CANCER PROGRAM
Annual Report 2016 with 2015 Statistics

Carroll Hospital
a LifeBridge Health center
Letter from the Chairman  Flavio Kruter, M.D.

Carroll Hospital’s cancer program remains at the forefront of innovative and exceptional patient care, and continues to be the destination of choice for those with cancer in our community.

Since the William E. Kahlert Regional Cancer Center opened in 2014, the number of patients treated here has significantly increased due to the scope of our high quality care. Now, with the cancer center being a program of Sinai Hospital, that outstanding care will continue to grow.

Our cancer program continues to offer a broad range of treatment therapies such as immunotherapy and targeted therapies. Thanks to our membership in the Alliance for Clinical Trials in Oncology, patients continue to have access to innovative treatments. And, because of the hospital’s partnership with LifeBridge Health, an even greater number of clinical trials will be available to our patients, right here in the community.

We’ve increased the number of experts involved in our multidisciplinary cancer conferences by holding joint conferences remotely with members of the oncology team at Sinai Hospital. This forum for physicians and specialists to discuss patient cases and provide recommendations on effective treatment plans will be an invaluable resource to our cancer care team.

Our ongoing commitment to providing holistic services to patients continues to make a positive impact on not only patients, but also their family members. This integrative approach to cancer care includes providing social services, financial support and a host of complementary services that help patients through their cancer journey.

I’m extremely proud of all of our cancer program’s achievements, but what matters most is the health of our patients. They have consistently expressed their amazement and gratitude for the excellent care our cancer program provides.

Such accolades would not be possible without our dedicated health care providers and cancer committee members. Their hard work and exceptional care are what has made our cancer program such a success in the community.

Flavio Kruter, M.D.
Medical Oncology/Hematology | Medical Director of the William E. Kahlert Regional Cancer Center

Cancer Liaison Physician Summary  Dona Hobart, M.D.

The role of cancer liaison physician is to facilitate the flow of information from the complex data in the National Cancer Data Base to the doctors and other staff on the front line of patient care in order to evaluate and improve quality care within the cancer program. The role of field liaison was created in 1962 and was further expanded by the Commission on Cancer® in 2009. I was appointed to this role in 2015 and am thankful for the wisdom of those who had the foresight to create this position. They understood the power of having the data put to real use for the betterment of each patient.

Last year I reported one measure of quality, relating to our patients receiving timely chemotherapy for breast cancer, where we lagged behind national averages. There were many other measures where we were showing our excellence in breast care, but we focused on the opportunity to get even better! We brought together our team to institute new policies, which I am proud to say have resulted in us improving significantly in this measure. We now measure above the national average. This is just one example of how we use the data to effect real change in the lives of our patients.

I am looking forward to the immense possibilities as a result of our affiliation with LifeBridge Health and I am proud to say I will be serving in the role of cancer liaison physician for the LifeBridge Health system as a whole. I am up to the challenges which lay ahead and am working diligently to find those areas where we can raise the level of care to new and better heights.

Dona Hobart, M.D.
Medical Director of the Center for Breast Health at Carroll Hospital
Cancer Liaison Physician & Cancer Conference Coordinator
Carroll Hospital currently maintains a nationally recognized American College of Surgeon’s Commission on Cancer (ACoS-CoC) accredited Comprehensive Community Hospital Cancer Program. Since 2005, our cancer program has been continuously ACoS-CoC accredited with commendation.

As a Commission on Cancer accredited program, our patients are assured that the hospital administers services of the highest recognized quality. This includes cancer therapies that adhere to guidelines set by the National Comprehensive Cancer Network (NCCN), the National Quality Measures for Breast Centers (NQMBC) and other nationally and internationally renowned clinical cancer management standard setters. This is complemented by the hospital’s continued commitment not only to reach the high bars these entities set but also to develop and implement initiatives that go further to ensure that the highest quality of care obtainable is available to the communities we serve.

Our program includes a wide array of clinical services such as state-of-the-art cancer diagnostics, general surgery, specialty surgery, medical oncology, radiation oncology, access to the latest clinical trials, and genetic counseling and testing. This is rounded out by our psychosocial services and complementary health services that address the emotional and spiritual health needs of our patients. These services are administered throughout the hospital at the Center for Breast Health, the Tevis Center for Wellness, as well as at the William E. Kahlert Regional Cancer Center. We also work collaboratively with our LifeBridge Health sister hospitals, Sinai Hospital and Northwest Hospital, and other health care providers in the region.

This year, Carroll Hospital celebrated its one year anniversary as the newest member of the LifeBridge Health system. LifeBridge Health now consists of Sinai Hospital, Northwest Hospital, Leindale Hebrew Geriatric Center and Hospital, and Carroll Hospital, as well as numerous affiliates. The cancer programs at LifeBridge Health’s three acute care hospitals are all accredited by the Commission on Cancer, with Sinai Hospital and Northwest Hospital operating as a Commission on Cancer Integrated Network Cancer Program (INCP). In January 2017, Carroll Hospital will join these hospitals to become the third member hospital participating in LifeBridge Health’s INCP.

While working under the consultation of the INCP, each hospital individually and collaboratively will work to achieve the highest performance outcomes and partner in cancer-related clinical research including managing and facilitating patient access to the latest clinical trials available. During the past year, the Carroll Hospital cancer program staff has worked collaboratively with staff from Sinai and Northwest hospitals to maximize human and financial resources in order to implement best practices and improve the delivery of care.

This networking will ensure that our services to community residents will not only continue access to quality cancer care close to home, but also enhance Carroll Hospital’s cancer program’s demonstrated commitment and record of achieving the best clinical outcomes possible for our cancer patients.
Cancer Services Available at Carroll Hospital

State-of-the-Art Diagnostics:
- PET/CT Imaging
- MRI
- Stereotactic Breast Biopsy
- Nuclear Medicine
- Esophagogastroduodenoscopy
- Endoscopic Retrograde Cholangiopancreatography (ERCP)
- CT Imaging
- Digital Mammography
- Ultrasound
- Digital X-Ray
- Seed Localization

Therapeutic Services with Personalized Treatment Plan:
- Surgery — Including advanced surgical procedures and minimally invasive techniques.
- Systemic Therapies — Including chemotherapy, hormone therapy, immunotherapy, blood transfusions and ancillary supportive medication management regimes.
- Radiation Therapies — Including brachytherapies like MammoSite® 5-day targeted radiation therapy that allows early stage breast cancer patients to return to their daily lives faster, as well as high dose rate radioactive seed implanting for prostate cancer patients.
- Clinical Trials — Facilitating access to new state-of-the-art therapeutic options.

Support Services:
- Nurse Health Navigation Services
- Nutrition Counseling and Classes
- Genetic Counseling (in partnership with the University of Maryland and Stewart Greenebaum Cancer Center)
- Palliative Care Services (designed to optimize quality of life at any stage of cancer)
- Lymphedema Therapy Program (featuring certified lymphedema therapists)
- Cancer Survivorship Programs
- Transportation Services (in partnership with the American Cancer Society®)
- Lodging Services (in partnership with the American Cancer Society®)
- Complementary Health Services (e.g., massage therapy, acupuncture and integrative reflexology)
- Studio YOU (a specialty area in the hospital’s Wellness Boutique providing wigs, hats, turbans, mastectomy bras and breast prostheses)
- Financial Assistance (through various resources such as the Gina’s Warriors Comfort Fund and The Red Devils)

Carroll Hospital’s cancer program has had a 17 percent increase in new cancer case volume since 2011.
Embrace to Win and Embrace Peer programs presented at National Consortium of Breast Centers Conference

The Center for Breast Health was honored to have two poster presentations at the 26th Annual National Consortium of Breast Center’s [NCBC] conference held in Las Vegas in April to bring national attention to these successful programs. The Embrace Peer program also was presented in St. Louis this fall at the Association of Community Cancer Centers meeting. This demonstrates the strength of Carroll Hospital’s survivorship programs.

The Embrace You Overnight Retreat

The Embrace You Overnight Retreat was held on March 19 and 20 at the Retreat and Conference Center at Bon Secours, in Marriottsville, Md., where 33 breast cancer survivors gathered for a weekend of growth. During the retreat, breast cancer survivors listened to a thought-provoking presentation by guest speaker Anne Katz, Ph.D., R.N., enjoyed a range of activities such as yoga, acupuncture, a mindfulness meditation class, a Labyrinth walking exercise and musical entertainment.

The Embrace Fund

The Carroll Hospital Foundation recently began the Embrace Fund to help defray the costs of various services provided to patients following the first five years of cancer treatment. Made possible by generous gifts, the fund’s goal is to positively impact cancer survivors’ overall health and well-being and to give them the needed tools after treatment.

Embrace the Power of Yoga

Yoga participation improves outcomes in breast cancer. Following the yoga classes offered through the Embrace program, participants grew to truly embody the benefits of yoga and have continued taking yoga classes. Each Monday night breast cancer survivors would gather at a local church for an hour of gentle yoga, resulting in increased long-term wellness and decreased overall stress. The classes were so well-received the Center for Breast Health added two 8-week yoga classes in the Tevis Center for Wellness at the hospital.

Community Screenings

The hospital expanded its community breast cancer screening program by increasing the number of activities held and expanding the locations of the screenings throughout Carroll County.

Commitment to our Mind, Body, Spirit Philosophy

We continue to be dedicated to all aspects of patient care. We strive to meet the individual needs of patients, giving each patient the support needed. We do this through our strong navigation program as well as through the use of our robust integrative medicine department.

Hidden Scar™ Certification

In keeping with our goal to constantly improve and expand our cancer care programs, Dr. Dona Hobart recently became Hidden Scar Certified. Hidden Scar Breast Cancer Surgery is an advanced technique used in breast surgery in which breast surgeons remove cancerous tissue through a single incision that minimizes visible scarring. With minimized scarring, patients have very little visual reminder of the surgery and can experience a more natural-looking breast reconstruction. Being able to provide this demonstrates the Center for Breast Health’s commitment to not only achieving the best clinical outcomes, but also the best aesthetic outcomes for our patients.
The Rapid Quality Reporting System

Carroll Hospital has participated in the Rapid Quality Reporting System (RQRS) since 2013. RQRS is an online quality of care management tool provided by the Commission on Cancer to its accredited cancer programs to monitor real time performance of breast and colon cancer cases’ adherence to nationally recognized standards of care for these patients. The cancer registry staff rapidly identifies patients and prepares and submits de-identified clinical abstracts to the RQRS where cases are enrolled in an automated program that electronically alerts clinicians when therapies are expected and due, based on patient clinical specifics. This can help ensure that patients do not experience delays in their expected treatment modalities. Careful monitoring of these quality measures allows clinicians to assess and correct issues that may impede concordance with nationally recognized standards of care that are evidenced to produce the most optimal outcome for patients. Under the leadership of Cancer Liaison Physician Dona Hobart, M.D., Carroll Hospital’s cancer program monitors and provides quarterly reporting on the hospital’s RQRS concordance rates to the hospital’s cancer committee which oversees all cancer program activities.

Carroll Hospital RQRS Quality Measure Rates vs. Commission on Cancer National and Maryland State Cancer Programs

<table>
<thead>
<tr>
<th>Measure</th>
<th>Maryland State Average (last CoC posting)</th>
<th>National Average (Last CoC posting)</th>
<th>Carroll Hospital RQRS Rate posted 9/23/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjuvant chemotherapy is considered or administered within 4 months (120 days) of diagnosis for patients &lt;80 with AJCC Stage II (lymph node positive) colon cancer.</td>
<td>90.6%</td>
<td>100.0%</td>
<td>93.9%</td>
</tr>
<tr>
<td>At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.</td>
<td>90.2%</td>
<td>91.0%</td>
<td>91.6%</td>
</tr>
<tr>
<td>Radiation Rx is considered or administered following mastectomy within 1 year (365 days) of diagnosis for women with &gt;=4 positive regional lymph nodes.</td>
<td>91.0%</td>
<td>100.0%</td>
<td>89.8%</td>
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<tr>
<td>Combination chemotherapy is considered or administered within 4 months (120 days) of diagnosis for women &gt;70 with AJCC T1cN0M0 or stage IB-III hormone receptor negative breast cancer.</td>
<td>91.0%</td>
<td>100.0%</td>
<td>89.8%</td>
</tr>
<tr>
<td>Tamoxifen or third generation aromatase inhibitor is considered or administered for women with AJCC T1cN0M0 or stage IB-III hormone receptor positive breast cancer.</td>
<td>92.8%</td>
<td>96.0%</td>
<td>92.8%</td>
</tr>
<tr>
<td>Radiation Rx is administered within 1 year (365 days) of diagnosis for women &lt;70 receiving breast conserving surgery for breast cancer.</td>
<td>92.9%</td>
<td>93.4%</td>
<td>92.3%</td>
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</tbody>
</table>

Maryland State Average (last CoC posting)
National Average (Last CoC posting)
Carroll Hospital (RQRS Rate posted 9/23/16)
What is lung cancer?
Lung cancer is the uncontrolled growth of cells within the lung tissue leading to the development of malignant lung tumors. These tumors are referred to as lung cancer or carcinoma of the lung. If a tumor is left untreated it will continue to grow within the lung and can spread by a process called metastasis to nearby structures in the chest or to other parts of the body.

What are the risk factors for lung cancer?
- **Cigarette Smoking** – This the single most important risk factor for lung cancer. It is well known that the incidence of lung cancer increased dramatically when cigarette smoking became common in the 1930s. Cigarette smoke is a complex mix of several thousand chemicals, of which 70 have proven to have a carcinogenetic activity. Of all patients with lung cancer, 70 to 80 percent smoke.
- **Secondhand Smoke** – Secondhand smoke also leads to increased risks for lung cancer.
- **Other Risk Factors** – Other risk factors for lung cancer include familial history of lung cancer and exposure to carcinogenetic agents like asbestos and radon gas.

What are the symptoms of lung cancer?
The symptoms of lung cancer are determined by its location in the chest.
- **Centrally located tumors** can cause partial obstruction or irritation of the central breathing tubes and can cause coughing, shortness of breath, pneumonia or coughing up of blood.
- **Peripherally located tumors** can invade the chest wall and lead to chest pain and tenderness.
- **Apically located tumors** can cause pain in the shoulder, neck and arm.

Lung cancer can also cause a collapse of the lung from fluid collecting in the chest cavity, again causing shortness of breath and coughing.

How is lung cancer diagnosed?
When physicians suspect lung problems on the basis of pulmonary symptoms, a chest X-ray is often the first and simplest test to identify the cause. If a shadow suggestive of an abnormality in the chest X-ray is seen, the next step is often a computerized tomography (CT) scan of the chest. Nodules or masses in the lungs can be clearly seen on the CT scan. To further confirm the presence of cancer in a lung mass, a positron emission tomography (PET) scan is done. Beyond this point a bronchoscopy with biopsy of a centrally located tumor or CT-guided biopsy of a peripheral lesion may be done to prove the presence of lung cancer.

How is lung cancer treated?
There are two types of lung cancer: small cell carcinoma and non-small cell carcinoma. Treatment is based on the histologic type of tumor and on the extent of the spread of the disease. Small cell carcinomas are primarily treated with chemotherapy. Non-small cell carcinomas, if still localized, are best treated surgically with a complete removal of the cancer-bearing part of the lung. Larger, non-small cell carcinomas and those metastasized beyond the confines of the lung are treated with a combination of chemotherapy and radiation therapy. Lung cancers that have metastasized to the brain and bone are also treated with radiation therapy.
Lung Cancer Data 2015 Accession Year

**Analytic Lung Cancer Cases by AJCC Stage**

- Stage I: 25%
- Stage II: 9%
- Stage III: 25%
- Stage IV: 41%

**Newly Diagnosed Lung Cases by Gender**

- Male: 54%
- Female: 46%

**Lung Cancer Cases Treatment Type**

- Combination Radiation and Chemotherapy Rx: 26%
- Surgery Alone: 21%
- Chemotherapy Rx Alone: 16%
- Immunotherapy Rx: 15%
- Comfort Care: 15%
- Radiation Rx Alone: 9%
Christopher Grove, M.D.
Chief of Pathology

In 2016, Carroll Hospital’s Pathology Department continued to support the hospital’s cancer program at the William E. Kahlert Regional Cancer Center by ensuring patients received comprehensive testing and accurate diagnoses in a timely manner.

Our department continues to provide reflex molecular testing on breast, lung and colorectal cancers to enable our oncologists to make timely decisions regarding prognostics and treatment. This advanced testing is initiated at the time of diagnosis and allows the treating physician to tailor treatment to the individual patient.

All of our technicians have been expertly trained in assisting oncologists during bone marrow biopsies of patients with leukemia and lymphoma. During these procedures, our technicians are able to acquire the necessary tissue and then return it to the laboratory promptly, where it is evaluated and a diagnosis made.

We continue to provide services during seed localizations for breast surgery patients through our specialized handling and collection of the sealed radioactive seeds that are safely removed from the patient.

In addition, our team remains a crucial participant in the hospital’s various multidisciplinary cancer conferences, including those dedicated to cancers of the genitourinary tract, gastrointestinal system, breast, as well as other organ systems.

Our ability to provide such exceptional patient care is only expected to grow in the future. Thanks to the hospital’s partnership with LifeBridge Health, our pathologists are now able to provide laboratory services across the entire LifeBridge Health system. If a patient receives laboratory tests at any one of the health system’s hospitals—Northwest Hospital, Sinai Hospital, Levindale or Carroll Hospital—our pathology group is able to review those results, including glass slides, to quickly confirm the diagnosis and expedite treatment. This provides for seamless diagnoses and quick treatment decisions.

Bertan Ozgun, M.D.
Chief of Diagnostic Imaging

Carroll Hospital’s diagnostic imaging team has continued to provide patients with comprehensive diagnostic imaging services both at the hospital and at Advanced Radiology in the Charles O. Fisher Medical Building on the hospital’s campus.

Our services included all imaging modalities such as X-rays, ultrasounds, magnetic resonance imaging (MRI), positron emission tomography (PET) and computerized tomography (CT) scans, as well as interventional procedures such as stereotactic-guided and ultrasound-guided breast biopsies, wire and seed localization for breast surgery patients and a full range of inpatient interventional procedures.

This year was particularly exciting because we added a new lung cancer screening program to help detect lung cancer in patients at an earlier stage, when it is most treatable and potentially curable.

The program provides low-dose lung CT screenings to individuals who are at a high risk of developing lung cancer. The detailed images can detect tiny pulmonary nodules and abnormalities using up to 90 percent less ionizing radiation than a conventional standard chest CT. Since its implementation, our department has performed a large number of these screenings, which has helped us in detecting a number of unsuspected lung cancers.

We have also increased the number of breast tomosynthesis (3-D mammography) services provided, allowing us to more accurately detect breast cancer in patients, particularly in those with dense breasts. Now covered by most medical insurance companies, the imaging test has become such a valuable and commonly used tool in breast screenings that plans are underway to add a second tomosynthesis machine to our location in the Fisher Medical Building.

While there have been different viewpoints from various national organizations on breast screening recommendations, at Carroll Hospital, our diagnostic imaging team supports yearly screenings starting at the age of 40 and continuing for as long as the patient is in good health.
Multidisciplinary Cancer Conferences, otherwise referred to as Multi-D conferences or “Tumor Boards,” are physician-directed conferences regularly convened to facilitate discussion of newly diagnosed cancer patients among surgeons, medical oncologists, radiation oncologist, pathologists, diagnostic radiologists and allied health care professionals. In these conferences, physicians confer on the most appropriate diagnostic testing and/or cancer therapeutic interventions for patients.

These conferences serve as a valuable enhancement of, and often expedite, the formal consultation process needed to have patients begin the most appropriate course and correct sequence of first course cancer therapy as soon as possible. The timing of treatment initiation is important in producing the most optimal clinical outcomes for patients. Carroll Hospital now holds several prospective or treatment planning multidisciplinary conferences. Prospective breast cancer conferences are held weekly; the genitourinary cancer conference, and colorectal cancer conference are held monthly; and the general multidisciplinary cancer conference convenes twice per month. Patients with a wide array of primary cancer sites are discussed in the general “Multi-D” cancer conference.

Psychosocial Health and the Cancer Patient

Kelly Kromm, L.C.S.W.-C.
William E. Kahlert Regional Cancer Center Social Worker & Cancer Program Psychosocial Coordinator

A cancer diagnosis involves more than frequent physician appointments, scans and treatment. It also brings about very complicated emotions, which might include depression, anxiety or loss of hope. Patients are suddenly thrust into a situation where they must deal with a potentially life threatening illness and figure out how to keep life moving forward.

For most, cancer summons us on a roller coaster of emotions: the ups and downs of an appointment with the oncologist, the relief of a good test result and sometimes the crush of a recurrence.

Most patients getting cancer treatments are screened for distress by the cancer center social worker. Patients answer questions to determine if they are at risk for depression and anxiety. This screening gives social workers the opportunity to talk with patients about their support system and what barriers may exist that could interfere with them getting their planned treatment. The social worker is part of the patients’ multidisciplinary care team assisting them as they move through their cancer journey.

The oncology social worker’s role is varied. At the William E. Kahlert Regional Cancer Center, the oncology social worker talks with patients about what their cancer diagnosis means to them. The social worker can provide some counseling, education and referrals to community programs; assistance with insurance/billing issues; help with accessing transportation services and much more.

Oncology social workers are given an opportunity to work with patients and caregivers during a very vulnerable and difficult time. Our primary role is to provide support, whether it’s through providing referrals or simply listening and providing comfort.

At the William E. Kahlert Regional Cancer Center, the social worker is readily available to assist patients in any way possible—in person or by phone—and will work with patients, their caregivers and their providers to ensure they have the resources and support required every step of the way.
Complementary Health Services

Mary Peloquin
Manager of Community Health and Wellness

A key component of Carroll Hospital’s cancer program is providing holistic services or programs that address patients’ emotional and physical needs as well as medical needs. That’s where the hospital’s complementary health and support services play an integral role in our cancer care.

Mainly provided in the Tevis Center for Wellness, conveniently located in the hospital’s East Pavilion with the William E. Kahlert Regional Cancer Center, our complementary health and support services accompanies cancer patients’ medical care to help patients during their cancer journey.

We offer acupuncture and massage to help patients in alleviating the pain associated with cancer, as well as the many side effects of cancer treatment such as nausea, anxiety, depression and sleep disturbances.

Yoga classes are offered to provide patients with much needed relief as well. Like acupuncture and massage, yoga has been extremely effective in helping to reduce fatigue and stress in cancer patients, while also improving their physical functioning, sleep and overall quality of life.

Nutrition classes, specifically geared toward cancer patients, are available to provide education on the many benefits and importance of proper nutrition during and after cancer treatment.

We also offer a variety of cancer support groups, such as those for people with breast and prostate cancers, and any type of cancer, to allow patients to freely discuss their emotions and experiences and receive advice in a warm and supportive environment.

When used in conjunction with a physician’s regular oncology care, our complementary health and support services can make a significant difference in improving the quality of life of cancer patients. And we have received many comments attesting to this fact.

In the future we hope to add even more creative ways to assist cancer patients and make their cancer therapy here as comfortable as possible.
Patient Health Navigation Program Activities and Initiatives
The complexities of health care can often create confusion that may unnecessarily delay the timely start of needed diagnostic tests and cancer therapy. Carroll Hospital’s cancer program created a patient navigation program to make certain a patient’s cancer journey proceeds as effortlessly and timely as possible.

As part of the program, registered nurse health navigators, who are nationally certified in oncology nursing, work collaboratively with the program’s clinical social worker, financial counselors and administrative support staff to ensure that any barriers encountered by the patient is resolved so that cancer therapies can commence in a timely manner.

Each patient is assigned a health navigator who guides and supports the patient from cancer diagnosis through the end of cancer therapy.

At the end of cancer therapy, patients are provided with a customized plan of care by their oncology physician outlining the follow-up plan and goals for long-term survival and health maintenance. All of the patient’s progress, treatment plan and outcomes are shared with the patient’s primary care provider throughout the treatment process including the summary of care.

Quality Improvement Activities and Initiatives
The quality improvement (QI) team commenced multiple projects to improve the care experience of cancer program patients. Studies of quality for this year included: (1) evaluating the impact of a focused education, planning and follow-up process for patients receiving oral chemotherapy agents to improve intensity of oversight for these patients, and (2) assessing the current state of our program’s end-of-life care by evaluating the duration of hospice enrollment and time from last chemotherapy to patient death. Our quality improvement projects were to: (1) establish a standard process to implement care commensurate with the stated goal of treatment; curative vs. palliative, and (2) to improve discharge preparedness and follow-up compliance for hospitalized patients by ensuring a clinic follow-up appointment was scheduled prior to the patient being discharged from the hospital. Work on all quality projects is ongoing and we have documented successful outcomes for patients undergoing treatment with oral therapies.

Survivorship Program Activities and Initiatives
Carroll Hospital’s cancer program is committed to providing continued care for the unique needs of patients as they enter survivorship.

To help patients through the myriad challenges they may encounter—physical, emotional, financial or a combination of these—Carroll Hospital’s Survivorship Program staff works collaboratively with community partners to ensure that needed assistance is available.

Multiple survivorship activities, new programs and resources are available to patients. A monthly survivorship e-newsletter is now sent to survivors and a peer mentorship program for breast cancer patients has been implemented and very well received.

In the peer mentorship program, patients are partnered with a peer mentor after their interview process with a breast coordinator. Patients agreeing to become peer mentors consent to participate in semi-annual mentor training, and provide written consent to the Health Insurance Portability and Accountability Act (HIPAA) and patient confidentiality requirements. Mentors and mentees are matched using criteria such as cancer stage, age and personality commonalities.

This year, the Embrace to Win Program was offered to breast cancer survivors and was well received. The eight-week nutrition and exercise program encourages the adoption of a healthier lifestyle, which can positively affect multiple disease-specific outcomes, including cancer.

Melanie Berdyck, R.D., Carroll Hospital’s community nutrition educator.
The breast cancer education and screening activities were expanded in 2016 based upon a review of the cancer registry data and the experience of the Center for Breast Health staff. Both revealed that elderly women in Carroll County were being diagnosed with breast cancer at a higher rate than average or at a late stage in the disease.

These women were not receiving routine mammography. In response, the community outreach team, in conjunction with the hospital’s Center for Breast Health, implemented breast cancer education and screening programs in multiple Carroll County venues including senior centers. The programs have been very successful. Two cases of new invasive cancer were discovered during the screening activities in 2015, substantiating that not only is the program needed, but the need for expansion was warranted. Additional education sessions are now being offered by the community outreach team. The educational activities are followed by clinical screening sessions shortly after the education sessions are held.

Melanoma and other skin cancer education and screening activities continued in 2016 as melanoma, one of the most serious forms of skin cancers, remains to be seen in higher rates in Carroll County. The agricultural industry is still a major industry in the county, and the sun exposure inherent in the industry is thought to be the primary cause for the higher melanoma rates.

Consultations with area gynecology and primary care physician groups affiliated with Carroll Hospital reveal that the rates of human papillomavirus (HPV) vaccinations are low. Carroll Hospital’s cancer program community outreach team is partnering with these physician groups to increase the compliance rates for these vaccinations. Using various materials and live presentations, Carroll Hospital’s community outreach staff will educate the community about HPV and its link to certain types of cervical, anal, penile, oral and pharyngeal cancers, with an emphasis on the fact that these HPV-linked cancers are preventable with the vaccine. This effort will be followed by strong encouragement to adhere to medical recommendations that both males and females between the ages of 9 and 26 should receive the complete series of HPV vaccines, which can prevent the contraction of most types of HPV infections that can cause cancer.

2016 Community Outreach
Prevention, Education & Screening Programs
• Breast Cancer/Breast Health Education
• Colorectal Cancer Education
• Cooking Demonstrations
• Health Fairs and Seminars
• Live Well For Life [Staff Wellness Program]
• Nutrition Education and Screening
• Pink Fling [Breast Cancer Awareness]
• Prostate Cancer Education
• Relay For Life Events
• Skin Cancer Education and Screening
• Sun Safety Programs
• Tobacco Cessation Programs
• Walk Carroll

Support Groups/Services
• Breast Cancer Support Group
• Bereavement Services & Support Groups
• Cancer Navigation Services
• Cancer Survivors Day
• Cancer Support Group
• Complementary Health Services
• Embrace Program
• Grief Counseling
• Gina’s Warriors Comfort Fund
• Look Good, Feel Better
• Lymphedema Treatment
• Ostomy Support Group
• Nutrition Consults
• Pastoral Care
• Patient Assistance Funds
• Prostate Cancer Education and Support Group
• Reach for Recovery
• Road to Recovery
• Studio YOU and the Wellness Boutique Assistance Fund
• The Red Devils
• Weight Management Support Group
• Weight Management Program
What is a Cancer Registry?
A cancer registry is a standardized data system used to collect, manage and analyze data on patients with cancer and other neoplastic diseases. As a Commission on Cancer (CoC)-approved Comprehensive Community Cancer Program, Carroll Hospital has maintained a cancer registry for patients diagnosed with cancer and central nervous system neoplasms since January 1, 2003.

Certified tumor registrars, who are trained and certified to manage standardized cancer data, prepare clinical cancer summaries for all newly diagnosed cancer patients who are diagnosed and/or who received their first course of cancer therapy at Carroll Hospital. This is done in accordance with national standardized cancer data collection rubrics as defined and implemented by the North American Association of Central Cancer Registries (NAACCR). These data collection rules reflect the consensus of the North American cancer registry industry recognizing that uniform cancer data collection is essential for the calibration of analysis of cancer data across the United States and Canada.

What Data are Collected?
The cancer registry clinical abstracts include patient demographics, pertinent social and family history, tobacco usage, primary cancer site, histologic tumor type and grade, cancer stage at diagnosis, cancer site-specific prognostic indicators, first course treatment information, subsequent treatment for recurrent disease/disease progression, clinical trials participation, multidisciplinary treatment planning conference information and annual follow-up information, including vital status and disease status. Carroll Hospital’s cancer program physician leadership routinely performs a sample review of cancer registry data to ensure the veracity of the data. This ensures that cancer registry data remains a useful tool to perform clinical outcome analysis, which allows for the assessment of efficacy of the cancer therapies administered.

Measuring Quality
Our data is reported to multiple sources, which includes the nationwide clinical oncology outcomes database called the National Cancer Data Base (NCDB). The NCDB is a joint venture of the Commission on Cancer and the American Cancer Society. NCDB data is a rich resource to monitor cancer outcomes across the years, which can be used as a valuable research tool, and analysis of multi-year trending. Clinical cancer data is also used to ensure that evidenced based treatment is administered as recommended by the National Comprehensive Cancer Network (NCCN), the National Quality Forum (NQF), the Commission on Cancer’s Rapid Quality Reporting System (RQRS) and the National Quality Measures for Breast Centers (NQMB). These nationally renowned entities are recognized as leaders in improving the quality of clinical care for cancer patients.

Cancer Education and Prevention
Cancer registry data is not just useful in the clinical setting, but it is an invaluable tool for epidemiologic purposes. It informs public health professionals of the who, what, where and often the why of cancer, so they can better develop and implement the most appropriate interventions needed to reduce cancer prevalence and, in many instances, prevent it. It also ensures that cancer prevention resources are customized and targeted to affected and at-risk populations to produce maximum community benefit.

Carroll Hospital’s Cancer Program Community Outreach Team uses cancer registry data, along with other data sources, to plan the hospital’s cancer education, prevention and screening activities for the communities the hospital serves. Our cancer registry data is also reported to the Maryland Cancer Registry (MCR), the state’s central cancer registry. This registry uses the cancer data obtained from all of the state’s cancer diagnosing and treatment facilities or providers to plan cancer education, prevention and screening activities across the state to reduce the cancer burden for all Maryland residents. MCR (like all state cancer registries) works collaboratively with the Centers for Disease Control and Prevention’s (CDC) National Program of Cancer Registries (NPCR) by supplying aggregated state cancer registry data that is combined with cancer data from the National Cancer Institute’s (NCI) Surveillance, Epidemiology, and End Results (SEER) program to produce the United States Cancer Statistics Cancer Incidence and Mortality Report.
For the 2015 statistical year, Carroll Hospital’s cancer registry data managers added 670 new cancer cases to the cancer registry data base (see primary cancer site table). The top 10 primary cancer sites seen at the hospital for the 2015 cancer case accession year were breast, lung, colorectal, blood and bone marrow, melanoma of the skin, prostate gland, urinary bladder, lymph nodes, kidney and primary of unknown origin. The top primary cancer sites diagnosed nationally per the American Cancer Society® (ACS) were breast, lung, prostate, colorectal, urinary bladder, melanoma of skin, lymphoma (Non-Hodgkin), thyroid, kidney and leukemia.

<table>
<thead>
<tr>
<th>PRIMARY CANCER SITE</th>
<th>Total Cases</th>
<th>American Joint Committee on Cancer (AJCC) Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>I</td>
</tr>
<tr>
<td>Breast</td>
<td>159</td>
<td>41</td>
</tr>
<tr>
<td>Bronchus &amp; Lung</td>
<td>105</td>
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<tr>
<td>Colorectal</td>
<td>77</td>
<td>1</td>
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<tr>
<td>Blood &amp; Bone Marrow</td>
<td>51</td>
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<tr>
<td>Skin (non- bcc &amp; scc)</td>
<td>37</td>
<td>7</td>
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<tr>
<td>Prostate Gland</td>
<td>27</td>
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<tr>
<td>Urinary Bladder</td>
<td>26</td>
<td>14</td>
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<tr>
<td>Lymph Nodes</td>
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<tr>
<td>Kidney</td>
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<tr>
<td>Unknown Primary</td>
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<tr>
<td>Meninges</td>
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<tr>
<td>Pancreas</td>
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<tr>
<td>Thyroid Gland</td>
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<tr>
<td>Liver &amp; Bile Ducts</td>
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<tr>
<td>Corpus Uteri</td>
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<tr>
<td>Stomach</td>
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</tr>
<tr>
<td>Testis</td>
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<tr>
<td>Esophagus</td>
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<tr>
<td>Gallbladder</td>
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<tr>
<td>Connective/Soft Tissue</td>
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<td>0</td>
</tr>
<tr>
<td>Vulva</td>
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<td>2</td>
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<tr>
<td>Ovary</td>
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<tr>
<td>Brain</td>
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<td>0</td>
</tr>
<tr>
<td>Base of Tongue</td>
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<tr>
<td>Tonsil</td>
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<tr>
<td>Anus &amp; Anal Canal</td>
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<tr>
<td>Small Intestine</td>
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<tr>
<td>Other Biliary Tract</td>
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<tr>
<td>Other Digestive Organs</td>
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<tr>
<td>Oropharynx</td>
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<td>Nasopharynx</td>
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<tr>
<td>Accessory Sinuses</td>
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<tr>
<td>Larynx</td>
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<tr>
<td>Heart Mediastinum Pleura</td>
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<tr>
<td>Retroperitoneum &amp; Peritoneum</td>
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<td>0</td>
</tr>
<tr>
<td>Cervix Uteri</td>
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<td>0</td>
</tr>
<tr>
<td>Kidney, Renal Pelvis</td>
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<td>1</td>
</tr>
<tr>
<td>Ureter</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Other Endocrine Glands</td>
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</tbody>
</table>

Overall totals 670 68 158 123 89 134 8 90
Top 10 Cancer Sites

Carroll Hospital
1. Breast
2. Lung
3. Colorectal
4. Bone Marrow
5. Melanoma of Skin
6. Prostate
7. Urinary Bladder
8. Lymphoma (Non-Hodgkin)
9. Kidney
10. Unknown Primary

Nationally*
1. Breast
2. Lung
3. Prostate
4. Colorectal
5. Urinary Bladder
6. Melanoma of Skin
7. Lymphoma (Non-Hodgkin)
8. Thyroid
9. Kidney
10. Leukemia

Maryland*
1. Breast
2. Lung
3. Prostate
4. Colorectal
5. Melanoma of Skin
6. Urinary Bladder
7. Lymphoma (Non-Hodgkin)
8. Corpus Uteri
9. Leukemia
10. Cervix

* Per American Cancer Society (ACS) Fact and Figures

Analytic Cases AJCC Stage at Diagnosis at Carroll Hospital

<table>
<thead>
<tr>
<th>Stage</th>
<th>Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
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<td>10%</td>
</tr>
<tr>
<td>Stage I</td>
<td></td>
<td>24%</td>
</tr>
<tr>
<td>Stage II</td>
<td></td>
<td>18%</td>
</tr>
<tr>
<td>Stage III</td>
<td></td>
<td>13%</td>
</tr>
<tr>
<td>Stage IV</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Unknown Stage</td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>AJCC Stage N/A</td>
<td></td>
<td>13%</td>
</tr>
</tbody>
</table>
**Newly Diagnosed Patients by County/State of Residence**

- Florida: 1
- Worcester County, Maryland: 1
- Howard County, Maryland: 9
- Frederick County, Maryland: 20
- Pennsylvania: 35
- Baltimore County, Maryland: 47
- Carroll County, Maryland: 556

**Carroll Hospital 2015 Accession Year by Gender**

- Female: 42.4%
- Male: 57.6%
2016 Cancer Committee Members

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Oncology Nurse-Quality Improvement Team

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Rehabilitation Representative

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*required cancer committee coordinators