

## 2015 Message from the Medical Directors - S. Wallace, MD & A. Bapat, MD

Virtua is a multi-hospital healthcare system with facilities in Mt. Holly, Marlton, Voorhees, Berlin, Washington Township and Moorestown. Virtua serves Burlington, Camden and Gloucester counties and their surrounding communities in central and southern New Jersey.

Virtua's Cancer Program is accredited by both the American College of Surgeons Commission on Cancer and by the National Accreditation Program for Breast Centers. Accreditation by both of these organizations provides many notable benefits that enhance our quality of care by providing our patients with a full range of diagnostic, treatment and supportive services including community based resources. To maintain accreditation facilities must undergo a rigorous evaluation and review of its performance and compliance with standards established by each of these organizations.

Virtua offers a wide array of surgical oncology expertise in colorectal surgery, breast cancer surgery, urologic surgery, gynecologic surgery, thoracic, otolaryngotic surgery and spine surgery. Radiation oncology facilities, interventional radiology along with medical oncology and surgical oncology practices are all available throughout our service areas.

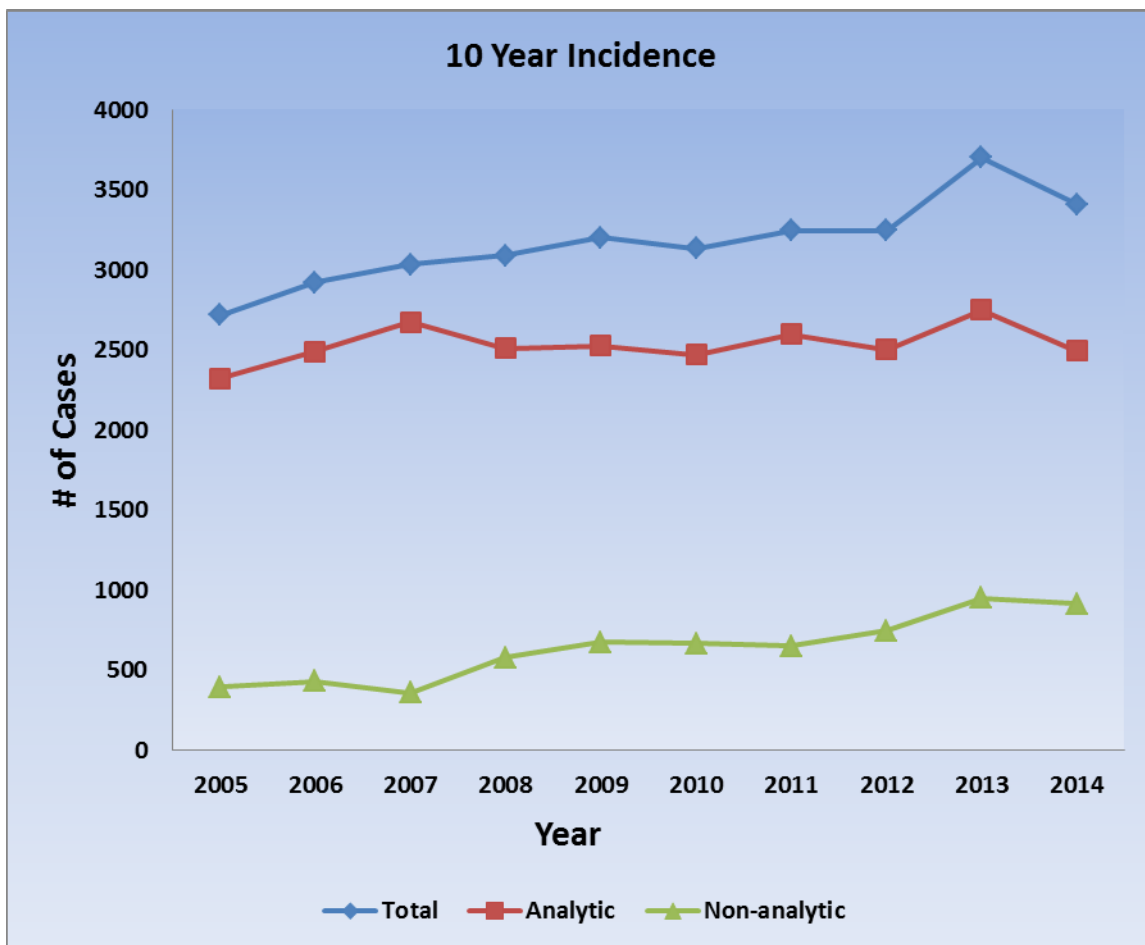
Highlights of our key accomplishments for 2015 are as follows:

- Virtua and Penn Medicine have announced a partnership alliance. This partnership provides Virtua's cancer specialists an opportunity to collaborate with Penn Medicine's physicians to provide best practice in cancer care and treatment close to home. Our patients will have access to the latest in advanced treatments and clinical trials, as well as quick and easy access to second opinions from Penn Medicine.
- Achieved three year full reaccreditation for the National Accreditation for Breast Centers meeting all 29 standards.
- Expanded our Thoracic Program Service Line to include identification and follow-up for all inpatients and emergency room patients found to have incidental lung nodules who may be at risk for developing lung cancer.
- Implemented Survivorship Care Plans providing comprehensive, personalized, standard sized guidelines and benchmark-driven Survivorship Care Plans for all of our breast cancer patients utilizing Carevive Systems. In addition, we transitioned our psychosocial distress screening tool to a new platform utilizing Carevive, as well.
- Instituted two multi-specialty Infusion Oncology Medical Directors for both Virtua Memorial and Voorhees infusion Centers led by Dr. James Lee and Dr. Stephen Zrada; in addition Mohamed Eldbid joined Virtua's Pharmacy as a dedicated Oncology Clinical Pharmacist.
- Initiated the design of a new building project plan for a new Memorial Cancer Center to be located in Moorestown and completed 3<sup>rd</sup> quarter 2017
- Continued to work closely with Samaritan Healthcare and Hospice to expand supportive services such as the following: new inpatient hospice, survivorship, and palliative care.

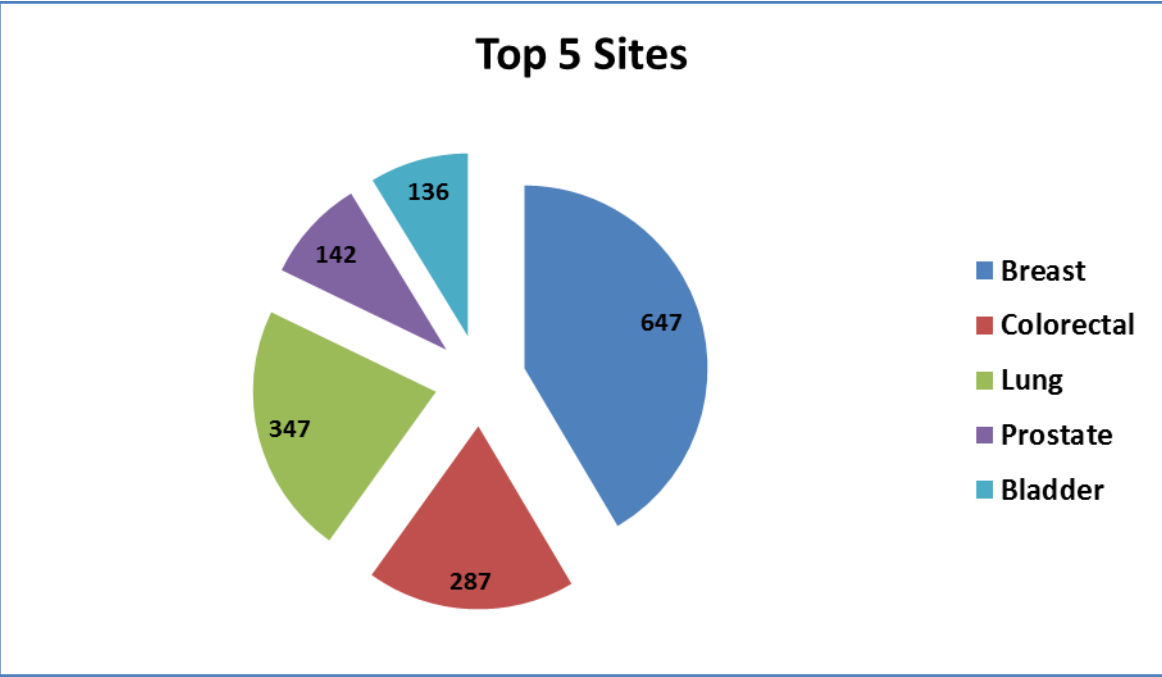
We are looking forward to 2016, as we continue to strengthen our oncology program working with our partners of Penn Medicine in Philadelphia and Samaritan Healthcare and Hospice.

## Cancer Registry

The Cancer Registry is responsible for the accurate, timely collection of cancer patient data which is used for the evaluation of patient outcomes. The Cancer Registry coordinates many of the Virtua Cancer Program activities related to our participation in the American College of Surgeon's (ACoS) Commission on Cancer (CoC) accredited program and the National Accreditation Program for Breast Centers (NAPBC). The CoC establishes standards to ensure high quality, multi-disciplinary and comprehensive cancer care delivery in hospitals throughout the United States granting accreditation to only those facilities that have voluntarily committed to provide the best in cancer diagnosis and treatment and are able to comply with rigorous standards.



During 2014, the Cancer Registry collected data on 2,496 analytic and 913 non-analytic cases. Breast, prostate, lung, colorectal, and bladder are the most frequently seen sites at Virtua comprising 62% of the analytic cases accessioned into our database. The individual breakdowns are as follows: 26% breast, 14% lung, 11% colorectal, 6% prostate, and 5% bladder.



The Cancer Registry responds to hundreds of data requests annually, supporting physicians, hospital administration, clinical research, the nurse navigation program and the Cancer Genetics program.

The Cancer Registry is a primary source of data included in the Virtua Oncology Dash Board which benchmarks Virtua’s clinical outcomes against national standards. This year Virtua’s Oncology Quality Dashboard included clinical quality measures endorsed by the National Quality Forum (NQF), American College of Surgeons (ACoS) and the National Cancer Comprehensive Network (NCCN); the National Accreditation Program for Breast Centers (NAPBC) and the Oncology Roundtable.

## Performance Measures

The Virtua Cancer Program's accreditation with the Commission on Cancer (CoC) American College of Surgeons requires our cancer program to submit data annually. This data is analyzed and then utilized to identify potential gaps in cancer care in an effort to improve quality of care. Results of our performance measures for 2014 are as follows:

Adjuvant chemotherapy is considered or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC Stage III (lymph node positive) colon cancer.

Virtua Results: 94% CoC Benchmark: 90%

At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.

Virtua Results: 93% CoC Benchmark: 85%

Tamoxifen or third generation aromatase inhibitor is considered or administered within 1 year or 365 days of diagnosis with AJCC T1c or Stage IB-III hormone receptor positive breast cancer.

Virtua Results: 94% CoC Benchmark: 90%

Radiation is administered within 1 year (365 days) of diagnosis for women under the age of 70 receiving breast conservation surgery for breast cancer.

Virtua Results: 99% CoC Benchmark: 90%

Combination chemotherapy is considered or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1cN0 or Stage IB-III hormone receptor negative breast cancer.

Virtua Results: 100% CoC Benchmark: 90%

## Oncology Support Services

### Virtua Breast Program



The Breast Care Program is specifically designed to meet the needs of patients through the entire continuum of breast care. The program was established to support our growing Women's Health Program of Excellence, for patients seeking breast care at our institutions, and to provide greater access and enhanced services to patients in our community. We offer a full range of comprehensive clinical services from prevention and screening, through cancer diagnosis, multi-modality therapy, and supportive services. Under the direction of Dr. Diane R. Gillum and Dr. Arnold Baskies Virtua's Breast Care Program strives to provide innovative, integrated; high quality oncology care. Virtua strongly believes in a multidisciplinary team approach to breast cancer care that includes the patients and their family, physicians, nurse navigators, genetic counselors, Licensed Clinical Social Worker's, and support from health care professionals who specialize in all aspects of breast care. Virtua's Breast Care program was re-accredited from the National Accreditation Program for Breast Centers, passing on all 27 standards in September 2015. The Breast Program Leadership steering committee, under the guidance of Dr. Diane R. Gillum, monitors program quality, measures outcomes, sets standards of care system-wide and addresses all aspects of breast care. The multidisciplinary committee meets 6 times a year.

The Virtua Cancer Program provides care to approximately 650 newly diagnosed patients annually. Breast care is provided at two of our facilities: Virtua Voorhees and Virtua Memorial. The program at the Voorhees Health and Wellness Center includes a state of the art radiation oncology facility along with all program support services for the oncology program. Our oncology breast plastic reconstructive program is located at Virtua Memorial.

The goals of the breast navigation program are to support physicians in achieving optimal clinical outcomes, enhance communication between the various disciplines and referring physicians, and improve patient satisfaction. It allows for more efficient use of physician time spent with patients and ensures timely delivery of services.

The breast nurse navigators are oncology nurses with additional training in breast health and breast cancer care. Nurse navigators are available to newly diagnosed patients to assist with education, support and access to resources. Patient education and community outreach are important components of the Breast Care program. Many breast cancer educational programs, including lymphedema education and screening are provided at no additional cost to our patients.

### Other Oncology Nurse Navigation Services

Virtua's Nurse Navigation program has been recognized as best practice from Association of Community Cancer Centers. Nurse navigators also offer support for thoracic, prostate, colorectal, gynecological, and head and neck cancer patients. Nurse navigators are available to newly diagnosed patients to assist with education, support and access to resources. To date, all the navigation services have patient satisfaction scores of 97-100%.

## Oncology Social Work

The Penn Medicine Virtua Cancer Program provides a full range of clinical oncology social work services to meet the psychosocial needs of cancer patients and their families. We provide psychosocial counseling and emotional support to patients and their families through individual, family, and couples counseling. Clinical oncology social workers also support patients' psychosocial needs by providing appropriate referrals to numerous community resources including outpatient therapists who specialize in ongoing treatment of chronic illnesses and grief and loss. Oncology social workers continue to recommend and facilitate psychiatric referrals, when indicated, and develop, implement, assess, and facilitate oncology support groups for breast and gynecologic cancer. Cancer survivorship needs are addressed through supportive individual counseling, Cancer Survivors support group and appropriate referrals to a wide array of both Virtua and community resources.

A non-denominational chaplain offers professionally facilitated spiritual counseling to cancer patients and their families. Patients can be referred through our psychosocial distress screening initiative, any of our service providers or can self-refer for these services.

## Palliative Care and Survivorship Services

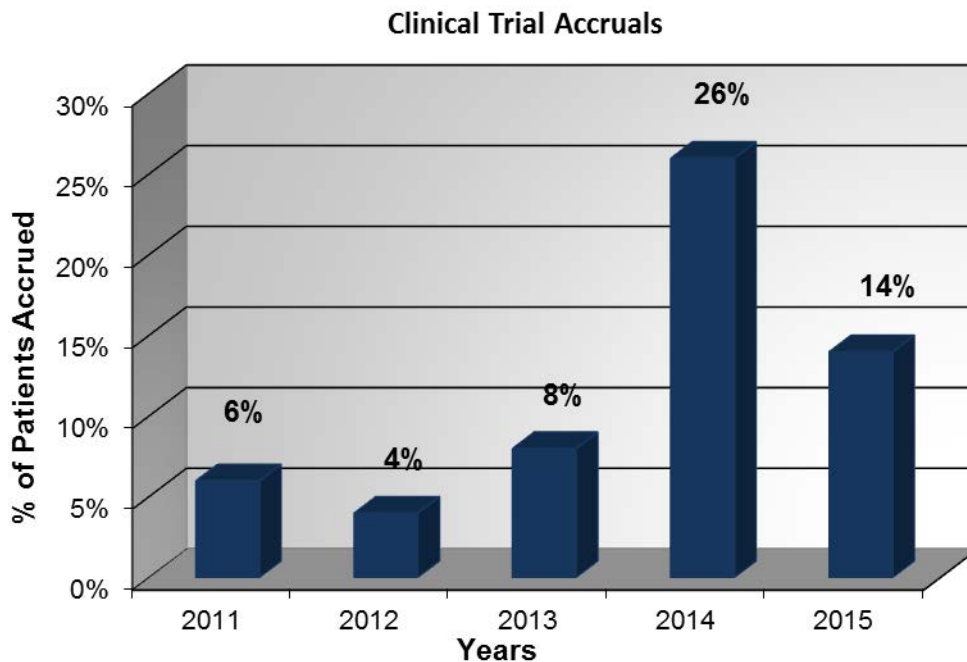
Virtua Oncology offers palliative care services through its LifeCare program. Partnering with Samaritan Healthcare and Hospice, Dr. Stephen Goldfine and his team provide these services that are available to Virtua patients. These clinics are offered at 2 campuses, Memorial and Voorhees and address care of the patient as a whole

Already existing survivorship programs include Look Good Feel Better sponsored by the American Cancer Society, massage therapy, Virtua Physical Therapy and Rehabilitative Services as well as cancer fitness classes. Additional services include psychosocial distress screening which is used to identify and examine psychological, behavioral and social problems which may interfere with a patient's ability to participate fully in their health care. This evaluation is utilized to provide patients with resources and/or referrals to address their psychosocial needs. Virtua Centers for HealthFitness and researchers at the University of Pennsylvania have teamed up to bring *Strength after Breast Cancer* to breast cancer survivors. The program educates survivors about lymphedema and helps them to build strength. Registered Dietitians are available to provide oncology nutrition counseling and our Chaplain is available to provide spiritual support and encouragement.

## Clinical Research

The Virtua Cancer Program is one of a select group of community-based hospitals in New Jersey and Pennsylvania whose cancer programs are affiliated with Penn Medicine in Philadelphia. This affiliation allows Virtua patients to have access to the latest advances in cancer care, treatment and research. The Virtua Cancer Program is staffed by Clinical Research Coordinators who work closely with our physician clinical investigators to ensure new clinical trials with the latest treatment options are available for our patients. A Scientific Review Committee comprised of our principal investigators meets monthly to discuss and recommend new trials to the Institutional Review Board (IRB) for approval.

Currently, there are 41 oncology clinical trials open through Penn Medicine and Virtua Cancer Services.



\* 2015 represents data through 12/1/15

◆ Penn Medicine and Virtua Cancer Services participate in multiple national cooperative groups including: Eastern Cooperative Oncology Group (ECOG), NRG Oncology, SWOG Cooperative Oncology Group.

◆ Through the Virtua Medical Group over 285 patients have an opportunity to participate in cancer control clinical trials.

## Radiation Oncology

Virtua Health Systems offers radiotherapy services in three counties across South Jersey: Memorial Hospital in Burlington County, Virtua Voorhees in Camden County, and at Virtua's Health & Wellness Center in Gloucester County. The Radiation Oncology program is accredited through the American College of Radiology who accredits and recognizes programs for delivering high quality care. The core value to patient care in the radiation oncology department is a collaborative, team approach. Each department across the system hosts weekly chart rounds to address any barriers to treatment the patient may be facing. To help identify these barriers; in 2015 the department(s) implemented a web based psychosocial distress screening tool utilizing *CareVive*. Our Weekly chart rounds are attended by:

### Radiation Oncology

- Radiation Oncologists
- Physicians
- Dosimetrists
- Radiation Therapists
- Oncology Nurses

### Supportive Services

- Social Work
- Nurse Navigators
- Genetic Counselors
- Research Coordinators

Each site is equipped with advanced treatment technology that allows for the precise targeting of cancer cells, and limits unnecessary dose to nearby tissue and organs. Image Guided Radiation Therapy (IGRT) is used to localize the tumor and ensure accuracy before the delivery of the treatment. Treatment modalities available across the system are as follows:

### Memorial Hospital-Mount Holly, NJ

- Intensity Modulated Radiation Therapy (IMRT)
- Three Dimensional Conformal Radiation Therapy (3D)
- Low Dose Rate (LDR) Brachytherapy for Prostate Cancer
- High Dose Rate (HDR) Brachytherapy for Gynecological Cancers
- 4-D CT Simulation capabilities
- Stereotactic Body Radiation Therapy (SBRT)
- Stereotactic Radiosurgery (SRS) coming in 2016
- Xofigo-used in the treatment of castration-resistant prostate cancer

### Virtua Voorhees- Voorhees, NJ

- Intensity Modulated Radiation Therapy (IMRT)
- Three Dimensional Conformal Radiation Therapy (3D)
- High Dose Rate (HDR) Brachytherapy for Gynecological Cancers
- 4-D CT Simulation
- Stereotactic Body Radiation Therapy (SBRT)
- Xofigo-used in the treatment of castration-resistant prostate cancer

### Health & Wellness Center- Washington Township, NJ

- Intensity Modulated Radiation Therapy (IMRT)
- Three Dimensional Conformal Radiation Therapy (3D)
- 4-D CT Simulation
- Stereotactic Body Radiation Therapy (SBRT)
- Stereotactic Radiosurgery (SRS)
- Prone Breast Technique
- Calypso- allows for continual real time tracking of prostate gland during treatment



## Cancer Genetic Program

Virtua's Cancer Genetic Program began in 2003 with a focus on hereditary breast and ovarian cancer syndromes and in 2009 expanded to include gastrointestinal and other adult cancer genetic syndromes. The volume of patients seeking genetic counseling continues to grow and we expect to continue to expand our program with the clinical resources and clinical education provided through Penn Medicine.

### Breast and Ovarian Cancer

Genetic tests are available for hereditary breast cancer. Among them are the most common hereditary breast cancer syndromes involving the BRCA1 and BRCA2 genes. When genetic testing is completed and an alteration is found in one of the identified genes, an individual's risk for developing certain types of cancer is significantly increased. For women, there is an increased risk for developing breast and/or ovarian cancer. For men, there is an increased risk for breast and prostate cancer. In addition, men and women who have already been diagnosed with these cancers are at increased risk for developing a second cancer.

### Colorectal Cancer

Genetic tests are available for hereditary colon cancer. Common hereditary cancer syndromes include Familial Adenomatous Polyposis (FAP) and Lynch Syndrome. FAP is an inherited condition that may cause an individual to have hundreds of colon polyps and significantly increases the risk for colon cancer. Lynch syndrome increases the risks for various cancers including colon, uterine, gastric, and ovarian cancer. At Virtua all colorectal and uterine cancers are screened for Lynch Syndrome. The aim of tumor screening is to identify patients who are at risk for having Lynch Syndrome to reduce the morbidity and mortality due to Lynch-related cancers in our patients and their family members. In 2013, we began automatic reflexing to MLH1 promoter hypermethylation on all uterine cancers with absent MLH1 by IHC based on a data review which revealed a great majority of these cancers are sporadic. This year, we implemented automatic reflexing to MLH1 promoter hypermethylation for all colorectal cancers with absent MLH1 by IHC based on our clinic experience and literature review.

### The Team Approach

The Cancer Genetics Program at Virtua is unique in that it consists of a multidisciplinary team of oncology and genetics experts including medical oncologists, an advanced practice nurse in genetics, board certified genetic counselors, and master's prepared licensed clinical social workers. The team discusses genetics cases and reviews current literature during monthly team meetings and the cancer genetics staff participates in weekly cancer case conferences at Virtua.

Experts at the Penn Medicine Virtua Cancer Genetics Program help guide patients through the cancer risk counseling process to identify their risk for cancer. The counselors help patients who are uncertain about their family's medical history or have concerns about other cancers by obtaining medical records and pathology reports from the various healthcare centers at which their family members have been treated. Other benefits of the program include:

- Receiving individualized and comprehensive counseling from cancer genetics experts including medical oncologists trained in cancer genetics, advanced practice nurse, board-certified genetic counselors and social workers
- Discovering an increased risk for cancer
- Learning about the benefits, risks and limitations of genetic testing as well as the inheritance pattern and impact on family members

- Undergoing genetic testing, if appropriate
- Learning ways to decrease risk for developing cancer and early detection strategies for high risk individuals (screening or medical and surgical approaches)

### Clinical Trials

Patients, who have a personal or family history certain cancers, may be eligible for research studies. Participation in a clinical trial may help provide insight into hereditary factors, or genes, that influence cancer risk.

### Community Outreach

Our cancer genetics staff is committed to community education of healthcare providers and the lay community. Our experts travel throughout our surrounding communities fulfilling many speaking engagements. This year, one of our genetic counselors presented a lecture on cancer genetics at the annual Oncology Registrars of New Jersey Annual Meeting in Atlantic City. Our advanced practice nurse contributed to an article which is pending publication. Another genetic counselor presented an abstract at Virtua's evidence-based annual conference.

The Cancer Genetics Program has been interviewed and featured in many Virtua publications and local newspapers, magazines and television programs discussing the identification and management of high risk individuals. The Cancer Genetics Program is an established clinical site for the graduate students enrolled in the Genetic Counseling Master's program at Arcadia University. Our program hosted one student in 2015.

## Community Outreach and Education

Virtua's Community Outreach Program works closely with cancer advocacy organizations and community partners to improve and enhance cancer education, prevention and supportive services throughout the region. In tandem with our community needs assessment the cancer program develops resources and services to augment existing programs while identifying the future direction for cancer education and prevention efforts. Resources and services are designed across the continuum of care, from prevention to risk reduction and support. This report will detail all of the community and education activities held throughout this year.

### Oncology Lectures given in the community

Many of our oncology physicians, nurses, therapists, educators and executives are active members of the Virtua Speakers Bureau. These experts travel throughout our surrounding counties speaking on cancer related topics for lay and professional audiences. Lectures are given free of charge as a community service.

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

|                       | Total Lectures<br>Jan-Dec | Total Attendance |
|-----------------------|---------------------------|------------------|
| <b>TOTAL LECTURES</b> | <b>11</b>                 | <b>465</b>       |

### Outreach Health and Wellness Events

Participation in health fairs provide an 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 available resources. Our participation in health fairs includes exhibits, mini-workshops, demonstrations and screenings.

| Display and Health Fairs | Encounters |
|--------------------------|------------|
| 24                       | 1,980      |

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

### Grant Funded Programs

The New Jersey Cancer Education and Early Detection Program (NJCEED) is sponsored by the New Jersey Department of Health and Senior Services. NJCEED provides grants to facilitate comprehensive screening services for breast, cervical, prostate and colorectal cancer for uninsured or underserved populations. 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 residents of Camden and Burlington Counties. This year's NJ CEED grant totaled \$ 460,500 and was awarded to Virtua as a regional grant for both Camden and Burlington County.

The recent Community Health Needs Assessment, conducted by the Tri-County Health Assessment Collaborative, identified access to health care as a barrier for all patients with chronic conditions. This finding was presented to Virtua’s Cancer Committee and as a result the CEED program expanded their outreach activities working closely with our nurse navigation team, social workers etc. to educate uninsured, underinsured, and newly insured residents on how and where to access appropriate health care to address the specific needs of this population. The NJCEED staff are participating members of the Burlington and Camden County Chronic Disease Coalition, a group of community partners, charged with providing education on chronic disease, obesity, cancer, tobacco cessation, and chronic disease management to the counties we serve.

| <b>Camden County CEED screenings</b> | <b>Totals Screened</b> | <b>Positive Findings</b> |
|--------------------------------------|------------------------|--------------------------|
| Breast & Cervical Ca.                | 245                    | 3.6%                     |
| Prostate Cancer                      | 8                      | 0                        |
| Colon Cancer                         | 28                     | 0                        |

| <b>Burlington County CEED screenings</b> | <b>Totals Screened</b> | <b>Positive Findings</b> |
|--|------------------------|--------------------------|
| Breast & Cervical Ca.                    | 137                    | 3%                       |
| Prostate Cancer                          | 10                     | 0                        |
| Colon Cancer                             | 20                     | 0                        |

**Susan G Komen for the Cure Central & South Jersey Affiliate** funded the Breast Care Program \$44,500 to provide bilingual outreach to increase screening compliance among NJCEED patients. And provide breast education in Gloucester County.

### **Support Groups and Counseling**

Penn Medicine and Virtua Cancer Services offer support groups that provide patients and their loved ones an opportunity to learn how to cope with their cancer diagnosis and treatment. These support groups 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 Penn Medicine and Virtua Cancer Service oncology professionals.

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 provides a comprehensive view to 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.

| Support Groups                      | Virtua Location | # Of mtgs. | Avg. pts./ |
|-------------------------------------|-----------------|------------|------------|
| BRCA Support/Women Supporting Women | Mt. Holly       | 9          | 6          |
| GYN Cancer Support Group            | Voorhees        | 10         | 5          |
| Cancer Survivors Support Group      | Voorhees        | 18         | 4          |

### 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. Penn Medicine and Virtua Cancer Services sponsor this workshop with the American Cancer Society as a community service and offer it on-site at both Virtua Memorial and Virtua Voorhees.

### Advocacy and Community Events

Penn Medicine and Virtua Cancer Services 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.

### Virtua Cancer Service Teams participated in the following events in 2015:

- Susan G. Komen Breast Cancer Foundation's *Race for the Cure* in PA and NJ
- Leukemia and Lymphoma Society's *Light the Night Walk*
- American Cancer Society's *Making Strides Against Breast Cancer* walk
- American Cancer Society's "*Relay for Life*" events
- Annual Cancer Survivor's Day Celebration at the Marlton "*Relay for Life*" event

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

- **Moving On** is a fitness and exercise program that offers a supervised exercise program for cancer survivors. This program is based in Virtua's William G. Rohrer Center for Health Fitness.
- **Strength after Breast Cancer** is an evidence-based rehabilitation adapted from Physical Activity & Lymphedema Trial conducted by University of Pennsylvania. Virtua in Motion Physical Therapy and Rehabilitation, Virtua's Center for Health-Fitness and researchers at the University of Pennsylvania have teamed up to bring exercise to breast cancer survivors.
- **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.
- **Collaborative Efforts:** Penn Medicine and Virtua Cancer Services collaborate with many organizations in our community while trying to meet the needs of all community members. We actively participate in cancer-related coalitions including the following: American Cancer Society, the Susan G Komen Breast Cancer Foundation, Burlington County Department of Health, Camden County Department of Health, South Jersey Cancer Coalition, and South Jersey Breast Cancer Coalition, Camden and Burlington Counties Chronic Disease Coalition and many others.