outreach Health and Wellness Events***

Health fairs give the Fox Chase Virtua Health Cancer Program the opportunity to reach out to people and the community about their health and well-being. By bringing health professionals and lay people together, a health fair educates people about health, behavior modification, prevention and the resources that the Fox Chase Virtua Health Cancer Program has available to the community. FCVH's participation in health fairs can include exhibits, mini-workshops, demonstrations and screenings. Our participation in health fairs also allows us to develop a network of organizations interested in promoting health issues to the community.

<b>Display and Health Fairs</b>	<b>Encounters</b>
30 Events	3400

*\*Encounters are the total number of people that the employee comes in contact with at a healthfair/event*

### ***Grant Funded Programs***

***The New Jersey Cancer Education and Early Detection Program*** (NJCEED) is part of the New Jersey Department of Health and Senior Services. NJCEED provides grants to facilitate comprehensive screening services for breast, cervical, prostate and colorectal cancer. The NJCEED grant provides monies for outreach, education and cancer screening services with case management for breast, cervical, prostate and colorectal cancer. Services are provided by Virtua affiliated physicians to the uninsured or underinsured residents in Camden County. This years NJCEED grant totaled \$180,000.

<b>Camden County CEED screenings</b>	<b>Screened</b>
Breast & Cervical Ca.	298
Prostate Cancer	24
Colon Cancer	65

***Susan G Komen Breast Cancer Foundation Central & South Jersey Affiliate*** funded the Breast Care Program \$31,371 to increase education and support to newly diagnosed women in our cancer program and our community. Through generous grant funding we were able to enhance our existing patient education and our breast cancer services offered through the program. Some of the activities that grant funding supported included: the availability of our free publication "The Breast Cancer Handbook: a guide to healing and recovery", sponsorship of free



education workshops with guest speaker experts addressing topics that affect breast cancer patients, high school BSE education and instruction, community based lectures on breast cancer awareness by oncology nurses and a breast cancer support group in Voorhees. Program results are included throughout this report.

***Professional Education Programs***

In order to promote clinical excellence in the treatment of cancer, the Fox Chase Virtua Health Cancer Program recognizes the importance of continuing medical education whether by bringing in experts in the field of cancer treatment or using our expertise to educate our peers. The program sponsored two continuing medical education programs focused on the management of the colorectal cancer patient and the management of the high risk breast and ovarian cancer patient.

<b>Continuing Medical Education Programs</b>	<b>Attendance</b>
Management of the Colorectal Cancer Patient	48
Management of the High Risk Breast and Ovarian Cancer Patient	18
<b>Total Attendance</b>	<b>66</b>

<b>Professional Peer to Peer lectures totals</b>	<b>Attendance</b>
14 lectures	683

***Support Groups and Counseling***

Fox Chase Virtua Health Cancer Program offers support groups that provide patients and their loved ones an opportunity to learn ways of coping with their cancer diagnosis and treatment. These specifically designed groups can provide emotional support and decrease the sense of isolation commonly associated with treatment. They provide a forum where patients can get practical advice as well as share thoughts, feelings and concerns. The support groups are facilitated and managed by oncology professionals from the Fox Chase Virtua Health Cancer Program.

In addition to support groups, patients have access to oncology social workers that provide support both in the hospital and on an outpatient basis including individual and group support, and counseling for children whose parents have cancer. An oncology social worker is a professional who has specialized training in how a diagnosis of cancer affects a person and his or her family and friends. An oncology social worker understands that there are many aspects of a person’s life outside of cancer, and that cancer affects each person in a different way. The oncology social worker's expertise is a comprehensive view of the person living with cancer that is respectful of each individual's ethnicity, spirituality, family situation, unique strengths and challenges. It is his or her job to represent a person's interests and needs to the medical team.

<b>Support Group</b>	<b>Virtua Location</b>	<b># of mtgs.</b>	<b>Avg. pts/</b>
Caregivers Group	Mt.Holly	7	5
Burlington Cty. United Ostomy Assoc.	Mt.Holly	8	25
Living with Lung Cancer	Mt Holly	7	3
Man to Man: Prostate Cancer	Voorhees	10	30
Women Supporting Women with Breast Cancer	Voorhees	18	7
Women’s Cancer Connection GYN cancer	Voorhees	10	5

### **Workshops**

**Look Good Feel Better** is a program that teaches female cancer patients beauty techniques to help restore their appearance and self-image during chemotherapy and radiation treatments. A licensed cosmetologist teaches participants about makeup, skincare, nail care and options related to hair loss such as wigs, turbans and scarves. Each group receives a free kit of cosmetics to use during and after the workshop. The Fox Chase Virtua Health Cancer Program sponsors this workshop of the American Cancer Society as a community service and offers it on-site at Virtua Memorial and Virtua West Jersey.

<b>Workshops held</b>	<b>Avg. Attendance</b>
9	5 patients/session

**Pink Ribbon Poetry Workshop** is a unique program that offers breast cancer patients the opportunity to meet other survivors, to learn about using poetry as a tool for reflection and to express their own feelings through writing and poetry. The women gather to read the poetry of published survivors and create their own poetry, which is published on the Virtua.org website. The group is open to all breast cancer patients and meets weekly at our Mt. Holly campus.

<b>Workshops held</b>	<b>Avg. Attendance</b>
19	7 patients/session

**In the Looking Glass** is a collaborative program between the Fox Chase Virtua Health Cancer Program and The Cancer Foundation for Personal Wellness. Cancer patients learn how to maintain optimum health and physical appearance during and after cancer treatment through this educational workshop. Participants are educated on the importance of nutrition, relaxation, and how to care for their skin and hair during treatment.

<b>Workshops held</b>	<b>Attendance</b>
2	20 patients

### **Special Events**

**Cancer Survivor's Day "Celebrate Hope"** is an annual program that allows families and physicians to get together and rejoice in their survival. The theme for the day was "Eat Dessert First". Staff and physicians scooped ice cream; patients made sundaes and listened to the sounds of Stephanie Guertler our program's classical harpist. The keynote speaker was Lauren Hart. Ms. Hart is a singer song writer and a cancer survivor herself. Lauren sang two songs to the attendees and spoke on the importance of maintaining hope during treatment. Complementing the program were four other cancer survivors who shared their words of hope and encouragement.

<b>Cancer Survivors Day</b>	<b>Attendance</b>
June 5, 2005	367

**11<sup>th</sup> Howard S. Fiala Memorial Oncology Lecture and Dinner** is an endowed lectureship, in memory of the Virtua Memorial Hospital trustee and Moorestown resident who succumbed to cancer in 1986. The purpose of the lecture series is to bring nationally recognized teachers and scientists to speak and share their knowledge with our lay and professional community. This year, Bernard S. Siegel, MD, a renowned physician and lecturer, was the keynote speaker on the "Art of Healing". Dr. Siegel has authored a number of books and has several other books in the

works, with the goal of humanizing medical education and medical care, as well as empowering patients and teaching survival behavior to enhance immune system competency.

Howard Fiala Lecture and Dinner	Attendance
April 27, 2005	350

**Dr. Peter Scardino, Prostate Cancer Lecture and Book signing** was an event co-sponsored by Fox Chase Virtua Health Cancer Program and Friends Health Connection. Dr. Peter Scardino, MD author of *The Complete Guide to Overcoming Prostate Cancer, Prostatitis and BPH* is considered one of the world's top prostate doctors. He serves as the chairman of the department of Urology at the Memorial Sloan-Kettering Cancer Center in NY and head of the hospital's Prostate Cancer Program. Dr. Scardino's lecture described proven prevention strategies, risk factors and the cutting edge research that is rapidly improving medical understanding of prostate diseases. Dr. Scardino was also available at the end of the program to answer questions and sign copies of his most recent book.

Prostate Cancer Lecture Event	Attendance
June 28, 2005	72

### **Advocacy and Community Events**

Fox Chase Virtua Health Cancer Program's employees actively participate in community awareness and cancer advocacy fund raising events independent of their employee responsibilities. This year, teams of employees, physician and patients walked, raced, rowed and raised funds to support cancer research and cancer care in our community.

#### **Teams participated in events held in our community including:**

- Susan G. Komen Breast Cancer Foundation's *Race for the Cure* in PA and NJ
- Leukemia Lymphoma Society's *Light the Night Walk*
- South Jersey Breast Cancer Coalition's *Strike Out Breast Cancer* Bowling Event
- American Cancer Society's *Making Strides Against Breast Cancer* walk
- American Cancer Society's "Relay for Life" event
- 4<sup>th</sup> Annual Philadelphia International Dragon Boat Festival
- Prostate Cancer Foundation's *Score for the Cure* golf tournament
- William G. Rohrer Center for HealthFitness 5K Race to benefit Fox Chase Virtua Health Cancer Program

#### **Additional programs and activities of distinction for oncology patients**

- **FitCare** is a fitness program that offers a supervised exercise program for oncology patients. This program is based in Virtua's William G. Rohrer Center for HealthFitness.
- **Family Risk Assessment Program (FRAP)** offers men and women with a family history of breast or ovarian cancer education, counseling and genetic testing for hereditary breast and ovarian cancer.
- **Outpatient nutrition services** are offered to meet the needs of patients who are undergoing cancer treatment. Patients undergoing chemotherapy or radiation will be counseled by a registered dietician through meal plans that incorporate their individual food preferences.

- **Complementary health services** are available for our patients. They include massage therapy, guided imagery and mind/body healing.
- **Reiki Therapy** is a free service offered to the patients on 5 Stokes once a week. The Japanese work "Reiki" means universal life force energy; it also refers to the technique of hands-on healing that uses this energy to restore physical, mental and emotional balance.
- **Collaborative Efforts:** Virtua Health collaborates with many organizations in our community while trying to meet the needs of all community members. We actively participate in cancer-related coalitions on many levels to help meet some of these needs. Examples include: American Cancer Society and the Susan G Komen Breast Cancer Foundation Central & South Jersey Affiliate, Burlington County Department of Health, Camden County Department of Health, South Jersey Cancer Coalition, South Jersey Breast Cancer Coalition, ACS Nutrition Task Team, Camden County CEED Coalition, NJ State CEED Coalition, New Jersey Cancer Control Task Force, and the Camden and Burlington County CAT Coalition.

Fox Chase Virtua Health Cancer Program will continue to improve upon its effectiveness to bring to the community the best cancer prevention, education, screening services and supportive programming available.

**To receive complimentary Fox Chase Virtua Health Cancer Program publications for your office, please call 1-888-Virtua-3. Topics include smoking cessation, clinical trials, Breast Cancer Handbook, Prostate Cancer Handbook, Cancer Survivor's Guidebook, and health alerts on a variety of cancers and cancer-related topics.**

## *Fox Chase Virtua Health Cancer Program's In-patient Oncology Education Report*

Virtua Health employs masters prepared oncology advanced practice nurses (APN's) in two of its acute care facilities who assist in the development and implementation of inpatient oncology and pain education programs.

These oncology APN's help FCVH:

- Provide basic oncology and chemotherapy information to nurses so they may apply this specialized knowledge and skill to clinical practice
- Continue to provide and maintain quality care to oncology patients. Continue to address the complex needs of the oncology patient and family
- Comply with chemotherapy administration regulatory bodies (National Institute of Occupational Safety and Health (NIOSH))
- Further develop nursing orientation and annual nursing competencies regarding oncology issues so to maintain provision of quality patient care

In the summer Virtua Health offered a two-day Oncology Nursing Society Chemotherapy and Biotherapy Course. The course provided nurses with the education necessary to safely and effectively administer chemotherapy, while understanding the adverse events that can occur from treatment and interventions necessary to manage those events.

<b>ONS Chemotherapy and Biotherapy Course</b>	<b>Attendance</b>
June	11
September	13
<b>Total Attendance</b>	<b>24</b>

In collaboration with Virtua's Oncology Nursing Practice Committee, the oncology APN's are developing and implementing an oncology review course for 2006 to provide nurses with the advanced skills needed to care for and assess the oncology patient.

### **Pain Education Program:**

Virtua's inpatient oncology APN's are collaborating with Virtua's pain resource nurses to implement a pain resource nurse education course, while focusing on further development of a nursing pain initiative.

Goals of the in-patient pain education program/pain initiative include:

- Provide basic information to nurses regarding pain assessment and management
- Improve nurses' knowledge and attitudes toward managing and assessing pain
- Increase utilization of the pain resource nurses throughout Virtua Health
- Integrate a pain assessment presentation into nursing orientation to heighten nurses awareness of the importance of pain assessment/management

In October, the oncology APN's worked with Virtua's clinical education coordinator to develop a pain self learning packet, which was given to all Virtua nurses caring for adult patients. In December 2005, they collaborated with the pain resource nurses to host the second annual pain symposium which addressed a spectrum of pain topics including: pain pathophysiology, assessment, management, surgical pain, refractory pain and pain in adolescents and pregnancy. The program was well-attended by nurses and pharmacists.

<b>Virtua's 2nd Annual Pain Symposium</b>	<b>Attendance</b>
December	87

## 2004 Annual Site Study: Breast Cancer

### *Advancing oncology care today and tomorrow*

Diane Gillum, MD, Eric Miller, MD, Colleen Merrell, RN, BSN, OCN, Judy Neuman, BA, CTR



Much has changed about breast cancer over the past decade, and the detection and treatment of the disease continues to evolve. Our annual cancer report last looked at our breast cancer statistics in 2000. At that time, the majority of disease was early stage corresponding with improved survival and the addition of new technology such as the sentinel node biopsy was anticipated. It has been exciting over the last five years to see the growth of our breast care program, improvements in treatment options, expansion of patient care services and adoption of innovative technologies.

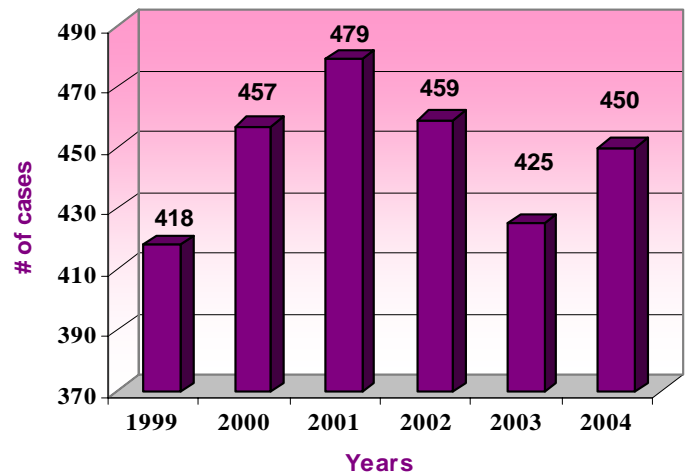
In this 2004 breast cancer report, we will reassess the state of breast cancer care today at Fox Chase Virtua Health Cancer Program [FCVH], highlight several of our breast care services and initiatives and look to the future direction of technology and therapy for breast cancer care.

### **INCIDENCE**

Breast cancer remains one of the most common cancers in women. Approximately 215,900 new cases of invasive breast cancer and 59,390 new cases of in situ breast were estimated to occur in 2004.<sup>1</sup> Breast cancer continues to be a leading cancer killer of women, second only to lung cancer. According to the American Cancer Society statistics, approximately 40,580 deaths from breast cancer were estimated to occur in 2004.<sup>1</sup>

The incidence of breast cancer continues to increase, although the rate of increase has slowed significantly over the past few years. This reflects the impact of screening mammography which began in the mid 1980's.<sup>1</sup> Though not a realization yet, we look forward to the time we see breast cancer incidence falling due to effective chemoprevention approaches and other lifestyle modifications. The number of breast cancer cases at Virtua Health has increased 8% from 1999 to 2004 (*see chart on right*). Breast cancer remains the most common cancer site in our cancer registry. Breast cancer accounts for 20 % of the 2,273 cancer cases reported in 2004.

*Fox Chase Virtua Health Cancer Program  
Breast Cancer Incidence 1999 - 2004*

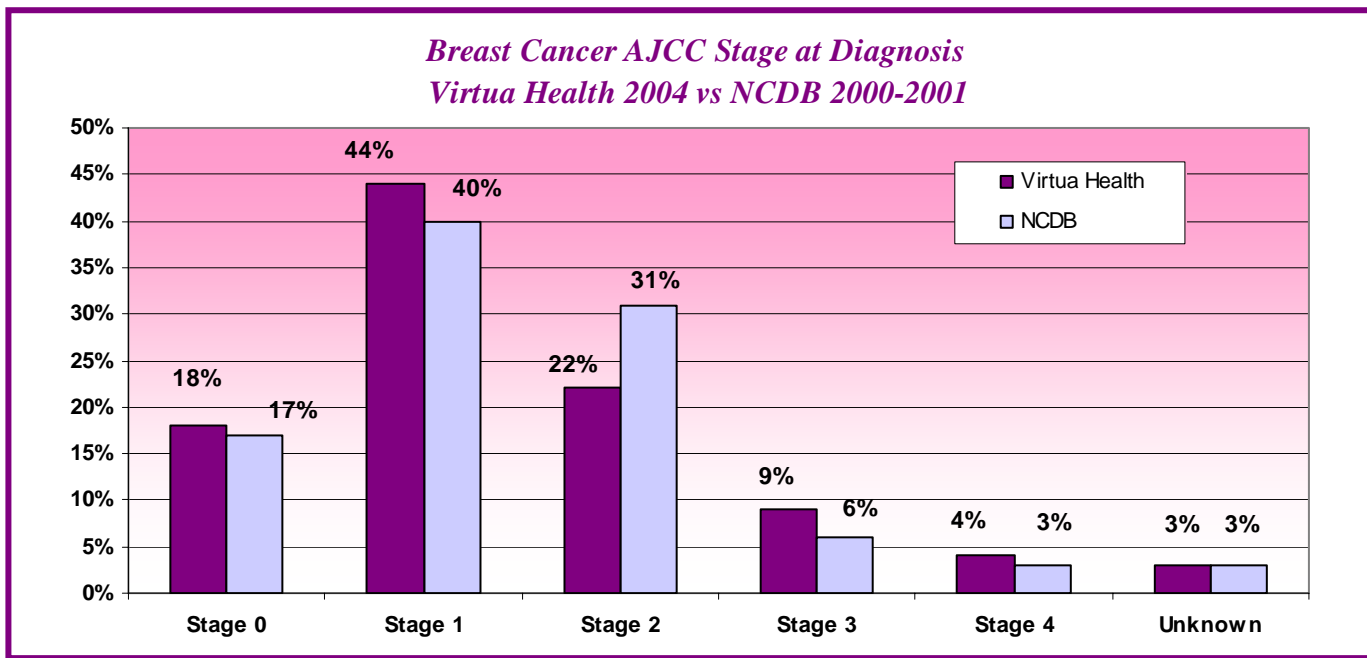


### **DETECTION**

Screening mammography remains the gold standard for early detection of breast cancer. Screening mammography should be utilized in women aged 40 and older, to identify breast cancer at an earlier stage and smaller size, which has been associated with an improved survival and a higher probability of breast conservation.<sup>2,3,4,5</sup> Computer evaluation of mammograms has been associated with a decreased incidence of false negative readings (CAD, R2®).<sup>6,7,8</sup> Digital mammography is presently being evaluated; while there is no overall difference in the efficacy of film screen mammogram and digital mammogram, in both younger women and women with dense breasts, digital mammogram may be a better modality.<sup>7</sup>

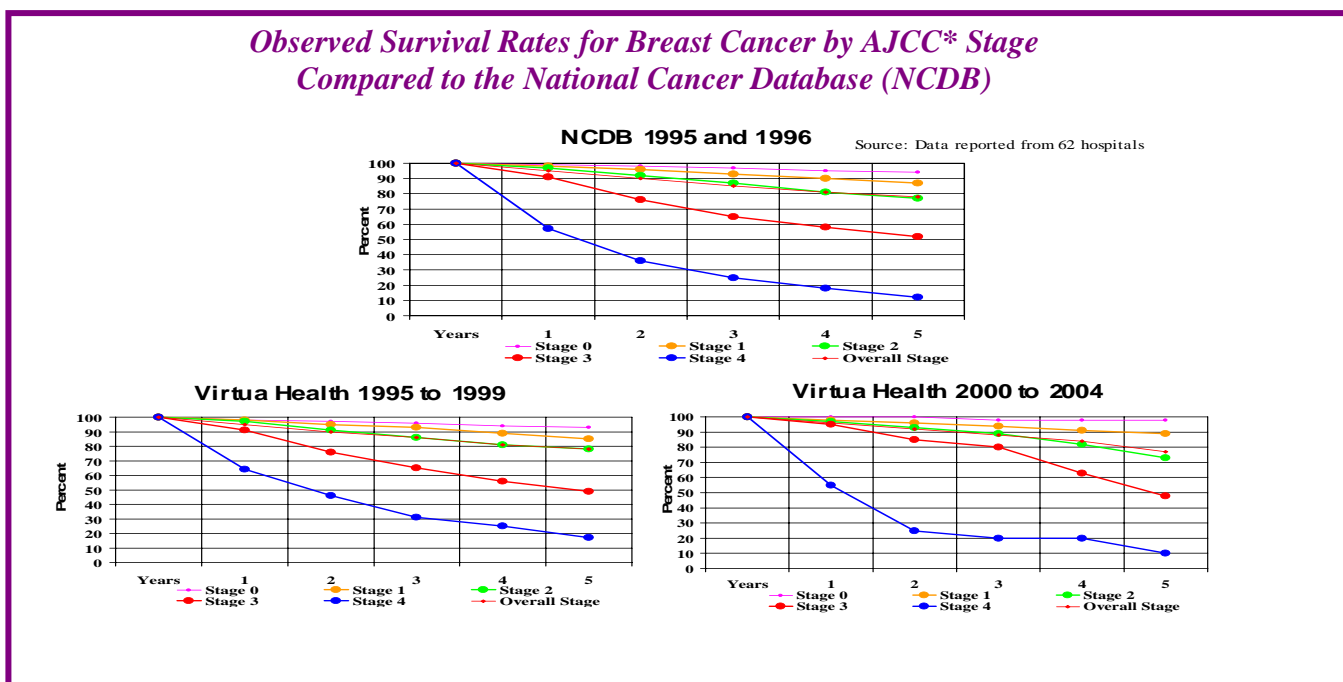
## DIAGNOSIS

There has not been a significant shift in the age of diagnosis in our data over the last five year period. When we last reviewed our data, approximately 50% of the patients were 60 years or older. This continues to be the case today. In addition, the majority of patients continue to be diagnosed at an early stage. This again reflects favorably on the detection approaches. As illustrated in the below chart comparing our data to the National Cancer Data Base [NCDB], 87% of the cases in 2004 were Stage 0, 1 or 2, which is similar to the data five years ago, with a slight increase in Stage 0 disease most recently and slight decrease in Stage 2 disease.



## SURVIVAL

The most recent survival data trends continue to show improved survival based on the stage at diagnosis. From 2000 to 2004, the five year survival for all stages of disease from our registry data was 77%. Our survival data based on stage compares favorably with the available NCDB data. (see chart below) Our data shows near 100% survival rates for the earliest stage of disease (Stage 0).





## TREATMENT

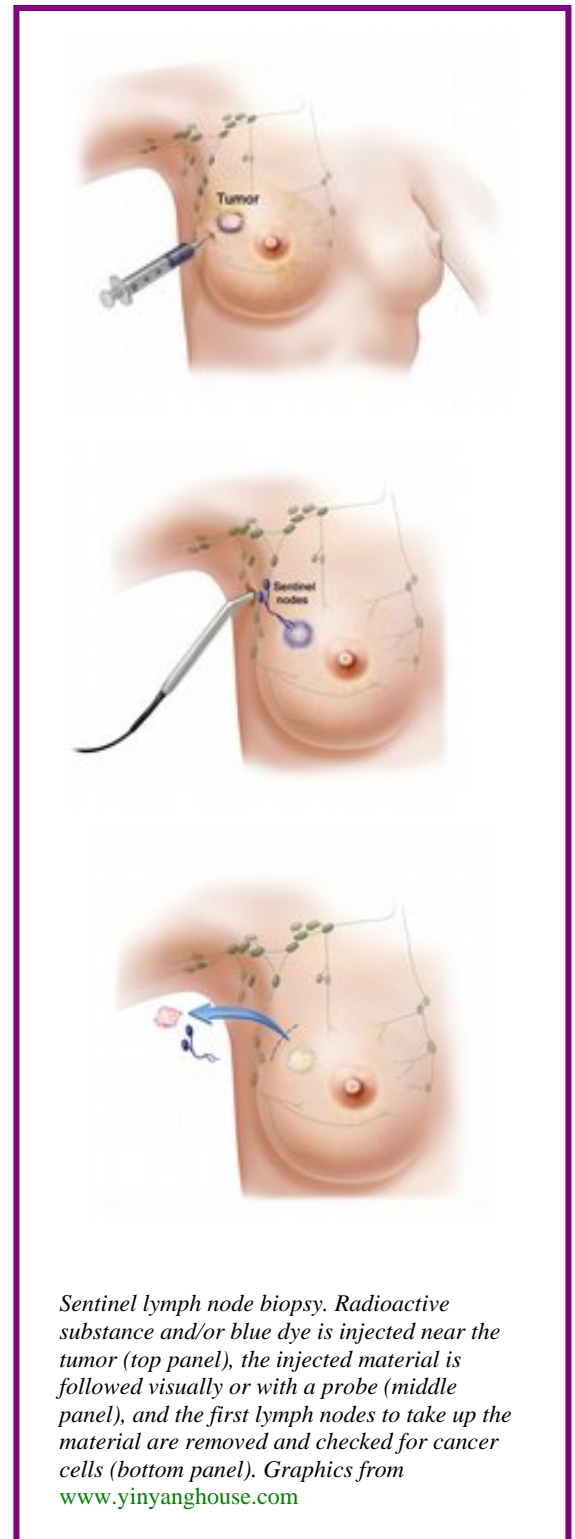
Major shifts in the approach to breast cancer treatment have occurred over the past decade including sentinel lymph node biopsy and targeted therapy. Evaluation of lymph nodes for metastatic disease is important for both staging of breast cancer and local control of the axilla. We have seen adoption of the sentinel node procedure in the surgical management of breast cancer.

In 2004, 59% of all invasive breast cancer cases had a sentinel node procedure done and for 28% of patients, this was the only procedure done in the axilla. Our sentinel node utilization rates are higher when compared to the reported rates from analyzing SEER data in community settings where 22 to 27% of Stage I and II breast cancer cases had a sentinel node biopsy.<sup>9</sup> We expect to continue to see an increased utilization of sentinel node biopsy in this patient population.

The sentinel node procedure allows more intense pathological scrutiny of what is felt to be the most likely axillary node, if any, to harbor metastatic disease. In general, both a radiocolloid (technetium sulfur colloid) and a blue dye (isosulfan blue, methylene blue) are injected in the breast tissue surrounding the breast cancer. The markers will migrate in the lymphatics to the first draining lymph nodes(s), identified because they are “hot” (identifies the injected radiocolloid with an intraoperative gamma counter) and blue (from the blue dye). Additionally, sentinel lymph nodes can be clinically suspicious. If the sentinel lymph nodes do not demonstrate evidence of metastatic breast cancer, then the likelihood is the remaining axillary lymph nodes also do not harbor metastatic disease and need not be removed by axillary dissection.

Sentinel lymph node mapping and biopsy has minimized need for axillary dissection and possibly the complication of this surgery including lymphedema. The National Surgical Adjuvant Breast and Bowel Project [NSABP] is presently studying any differences in survival or local recurrence in patients treated with either sentinel lymph node biopsy or axillary dissection (NSABP-32).<sup>10</sup> Based on results from additional research studies and the American College of Surgeons Oncology Group, the axillary node dissection, with its significant morbidity, could play less of a role in the management of breast cancer.

Clinical applications for the presence or absence of estrogen and progesterone receptors (ER/PR) include patient prognosis and patient response to adjuvant endocrine therapy. Historically, receptor assay results had a turnaround time average of 10 to 14 days. As of February 2005, the Department of Pathology at Virtua Health now offers in-house assay testing with clinicians receiving results in an average of seven days. Some of the most successful medications in the treatment of breast cancer are the endocrine therapies Tamoxifen (which blocks the tumor’s ability to use estrogen) and aromatase inhibitors (which block the production of estrogen, may be used only in postmenopausal women). Recent trials have



demonstrated an improved survival and lower recurrence rate when treated for five years with the aromatase inhibitor Arimidex® compared to Tamoxifen (ATAC).<sup>11,12</sup>

In addition, in patients treated with Tamoxifen for a limited time, switching to the aromatase inhibitor Exemestane for completion of the five years of treatment was found to improve survival.<sup>13</sup> Extending treatment after five years of Tamoxifen use with the aromatase inhibitor Letrozole® (MA.17 trial) improves disease-free and distant disease-free survival, but not overall survival (except in node positive patients whose overall survival was increased).<sup>14</sup>

Some patient's breast cancers overexpress an epidermal growth factor receptor HER-2; these patients have a higher risk of distant disease. A humanized antibody, Herceptin®, to HER-2 has been developed by Genetech®. In patients with tumors that overexpress HER-2 and have metastatic disease, patients were found to have an improved survival when treated with Herceptin®.<sup>15</sup> In addition, patients with high risk HER-2 positive breast cancer and localized disease, the addition of Herceptin® has also been shown to prolong survival.<sup>16,17</sup> In addition, there is preliminary data using preoperative Herceptin®.<sup>18</sup> This is an exciting addition to chemotherapy for the treatment of breast cancer.

## **SUMMARY**

At the conclusion of the 2000 Virtua Health breast cancer annual report, we were anticipating the advent of breast MRI, targeted systemic treatments, less invasive surgical procedures, increase utilization of image-guided biopsy techniques, accelerated partial breast irradiation techniques and broader prevention options. Through research advances and our dedication to improving breast cancer care and many of the promising advances are now available at FCVH. The following pages of this report will highlight some of our services including: the breast care program, screening and high risk programs, multidisciplinary treatment planning, access to clinical trials and rehabilitation. Finally, we will look to a bright future of advances and improvements in detection, evaluation and treatment of breast cancer.

## Breast Care Program

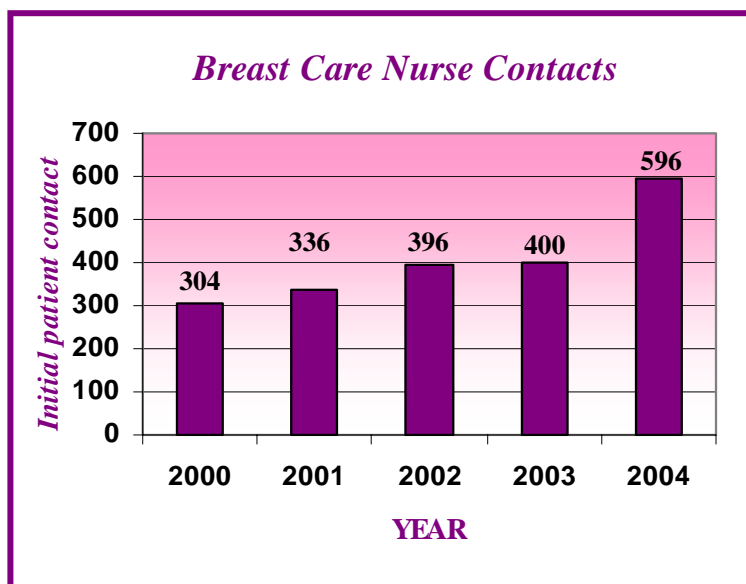
*Advancing oncology care through education and coordination of care*



The Breast Care Program at Fox Chase Virtua Health Cancer Program [FCVH] is specifically designed to meet the needs of patients through the continuum of breast care. We offer a full range of comprehensive clinical services from prevention and screening through cancer diagnosis, multi modality therapy and supportive services. Our program provides innovative, integrated and high quality oncology care. We strongly believe in a collaborative approach to breast cancer care that includes: the patient, their family, physicians, health care professionals and patient advocates who specialize in all aspects of breast care.

The Breast Care Program was developed from a well-established foundation and commitment to women's health and oncology care. The program was formed in response to our growing Women's Health Program of Excellence and patients seeking breast care at our institutions and the need to provide greater access and enhanced services to patients in our community. Through all of our clinical and supportive efforts, FCVH continues to deliver a world class patient experience through its programs of excellence in oncology, women's health, pediatrics, cardiology, orthopedics and geriatrics.

The breast care program medical directors, Dr Eric J. Miller and Dr. Diane R. Gillum provide the leadership and program development. A unique feature to the program is our breast care nurses. Colleen Merrell, RN, BSN, OCN, and Barbara Francks, RN, who are oncology nurses with additional training in breast health and breast cancer care. The breast care nurses are available to patients and families to provide assistance, education, support and access to resources. Referrals to the nurses continue to increase each year from physicians, healthcare professionals, advocacy organizations, patient self-referrals, word of mouth, outreach efforts and our *Breast Cancer Handbook: A guide to healing and recovery* (see chart on right).



Patient education and community outreach are important components of the program. Funding from cancer advocacy groups supports the purchase and development of education materials, performances of our breast cancer outreach play, *Ruthie Says* and provides supplemental financial support for free breast cancer awareness lectures, breast cancer education workshops and breast cancer support groups free of charge to our community.

From 2000 to 2005, the Breast Care Program has received more than \$106,000 in outside grant funding to support many of the programs and activities sponsored by the program. This year alone, more than 5,000 community members have been reached through our programs. A complete listing of all breast care program education and outreach activities is detailed in the 2005 Oncology Community Education section of this report. Our program will continue to build on our existing community and advocacy partnerships to increase breast cancer awareness and reach our community.

**For more information or to refer a patient for education and support, call 1-888-Virtua-3 and ask to speak to one of our breast care program nurses.**

# New Jersey Cancer Education and Early Detection Program

*Advancing oncology care through outreach and early detection*



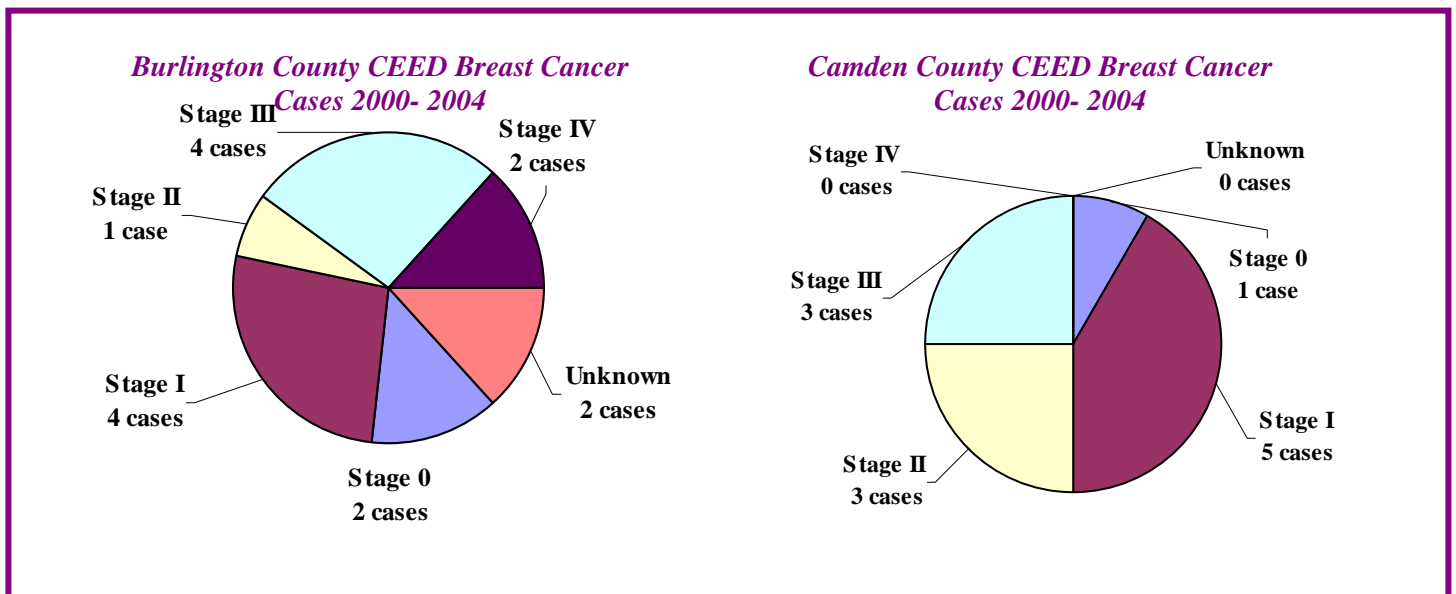
The New Jersey Cancer Education and Early Detection (NJCEED) Program is funded by the Centers for Disease Control and Prevention, the State of New Jersey and Virtua Health. It is administered by the New Jersey Department of Health and Senior Services. NJCEED provides breast, cervical, prostate and colorectal cancer outreach, education and screening services to eligible people who have limited incomes and are uninsured or underinsured, with an emphasis on disadvantaged racial and ethnic groups. Services include education sessions provided in the community for the different cancers, diagnostic testing for screening participants with abnormalities, case management services providing patient navigation for persons with abnormal results, one-on-one counseling as needed, help with transportation; emotional support and follow-up for those diagnosed with a malignancy.

In Camden County, Virtua Health is the lead agency and NJCEED provider. The Burlington County Health Department is the lead agency with Virtua Health's Home Care – Community Nursing Service providing services as a subcontractor in that county. The NJCEED programs work with their large network of faith-based, cancer advocacy, minority organizations and community partners to provide education, seminars, outreach and screening services throughout the counties

Each year, thousands of residents gain access to education and life saving screenings to detect breast cancer at its earliest and most treatable stage. From 2000 to 2004, the Burlington and Camden County CEED programs screened more than 2,100 women and diagnosed 27 cases of breast cancer. Of those breast cancer cases, 59% were identified in stage 0, 1 and 2 (*see chart below*).

The program and its providers continue to advocate for increasing state funding and cancer awareness to screen more residents and identify cancers at any early stage in this medically underserved population.

From January 1, 2005 to October 1, 2005, more than 690 men and women have completed breast, cervical, colon and prostate cancer screening and accessed services in both Burlington and Camden counties.



For more information or to refer a patient to the program, call 1-888-Virtua-3 and ask to speak to the NJ CEED coordinator for Burlington or Camden county.

## Family Risk Assessment Program (FRAP)

*Advancing oncology care through risk assessment and genetics*

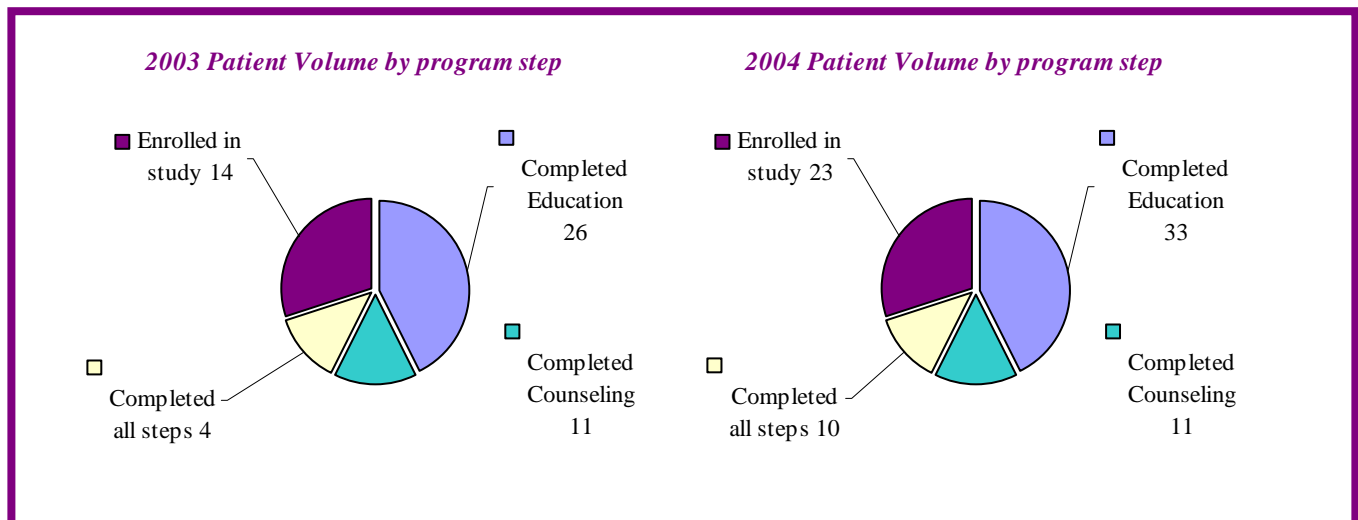
A family history of breast or ovarian cancer can increase a woman's risk of developing these cancers. Five to 10% of breast and ovarian cancers are due to genetic factors that are passed on from one generation to the next. Identifying and educating high risk women about their cancer risk and options are an important component of our comprehensive breast care program.

The Family Risk Assessment Program (FRAP) offers individuals and their families counseling about their personal risk, risk reduction, benefits and limitations of screening methods, access to clinical studies, prevention treatment and genetic testing options. Genetic testing is available for the BRCA1 and BRCA2 genes (cancer susceptibility genes). These genes increase the risk of both breast and ovarian cancer. In addition to BRCA1 and BRCA2, other cancer-related genes are discussed if appropriate.

The FRAP staff includes medical oncologists, a breast surgeon, gynecology oncologist, an advanced-practice oncology nurse and genetic counselors trained in cancer prevention. The program is comprised of three steps for participants and families. Based on the individual's evaluation, a tailored plan is recommended to the participant that includes risk assessment, education, counseling, genetic testing and possible treatment options. Through collaboration with the Fox Chase Cancer Center, participants have an opportunity to participate in research studies for genetic testing, screening and prevention.

The Family Risk Assessment Program continues to grow in volume. From January 1, 2005 to October 1, 2005, more than 49 patients have accessed the program with 42 enrolling in clinical research studies.

Virtua Health's FRAP has been recognized by the Fox Chase Network as a model for developing a risk assessment program in a community setting. Bridget LeGrazie, RN, MSN, AOCN, APN.c, High Risk Program Manager, presented this topic at Fox Chase Cancer Center's Regional Advanced Genetics Course for healthcare providers in March 2005. Based on the success of this program, expansion of the program to include a risk assessment program for colon cancer will be established in 2006.



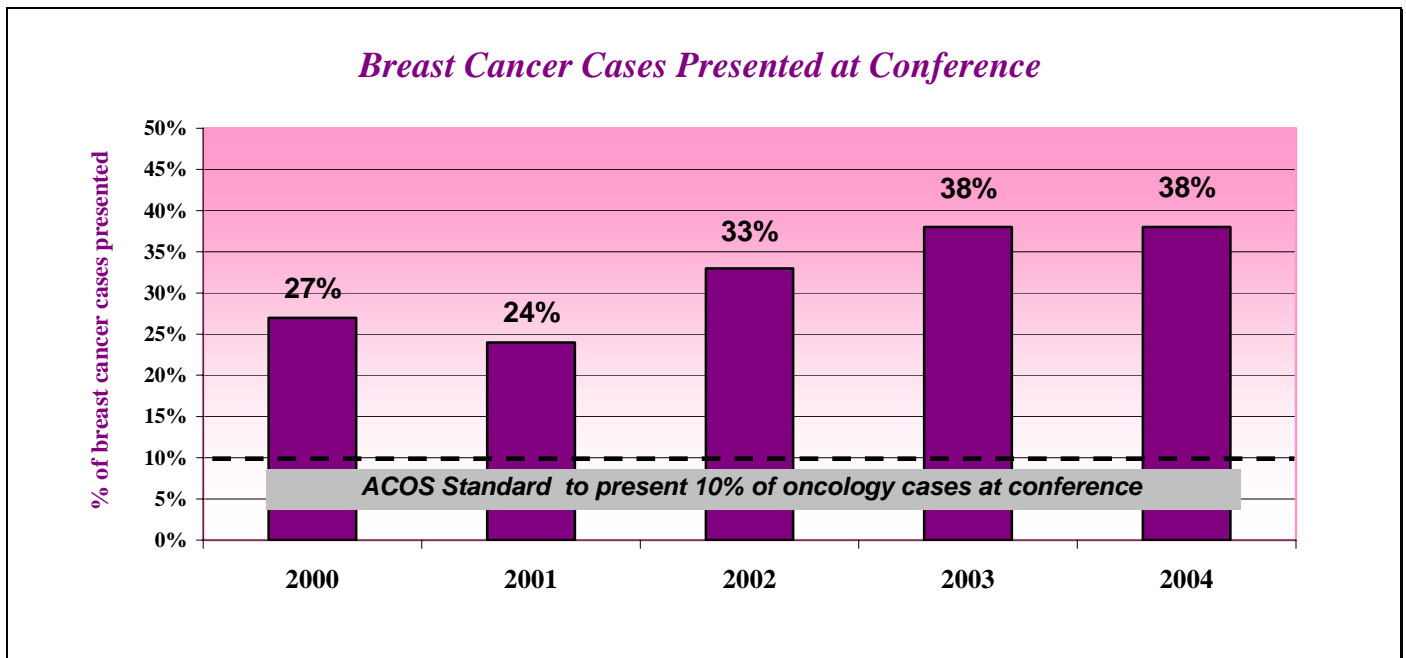
For more information or to refer a patient to the Family Risk Assessment Program, call 1-888-Virtua-3.

## Breast Cancer Conferences

*Advancing oncology through multidisciplinary care*

In addition to presenting selected cases at weekly cancer conferences, site-specific Breast Cancer Conferences are held twice at month at both Virtua Memorial Hospital and Virtua West Jersey Hospital Voorhees. These conferences provide an interdisciplinary and collaborative approach in the development of treatment plans for patients with breast cancer. The purpose of these conferences is to offer physicians the opportunity to present newly diagnosed or particularly difficult cases to their colleagues for collaboration in best practices related to the management and treatment prior to initiating a treatment plan. These conferences provide a forum where multi-modality and interdisciplinary case reviews are conducted on a frequent basis to ensure physician and patient access to consultative services by all disciplines, and access to the latest treatments in the form of clinical trials.

Conferences are attended by physicians specializing in breast cancer, oncology nurses and other health care providers with a special interest in breast cancer. Pertinent information including patient history, psycho social issues, physical examination findings, staging, pathology, imaging and operative findings is reviewed and discussed at the meeting. Treatment options, clinical trial eligibility, journal article review and latest cancer therapies and treatment guidelines are discussed as the team strives to formulate a consensus-based management recommendation. The chart below illustrates the percentage of breast cancer cases that are reviewed at these multidisciplinary conferences.



For a schedule of upcoming breast cancer conferences or to present a case for discussion, call 1-888-Virtua-3 and speak to one of our breast care program nurse.

## Breast Cancer Clinical Research

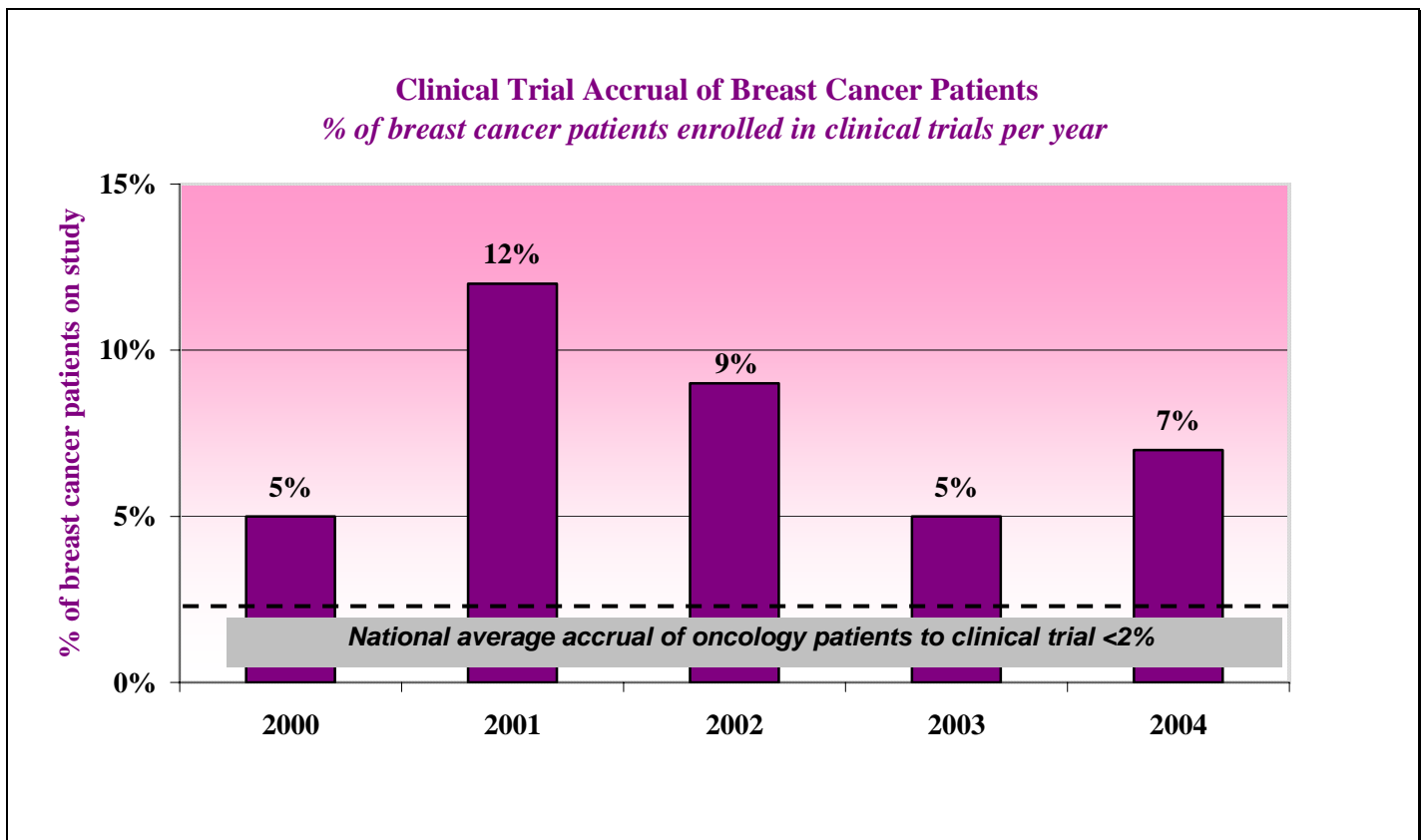
*Advancing oncology care through research*

An important component of our cancer program is offering our patients the opportunity to participate in national clinical trials from prevention to treatment. Fox Chase Virtua Health patients have access to the most recent approaches in cancer care, developed by the nation's foremost cancer specialists, including those from the National Cancer Institute and the American College of Surgeons Oncology Group. Through our affiliation with Fox Chase Cancer Center, patients also have access to studies conducted exclusively for Fox Chase patients.

In addition to treatment studies, Fox Chase Virtua Health Cancer Program participates in cancer prevention and genetic studies for individuals at increased risk for developing cancer. Our program enrolled 23 women in the second national breast cancer prevention STAR trial, the Study of Tamoxifen and Raloxifene (STAR). In the first two years of the Family Risk Assessment Program (FRAP), thirty-seven participants were enrolled in research studies for new screening methods, genetic testing for research purposes and cancer prevention trials.

Nationally, less than 2% of adult cancer patients participate in clinical trials. As part of the American College of Surgeons Commission on Cancer accreditation, Fox Chase Virtua Health Cancer Program continues to meet commendation level of the Commission's standard by enrolling 4% of oncology patients annually in clinical trials. The chart below illustrates the high percentage of breast cancer patients that are enrolled in clinical trials each year.

From January 1, 2005 to November 1, 2005, 122 oncology patients have enrolled in clinical trials for site specific cancers available at Fox Chase Virtua Health Cancer Program.



To learn more about clinical trials or find out about open prevention and treatment studies available at Fox Chase Virtua Health Cancer Program, call 1-888-Virtua-3 and ask to speak with a protocol coordinator.

## Lymphedema program

*Advancing oncology care through physical rehabilitation*

Physical rehabilitation is often essential to maximize a patient's recovery and quality of life. Virtua Health's Lymphedema Program was established as part of the physical rehabilitation services. The program offers a comprehensive approach to management of symptoms for patients with primary or secondary lymphedema. Our experienced physical and occupational therapists are specially trained in the treatment of patients with compromised lymph systems.

Information about arm care guidelines and signs and symptoms of lymphedema are important components of patient education following breast cancer surgery. Our physical therapists offer post operative consultations to review lymphedema information, precautions, arm care and exercises. From 2000 to 2004, more than 374 breast cancer patients were evaluated post operatively through our program.

For patients that develop lymphedema, Virtua Health offers a comprehensive out patient lymphedema management program. The goals of lymphedema treatment are to control and reduce swelling, prevent the progression of lymphedema, prevent infection and improve the patient's overall quality of life.

Virtua Health's Lymphedema Program offers several treatment options, including:

- Manual lymphatic drainage – specialized massage to reroute and increase lymph flow and decrease swelling
- Tailored exercises to increase lymph drainage
- Bandaging and compression
- Skin care and instructions in precautions and ways to control lymphedema
- Consultation on modifications of daily living activities and lifestyle adaptations

More than 165 breast cancer patients have been evaluated and treated from 2000 to 2004 in our Mt. Holly and Voorhees centers. With the increased utilization of sentinel lymph node biopsy, we hope to prevent this condition and see a decrease in the incidence of lymphedema in breast cancer patients in the future.

**To learn more about our lymphedema program or to refer a patient for evaluation, call 1-888-Virtua-3 and ask to speak with a staff member of the physical therapy department.**



# The Future of Breast Cancer Management

## *Advancing oncology care through research and technology*

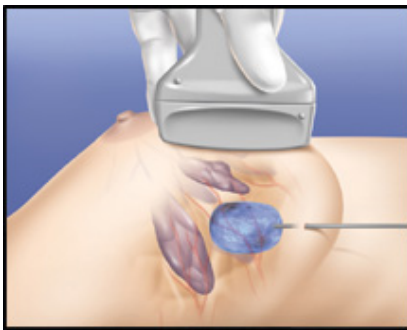
Progress in the prevention, evaluation and early detection, and treatment continues to provide encouraging results and a hopeful future for the treatment of breast cancer.

### **ADVANCES FOR HIGH RISK WOMEN**

To provide a risk reduction for the development of breast cancer and minimize some side effects, the National Surgical Adjuvant Breast and Bowel Project [NSABP] embarked on a second national breast cancer risk reduction trial in postmenopausal women, the P-2 trial called STAR for the Study of Tamoxifen and Raloxifene.<sup>19</sup> At present, we are eagerly awaiting these results to determine whether Raloxifene, when compared to Tamoxifen, can provide a comparable risk reduction for the development of breast cancer and have less associated side effects. A different class of drugs, aromatase inhibitors (which inhibit the production of estrogen, and can only be utilized in postmenopausal women) have been found to be more effective than Tamoxifen in reducing the incidence of second breast cancers, and in postmenopausal women these agents are being evaluated in breast cancer risk reduction trial (IBIS-II, MAP.3)<sup>20,21,22</sup> At present, these new trials do not address premenopausal women at increased risk for breast cancer.

MRI of the breast has evolved into a major advancement in breast imaging for screening of high risk patients, evaluation of the breast with cancer for multifocal disease, evaluation of the contralateral breast in women with breast cancer, evaluation of the cancer for neoadjuvant therapy, examination of the breast in patients with unknown primary and adenocarcinoma of the axilla, concern for residual disease in the postoperative setting, evaluation of the breast with no focal findings and inconclusive findings with mammogram, ultrasound, and examination (eg. spontaneous nipple discharge), and the evaluation of breast implants.<sup>23</sup> MRI of the breast is not a screening modality for general use.

### **ADVANCES IN TREATMENT MODALITIES**

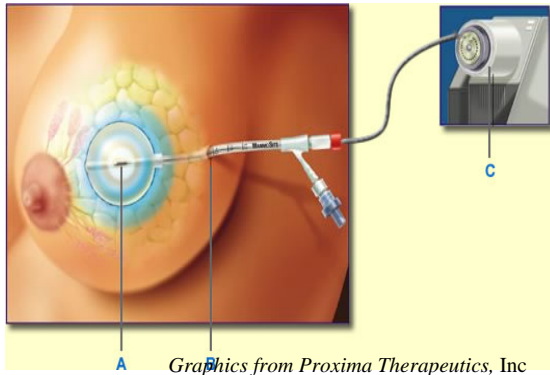


*Graphics from Sanarus Visica™ Treatment System*

Numerous ablative techniques for the treatment of breast cancer are being developed so that the primary breast cancer can be treated within the breast. These include laser, radiofrequency ablation, focused ultrasound (Exblate®), microwave, and cryosurgery.<sup>24,25</sup> Cryosurgery has received FDA approval for the treatment of benign breast tumors (e.g. fibroadenoma). Cryosurgery ablation of fibroadenomas is an office procedure performed with local anesthesia and ultrasound guidance. It utilizes a cooling probe which develops a 4 cm ice ball causing destruction of the fibroadenoma. Over months duration, the fibroadenoma will resorb.<sup>26</sup> The ACOSOG will be introducing a trial to evaluate the efficacy of cryosurgery for breast cancer. This will be evaluated by subsequent surgical resection.

Advances in breast brachytherapy techniques have led to the development of new approaches to breast conserving therapy. Most breast cancer recurrences occur within a short distance from the area of the cancer and the incidence of cancers elsewhere in the breast is similar between patients treated with or without radiation therapy. Thus, it appears that the primary benefit of radiation therapy is in the area of the tumor bed, and newer techniques involve focal treatments to the tumor bed. There are generally three

accepted techniques of partial breast irradiation: multicatheter brachytherapy, intracavitary radiation with a balloon catheter (MammoSite®) or 3D conformal radiation<sup>27,28,29</sup>



In the winter of 2005, surgeons and radiation oncologists at Virtua Health will begin offering partial breast irradiation utilizing MammoSite® as an alternative to conventional radiation therapy. Radiation is delivered via an inflated balloon catheter placed in the lumpectomy cavity. An advantage of this approach is a shorter duration of treatment (five days instead of six weeks). With a shortened course over five days, partial breast irradiation can be completed prior to initiation of chemotherapy. A cooperative trial (NSABP B-39/ RTOG 0413) is currently comparing the efficacy of partial breast irradiation and whole breast irradiation.<sup>30</sup> The Fox Chase Virtua Health Cancer Program will be offering this important clinical trial to our patients.

The use of preoperative chemotherapy has demonstrated an ability to shrink the primary breast cancer. The shrinkage may be of sufficient degree to change the surgical treatment from a mastectomy to a lumpectomy.<sup>31</sup> Thus, preoperative chemotherapy has been helpful in increasing the number of patients who can obtain breast conservation. In women with estrogen receptor positive breast cancer, preoperative endocrine therapy with either Tamoxifen or an aromatase inhibitors can also shrink the primary breast cancer.<sup>32,33</sup> ACOSOG will be introducing a trial of four months of preoperative endocrine therapy in postmenopausal, estrogen receptor positive breast cancer patients with the aromatase inhibitors Arimidex®, Exemestane, and Femara® (ACOSOG trial Z1052).

Chemotherapy has been shown to prolong survival in selected patients with breast cancer. However, prior to the utilization of chemotherapy, historical control patients were often cured with local measures (surgery, radiation) alone. Thus, many patients treated with chemotherapy may not need this therapy. Numerous tumor characteristics have been evaluated in attempts to better define the patients who may (or may not) need chemotherapy. This has recently been studied in lymph node negative, estrogen positive patients who had been treated with Tamoxifen, with a reverse-transcriptase-polymerase-chain-reaction (RT-PCR) assay of 21 genes.<sup>34</sup> Patients were categorized as low, intermediate and high-risk for distant disease; distant recurrence at 10 years was 6.8%, 14.3%, and 30.5% respectively. Thus, low risk patients may not need to be treated with chemotherapy. While this test is now commercially available, the limited number of patients evaluated have not fully defined the selection of patients who need treatment. Other investigators are evaluating additional gene assays to further refine and define which patients need chemotherapy and which patients may not need chemotherapy.<sup>35</sup>

## CONCLUSION

Advances in research and improvements in treatment options will continue to change the management of breast cancer care in the future. Our breast care program will continue to support research advancement by providing access and actively accruing patients to clinical trials. We are equally committed to enhancing our current clinical and supportive services. In the winter of 2006, the Breast Care Program at Fox Chase Virtua Health Cancer Program and GE Healthcare will partner to bring personalized breast care management to our community. The combined expertise of these organizations will build on our existing breast care program and work to improve patient care by developing a system-wide comprehensive breast care management program that will individualize screening, diagnostic and treatment. The goal of the program is provide timely, integrated multi-specialty quality care with emphasis on individual risk factors. This program has the potential to change the care delivered in our community and to create a model for care across the country.

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