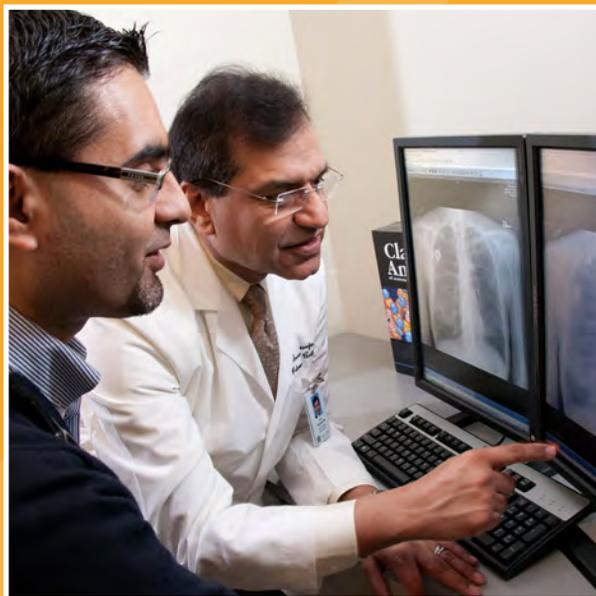


ONE PLACE. ONE TEAM. ONE GOAL.

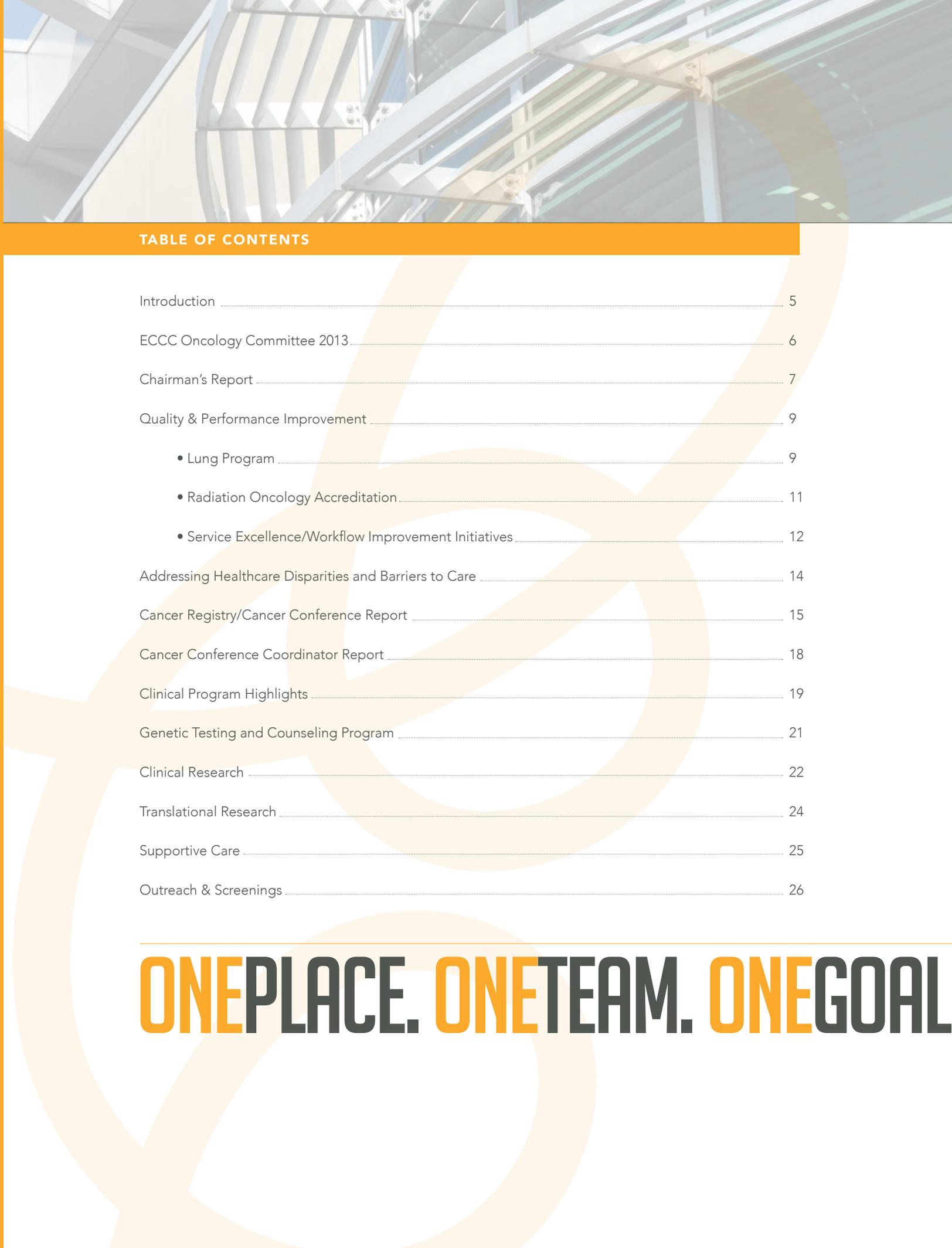
ANNUAL REPORT

2013





From Pittsburgh to Lexington, no other facility has a more complete range of academically affiliated medical, surgical and radiation oncologists providing such a comprehensive range of highly specialized cancer services for both adults and children than the Edwards Comprehensive Cancer Center at Cabell Huntington Hospital.



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**ONEPLACE. ONETEAM. ONEGOAL**





The American Cancer Society recently published *Cancer Statistics 2014*, and there is good news to report. Cancer death rates have steadily declined for the past 20 years — equating to a 20 percent decrease in the overall risk of dying from cancer. This means that 1,340,400 deaths from cancer have been prevented. According to *Cancer Statistics 2014*, this decrease is primarily due to three factors —prevention, improvements in early detection and the development of more effective treatment through research.

As you review this annual report, I'd like to call your attention to the Edwards Comprehensive Cancer Center's progress in the same key areas:

**Prevention:** Although the decrease in cancer death rates is reassuring, we still have a long way to go. Obesity and the use of tobacco products are major risk factors for cancer and, according to the CDC, West Virginia ranks highest in the nation for tobacco use and second highest for obesity. The staff of the ECCC is committed to lowering the cancer risk of Tri-State residents by promoting healthy lifestyle changes, such as exercise, a healthy diet and eliminating the use of tobacco products, and their efforts to do so are documented in the final section of this report. The ECCC's Genetic Testing and Counseling Program offers breast cancer risk assessments as well as hereditary cancer risk assessments to help people understand and reduce their risk of developing cancer.

**Early Detection:** Whenever possible, the Edwards Comprehensive Cancer Center implements new technology to advance early detection of cancer. All mammograms now use 3D mammography, which creates a three-dimensional rendering of the breast that offers greater visibility of tissue details and results in greater accuracy. The ECCC Lung Cancer Program now uses low-dose CT scans for detection, and as you will see in this report, lung cancer patients are being diagnosed earlier than just a few years ago, and at a percentage that meets or exceeds the national average.

**Treatment:** The Edwards Comprehensive Cancer Center hosts three programs dedicated to cancer research, with the goal of developing safer, more effective treatments. The Clinical Trials Program offers adult and pediatric patients advanced cancer care and treatment options. The Tissue Procurement Program is invaluable to research and allows patients to be active participants in the ongoing fight against cancer. The Marshall University Translational Genomic Research Institute offers the perfect environment for investigator-initiated trials designed and conducted by MU researchers and ECCC physicians. This collaboration has resulted in a number of projects, including the therapeutic and symptom control trials designed by Drs. Hardman and Niles, and the cancer stem cell research conducted by Dr. Claudio described in this report.

I am proud to share this report outlining the Edwards Comprehensive Cancer Center's efforts in the fight against cancer. Our goal is ensure the best possible outcome for each patient, and we are fully committed to putting all of our knowledge, resources, energy and passion behind it.

Sincerely,

A handwritten signature in black ink that reads "Brent A. Marsteller". The signature is fluid and cursive.

Brent A. Marsteller  
President & CEO  
Cabell Huntington Hospital

**MANDATORY REPRESENTATION - PHYSICIANS**

Chairman	Gerard Oakley, MD, Gynecology Oncology
ACoS Liaison	Andrew Freeman, MD, Radiation Oncology
Surgery	Jack Traylor, MD
Medical Oncology	Maria Tirona, MD
Diagnostic Radiology	Pete Chirico, MD
Radiation Oncology	Andrew Freeman, MD
Pathology	Linda Brown, MD

**MANDATORY REPRESENTATION – NON-PHYSICIANS**

Cancer Program Administrator	Chad Schaeffer, FACHE
Oncology Nursing	Molly Sarver, RN, OCN, MBA
Cancer Registry	Phyllis Edwards, RHIT, CTR, CCS & Shelby Moore, CTR, CCS
Social Services	Michael Hanft, MSW
Clinical Research	Leann Ross, RN, OCN, CCRP
Quality Management/ Performance Improvement	Denise Gabel-Comeau, MHA, CPHQ, CCC-SLP Margaret Wagnerowski, RN, MSN, AOCN, AOCNS
Community Outreach	Gigi Gerlach, RN, OCN
Psychosocial Services	Sheila Stephens, DNP, MBA, AOCN
Palliative Care	Charles McCormick, MD
Genetic Counseling	Lisa Muto, MSN, WHNP-BC, OCN
Rehabilitation	Molly O’Dell, OTR/L, CDT

**ADDITIONAL SPECIALTY MEMBERS**

Surgical Oncology	Wade Douglas, MD
Urology	James Jensen, MD
Orthopedic Oncology	Felix Cheung, MD
Pediatric Oncology	Mark Mogul, MD
Thoracic Surgery	Jonathan Kiev, MD, FACS

**ADDITIONAL SPECIALTY NON-PHYSICIAN MEMBERS**

Administration	Hoyt Burdick, MD
Pharmacy	Chris Larck, PharmD
Home Health	Andra Hardin, RN,
Clinical Trials	Teresa Giles, RN
Radiation Oncology	Angie Hayes, MS, CMD
Tissue Procurement	Julie Morrison, MA
Breast Health Center	Marsha Dillow, RN, MSN, CBCN
Psychology	Katie Sharp, MA (MU Student)
Site Navigators	Heather Streets, BSN, OCN (Lung) & Jennifer Brown, RN (Colorectal)
Nutrition/Dietetics	Susan Hale, RDN, CSO, LD, CDE
American Cancer Society	Michelle Chappell, State Mission Delivery Director

**DESIGNATED ALTERNATES: 2014**

Medical Oncology	Aneel Chowdhary, MD, Mohamad Khasawneh, MD & Toni Pacioles, MD
Pathology	Doreen Griswold, MD
Oncology Nursing	Dee Murphy, RN
American Cancer Society	Teri Francis
Medical Oncology Fellows	Laurie Matt, MD & M. Mozayen, MD

Revised 8/30/12, 12/6/12, 7/5/13  
 Updated 11/5/13  
 Revised 12/5/13, 12/30/13





**Gerard J. Oakley, MD**

*Medical Director, Edwards Comprehensive Cancer Center*

We all have dreams and aspirations. They are what motivate us to strive to achieve and ultimately, to succeed.

Not long ago, the Edwards Comprehensive Cancer Center was nothing more than a dream, and with hard work and perseverance that dream became a reality. The bricks and mortar were assembled and a building rose where before there was none. In 2006, after years of planning and construction, the Cancer Center was finally opened. From relatively modest beginnings with less than a handful of physicians, the Center has grown to the multispecialty oncologic center of excellence that operates today. Services available range from pediatric oncology caring for the youngest of patients, to a wide scope of adult oncologic specialties providing services for adult patients with malignancies.

The Pediatric Cancer Program continues to provide state-of-the-art care and treatment in our community for children with malignancies. Through this program, children with cancer are provided access to national clinical management regimens and protocols, ensuring that their treatment plans are designed on the cutting edge of medicine. All the while, the staff maintains a personal touch, with individualized care and close attention to detail and the unique needs of these unfortunate children and their families.

The Edwards Comprehensive Cancer Center (ECCC) is the only site statewide to offer specialty treatment of orthopedic malignancies. Utilizing the latest technologies and treatment modalities, and offering a multidisciplinary approach including orthopedic oncology, medical oncology, and radiation therapy, outcomes are optimized and function maximized. Dedicated teleconferencing for sarcomas fosters wide access to specialists for discussion of management for rare and unusual tumors.

Radiation therapy as a treatment modality has experienced considerable advances in recent years and Cabell Huntington Hospital and the ECCC have cooperated to ensure that technologic advances are brought immediately to the community. Frequent software upgrades and improved therapeutic delivery systems are a constant reminder of this commitment to maintain our position in the forefront of radiation treatment.

Medical oncology, the backbone of any cancer center, is arguably our flagship. Our five active medical oncologists are the critical element in maintaining our academic Fellowship Training Program in medical oncology. The responsibility of training physicians in the art and science of medical oncology is indeed great, and they view this as a great opportunity to mold the minds of these physicians in training to further benefit not only this generation, but also generations to come. All the while, our talented oncologists maintain the patient-centered focus that is our mission within the Cancer Center.

The Breast Center, a specialized service within the ECCC, continues to display the level of excellent care that has separated us from other programs in the region. Specialized accreditation in the comprehensive nature of breast cancer management has been earned and maintained by the Breast Center. Weekly multidisciplinary conferences dedicated to breast malignancies allow in-depth discussion and treatment planning to ensure that each patient gets individualized care at the cutting edge of medical knowledge.





Patients with urologic malignancies are treated by the region's most experienced urologic surgeon who specializes in minimally invasive surgery. Tumors and malignancies of the bladder, kidney or other area of the urologic system can often be addressed surgically with the daVinci Robotic surgery platform, offering manifold benefits over conventional surgery. Improved outcomes, decreased in-hospital times and quicker recoveries are only some of the benefits of minimally invasive surgery. Women with gynecologic

malignancies are comprehensively treated in the Gynecologic Oncology Center. Minimally invasive surgery is also a mainstay for management in this specialty, allowing improved outcomes, decreased pain and more rapid recovery and return to usual activities. Close coordination with radiation therapy and in-depth discussions of treatment planning at multidisciplinary conferences promotes optimized outcomes.

Specialized programs addressing gastrointestinal malignancies, and lung nodules and cancers, led by dedicated patient navigators, have broadened the spectrum of patients served through the ECCC. Other programs designed to provide expanded community access to early breast cancer and cervical cancer detection continue to bring care to many who otherwise might not receive it. Dedicated Social Services staff, Nutritional Support staff, and an active Genetic Diagnostic Program address specific needs and concerns. Our Infusion Center provides access to chemotherapy and other infusion-related treatment modalities in a warm, nurturing environment, creating a level of comfort for individual patients that is unsurpassed.

The Edwards Comprehensive Cancer Center, as our name implies, is truly dedicated to providing all-encompassing and far-reaching care for the total patient. It is in this way that we strive to be the best we can be — the best anyone can be. We realize the great responsibility our patients have entrusted us with — their health and indeed even their lives — and we view this as an opportunity to provide for them the best that medicine has to offer, in their community, in a warm and welcoming environment. Our goal is to treat every patient as we would want to be treated ourselves; our dream is to deliver successful treatment to all of our patients with as minimal a level of discomfort and inconvenience as possible, and to create results that produce not just survival, but prosperity.

I am pleased to have this opportunity to be included in this, our eighth Annual Report of the Edwards Comprehensive Cancer Center. I am proud to be a member of the Edwards Comprehensive Cancer Center, and I am very proud of the accomplishments and progress we have made over the past few years. At the same time, I am aware that there is still much to accomplish. We are constantly searching for new and better ways of doing things, new treatments, new technologies, and we will continue our commitment to excellence. I personally wish to thank all of our patients, their families and loved ones for their trust and support. We promise that we will continue to strive and to do all things possible to ensure your successful outcome. We relish the opportunity to serve you and will remain ever aware of the great responsibility that that entails.

The focus of the ECCC is to consistently deliver compassionate, optimal care in an environment of minimal risk. Patient care is a coordinated and collaborative effort, and striving to continuously improve all aspects of patient care and patient outcomes involves input and cooperation from multiple departments and disciplines. This section focuses on quality and performance improvement efforts in lung cancer care, radiation oncology and more effectively meeting the needs of the patients we serve by implementing new service excellence initiatives.



**Lung Cancer Program**

Heather Streets, BSN, OCN®

Lung cancer is a leading cause of cancer deaths in the United States for men and women, claiming more lives each year than colon, prostate, ovarian, lymphoma and breast cancer combined. And while rates of lung cancer are decreasing in other areas of the country, the rates remain high in Appalachia. The ECCC has seen an increase of 94 cases (nearly 32%) over the last few years:

- 2007 - 2009: 294 cases of lung and bronchus cancer diagnosed and/or treated
- 2010 - 2012: 388 cases of lung and bronchus cancer diagnosed and/or treated

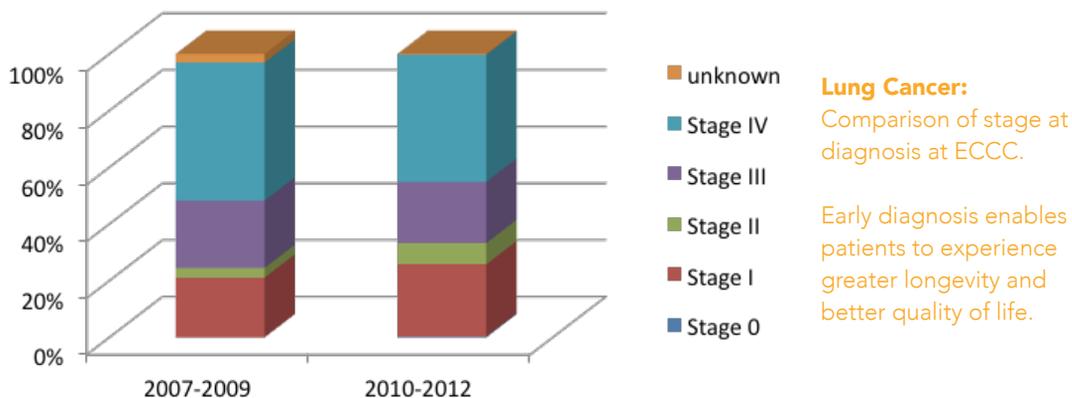
The high rates speak directly to lifestyle and increased risk factors for lung cancer in our area. The ECCC is working to reduce the morbidity and mortality of lung cancer through early prevention, early detection and collaborative patient-focused care.

**Lung Cancer Screening and Prevention**

While there are people who develop lung cancer with no known risk factors, most lung cancers are caused by inhaling material that damages the cells lining the lungs. Smoking remains the primary risk factor for developing lung cancer. Primary prevention is achieved through smoking cessation and avoidance of smoking. The ECCC staff works closely with smoking cessation counselors and organizations and participates in community education and health fairs. They work tirelessly to diagnosis lung cancer at an early stage, when definitive treatment is available.

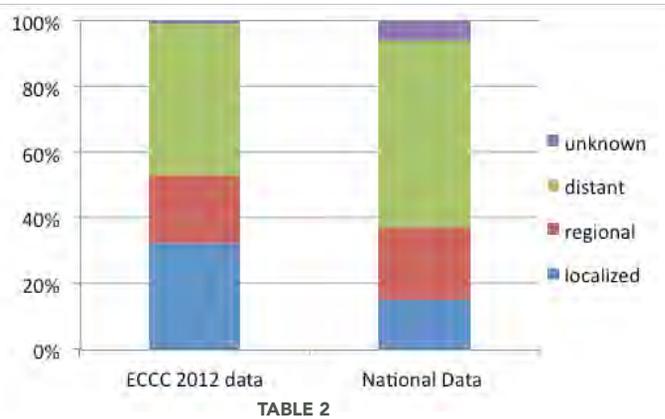
Effective cancer screening programs are designed to detect cancer in early stages, before symptoms occur. The ECCC has embraced recommendations from the American Cancer Society, the American College of Chest Physicians, the Association of Clinical Oncology, and National Comprehensive Cancer Network (NCCN). The NCCN clinical practice guidelines set forth the recommendation for lung cancer screening, including a careful discussion related to risks and benefits of the screening.

Low-dose computer tomography (LDCT), a low-dose CT scan, has been shown to be effective in detecting lung cancer at an early stage and reducing death by up to 20 percent. The ECCC provides low-cost LDCT to those at high risk— age 55 to 74 with a smoking history of 30 or more years, who continue to smoke or have quit within the past 15 years.



**Lung Cancer:**  
Comparison of stage at diagnosis at ECCC.  
Early diagnosis enables patients to experience greater longevity and better quality of life.

Our focus on early lung cancer screening is reflected in Table 1, which shows a decrease in late stage disease at diagnosis as well as an increase in diagnosis at Stage I and Stage II, when patients experience greater longevity and better quality of life. We are proud to report that the ECCC is diagnosing patients earlier than just a few years ago, and the percentage of ECCC patients diagnosed with early disease is higher than the national average.



**Comparison of ECCC stage at diagnosis with SEER data**

Table 2 compares ECCC statistics with national data compiled by the Surveillance, Epidemiology and End Results (SEER) program from the National Cancer Institute.

**Lung Nodule Clinic**

While low-dose computer tomography (LDCT) detects early lung cancers, it also can detect other abnormalities in the lung, such as lung nodules, which are a common finding. While most of these nodules are benign, it is important to determine if the nodule could develop into lung cancer. A multidisciplinary team comprised of a medical oncologist, pulmonologist, thoracic surgeon, radiation oncologist and a radiologist meet weekly to review the LDCT results and develop a treatment plan based on the NCCN guidelines to maximize the patient’s treatment and outcome. While many facilities offer LDCT, the ECCC has the components in place to ensure proper diagnosis, treatment and follow-up of any abnormality detected.



**Multidisciplinary Lung Conference and Clinic**

Our Multidisciplinary Lung Conference includes a medical oncologist, pulmonologist, thoracic surgeon, radiation oncologist, pathologist and a radiologist who meet regularly to review cases of lung cancer diagnosed or treated at ECCC. These core physicians consult with nurses and clinical trial nurses and representatives from social work, palliative care and dietetics as needed to formulate the best plan of care for each patient.

For the convenience of both patients and physicians, patients are examined in one multidisciplinary clinic visit by all team members assisting in their treatment and care. The patient remains in one clinical exam room while each member of the team assesses and meets with the patient and family to discuss specific treatment options.



Diagnosing lung cancer early and beginning treatment right away is vital to improving a patient’s long-term survival. Before the improvements to our lung program, the timeline from a suspicious finding to diagnosis and treatment varied greatly, and lasted two to three months, in some cases. With the addition of the nurse navigator and other process improvements, the timeline has been shortened to an average of three weeks or less.

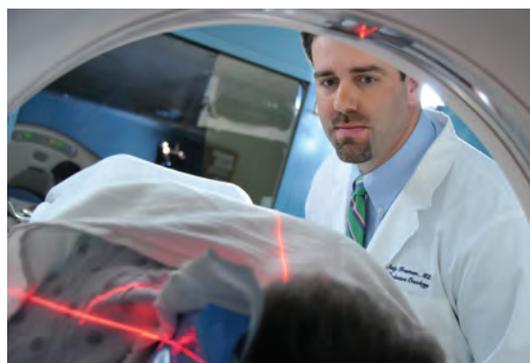


**Radiation Oncology Accreditation**

*Angela Hayes, MS, R.T.(R)(T), CMD*

Radiation oncology is a treatment option for nearly 50 percent of patients diagnosed with cancer. The complexity, quality and safety of radiation therapy practice and treatments can be evaluated through various means. The Radiation Oncology Department of the Edwards Comprehensive Cancer Center chose to pursue accreditation through the American College of Radiology (ACR), which is considered the gold standard for accreditation. The ACR is the nation's oldest and most widely accepted radiation oncology accrediting body, with over 500 accredited sites, and 25 years of accreditation experience.

The ACR seal of accreditation represents the highest level of quality and patient safety. It is awarded only to facilities meeting specific practice guidelines and technical standards developed by the ACR after a peer-reviewed on-site evaluation by board-certified radiation oncologists and medical physicists who are experts in the field. Patient care, treatment, patient safety, personnel qualifications, adequacy of facility equipment, quality control procedures and quality assurance programs are assessed. The findings are reported to the ACR Committee on Radiation Oncology Accreditation, which subsequently provides the practice with a comprehensive report they can use for continuous practice improvement.



*Radiation oncologist Andrew Freeman, MD, observes his patient's treatment.*

The road to accreditation began in January 2011, with a 12-month Radiation Oncology Department performance improvement study that focused on monitoring practice guidelines as defined by the ACR. The documentation audited for this study included diagnosis and staging, pathology reports, pertinent history and physical and other treatment planning items as prescribed by the radiation oncologist. The first quarter audit found the department 96.7 percent compliant for the necessary items, and the final quarter revealed a 100 percent compliance rate. In 2012, documentation of patient education was monitored, and compliance increased by the fourth quarter.

With the hiring of two board-certified radiation oncologists, policies and procedures were developed or revised to better define radiation oncology processes for the ACR reviewers. In addition, based on ACR guidelines, a Continuing Quality Improvement (CQI) Committee, new patient conferences and weekly chart rounds were implemented. In early 2013, an intradepartmental committee met regularly to provide final reviews of policies, procedures and treatment charts, including the complete electronic medical record.

In April 2013, the ACR sent a radiation oncologist and a medical physicist to survey the Edwards Comprehensive Cancer Center. They reviewed patients' records, including all aspects of the treatment plan, images and documentation that support a course of treatment. They focused on quality assurance practices for all aspects of the department, interviewed staff and reviewed policies and procedures. The surveyors do not determine accreditation status on site; they make recommendations to the ACR Board based on their findings. The Board then determines whether or not the facility's practices are at a level that merits ACR accreditation. After three weeks, the ACR granted the ECCC a three-year accreditation in radiation oncology and highly commended ECCC quality assurance practices.

The Edwards Comprehensive Cancer Center staff is very proud of this accreditation, as well as the distinction of being the first radiation oncology department in the state to earn the honor.





### Service Excellence & Workflow Improvement Initiatives

Although increased survival rates, more targeted chemotherapies, more refined radiation therapy techniques and more effective therapies for the side effects of cancer and treatment are improving care, most cancer centers are coping with a growing demand for cancer care, providing increasingly complex treatments and dealing with rising costs. To combat these pressures, the ECCC operates in a mode of continuous improvement— re-evaluating and redesigning the way that cancer care is delivered to patients to improve the patient experience, and building sustainable improvements across the entire spectrum of care.

**Patient-Family Advisory Council (PFAC):** The PFAC was established this year, with nine patient-family members and two staff members. The PFAC is actively engaged in initiatives they chose, including:

- developing a Peer-to-Peer Program to link new patients with cancer survivors
- redesigning the first patient visit experience to ensure sensitivity and seamless continuity of care
- planning for the ECCC's first Colors of Cancer 5K Run/Walk

**Front Desk/Clinic Workflow Committee:** Because process problems ultimately influence the patient experience and quality of care, the goal is to improve communication and address issues that commonly occur between front desk/registration and the medical and surgical oncology clinics. The committee, which includes representatives from clinic nursing, front desk staff, administration and physicians, established new policies and procedures for new patient referrals, lab orders, encounter forms and handling critical lab values.



Medical oncologists Mohamad Khasawneh, MD, and Aneel Chowdhary, MD, discuss a patient's treatment plan.

### Medical Oncology Performance Improvement Committee:

This group, which represents pharmacy, infusion nursing, clinic nursing, administration and physicians began meeting in June. The goal is to improve patient safety and address issues that commonly occur in the medical oncology infusion/clinics. The group established new policies and procedures for chemotherapy orders and approvals and oral chemotherapy nursing protocols and improved nurses' access to physicians.

**Arrival Process Improvements:** Based on feedback from PFAC, improvements include a first-contact call from

ECCC, more visible signage for the oncology parking area, streamlining registration by mailing new patient packets and having forms available online and calling each patient after the first appointment.

**Survivorship EMR System:** About a year ago, the ECCC began phasing in EQUICARE CS, a cancer navigation and survivorship software program included by the American College of Surgeons Commission on Cancer in its Best Practices Repository for high-quality, patient-centered care. Details of this system can be found in the *Cancer Program Highlights* section of this report.

**Accreditations:** In May, the ECCC became the first radiation oncology service in West Virginia to earn accreditation from the American College of Radiology; less than 500 other cancer centers in the nation have earned this distinction. The ECCC's Medical Oncology Program has now begun working toward Quality Oncology Practice Initiative certification. This process will take about a year to achieve; only one other medical oncology program in the state currently has this distinction.

**Future Initiatives:** Specific goals for 2014 will be identified by the quality improvement groups established by the ECCC, but the general focus will be on optimizing our use of advanced information and medical technologies to facilitate cancer research, to continue our efforts to increase awareness of and access to state-of-the-art cancer control methods and to ensure the best possible outcomes for all cancer patients.



The one team in the region that  
can provide comprehensive  
cancer care for adults and  
children — all under one roof.





**Sheila Stephens, DNP, RN, MBA, AOCN®**

In collaboration with county health departments and hospitals in the Tri-State community, Cabell Huntington Hospital conducted a year-long Community Health Needs Assessment (CHNA) to gain a better understanding of the local perception of health needs, identify current health priorities and form strategies to address the priorities. The CHNA results, in combination with feedback from ECCC physicians and patient population, the Patient Advisory Group, key healthcare providers and data provided by national interest groups such as the Centers for Disease Control and Prevention and the Bureau for Public Health, provided the basis for the disparities and barriers to care identified below:

**Resources & practices addressing  
access to care, including transportation**

- Free designated parking and free valet parking
- Partnership with Faith in Action for transportation
- American Cancer Society's Road to Recovery
- Buses, including TTA, Wayne Express, senior center buses, MU campus buses
- Accept patients, regardless of ability to pay
- Ronald McDonald House (on campus), hospitality houses, motel discounts
- Bus/taxi vouchers and gas cards

**Resources & practices addressing  
affordability of insurance and services**

- Free screenings
- Komen grant for uninsured
- Financial assistance/counselor
- ECCC Good Samaritan Fund
- WV Breast Cancer Screening Program
- Ebenezer Medical Outreach
- Community health fairs, SeniorFest
- Collaboration with MU Family Medicine's Medical Mission Outreach

**Resources & practices addressing  
chronic disease treatment**

- Comprehensive cancer care
- Palliative care
- Center for Lung Health
- WVDHHR Catastrophic Illness Commission
- Pain clinic
- Nurse navigators for breast, lung and colorectal cancer

**Resources & practices addressing  
health education & literacy**

- Education provided at community health fairs and Huntington Mall
- ECCC Patient Education Committee reviews materials for literacy
- ECCC Resource Room provides computer/internet access, videos and reading material

**Resources & practices addressing  
mental health**

- Distress scale in use
- Social worker for oncology patients only
- MU Dept. of Psychiatry staff for consults
- MU Dept. of Psychiatry doctoral students for free one-to-one counseling

**Resources & practices addressing  
nutrition**

- Oncology-certified dietitian onsite, screening tool in place
- Huntington's Kitchen – teaching healthy eating
- Dr. Niles work/experience in obesity & cancer

**Resources & practices addressing  
prevention & screenings**

- Screenings: breast, skin, cervical, lung, colorectal
- High-risk breast clinic
- Prevention clinical trials
- Cancer risk assessments

**Resources & practices addressing  
decreasing tobacco use & smoking**

- Tobacco-free campus
- Low-dose, low-cost lung screening
- Smoking cessation program
- Lung Nodule Clinic
- Multidisciplinary Lung Clinic



**Phyllis Edwards, RHIT, CCS, CTR**

The Cancer Registry is a cumulative data collection center where information regarding cancer diagnoses, cancer treatment options and outcome reports are stored. The registrars diligently search for documentation to be included in the database, as mandated by the guidelines and coding instructions to which they must adhere.

There has been continuous growth in the number of cases being diagnosed and treated at Cabell Huntington Hospital and the Edwards Comprehensive Cancer Center. The Cancer Registry collects data from both entities as well as from staff physicians' offices. Since cancer is considered to be a reportable disease, cases must be reported to the state and national cancer registries. The Cancer Registry must report all incidences of cancer seen for diagnosis, treatment and/or follow-up, including previous history of cancer.

The electronic medical record is a key element in acquiring accurate data collection. Whether searching for treatment or diagnosis date, access to the record is crucial for maintaining the Cancer Registry database. Cancer data are highly confidential, and one of the key responsibilities of Cancer Registry professionals is to safeguard the confidentiality of cancer patient information.

Another important aspect of the cancer registry is to maintain and monitor data quality. The characteristics of data quality are accuracy, completeness and timeliness. Software edit checks as well as state and national edit checks notify registrars if data collected does not fulfill the standard requirements. Data completeness is necessary to achieve accurate outcome statistics.

As the number of cases increased, it became necessary to increase the number of tumor conferences in order to provide multidisciplinary discussion of malignant diagnoses and treatment options. In 2012, the registry database acquired 857 new analytic cases as well as 252 non-analytic cases (required by West Virginia Cancer Registry). Currently, 14 conferences are scheduled each month, with plans to add a video conference for pediatric oncology in the near future.

Continuing education is vital for the Cancer Registry staff to maintain quality abstracting skills and data collection. The registrars attended national and state conferences to maintain credentialing and to follow the standards set by the American College of Surgeons Commission on Cancer.



Improvements in our knowledge of cancer prevention, diagnosis, treatment and, eventually, a cure rely on the collection of complete, accurate and timely data.



CANCER REGISTRY REPORT

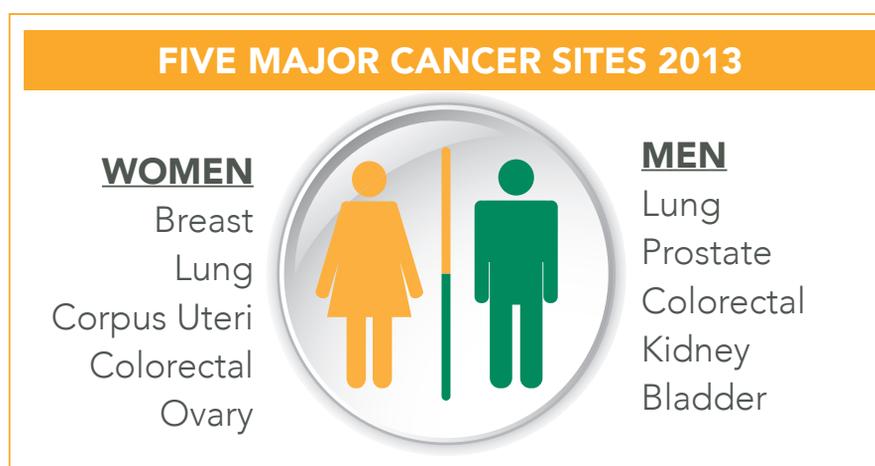
Summary by Body System, Sex, Class, Status and Best CS/AJCC Stage Report  
2012 Cancer Registry Report

Primary Site	Total (%)	Sex		Class of		Statu			Stage Distribution - Analytic Cases Only						
		M	F	Analv	NA	Alive	Exp	Sta	Sta	I Sta	Sta	Sta	88	Unk	Blank/In
<b>ORAL CAVITY &amp; PHARYNX</b>	22 (2.0%)	16	6	17	5	17	5	1	3	1	1	11	0	0	0
Tongue	8 (0.7%)	6	2	7	1	6	2	0	2	0	0	5	0	0	0
Floor of Mouth	3 (0.3%)	2	1	2	1	2	1	0	1	0	0	1	0	0	0
Gum & Other Mouth	3 (0.3%)	2	1	3	0	2	1	1	0	1	0	1	0	0	0
Nasopharynx	1 (0.1%)	1	0	1	0	1	0	0	0	0	1	0	0	0	0
Tonsil	5 (0.5%)	3	2	3	2	4	1	0	0	0	0	3	0	0	0
Oropharynx	1 (0.1%)	1	0	1	0	1	0	0	0	0	0	1	0	0	0
Hypopharynx	1 (0.1%)	1	0	0	1	1	0	0	0	0	0	0	0	0	0
<b>DIGESTIVE SYSTEM</b>	150 (13.9%)	86	64	115	35	93	57	5	24	22	23	37	2	2	0
Esophagus	11 (1.0%)	9	2	6	5	5	6	0	2	0	1	3	0	0	0
Stomach	7 (0.6%)	4	3	4	3	5	2	0	3	1	0	0	0	0	0
Small Intestine	6 (0.6%)	4	2	6	0	5	1	0	1	0	2	3	0	0	0
Colon Excluding Rectum	45 (4.2%)	20	25	36	9	30	15	2	6	6	7	14	0	1	0
Cecum	11	4	7	11	0	10	1	2	2	2	2	3	0	0	0
Appendix	5	4	1	4	1	4	1	0	1	0	0	3	0	0	0
Ascending Colon	6	2	4	6	0	4	2	0	1	1	2	2	0	0	0
Hepatic Flexure	3	0	3	2	1	2	1	0	0	0	2	0	0	0	0
Transverse Colon	4	3	1	4	0	2	2	0	2	1	0	1	0	0	0
Sigmoid Colon	9	5	4	8	1	3	6	0	0	2	1	4	0	1	0
Large Intestine, NOS	7	2	5	1	6	5	2	0	0	0	0	1	0	0	0
Rectum & Rectosigmoid	33 (3.1%)	19	14	27	6	28	5	3	5	9	7	2	0	1	0
Rectosigmoid Junction	14	8	6	13	1	10	4	2	0	4	4	2	0	1	0
Rectum	19	11	8	14	5	18	1	1	5	5	3	0	0	0	0
Anus, Anal Canal & Anorectum	3 (0.3%)	0	3	2	1	3	0	0	0	1	1	0	0	0	0
Liver & Intrahepatic Bile Duct	9 (0.8%)	9	0	6	3	3	6	0	2	1	1	1	1	0	0
Liver	7	7	0	4	3	2	5	0	1	1	1	0	1	0	0
Intrahepatic Bile Duct	2	2	0	2	0	1	1	0	1	0	0	1	0	0	0
Other Biliary	6 (0.6%)	4	2	4	2	3	3	0	0	0	1	2	1	0	0
Pancreas	29 (2.7%)	17	12	24	5	10	19	0	5	4	3	12	0	0	0
Retroperitoneum	1 (0.1%)	0	1	0	1	1	0	0	0	0	0	0	0	0	0
<b>RESPIRATORY SYSTEM</b>	193 (17.9%)	107	86	146	47	100	93	0	39	13	32	61	1	0	0
Nose, Nasal Cavity & Middle Ear	1 (0.1%)	1	0	1	0	1	0	0	0	0	0	0	0	0	0
Larynx	3 (0.3%)	2	1	1	2	2	1	0	1	0	0	0	0	0	0
Lung & Bronchus	188 (17.4%)	103	85	143	45	96	92	0	37	13	31	61	1	0	0
Trachea, Mediastinum & Other Resp Org	1 (0.1%)	1	0	1	0	1	0	0	1	0	0	0	0	0	0
<b>BONES &amp; JOINTS</b>	7 (0.6%)	3	4	6	1	5	2	0	2	2	0	2	0	0	0
Bones & Joints	7 (0.6%)	3	4	6	1	5	2	0	2	2	0	2	0	0	0
<b>SOFT TISSUE</b>	12 (1.1%)	8	4	9	3	11	1	0	3	1	3	2	0	0	0
Soft Tissue (including Heart)	12 (1.1%)	8	4	9	3	11	1	0	3	1	3	2	0	0	0
<b>SKIN EXCLUDING BASAL &amp; SQUAMOUS</b>	20 (1.9%)	8	12	16	4	18	2	0	3	8	2	2	1	0	0
Melanoma -- Skin	16 (1.5%)	6	10	13	3	14	2	0	3	6	2	2	0	0	0
Other Non-Epithelial Skin	4 (0.4%)	2	2	3	1	4	0	0	0	2	0	0	1	0	0
<b>BREAST</b>	167 (15.4%)	2	165	149	18	154	13	25	63	41	11	8	0	1	0
Breast	167 (15.4%)	2	165	149	18	154	13	25	63	41	11	8	0	1	0
<b>FEMALE GENITAL SYSTEM</b>	125 (11.6%)	0	125	105	20	113	12	1	69	11	10	13	0	1	0
Cervix Uteri	16 (1.5%)	0	16	14	2	15	1	0	9	1	2	2	0	0	0
Corpus & Uterus, NOS	64 (5.9%)	0	64	60	4	59	5	0	46	5	2	6	0	1	0
Corpus Uteri	63	0	63	59	4	59	4	0	46	5	2	5	0	1	0
Uterus, NOS	1	0	1	1	0	0	1	0	0	0	0	1	0	0	0
Ovary	18 (1.7%)	0	18	16	2	15	3	0	7	3	3	3	0	0	0
Vagina	6 (0.6%)	0	6	5	1	6	0	0	3	2	0	0	0	0	0
Vulva	19 (1.8%)	0	19	8	11	16	3	1	4	0	1	2	0	0	0
Other Female Genital Organs	2 (0.2%)	0	2	2	0	2	0	0	0	0	2	0	0	0	0
<b>MALE GENITAL SYSTEM</b>	104 (9.6%)	104	0	88	16	98	6	1	15	47	14	9	0	2	0
Prostate	99 (9.2%)	99	0	85	14	94	5	0	14	46	14	9	0	2	0
Testis	2 (0.2%)	2	0	2	0	2	0	0	1	1	0	0	0	0	0
Penis	3 (0.3%)	3	0	1	2	2	1	1	0	0	0	0	0	0	0

## CANCER REGISTRY REPORT (CONTINUED)

### Summary by Body System, Sex, Class, Status and Best CS/AJCC Stage Report 2012 Cancer Registry Report

Primary Site	Total (%)	Sex		Class of Analy NA	Statu			Stage Distribution - Analytic Cases Only							
		M	F		Alive	Exp	Stg	Stg I	Stg	Stg	Stg	88	Unk	Blank/n	
<b>URINARY SYSTEM</b>	88 (8.1%)	63	25	69	19	72	16	8	35	7	8	10	1	0	0
Urinary Bladder	31 (2.9%)	25	6	23	8	28	3	8	9	2	2	1	1	0	0
Kidney & Renal Pelvis	54 (5.0%)	36	18	44	10	42	12	0	26	4	6	8	0	0	0
Ureter	2 (0.2%)	1	1	2	0	2	0	0	0	1	0	1	0	0	0
Other Urinary Organs	1 (0.1%)	1	0	0	1	0	1	0	0	0	0	0	0	0	0
<b>EYE &amp; ORBIT</b>	1 (0.1%)	1	0	0	1	0	1	0	0	0	0	0	0	0	0
Eye & Orbit	1 (0.1%)	1	0	0	1	0	1	0	0	0	0	0	0	0	0
<b>BRAIN &amp; OTHER NERVOUS SYSTEM</b>	29 (2.7%)	15	14	25	4	26	3	0	0	0	0	0	25	0	0
Brain	13 (1.2%)	7	6	12	1	11	2	0	0	0	0	0	12	0	0
Cranial Nerves Other Nervous System	16 (1.5%)	8	8	13	3	15	1	0	0	0	0	0	13	0	0
<b>ENDOCRINE SYSTEM</b>	35 (3.2%)	13	22	29	6	35	0	0	9	1	7	0	10	2	0
Thyroid	20 (1.9%)	5	15	18	2	20	0	0	9	1	6	0	0	2	0
Other Endocrine including Thymus	15 (1.4%)	8	7	11	4	15	0	0	0	0	1	0	10	0	0
<b>LYMPHOMA</b>	39 (3.6%)	22	17	32	7	29	10	0	8	4	6	12	0	2	0
Hodgkin Lymphoma	5 (0.5%)	3	2	4	1	5	0	0	1	1	0	1	0	1	0
Non-Hodgkin Lymphoma	34 (3.1%)	19	15	28	6	24	10	0	7	3	6	11	0	1	0
NHL - Nodal	22	14	8	16	6	16	6	0	2	0	4	9	0	1	0
NHL - Extranodal	12	5	7	12	0	8	4	0	5	3	2	2	0	0	0
<b>MYELOMA</b>	16 (1.5%)	10	6	10	6	12	4	0	0	0	0	0	10	0	0
Myeloma	16 (1.5%)	10	6	10	6	12	4	0	0	0	0	0	10	0	0
<b>LEUKEMIA</b>	33 (3.1%)	21	12	25	8	26	7	0	0	0	0	0	25	0	0
Lymphocytic Leukemia	20 (1.9%)	15	5	15	5	17	3	0	0	0	0	0	15	0	0
Acute Lymphocytic Leukemia	8	8	0	8	0	6	2	0	0	0	0	0	8	0	0
Chronic Lymphocytic Leukemia	10	7	3	6	4	9	1	0	0	0	0	0	6	0	0
Other Lymphocytic Leukemia	2	0	2	1	1	2	0	0	0	0	0	0	1	0	0
Myeloid & Monocytic Leukemia	10 (0.9%)	5	5	7	3	6	4	0	0	0	0	0	7	0	0
Acute Myeloid Leukemia	7	3	4	6	1	3	4	0	0	0	0	0	6	0	0
Chronic Myeloid Leukemia	3	2	1	1	2	3	0	0	0	0	0	0	1	0	0
Other Leukemia	3 (0.3%)	1	2	3	0	3	0	0	0	0	0	0	3	0	0
<b>MESOTHELIOMA</b>	2 (0.2%)	2	0	2	0	1	1	0	1	0	0	1	0	0	0
Mesothelioma	2 (0.2%)	2	0	2	0	1	1	0	1	0	0	1	0	0	0
<b>MISCELLANEOUS</b>	38 (3.5%)	21	17	23	15	19	19	0	0	0	0	0	23	0	0
Miscellaneous	38 (3.5%)	21	17	23	15	19	19	0	0	0	0	0	23	0	0
<b>Total</b>	<b>1,081</b>	<b>502</b>	<b>579</b>	<b>866</b>	<b>215</b>	<b>829</b>	<b>252</b>	<b>41</b>	<b>274</b>	<b>158</b>	<b>117</b>	<b>168</b>	<b>98</b>	<b>10</b>	<b>0</b>
Exclusion Not Male and Not Female															0





**Shelby Moore, CTR, CCS, Cancer Conference Coordinator**

The purpose of a cancer conference is to create a forum for cancer specialists from all disciplines to interact and discuss the diagnosis and the best treatment options for each cancer patient. Members of the multidisciplinary team present their cases, along with pathology and films, in a conference room that is fully equipped with internet access, allowing for the most up-to-date clinical practice guidelines. Access to virtual meetings is available, with visual and audio communication between multiple locations. The Edwards Comprehensive Cancer Center follows an aggressive schedule of cancer conferences, with as many as 14 one-hour conferences to consider 60 or more cases each month.

The cancer conference coordinator coordinates and monitors meeting activities to ensure the ECCC program fulfills the compliance criteria by the Commission on Cancer (Standard 1.7). Information includes:



- Conference frequency
- Multidisciplinary attendance
- Total case presentation
- Prospective case presentation
- Discussion of stage, including prognostic indicators, and treatment planning using evidence-based treatment guidelines.

In addition to a facility-wide cancer conference, site-specific conferences allow physicians to share their expertise in significant detail with the goal of developing the best treatment available for patients and helping to improve their overall

experience. Currently, we have five separate tumor board conferences throughout the year, including facility-wide, breast, lung, genitourinary and multi-institutional sarcoma.

When the diagnosis is cancer, the patient deserves the best possible treatment options. Through our multidisciplinary cancer conferences, physicians who specialize in diagnosing and treating cancer come together to recommend the most optimal treatment plan for each patient.

Our goal is ensure the best possible outcome for each patient, and we are fully committed to putting all of our knowledge, resources, energy and passion behind it.



*ECCC surgeon Felix Cheung, MD, is one of only about 120 orthopedic oncologists in the United States.*



**Bone Cancer.** The ECCC staff includes an orthopedic oncologist—a surgeon who specializes in the diagnosis and treatment of primary bone cancers, cancers of a different origin that have spread to the bone and malignant tumors of the soft tissue, such as muscle and fat. Dr. Felix Cheung is one of a very small number of orthopedic oncologists in the United States—and the only one within a 120-mile radius of Huntington. The plan of care for bone cancer often involves chemotherapy, surgery to remove the cancer, reconstructive surgery and then more chemotherapy. Recent progress in orthopedic oncology includes improvements in chemotherapy, the growing longevity of implants and improved survivorship for patients who receive the appropriate treatment.

**Breast Cancer.** All mammograms now use 3D mammography, a screening and diagnostic tool designed for early detection of breast cancer that can be used in conjunction with a traditional 2D digital mammogram. This FDA-approved procedure is particularly effective for women with dense breast tissue and those with an increased risk for breast cancer. While standard 2D mammography produces a flat image, 3D mammography creates a three-dimensional rendering of the breast, providing greater visibility for the radiologist to see tissue details, and resulting in greater accuracy, earlier breast cancer detection and a decrease in biopsies and recall rates.

**Cancer Survivorship.** About a year ago, the ECCC began phasing in EQUICARE CS, a cancer navigation and survivorship software program included by the American College of Surgeons Commission on Cancer in its Best Practices Repository for high-quality, patient-centered care. Many patients require post-treatment follow-up care for late effects of treatment, diagnostic testing, secondary cancers and quality-of-life issues. The software helps to produce survivorship care plans for each patient, including a record of care received, important disease characteristics and a follow-up care plan incorporating recognized evidence-based standards of care, with the aim of improving post-treatment care and support. The navigation component is currently in use, and the survivorship component, which offers patients and their caregivers and providers access to their care plans through a personalized portal on the internet, will go live in conjunction with implementation of the campus-wide patient portal, which is scheduled for Spring 2014.



**Colorectal Cancer.** The Multidisciplinary Colorectal Cancer Program enables patients see a medical oncologist, surgical oncologist and radiation oncologist all in their first clinic appointment. Whenever possible, scans and lab work are performed at that time to avoid repeated visits. This approach allows the treatment process to begin as soon as possible and reduces the number of visits for the patient. In addition, oncology specialists are on site and available for consultation when there are changes in the patient's condition.

**Kidney Cancer.** Kidney cancer is prevalent in West Virginia, due to a variety of risk factors such as smoking, obesity, environmental factors and genetics. In the past, a partial nephrectomy was performed through a large incision in the abdomen, with an increased risk of significant bleeding for those with larger, more complicated tumors. The ECCC now offers patients a partial nephrectomy using the *da Vinci*<sup>®</sup> Surgical System. Partial nephrectomies can benefit patients who have already had a kidney removed, those with kidney cancer that was detected at a later stage and/or those with large tumors. Robotic surgery removes the cancerous part of the kidney, preserving as much healthy kidney tissue as possible, which prolongs patients' lives and improves their overall health.

**Lung Cancer.** The Multidisciplinary Lung Cancer Program gives patients access to all of the physician specialists they need in one convenient, coordinated visit. In that visit, lung cancer patients are seen by a medical oncologist, pulmonologist, radiation oncologist and thoracic surgeon. By seeing all of the physicians in one visit, no time is wasted in getting patients the best treatment for their specific needs. Prevention and early detection are also key elements of the program. Identifying lung cancer before it spreads to other parts of the body can now be done effectively and efficiently through low-dose CT lung screening, which can detect cancer in its earliest stages.

**Palliative Care.** The palliative care team offers patients with life-limiting or life-threatening illnesses the services of many different healthcare professionals, including nurses, physicians, social workers, physical or occupational therapists, pharmacists and chaplains. Palliative care services may include managing pain and/or symptoms, making arrangements for post-discharge services, offering emotional and spiritual support and assisting patients and families in making difficult decisions.

**Pediatric Oncology.** The ECCC Pediatric Oncology Program has grown significantly over the past year, with a 56 percent increase in patient volume. This is primarily due to the efforts of Dr. Mark Mogul, a pediatric hematologist/oncologist, and his commitment to making ECCC the choice for pediatric cancer care in our region. The program currently includes 28 active patients, and eight of them are participating in a national treatment study. The ECCC Pediatric Oncology Program partners with the National Cancer Institute's Children's Oncology Group, which is the world's largest organization devoted exclusively to pediatric cancer research. Through this partnership, our Pediatric Oncology Program can offer patients the same state-of-the-art protocols and care they would receive at any other major referral center.



*Six-year-old patient Beth Ann Brown shares a good book with Mark Mogul, MD, pediatric oncologist, and Brooke Bella, RN, pediatric oncology nurse.*

**Urologic Cancer.** The Multidisciplinary Urologic Cancer Program emphasizes a comprehensive approach to treatment and encourages regular screenings to help fight what is now the second leading cancer in men. These screenings can detect urologic cancers at early stages, even before symptoms are present. The *da Vinci*<sup>®</sup> Surgical System is the #1 treatment for prostate cancer chosen by men over all other treatment options, according to Solucient<sup>®</sup> healthcare data. This minimally invasive procedure carefully removes the cancer and the prostate—the fastest and most effective way to treat prostate cancer. Patients can consider all treatment options offered by the ECCC's Multidisciplinary Urological Cancer Program.



**Lisa Muto, DNP, WHNP-BC, APNG, OCN**

At the Edwards Comprehensive Cancer Center, cancer risk assessment is offered through two programs:

**The Hereditary Cancer Risk Assessment Program** is for men and women at risk for any kind of hereditary cancer, whether they have a personal or a family history of cancer or they just have questions about whether genetic testing is appropriate for them. This program is open to anyone who is interested. The majority of patients seen are those with breast cancer, ovarian cancer and colon cancer, but patients have also been counseled for Li Fraumeni Syndrome, Cowden's Syndrome, Von Hippel Lindau Syndrome, MEN2 Syndrome, Birt-Hogg Dube' Syndrome and Peutz-Jeghers Syndrome. A minimum three-generation pedigree is constructed, and risk assessment models are utilized and discussed with the patients. The majority of the referrals come from physicians within the cancer center, but referrals are also received from other physicians.

**The Breast Cancer Risk Assessment Program** at the Edwards Comprehensive Cancer Center employs cancer experts who identify, counsel and provide personalized risk assessment and recommendations for women who are high risk for breast cancer. Identifying women at increased risk, increasing surveillance, and implementing risk reduction strategies increases early detection, leading to better prognosis and outcomes.

Services offered at this clinic include an initial screening with the physician and nurse practitioner, a personalized surveillance program based on personal history, education on topics such as breast screenings, breast self-exams, lifestyle modifications, familial risks, a personalized risk assessment and counseling for hereditary cancer risk, referrals for diagnostic procedures and screening tests, referrals to other services as needed, as well as long-term follow up.

The Genetic Testing and Counseling Program is directed by Lisa Muto, a board-certified Women's Health Nurse Practitioner. Members of the medical staff of the Edwards Comprehensive Cancer Center are available for consult, including a gynecologic oncologist, surgical breast oncologist, surgical oncologist, urologic oncologist, orthopedic oncologist and a pediatric oncologist, as well as medical and hematology oncologists. All of these physicians are board certified or board eligible.

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**Lisa Muto, DNP, WHNP-BC, APNG, OCN**

*Lisa has attended additional cancer genetic training at both Fox Chase Cancer Center and City of Hope National Medical Center. She attended City of Hope's Intensive Course in Cancer Risk Assessment, funded by a grant from NCI. She continues to collaborate with City of Hope and routinely attends and presents at their working group sessions. Lisa's oncology nursing certification was granted through the Oncology Nursing Certification Corporation, and her Advanced Practice Nurse in Genetics certification was earned through the Genetic Nursing Credentialing Commission. The focus of her Doctor of Nursing Practice is in cancer genetics, high-risk women and cancer screening.*

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Our staff is dedicated to offering each patient expert, compassionate care in a nurturing, supportive environment.





**Leann Ross, RN, BSN, OCN, CCRP**

Cancer research is an integral component of the mission and the state-of-the-art care provided to patients at Edwards Comprehensive Cancer Center (ECCC). In 2013, the American Cancer Society estimates that more than 1.6 million people in the US were newly diagnosed with cancer and more than 500,000 people died of cancer. ECCC physicians and researchers understand that ongoing cancer research is the key to changing these statistics and improving the lives of current and future patients. With this challenge in mind, they promote and participate in cancer research through various mechanisms. The research program at ECCC has three primary components:

### **Clinical Trials**

Clinical trials for children and adults are a key component of the advanced care treatment options available to ECCC patients. Clinical trials for the adult population are accessed through membership in the Alliance for Clinical Trials in Oncology, a national clinical trials network sponsored by the National Cancer Institute. As a member of the Alliance, ECCC is dedicated to conducting clinical trials that focus on promising new cancer therapies and prevention strategies, as well as trials designed to alleviate side effects of cancer and cancer treatments. ECCC also participates in select clinical trials sponsored by the pharmaceutical industry that may offer eligible patients the opportunity to use a promising new therapy not available outside of a clinical trial.

Children with cancer are a special population, and they deserve special care. As an affiliate of Nationwide Children's Hospital, ECCC participates in Children's Oncology Group clinical trials. The Children's Oncology Group (COG) is supported by the National Cancer Institute and is the world's largest organization devoted exclusively to childhood and adolescent cancer research. Due largely to COG-initiated research, childhood cancer has changed from a virtually incurable disease to one with a combined five-year survival rate of 80 percent today. Clinical trials are imperative for a comprehensive pediatric cancer program. The ECCC is committed to the continued growth of this program and proud to be able to offer patients this advanced option for care.

### **Tissue Procurement**

The tissue procurement program offers surgical patients at ECCC an opportunity to contribute to cancer research through donation of remnant surgical tissue. If patients consent to the banking of leftover tissue, the tissue is coded and archived for future use by researchers. The tissue procurement team also assists physicians in conducting trials that include the prospective collection of tissue for a specific clinical trial. Patients involved in these trials have consented to be part of the specific trial and know what the researchers are studying with regard to their tissue. Tissue donation is invaluable to research and allows patients to be active participants in the ongoing fight against cancer.

### **Translational Research**

Investigator-initiated trials are another important aspect of the research conducted in the ECCC. These trials are designed and conducted by Marshall University Translational Genomic Research Institute researchers and ECCC physicians. This collaboration has resulted in a number of translational research projects, including therapeutic and symptom control trials designed by Drs. Hardman and Niles, and cancer stem cell research conducted by Dr. Claudio. More details about translational cancer research can be found in the article that follows.

As the region's leading providers of cancer care, ECCC practitioners have an unwavering dedication to cancer research. Through the commitment and collaboration of physicians, scientists and support staff, ECCC will continue to work to enhance the body of knowledge about cancer and by doing so, improve the lives of those living with cancer today and in the future.

Through commitment and collaboration, physicians, scientists and support staff enhance the body of knowledge about cancer and ultimately improve the lives of those living with cancer today and in the future.



*Richard Niles, MD and Pier Paulo Claudio, MD*

**ONEPLACE. ONETEAM. ONEGOAL**



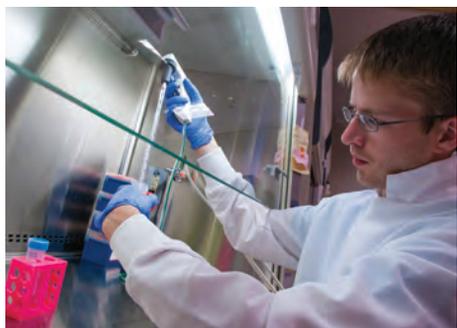


The Edwards Comprehensive Cancer Center (ECCC) has long been known as the region's leading provider of state-of-the-art cancer care. Its impact extends even beyond patient care and treatment, thanks to the Charles H. McKown, Jr., MD, Translational Genomic Research Institute (TGRI) housed on the ECCC's third floor.

Marshall University professors Dr. Richard Niles, Dr. Pier Paulo Claudio and Dr. W. Elaine Hardman, along with other Marshall scientists, perform leading-edge cancer research and conduct clinical trials that are helping to shape the future of cancer research — and not just in Huntington.

"The goal of cancer research at the TGRI is to directly affect the disease outcome by taking innovative technologies and novel drugs from the bench to the bedside," Dr. Claudio said. "This approach saves lives and reduces healthcare costs. The research we conduct at the TGRI, in collaboration with the Edwards Comprehensive Cancer Center, will have a far-reaching impact on people suffering with cancer around the world."

Led by Dr. Niles, professor and chair of Biochemistry and Microbiology and senior associate dean of research at the Marshall University Joan C. Edwards School of Medicine, TGRI researchers conduct a greater number of investigator-initiated clinical trials. Because the researchers work in such close proximity to the physicians of the Edwards Comprehensive Cancer Center, they are able to collaborate on both research ideas and clinical applications.



"Being located in the Edwards Comprehensive Cancer Center has made it much easier for us to interact with the oncologists and research nurses — and the interactions have already paid off." Dr. Niles said.

Research performed at the TGRI includes Dr. Hardman's globally recognized research on the effects of omega-3 fatty acids on the development of cancer; Dr. Claudio's isolation of cancer stem cells, which are resistant to traditional chemotherapy and radiation, in order to find new ways to destroy them; and Dr. Niles' groundbreaking studies in nutrition and cancer, focusing on

how vitamin C, resveratrol (found in red wine), vitamin A and quercetin (found in apples) may improve patient prognosis. All of their studies fall in the category of translational research — research conducted in a way to make the results applicable to actual patient care.

"It is such a motivating environment," said Dr. Niles. "You see the patients who might benefit from the work you're doing in the lab."

The 10,500 square feet occupied by the TGRI includes lab space, research equipment, sterile rooms, a tissue-processing laboratory and the headquarters of the West Virginia Genomics Network— a database of genomic information that allows researchers at institutions throughout the state to compare the genes of patients suffering from similar cancers. Using tissue donated by patients who have had tumors removed, doctors and researchers can use the West Virginia Genomics Network to predict patient responses to certain therapies and adjust treatments to prevent cancers from progressing.

"The location of the TGRI within the cancer center has made ongoing communication and collaboration so much easier," said Clinical Trials Supervisor Leann Ross, RN, OCN, CCRP. We feel fortunate to have researchers of this caliber associated with our facility and believe that our patients will ultimately reap the benefits."

"As a scientist and a clinician I am trying to make a contribution," said Dr. Claudio. "I believe that cancer patients around the world could possibly benefit from what we're doing here, and that's the most important thing to me."



**Cancer Navigators:** Patients with cancer often need extra support through diagnosis and treatment. Nurse navigators for the lung cancer, colon cancer and breast cancer programs provide this support to patients. They ensure that the patient and family understand and are able to follow their course of appointments, tests and treatments. The navigator's role includes:

- Offering education in treatment options
- Supporting patients and families at critical times through diagnosis and treatment and beyond
- Advocating for patients and families
- Working closely with physicians across disciplines to coordinate and expedite care
- Facilitating referrals to support services, including social work, nutrition and palliative care

**Nutrition Services:** Nutritional status may influence disease prognosis, treatment tolerance and the quality of life of anyone diagnosed with cancer. ECCC recognizes the vital role of nutrition, and a full-time registered dietitian is available to meet with patients. The dietitian is board-certified in oncology nutrition and can provide early nutritional intervention, develop strategies to manage side effects of cancer treatments, prevent weight loss and assist patients with all nutritional questions and concerns.

**Social Work:** A full-time social worker is available to speak with patients regarding a variety of issues related to coping with their new diagnoses as well as community resources, transportation, disability, finances and insurance. Each patient has a face-to-face meeting on the first visit and is provided with contact information for the social worker for future questions or concerns.

**Lymphedema Care:** Lymphedema occurs when the lymph system is damaged or blocked, and fluid builds up in soft body tissues and causes swelling. Because it is a common problem that may be caused by cancer and cancer treatment, the ECCC offers the services of an occupational therapist who has more than 12 years of experience in providing specialized treatment for lymphedema.



**Arts in Medicine:** ECCC partners with the Huntington Museum of Art to bring an art therapy program to our patients. Self-guided projects are available for chemotherapy patients at all times. Twice a month, an artist from the museum comes to the chemotherapy area to work one-on-one with patients on small art projects. Studies suggest that creative expression through art has many positive benefits. It may decrease anxiety and depression, and it gives the patient another means of expression for feelings or thoughts that may be difficult for them to talk about.

**Pet Therapy:** Because animal companionship brings many people comfort and relief of suffering, the effects of pet therapy in a healthcare environment have been studied for more than 30 years. Studies show that the presence of a dog may encourage staff-patient interactions, ease patient-visitor relations and/or improve staff and patient morale. The ECCC hosts a pet therapy program for patients to improve emotional connections, reduce stress and feelings of loneliness and offer much-needed distraction





**Gigi Gerlach, RN, OCN, Community Outreach Coordinator**

**Support Groups:** ECCC cancer support groups meet monthly. They are free and open to everyone, regardless of where they are being treated. Sisters of Hope (breast cancer) and Sharing (gynecologic cancer) have been meeting for years. This fall, an ostomy support group was established, and membership is growing.

**Look Good, Feel Better:** The ECCC co-sponsors this American Cancer Society program with another local hospital. Meetings take place every other month, and all cancer patients are welcome, regardless of where they are receiving treatment.

**Survivors-to-Students Program:** Every other month for the last four years, ECCC ovarian cancer survivors share their experiences from a patient's perspective with JCEMUSOM medical students.

**Patient-Family Advisory Committee:** This group began meeting this year. It consists of ECCC staff members and cancer survivors who meet every other month to address issues and improve the journey for our diagnosed cancer patients.

**Short-Term Counseling:** For the last few years, graduate students with the Marshall University Psychology Department work with ECCC patients based on referrals made by staff. There is no charge for counseling.



**ECCC Wig Program:** Cabell Huntington Hospital's Auxiliary helps fund this program, which provides wigs for our indigent and needy cancer patients undergoing treatment.

**Mountains of Hope:** Mountains of Hope is West Virginia's Comprehensive Cancer Coalition, comprised of more than 200 health care professionals, volunteers, cancer survivors and community advocates from across the state. Several ECCC staff members belong to this coalition and serve as "Agents of Hope,"

who actively support and promote the mission and vision of Mountains of Hope, and encourage positive behavior change, especially in rural and isolated communities.

**Blanket Project:** ECCC Volunteers instituted this project a few years ago. They cut the fabric, and the blankets are tied by the members of the breast and gynecologic cancer support groups and distributed to every patient undergoing infusion therapy. Both blanket makers and blanket recipients benefit from this project.

A Distinct Difference in Cancer Care.

## COMMUNITY OUTREACH & SCREENINGS (CONTINUED)

### Health Fairs & Screenings\*

- March, 2013: Health fairs at State Electric & First Baptist Church (Kenova)  
April, 2013: Health fair at Huntington Mall (Barboursville)  
April, 2013: Cervical Cancer Screening & Women's Health Fair (75 participants)  
August, 2013: Health fair at Lincoln Primary Care (Hamlin)  
September, 2013: Health fair for Marshall University staff  
September, 2013: Senior Fest health education and screening event for those over 50 (more than 1,800 participants)  
October, 2013: Health fairs at Marathon Refinery (Ashland, KY), Mountwest Community College, Pea Ridge Woman's club, and the VA Medical Center.  
October, 2013: Free Clinical Breast Exam Screenings (75 participants with two positive for breast cancer women to date)  
November, 2013: Health fair for Take Off Pounds Sensibly (TOPS) meeting

\* Unless otherwise noted, events took place in Huntington.

### Education & Outreach\*

- March, 2013: Women's health presentation at the Women's Philanthropy Luncheon
- March, 2013: **Cancer Nursing Conference**
- April, 2013: **Oncology & Hematology Updates for Primary Care Physicians Conference**
- April, 2013: **Evidence Based Nursing Conference**
- May, 2013: "Taking Care of Yourself, Mind, Body and Spirit"  
Ebenezer Outreach Medical
- May, 2013: **Cervical Cancer Screening**
- June, 2013: **National Cancer Survivor Day Celebration** (400+ survivors and family members participated)
- June, 2013: American Cancer Society's **Relay for Life** Celebration
- June, 2013: WV Governor Ray Tomblin declared September **Childhood Cancer Awareness Month**, generating media coverage of the ECCC pediatric oncology program and the new children's hospital under construction
- October, 2013: **5th Annual Breast Cancer Conference** (75 participants)
- October, 2013: Partnered with the Huntington Mall for our **Think Pink, Go Green** campaign encouraging women to get mammograms and a Think Pink Style Show featuring breast cancer survivors as models
- October, 2013: **Brunch at Tiffany's** event in the hospital atrium. It was an event open to the public and attended well.
- October, 2013: **Breast Cancer Survivors Dinner** at the New Baptist Church (200+ attended)
- October, 2013: **Colors of Cancer 5K Run/ Walk** with proceeds distributed to the ECCC Good Samaritan Fund for needy patients (410 applicants for the race)



\* Unless otherwise noted, events took place in Huntington. Events in bold type were self-sponsored



