LETTER FROM THE CHAIRMAN
Flavio Kruter, M.D.

Carroll Hospital’s cancer program is solidifying itself as the best place in Carroll County to receive comprehensive cancer care and one of the best in Maryland.

We could not be more proud of the William E. Kahlert Regional Cancer Center, which has put us on the map in terms of the sophistication of our cancer care. Since opening last year, more and more patients have been able to seek treatment close to home. In this state-of-the-art facility, patients have benefited from the latest advancements in diagnostic and treatment technologies, private and semi-private infusion rooms, and a host of holistic services to address their needs before, during and after treatment, such as health navigation, counseling and complementary health services.

Patients consistently express their amazement and gratitude for the center’s services and the fine details which have created the patient-friendly atmosphere inside.

Thanks to our membership in the Alliance for Clinical Trials in Oncology, patients continue to have increasing access to innovative treatments. Patients are screened to determine if they are proper candidates for the wide range of clinical trials we offer.

The scope of our multidisciplinary conferences has also grown with the addition of the genitourinary cancer and gastrointestinal tumor board multidisciplinary conferences. These conferences have provided a forum for physicians and specialists to discuss patient cases and provide valuable recommendations on the most effective treatment plans possible.

These achievements have only been made possible due to our dedicated team of health care providers and cancer committee members. I want to thank these talented individuals for their exceptional work in making quality cancer care a priority in the community.

Flavio Kruter, M.D.
Medical Oncology/Hematology | Medical Director of Carroll Hospital’s Cancer Program

CANCER LIAISON PHYSICIAN SUMMARY
Dona Hobart, M.D.

This year, I was pleased to assume the role of Cancer Liaison Physician (CLP) which has allowed me to be an integral part of the quality team at the William E. Kahlert Regional Cancer Center. It is an exciting time in cancer care, and I am proud to represent Carroll Hospital in this role.

One of the charges of the CLP is assessing various clinical data sets collected by the Commission on Cancer to monitor quality and adherence to national treatment guidelines. My goal is to use this data in a timely fashion to effect positive change resulting in tangible improvements in our already high level of patient care. The timeliest data we have are five specific measures related to breast cancer, as well as colon and rectal cancers which are reported as a part of the Rapid Quality Reporting System. This system allows us to see how we compare to other institutions across the state and nation. We have participated in this system since October 2013.

As seen in the graphs on pages 5, 6 and 8, we have performed above national averages in all but one of the measures. We used this opportunity to improve our systems and instituted new protocols to address notification to all providers concerning the timing of chemotherapy. To do this, we brought together the resources of all our cancer care professionals. I think this exemplifies the spirit in which the Commission on Cancer operates, using data to forge better systems and better communication and to continually raise the bar of patient care.

We will continuously examine the data for such opportunities in the future to keep us on the top of patient care. As the CLP, I view each data point not as ink on a graph, but as a living soul who deserves the best treatment today and every day.

Dona Hobart, M.D.
Medical Director of the Center for Breast Health at Carroll Hospital | Cancer Liaison Physician & Cancer Conference Coordinator
Carroll Hospital has maintained an American College of Surgeons Commission on Cancer (ACoS-CoC) accredited cancer program since 2005. With a 24 percent increase in the annual volume of new cancer cases since 2009, our cancer program was accredited as a Comprehensive Community Hospital Program during the CoC’s last accreditation assessment of our program in 2014.

The CoC performs a triennial cancer program survey of its participating hospitals to ensure they provide evidence-based clinical services, as well as psychosocial services to embrace a holistic approach to addressing the full spectrum of cancer patient needs. Our hospital also has to demonstrate to the CoC our engagement with the community through our hospital’s cancer-related community outreach activities, which educate residents on cancer and cancer prevention methods. These outreach activities both teach the importance of adopting a healthy lifestyle and facilitate access to cancer screenings.

The hospital’s program was re-accredited by the ACoS-CoC with silver level commendation in November 2014, demonstrating Carroll Hospital’s high quality oncology care. The hospital also has expanded its oncology services with the addition of the Center for Breast Health, providing state-of-the-art management of breast cancer. The center was certified last year as a participant in the National Quality Measures for Breast Centers™ (NQMBC™).

The Radiation Oncology Department is in the process of developing a Stereotactic Body Radiation Therapy (SBRT) program. SBRT allows the radiation oncologist to administer a more precise radiation dose in fewer treatments for appropriate patients. Our future plans also include adding a center of excellence for colorectal cancer care.

To assess the community’s growing cancer needs, in 2015, Carroll Hospital conducted patient focus groups and patient satisfaction surveys. The feedback from these methods will be used to inform the hospital’s development and implementation of future programs and services.

Our multidisciplinary medical staff works in partnership to personalize treatment plans for each patient’s unique set of clinical needs. A seasoned nursing team, along with a clinical social worker who works in the cancer center, is trained in the care of oncology patients through all phases of their cancer treatment.

Certified genetic counseling services continue to be offered in collaboration with the University of Maryland Marlene and Stewart Greenebaum Cancer Center via telemedicine conferencing. A team of oncology certified nurses ensures that patients are provided access to clinical trials provided both on and offsite in collaboration with regional cancer care providers. In addition, the psychosocial support and palliative care programs continue to screen cancer patients to identify their needs and provide palliative care assistance.

The hospital’s nurse health navigators have designed a cancer patient survivorship program. The logistics of the program are still being determined but once implemented, it will provide cancer patients with a customized follow-up care plan at the conclusion of their treatment.

As an enhancement of the interdisciplinary consultation process, the hospital convenes several prospective treatment planning conferences. This now includes primary cancer site specific multidisciplinary conferences for breast, genitourinary and gastrointestinal cancers, as well as a general cancer multidisciplinary conference that addresses all primary cancer sites. These conferences accelerate the start of treatment and serve as a forum for physicians and allied health professionals to receive continuing education.

The hospital’s cancer program sponsored three clinical educational programs this year: “Colon Cancer Screenings: Options, Benefits and Logistics for Health Care Providers,” presented by gastroenterologist John Rabine, M.D., of Carroll Health Group Gastroenterology; “Pan Cancer Panels: How Testing Can Impact Medical Management for Your Patients,” presented by Ann Miller of Myriad Genetics, Inc.; and “Melanoma and Other Malignancies,” presented by oncologist Geoffrey Gibney, M.D., of Georgetown University Medical Center. Our community outreach team also continued presenting several cancer education programs in the county.

In addition, medical oncology and radiation oncology services are provided in the William E. Kahlert Regional Cancer Center, which includes private and semi-private infusion rooms and a range of support services, all in a setting where patients can view the scenic Carroll County Farm Museum grounds.
CANCER SERVICES AVAILABLE at Carroll Hospital

State-of-the-Art Diagnostics:
- PET/CT Imaging
- CT Imaging
- MRI
- Digital Mammography
- Stereotactic Breast Biopsy
- Ultrasound
- Nuclear Medicine
- Digital X-Ray
- Esophagogastroduodenoscopy
- Endoscopic Retrograde Cholangiopancreatography (ERCP)
- 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** — That facilitate access to new state-of-the-art treatment options

Support Services:
- Nurse Health Navigation Services
- Nutrition Counseling and Classes
- Genetic Counseling *(in partnership with the University of Maryland Marlene 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 Program
- 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)*
- Oncology Resource Library

Since 2010, the cancer program has had a 24 percent increase in analytic cancer case volumes. Analytic cases are patients newly diagnosed and/or first seen at the facility for all or a portion of their first course of cancer treatment.
**Susan G. Komen Maryland®: Embrace**

The Center for Breast Health was awarded a $50,000 grant from Susan G. Komen® Maryland. The grant was used to fund our Embrace program for breast cancer survivors to facilitate their continued healing and thriving in survivorship. The first Embrace to Win program for breast cancer survivors also was held with great success. This 8-week weight management program provided breast cancer survivors with nutrition and fitness education. (For more information, see page 7.)

In addition, staff members at the center and throughout the hospital joined our Center for Breast Health Komen Team and participated in the 2015 Komen Maryland Race for the Cure®.

**National Accreditation by the National Quality Measures for Breast Centers™ Program**

The Center for Breast Health is now certified as a Quality Breast Center by the National Quality Measures for Breast Centers™ Program (NQMBC™). This designation involved reporting two consecutive data sets consisting of various quality measures over a six-month period. Our center will continue to focus on accreditation through national organizations, which demonstrates our commitment to national standards and our constant attention to quality of care.

**Seed Localization**

In collaboration with Advanced Radiology, Carroll Hospital began offering patients seed localization, a new, more patient-friendly approach for locating and treating breast cancers. The procedure involves a radiologist injecting a sealed radioactive seed—smaller than a grain of rice and completely safe—into a patient’s breast to mark the exact location of the cancer. During surgery, a breast surgeon uses a handheld radiation detection device to locate the seed and precisely navigate to the location of the cancer to remove both the cancer and the seed.

Compared to wire localization—which requires a radiologist to insert a wire into a patient’s breast hours before surgery to map the location of the cancer—with seed localization, patients can have the seed placed up to five days before surgery, and they can carry on with their normal activities with no discomfort or restrictions.

**Community-Based Free Screenings**

A series of free screenings were held at local senior centers for women who were no longer getting themselves screened with a mammogram or physical exam. If an issue was found, the patient was offered services at the Center for Breast Health or referred to a physician. (For more information, see page 7.)

**Patient Health Navigation**

Navigation continues to be at the heart of the center’s treatment philosophy. The center focuses on treating the whole patient: mind, body and spirit. Prior to having a biopsy, all patients are seen by a health navigator and this relationship continues as they progress through treatment.

Our center is unique in terms of the level of interaction patients have with our health navigators, which translates into a new level of comfort for patients before, during and after treatment.

**Lobbying**

Dona Hobart, M.D., medical director of the Center for Breast Health, was among nearly 30 breast cancer experts and survivors from across the country who visited Capitol Hill, in Washington, D.C. The group visit was organized by the National Consortium of Breast Centers to urge members of the Senate and Congress to support a two-year moratorium to prevent the U.S. Preventive Services Task Force’s (USPSTF) draft guidelines from being finalized. The recommendations gave annual mammograms for women ages 40 to 49 a “C” grade, meaning most women in this age group do not need an annual exam.

A bipartisan bill was eventually introduced in Congress that would place a two-year moratorium blocking adoption of the USPSTF’s breast cancer screening recommendations.
BREAST CANCER DATA
2014 Statistics

Concordance with Evidence-Based Standards of Quality for Breast Cancer Care

*(Based on the National Cancer Data Bases' Clinical Practice Profile Reports Published in 2015)*

**NEW BREAST CANCER CASES**
Total Number of Cases and Percentage of Overall New Cases by Accession Year

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
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<tbody>
<tr>
<td>Cases</td>
<td>93</td>
<td>98</td>
<td>111</td>
<td>123</td>
<td>139</td>
</tr>
<tr>
<td>%</td>
<td>20%</td>
<td>18%</td>
<td>19%</td>
<td>21%</td>
<td>23%</td>
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</tbody>
</table>

Image of Palpation-Guided Needle Biopsy of the Primary Site is Performed to Establish Diagnosis

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Carroll</th>
<th>Maryland</th>
<th>National</th>
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</thead>
<tbody>
<tr>
<td>%</td>
<td>88.9%</td>
<td>87.0%</td>
<td>88.1%</td>
</tr>
</tbody>
</table>

Breast Conservation Surgery Rate for Women with American Joint Committee on Cancer (AJCC) Stage 0, I or II

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Carroll</th>
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<tbody>
<tr>
<td>%</td>
<td>70.4%</td>
<td>62.2%</td>
<td>62.6%</td>
</tr>
</tbody>
</table>

Tamoxifen or Third Generation Aromatase Inhibitor is Considered or Administered Within 1 Year of Diagnosis for Women with AJCC Stage T1c or Ib-III Hormone Receptor Positive

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Carroll</th>
<th>Maryland</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>100%</td>
<td>89.2%</td>
<td>88%</td>
</tr>
</tbody>
</table>
Combination Chemotherapy is Considered or Administered within 4 Months of Diagnosis for Women under 70 with AJCC T1cN0 or Stage Ib-III Hormone Receptor Negative

<table>
<thead>
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<th></th>
<th>Carroll Hospital</th>
<th>Maryland</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiation</td>
<td>92.9%</td>
<td>91.0%</td>
<td>89.7%</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>80.0%</td>
<td>89.0%</td>
<td>91.0%</td>
</tr>
</tbody>
</table>

Review of the above data showed that while all patients meeting the criteria for this measure were administered or were considered for combination chemotherapy, some patients received the treatment past the recommended 120 days post diagnosis. Some patients had delays due to unforeseen complications. The cancer program has developed a new process to ensure that all patients eligible for treatment will receive it whenever possible within the 120-day recommendation.
Community outreach is an important part of our comprehensive cancer care program. It includes prevention and screening activities, support and survivorship programs all designed to meet the needs of our growing community. In 2015, our cancer program team held a range of activities for the community with the focus on providing additional screening and prevention programs.

Through our assessment of our community’s cancer care needs, we found that many older women (70+) were not receiving breast exams. To target this group, several one-on-one breast health consultation and clinical breast exam programs were held in various locations across the county, including at senior centers. During these programs, our affiliated physicians at the Center for Breast Health provided free breast exams (and referred participants for followup, if needed), as well as education on prevention and early detection and other breast health issues.

One of the cancer survivorship programs we introduced this year was the new Embrace program for breast cancer survivors. Made possible through a grant from Susan G. Komen® Maryland, the program provided breast cancer survivors who had finished treatment within the last two years with the opportunity to meet with a health navigator who assisted them with their next steps for survivorship. It also offered survivors a range of free services including massages, acupuncture, yoga classes and more.

Embrace to Win, an 8-week weight management program, was implemented to provide breast cancer survivors with nutrition and fitness education. The program was a huge success, with participants achieving positive results in terms of reducing their weight and stress and improving their overall well-being.

In addition, the Gina’s Warriors Comfort Fund was made available to colon cancer patients in the county to provide them with resources to improve their quality of life and eliminate the financial burden a serious illness can put on a family. Services the fund provided included massage therapy and acupuncture treatments, gift cards for food, gas transportation and comfort items, the cost of wigs and other cancer-related supplies, and more.

Our cancer committee will continue to provide these programs, in addition to our many other community outreach and support services, as we strive to meet the growing needs of the community.
What is a colorectal malignancy?
A colorectal malignancy is a cancerous tumor of the colon or rectum. Ninety-five percent of these cancers are called adenocarcinomas and are commonly referred to as colorectal cancer. Approximately 150,000 people are diagnosed with colon cancer every year in the United States.

What are the risk factors for colorectal malignancies?
Colon polyps represent a major risk factor for colorectal malignancies. These polyps are best detected by a screening colonoscopy which is recommended to be performed at age 50 for an average risk patient. Patients with a family history of colorectal cancer or polyps or gynecologic tumors (ovarian and uterine) should undergo a colonoscopy at an earlier age. Dietary risks factors include high consumption of meat and low-fiber diets.

What are the symptoms of colorectal malignancies?
A colonoscopy is recommended as a screening for the general population to detect colorectal malignancy since symptoms do not occur until its advanced stage. Warning signs that colorectal cancer may be present include bleeding and pain from the rectum or anus, change in bowel habits (diarrhea and constipation) and weakness, which may be related to anemia.

How are colorectal malignancies diagnosed?
Colorectal cancers are often diagnosed on routine screening colonoscopy, but colorectal malignancies may be initially diagnosed by visualization of a mass on a CT scan or barium enema. A colonoscopy is subsequently performed to examine the mass and a biopsy performed to confirm that it is cancer.

How are colorectal malignancies treated?
Colon cancers, if localized to the colon without spreading to other organs, are initially treated with surgery to remove the cancerous mass. This may be performed laparoscopically for early stage tumors. Colon tumors that have metastasized to the lymph nodes around the colon (confirmed by examining the specimen once it has been removed) are treated with additional chemotherapy for six months. Rectal cancers may be treated by surgery alone when diagnosed at an early stage by a CT scan and ultrasound while more locally advanced large rectal cancers are treated by combining radiation and chemotherapy to shrink the tumor followed by surgery, which may be performed laparoscopically, to remove the tumor.

Concordance with Evidence-Based Standards of Quality for Colorectal Cancer Care
(Based on the National Cancer Data Bases’ Clinical Practice Profile Reports Published in 2015)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Carroll Hospital</th>
<th>Maryland</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjuvant Chemotherapy is Considered or Administered Within 4 Months of Diagnosis for Patients Under 80 AJCC III (Lymph Node Positive) Colon Cancer</td>
<td>100.0%</td>
<td>89.6%</td>
<td>89.6%</td>
</tr>
<tr>
<td>At Least 12 Regional Lymph Nodes are Removed and Pathologically Examined for Resected Colon Cancer</td>
<td>87.0%</td>
<td>91.3%</td>
<td>89.8%</td>
</tr>
<tr>
<td>Preoperative Chemotherapy &amp; Radiation Treatment are Administered for Clinical AJCC T3N0, T4N0 or Stage III; or Postoperative Chemotherapy &amp; Radiation Treatment is Considered; for Patients Under Age 80 Receiving Resection of Rectal Cancer</td>
<td>100.0%</td>
<td>77.5%</td>
<td>84.1%</td>
</tr>
</tbody>
</table>
Carroll Hospital’s pathology department continues to provide support to the hospital’s cancer program in a myriad of ways and has even expanded its duties with the introduction of new tests and protocols to ensure patients are accurately diagnosed in a timely manner.

Our department has implemented updated protocols for reflex molecular testing on various cancer types, including lung cancer, colorectal cancer and breast cancer. These protocols reflect national guidelines and consensus recommendations. Reflex molecular testing occurs as soon as a cancer diagnosis is made in order to provide oncologists with treatment and prognostic information quickly, allowing them to start a treatment plan for patients without delays.

With the introduction of seed localization for breast surgery patients, our staff has been trained in the specialized handling and collection of these sealed radioactive seeds to ensure their safe removal from patients.

Our staff also has been actively involved in the hospital’s new multidisciplinary cancer conferences—the genitourinary cancer and gastrointestinal tumor board—as well as our ongoing participation in the hospital’s general and breast cancer conferences.

All of these developments are in addition to the many other diagnostic services we provide the cancer program on a regular basis. Our primary goal is to provide our cancer specialists with a swift and accurate diagnosis to ensure patients are able to receive the treatment they need as quickly as possible. And our team of expert laboratory and pathology specialists work around the clock, seven days a week, to make this a reality.

In 2015, Carroll Hospital’s diagnostic team continued to provide comprehensive diagnostic imaging services to patients at the hospital as well as at Advanced Radiology in the Charles O. Fisher Medical Building on the hospital’s campus.

We provided a range of imaging services, including ultrasounds, magnetic resonance imaging (MRI), positron emission tomography (PET) and computerized tomography (CT) scans. A full range of image guided biopsies and other image guided procedures are also available. Our imaging services are essential to the process of diagnosing cancer, treatment planning and evaluating response to therapy.

This year we were very happy to be able to provide patients with seed localization, an innovative approach that allows surgeons to precisely locate breast cancers for treatment during surgery. The procedure, which involves inserting a tiny sealed seed into a patient’s breast to mark the exact location of the cancer, has been a huge success by making breast cancer surgery easier and more comfortable for patients.

In October 2015, breast tomosynthesis (3-D mammography) was introduced at the Fisher imaging center. This is an innovative type of mammogram that promises to be more accurate in detecting breast cancer while reducing false positives.

As part of Carroll Hospital’s cancer program, our diagnostic imaging team provides a wide range of advanced diagnostic and interventional services allowing patients to receive everything they need for cancer care right here in the community, close to home.
PALLIATIVE CARE SERVICES
Jennifer Ballas, R.N., C.H.P.N. | Inpatient Palliative Care Coordinator

Palliative care is a specialized branch of medicine that looks at managing the pain, stress and symptoms that come with a serious illness. It is patient- and family-centered care that is available for all adult patients, regardless of their disease, and can be given alongside curative treatments.

Carroll Hospital’s inpatient team is led by nationally certified nurses who work with the patient’s doctors, specialists, chaplains and interdisciplinary health team to provide coordinated care.

The palliative care team provides care to patients with many different diseases like cancer, cardiac and respiratory issues, diabetes and dementia. The team meets with the patient and his or her family/caregivers to discuss goals of care and explain difficult-to-understand diseases and treatment options. The team also provides continued support to the patient and family during difficult and stressful hospitalizations and will provide that support regardless of the patient’s location in the hospital.

The feedback from families who have worked with the palliative care team has been tremendous. Examples include:

“I am so thankful for the care and compassion that the team provided. She made a difficult situation much better and presented all of the options in such a caring way.”
— A patient’s family member

“The plan we put together for Dad was terrific; he is so happy now, and I’m so thankful that you were there to talk through everything. It all made sense after we met.”
— A patient’s family members

Last year the palliative care team saw 685 inpatients and the number continues to grow. With the success of the inpatient program, Carroll Hospital plans to add an outpatient palliative care team soon. If you or your family is admitted to the hospital and has a serious illness, ask your doctor about palliative care to access our services.

CLINICAL TRIALS AND RESEARCH
Corilynn Hughes, R.N., B.S.N., O.C.N. | Clinical and Research Manager

Clinical trials are a scientific approach to answering questions about disease management and are the backbone of advances in medicine including cancer care. The clinical research program at the William E. Kahlert Regional Cancer Center provides people in our community who have a cancer diagnosis access to novel medications and innovative treatments. Our center participates in clinical trials through direct affiliation with the National Cancer Institute (NCI) Clinical Trial Network, and in conjunction with the pharmaceutical industry. These collaborations allow cancer patients in our community to participate in progressive cancer treatments without having to travel to larger institutions outside our immediate area.

Based on yearly cancer registry data and community statistics, our oncology research program ensures that we pursue and make available clinical trials that fit the needs of our population. Our research program has open trials for breast cancer, non-small cell lung cancer, prostate cancer, multiple myeloma, myelodysplastic syndrome and supportive care.

In 2014, our program screened more than 200 individuals and enrolled 30 individuals into trials. If a clinical trial for an individual patient is not one available here, our experienced research team locates the nearest institution with that open trial and connects the patient to that resource.
Patient Health Navigation Program Activities
The Carroll Hospital cancer program developed a patient health navigation process to guide patients through their cancer diagnosis and treatment journey. Patient navigators assist patients by using available hospital and community resources to mitigate barriers and delays in patients receiving needed cancer therapy. The William E. Kahlert Regional Cancer Center’s patient health navigation program continues to be successful with three registered nurse health navigators and a clinical oncology social worker on staff. The cancer center navigator team also works in conjunction with the registered nurse health navigation team from the Center for Breast Health and the Tevis Center for Wellness. This collaboration allows breast cancer patients to feel at ease as they move across the breast diagnostic and surgical service lines to the medical and radiation oncology services.

Survivorship Program Activities
The Carroll Hospital survivorship program was implemented in 2014 and the cancer program continues to flesh out the process for the delivery of services to patients who transition to survivorship status. In the near future, cancer survivors will be provided with a personalized plan for clinical followup, and since cancer survivors often have unique psychosocial concerns, our medical staff, health navigators and social worker will assure this is addressed in the survivorship plan as well.

All cancer patients will receive survivorship services, and Carroll Hospital’s survivorship program team employs both hospital resources and community assets to assist cancer survivors.

In 2015, the hospital launched several new funds to provide cancer patients with a wide range of resources designed to improve their quality of life and to eliminate the financial burden a serious illness can have on a family. The resources were provided through support services such as Embrace, the Gina’s Warriors Comfort Fund and the Studio YOU and Wellness Boutique Assistance Fund.

Quality Improvement Activities
The Carroll Hospital quality improvement team continuously monitors patient clinical outcomes and devises methods to identify opportunities for improvement. This year, the team added quality improvement initiatives that included developing a process for ongoing review of radiation treatment plans to ensure all of the care elements are completed in accordance with evidence-based standards. They also created a method to ensure that all treatment decisions regarding all treatment modalities were documented in the patient’s electronic medical record at the time the decision was made with the patient. In addition, a process was developed to evaluate patient readiness for chemotherapy and ensure that patients received their therapy in accordance with the established chemotherapy administration schedule. The patient’s treatment progress was also carefully monitored to identify any need for changes in treatment schedules, regimes and chemotherapy agents.
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.

Under the direction of the hospital’s cancer program physician leadership, clinical cancer data management professionals, known as certified tumor registrars, prepare clinical summaries of newly diagnosed patients at the facility and/or patients who received their first course of cancer therapy at the hospital. This is done in accordance with national standardized cancer data collection rubrics as defined or adopted by the North American Association of Central Cancer Registries (NAACCR).

What Data are Collected?
The cancer registry includes 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 registry now contains rich data for an analysis of 5,846 patients.

Outcomes Analysis
Our cancer patients receive lifetime surveillance to determine treatment outcomes to assess and improve the efficacy of treatments we administer. The standardization and collection of cancer data facilitates the easy analysis of cancer patient outcomes as well as analysis to compare treatment practices, locally, regionally and nationally to evaluate any variations in treatment practices that could impact our patient outcomes. All patients receive annual followup throughout their lifetime to monitor the status of their disease. This ensures that patients’ clinical abstracts reflect their cancer experiences from diagnosis through survivorship.

Measuring Quality
The hospital participates in a variety of programs that measure our facilities’ treatment practices and performance to ensure concordance with nationally recommended treatment standards as put forth by the National Comprehensive Cancer Network (NCCN), and the National Quality Forum (NQF). The hospital submits de-identified aggregated cancer data to the National Cancer Data Base, a collaboration of the Commission on Cancer and the American Cancer Society, the Commission on Cancer’s Rapid Quality Reporting System (RQRS), and the National Quality Measures for Breast Centers (NQMBC). These entities rate our performance with the national treatment guidelines for site-specific cancer diagnostics and cancer therapies. Participation in these performance measures serves as a valuable tool for the continuous monitoring and improvement of patient care.

Cancer Education and Prevention
Cancer registry data is a powerful tool used for analyzing the who, what and where of cancer. Carroll Hospital’s community outreach professionals use the hospital’s cancer registry data, along with data from other resources to plan cancer education, prevention and cancer screening activities for the community. The hospital’s cancer registry data also are submitted to the Maryland Cancer Registry (MCR). The MCR uses the data reported from all state cancer diagnosing and treating facilities to measure state-wide cancer prevalence. Analysis of this data is used to develop state initiatives for cancer reduction activities in Maryland.

The MCR contributes aggregated state cancer data to the Centers for Disease Control and Prevention’s (CDC) National Program of Cancer Registries (NPCR). The CDC’s NPCR and the National Cancer Institutes (NCI) Surveillance, Epidemiology and End Results (SEER) Program jointly collect cancer registry data that encompasses the United States population. This serves as the official federal statistics on the cancer incidence published in the Cancer Incidence and Mortality Data Report. This report is located on the CDC and NCI websites.
For the 2014 statistical year, Carroll Hospital's cancer data managers added 610 new cancer cases to the cancer registry database (see primary cancer site table). Currently 2,507 patients are under active annual followup. The top 10 primary cancer sites seen at the hospital for the 2014 cancer case accession year are breast, lung, colorectal, melanoma of the skin, blood and bone marrow, prostate gland, corpus uteri, kidney, lymph nodes and thyroid gland. The top cancers nationally per the American Cancer Society® (ACS) are breast, lung, prostate, colorectal, melanoma of the skin, urinary bladder, lymphoma (Non-Hodgkin), corpus uteri, leukemia and cervix (see page 14).

<table>
<thead>
<tr>
<th>PRIMARY CANCER SITE</th>
<th>Total Cases</th>
<th>American Joint Committee on Cancer (AJCC) Stage</th>
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</thead>
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<tr>
<td></td>
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<tr>
<td>Breast</td>
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**OVERALL TOTALS**  
610 61 176 111 65 118 7 72
Carroll Hospital’s cancer case prevalence differs slightly from that documented by the American Cancer Society® (ACS).

**Top 10 Cancer Sites for Carroll Hospital**
1. Breast
2. Lung
3. Colorectal
4. Melanoma of Skin
5. Blood & Bone Marrow
6. Prostate
7. Corpus Uteri
8. Kidney
9. Lymph Nodes
10. Thyroid Gland

**Top 10 Cancer Sites Nationally per ACS**
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
In 2014, 10 percent of the patients presented at diagnosis with AJCC stage 0 disease, 29 percent presented with stage I, 18 percent with stage II, 11 percent with stage III, 19 percent with stage IV, 6 percent with unknown AJCC stage (these patients elected no diagnostic work-up or intervention for their cancer), and 7 percent of patients were diagnosed with cancers not applicable for AJCC staging (see graph 2). Carroll Hospital’s cancer patient demographic distribution continues to closely reflect the population of Carroll County. For the 2014 case accession year, Carroll Hospital’s patient gender distribution was 59.8 percent female and 40.2 percent male (see graph 1).

The racial/ethnic distribution of the hospital's cancer patient population was 96.2 percent white non-Hispanic, 2.1 percent African American, 0.7 percent Hispanic and 0.7 percent Asian (see graph 3). The hospital also continues to have a higher percentage of patients age 80 and older (see graph 4).
Graph 3: 2014 Analytic Cases by Race/Ethnicity

- Other: 0.3%
- Hispanic: 0.7%
- Asian: 0.7%
- African American: 2.1%

Graph 4: 2014 Analytic Cases by Age Distribution
Compared Maryland State and National Statistics Published by the Commission on Cancer in 2015

- National
- Maryland
- Carroll Hospital
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Other Medical Specialty

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CAP Compliance Manager

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