We will provide superior quality, accessible, comprehensive cancer treatment, prevention and patient support services for western North Carolina and the surrounding region.

ONCOLOGY SERVICE LINE MISSION STATEMENT
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LETTER FROM THE

Cancer Committee Chair

Oncology continues to show rapid changes, both in diagnostic and therapeutic measures. With the complexity of the oncology world, it is becoming necessary for involvement of multiple specialties and coordination of care.

Further multidisciplinary programs will be developed. These will include specialties such as breast, gastrointestinal, neuro-oncology, and head and neck cancer. Through the coordinated efforts of multiple providers and ancillary specialties, patients will have their cancers discussed and courses of treatment coordinated, giving the best overall care, allowing for multiple views and opinions regarding what is felt to be best practice.

As part of this multidisciplinary approach, the area of genetics and genomics has become important and is now being further expanded at the Mission Cancer Program. The opening of the Genetics Center will allow expertise at Mission Hospital to be expanded to the region. This will offer patients of western North Carolina state-of-the-art diagnostic tools that will guide future therapies.

As the world of oncology continues to rapidly move forward, physicians and staff at the Mission Cancer Program remain active in national clinical trials, credentialing through the American College of Surgeons, American Society of Clinical Oncology (ASCO) and other quality programs including the American College of Radiology. Efforts in the future will continue to be focused on the rapid changes and continued advancement in personalized medicine. As a leader in oncology care in western North Carolina, Mission Hospital will continue to move in the direction of providing the best services to patients in this region.

Michael Messino, MD
Cancer Committee Chair | Medical Oncologist
## 2014 Mission Oncology Service Line

### Committee Members

#### Physicians

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<td>Michael J. Messino, MD</td>
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<td>Randall Johnson, MD</td>
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<td>Paul Ahearne, MD</td>
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2014 MISSION ONCOLOGY SERVICE LINE

Accreditations & Awards

The Commission on Cancer (CoC) of the American College of Surgeons (ACoS) granted another Three-Year Accreditation to the cancer program at Mission Hospital on October 2014. To earn voluntary CoC accreditation, a cancer program must meet:

- 34 CoC quality care standards
- Be evaluated every three years through a survey process
- Maintain levels of excellence in the delivery of comprehensive patient-centered care

Established in 1922 by the American College of Surgeons, the CoC is a consortium of professional organizations dedicated to improving patient outcomes and quality of life for cancer patients through standard-setting, prevention, research, education and the monitoring of comprehensive, quality care.

Because Mission Cancer Program is a CoC-accredited cancer center, it takes a multidisciplinary approach to treating cancer as a complex group of diseases that require consultation among surgeons, medical and radiation oncologists, diagnostic radiologists, pathologists and other cancer specialists. This multidisciplinary partnership results in improved patient care.

The CoC accreditation program provides the framework for Mission Cancer Program to improve its quality of patient care through various cancer-related programs that focus on the full spectrum of cancer care including:

- Prevention
- Early diagnosis
- Cancer staging
- Optimal treatment
- Rehabilitation
- Life-long follow up for recurrent disease
- End-of-life care

When patients receive care at a CoC facility, they also have access to information on:

- Clinical trials and new treatments
- Genetic counseling
- Psychosocial support
- A patient navigation process
- A survivorship care plan that documents the care each patient receives and seeks to improve cancer survivors’ quality of life

Like all CoC-accredited facilities, Mission Cancer Program maintains a cancer registry that contributes data to the National Cancer Data Base (NCDB), a joint program of the CoC and American Cancer Society (ACS). This nationwide oncology outcomes database is the largest clinical disease registry in the world. Data on all types of cancer are tracked and analyzed through the NCDB and used to explore trends in cancer care. CoC-accredited cancer centers, in turn, have access to information derived from this type of data analysis, which is used to create national, regional and state benchmark reports. These reports help CoC facilities with their quality improvement efforts.

ACS estimated more than 1.6 million cases of cancer will be diagnosed in 2014. There are currently more than 1,500 CoC-accredited cancer programs in the U.S. and Puerto Rico, representing 30 percent of all hospitals. CoC-accredited facilities diagnose and/or treat more than 70 percent of all newly diagnosed cancer patients.

When cancer patients choose to seek care locally at a CoC-accredited cancer center such as Mission Hospital, they are gaining access to comprehensive, state-of-the-art cancer care close to home.
Mission Hospital established a breast cancer program in 2002 to encourage multidisciplinary care for breast cancer by supporting both patients and providers. Breast cancer care requires a team approach, starting with screening, diagnosis, treatment and survivorship. The program was initially accredited by the National Accreditation Program for Breast Centers (NAPBC) in 2010 and reaccredited in 2013. We felt this program provided a framework for measuring and evaluating the quality of care in our community, and we exceeded the expectations of our surveyor by meeting all 27 NAPBC core standards.

Mission Breast Cancer Program seeks to move the patients to the center of care. We aspire to work together as a team to provide superior quality and accessible comprehensive cancer treatment.

Cancer Care of WNC (CCWNC) is a Quality Oncology Practice Initiative (QOPI) certified practice through the American Society of Clinical Oncology (ASCO). The goal of the QOPI program is to promote excellence in cancer care by helping practices create a culture of self-examination and improvement. The process employed for improving cancer care includes measurement, feedback and improvement tools for Medical Oncology practices. The practice participates bi-annually in a quality assessment under the QOPI standards. In 2014, CCWNC achieved 100% on the adjuvant quality score, which assesses care provided to patients receiving chemotherapy for nonmetastatic disease. The overall quality score for the practice was 98.8% and encompasses a broad assessment of quality metrics in oncology. In 2013, the practice developed an oral therapy surveillance procedure to monitor and track patients receiving oral chemotherapy agents. The procedure was fully implemented in 2014 in all of CCWNC’s regional facilities. Key quality metrics were -- overall compliance, patient understanding of the reason for the medication and safe handling of the medication by the patient. The scores for these metrics were 100%, 97.9% and 100% respectively.

CCWNC strives to meet the needs of the community by expediting appointments and seeing patients efficiently. In 2014, patient satisfaction rankings through Professional Research Consultants (PRC) placed the practice above the 95% in accommodating patient appointments in a timely manner.

In 2013, the Radiation Oncology department at Mission Hospital was awarded another Three-year term of accreditation in Radiation Oncology services as the result of a review by the American College of Radiology (ACR). This certification of accreditation is awarded only to facilities meeting ACR practice guidelines and technical standards after a peer-review evaluation by board certified physicians and medical physicists who are experts in the field. Personnel qualifications, adequacy of facility equipment, treatment-planning and treatment records, quality control procedures and quality assurance programs as well as patient-safety policies were assessed. The findings were reported to the ACR committee on accreditation, which subsequently provided the practice with a comprehensive report to be utilized for continuous practice improvement.

Mission Hospital Cancer Program was recognized by The Women’s Choice Award in 2014 as a Hospital of Choice. This award was based on Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey scores. Mission is one of the first hospitals recognized by this organization in the area of cancer care. Being named and recognized as a Hospital of Choice is an honorable achievement as it represents the strongest and most important consumer message in today’s healthcare marketplace.
CANCER LIAISON PHYSICIAN
( CLP) Report

2014 was a year of continued expansion of access to data and reports from the Commission on Cancer (CoC). This allowed even further evaluation of our program individually as well as in comparison to other accredited state and national facilities.

The CoC accreditation survey by Dr. Jonathan Britell confirmed our compliance with all Cancer Liaison Physician (CLP) associated standards. The exclusive time spent with Dr. Britell was extremely helpful and allowed discussion on multiple topics relating to the role of the CLP in our cancer center.

The Rapid Quality Reporting System (RQRS) was instituted, and our center received commendation for early enrollment in this new system. This program reports back to us monthly on individual patient compliance with CoC quality measures, thus allowing the Registrars to timely update and submit further data to the National Cancer Data Base (NCDB).

The Cancer Quality Improvement Program (CQIP) reports annual quality and outcomes data using the NCDB. Details on quality measure reports for breast, colon, rectum, non-small cell lung and gastric cancer allowed a comparison of our results with national data. An expansion of the program added six new quality measures and mortality for complex cancer operations, as well as other reports to help in the assessment of the quality of care provided to our patients.

The Cancer Program Practice Profile Report (CP3R) allowed an evaluation of our success with quality measures developed by the CoC. The rate of compliance with these measures is reported back by year. Our center exceeded all quality measures for which the CoC had an expected percent of compliance, which speaks highly of the quality provided at our institution.

The Cancer Registry Quality Control Plan requires a review of the accuracy of our data submitted to the NCDB. 250 records of various types of cancer were carefully reviewed. All discrepancies were reviewed with our Cancer Data Services Manager, who then reviewed them with the individual registrars and educated all the registrars when appropriate. The data was corrected and resubmitted to the NCDB.

Quarterly CLP reports to the Oncology Service Line Committee in 2014 utilized information from the CQIP, CP3R and the Registry Quality Control Plan. Discussion held in committee and review of our data has led to further investigations in 2015. The Commission on Cancer continually adds to existing quality measures and programs, ensuring that our patients receive the highest quality of cancer care.

Randall D. Johnson, MD
Cancer Liaison Physician
Surgeon
Mission Hospital Cancer Registry is designed to collect, manage, analyze and report complete information on cancer patients newly diagnosed and/or treated at Mission Hospital. Every single eligible case abstracted must meet the quality criteria established by the Facility Oncology Registry Data Standards (FORDS). Statistical information gathered from this data is used by area physicians, the American Cancer Society, the North Carolina Central Cancer Registry, the National Cancer Data Base and local hospitals to review trends and outcomes for cancer patients. Monitoring survival statistics and disease recurrence helps improve the standard of care for patients who have cancer, certain diseases of the blood and lymphatic systems and nonmalignant brain tumors, as well as providing data to prompt new research studies and clinical trials. Hospital administration and medical staff benefit from using cancer registry data for resource planning, physician recruitment and cancer program marketing, among other uses.

The Cancer Registry maintains a complete database of cancer cases diagnosed and/or treated at Mission Hospital since January 2000. Since that time, approximately 41,000 patients have presented to Mission Hospital for diagnosis or treatment of some type of malignancy, with an additional 3,445 cases accessioned in 2014. All living patients in the registry are required to be followed throughout their lifetime. Long-term follow up is essential to evaluate outcomes of cancer care. Accurate follow up data enable the program to compare outcomes with state, regional or national statistics. The data analysts (Registrars) regularly review inpatient visits, outpatient discharge and other external sources to obtain current information on our patients. Letters are also sent to the managing physicians and patients to obtain updated information.

Each year, complete and accurate data for all requested analytic cases are submitted to the National Cancer Data Base (NCDB). Data submitted to the NCDB are used to provide feedback to assess the quality of patient care. This feedback enables cancer programs to compare treatment and outcomes with state, regional and national patterns of care.

The NCDB is a nationwide oncology outcomes database used as a clinical surveillance mechanism to monitor changes and variation in patterns of cancer care and patient outcomes. The NCDB data are useful benchmarks for patient care and continuous quality improvement for cancer programs.
2000-2014
Annual Cancer Case Volume

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The statistics presented for Mission Hospital are based on the actual number of new cancer cases seen at the facility during 2014 with the exception of carcinoma in situ of the cervix, squamous cell and basal cell skin cancers, and intraepithelial neoplasia cases. Also excluded from the statistical analysis are cases that are diagnosed and/or treated at other facilities prior to referral to Mission Hospital at the time of progression of their disease. Comparison numbers for the United States and North Carolina are projected case numbers as provided by the American Cancer Society, North Carolina Centers for State Health Statistics and the Commission on Cancer National Cancer Data Base.

**Analytic Case**
A case that was diagnosed at Mission or cases in which all or part of the first course of therapy was given at Mission after the reference date.

**Non-Analytic Case**
A case involving a patient who was diagnosed and treated elsewhere or was diagnosed and treated prior to the reference date. These patients are excluded from the survival statistics.
## 2014 Cancer Incidences

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## 2014 Cancer Incidences

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MISSION CANCER CARE

2014 Cancer Cases by County

Other Locations:
- Catawba County - 7
- Cleveland County - 6
- Caldwell County - 17
- Watauga County - 3
- Wilkes County - 2
- Out of State - 102
Total Prospective Cases Presented

- 48% Bronchus & Lung
- 26% Genitourinary
- 16% Breast
- 10% Gastrointestinal
- 5% Head & Neck
- 5% Skin Melanoma
- 5% Lymphatic System
A finite number of didactic educational sessions are periodically held. These typically consist of lectures by nationally recognized speakers.

- **PERJETA (Pertuzumab) for the Neoadjuvant Treatment of HER2-Positive Early Breast Cancer**
  *Lowell Hart, MD, FACP, Florida Cancer Specialists*

- **Evidence-based Management of Metastatic Colorectal Cancer**
  *Richard Kim, MD, Associate Staff, Gastrointestinal Oncology, H. Lee Moffitt Cancer Center*

- **Personalized Cancer Treatment: Genetics, Genomics, and Beyond**
  *Lynn Dressler, PhD, Director of Personalized Medicine Program, Mission Hospital*

- **Advanced Hepatocellular Carcinoma**
  *Ghassan Abou-Alfa, MD, Memorial Sloan-Kettering Cancer Center*

Weekly telehealth lectures provided by faculty from the University of North Carolina School of Medicine are available to all Mission care providers.
The Mission Clinical Research Program at the SECU Cancer Center has grown to encompass several fields over the years including:

- Adult Oncology
- Breast & Women’s Cancer
- Radiation
- Pediatric Oncology

In bringing these fields together we have been able to unify and standardize our approach to cancer research. We have reaffirmed our commitment to national cooperative group trials and increased our participation with private industry-sponsored trials, which has helped bring cutting-edge treatment to the cancer patients of western North Carolina. We have averaged over 200 patients annually enrolled on oncology clinical trials.

Historically our community has participated with cooperative group trials through the Southeast Cancer Control Consortium (SCCC), which has been one of the highest accruing sites for national cooperative group oncology trials. They have given us access to numerous high-profile trials from such groups as:

- CALGB
- SWOG
- NRG
- GOG
- RTOG
- Other cancer control trials aimed at helping symptom management

We have been a top site in SCCC and a vital community as all national cooperative groups have moved toward NCORP funding. In 2014, SCCC transformed into Southeast Clinical Oncology Research Consortium (SCOR).

Private industry-sponsored trials have allowed us to expand the array of oncology trials offered through several different avenues. UNC trials offered at the SECU Cancer Center have given patients access to trials locally that they otherwise would have to travel across the state for. Translational Research in Oncology (TRIO) is a nationally recognized group of oncology practices offering promising translational treatment trials. In addition, we have worked directly with several large pharmaceutical companies. A trial offered through Merck studied the shingles vaccine for cancer patients. On a recent trial by Bristol-Myers Squibb with the much anticipated immune modulator, Nivolumab for lung cancer, we were able to enroll 6 patients in one month. We opened an international trial for Multiple Myeloma by Millennium and were the first site to enroll a patient in the U.S.
Our success in clinical trials has led to national recognition for our investigators. In 2014, three of our physicians were recognized in national publications for their contribution to research. Dr. Michael Messino and Dr. David Hetzel received citations in the NEJM, one of the most prestigious medical journals, for their participation in a trial studying adjuvant ovarian suppression in premenopausal breast cancer patients. Dr. Michael Messino was also recognized for his contribution for a feasibility study assessing geriatric oncology patients led by UNC researcher Dr. Hyman Muss. Dr. Christopher Chay was cited in a clinical trial looking at the pharmacokinetics of 5FU dosing in colorectal cancer patients.

The physicians and staff associated with the Mission Clinical Research program at the SECU Cancer Center look forward to continuing to serve our cancer patients in western North Carolina. We hope to continue and expand our services as we offer cutting-edge treatment across all types of cancers. We will continue to strive to offer clinical trials to meet the needs of our patients and give them access to the highest quality of care while staying closer to home.

Adjuvant exemestane with ovarian suppression in premenopausal breast cancer:

Feasibility of geriatric assessment in community oncology clinics:
Williams GR, Deal AM, Jolly TA, Alston SM, Gordon BB, Dixon SA, Olajide OA, Chris Taylor W, Messino MJ, Muss HB.

A community-based multicenter trial of pharmacokinetically guided 5-fluorouracil dosing for personalized colorectal cancer therapy:
Patel JN, O’Neil BH, Deal AM, Ibrahim JG, Sherrill GB, Olajide OA, Atluri PM, Inzerillo JJ, Chay CH, McLeod HL, Walko CM.

Christopher Chay, MD
Principal Investigator
Medical Oncologist
Pathology Services

The Mission Hospital pathology department touches virtually every cancer patient at Mission Hospital and the Mission Cancer Center. Pathologic evaluation and clinical laboratory testing are vital elements of diagnosis, treatment planning and monitoring for cancer patients including the most common as well as the most esoteric cancers. Attending physicians rely on the specialists in the pathology department to provide the expert diagnosis, second opinions and subspecialty consultation that are the basis for effective patient care.

The Mission Hospital pathology department is staffed by 12 board certified pathologists with subspecialty expertise and interests in gastrointestinal pathology, hematopathology, cytopathology, bone and soft tissue pathology, genitourinary pathology and gynecologic pathology. These pathologists provide surgical pathology, cytopathology and clinical pathology services for cancer patients as well as other medical and surgical patients at Mission Hospital, McDowell Hospital, Blue Ridge Hospital, Transylvania Regional Hospital and Angel Medical Center. The pathology staff also includes three pathology assistants, nine histotechnologists, three and a half pathology laboratory assistants and five clerical staff.

Services provided include routine tissue processing, staining and evaluation as well as special histochemical and immunohistochemical stains useful for tumor classification. Additional prognostic testing performed using immunohistochemical stains and in situ hybridization is useful in guiding chemotherapy or hormonal therapy. In 2014, the pathology department evaluated 19,423 surgical pathology specimens and 2,834 cytology specimens and performed 409 bone marrow evaluations.

Immunophenotyping by flow cytometry used as an aid in diagnosis and classification of lymphoid tumors is currently provided by Integrated Oncology, a reference lab based in New York City, which also provides cytogenetic testing and additional specialized and molecular testing useful in guiding therapy, in selecting targeted therapy and in evaluating the need for genetic counselling for patients with certain tumor types.

Michael Teaford, MD
Pathologist
At the Fullerton Genetics Center, we have established a Hereditary Cancer Screening Program to help identify individuals at higher risk of developing certain cancers because of their genetic makeup. Working with the local medical community, we hope to decrease the incidence of cancer and/or increase diagnosis in the early stages when cancer is most treatable.

We are the only genetic center located in western North Carolina and provide services to individuals from Murphy to Hickory as well as neighboring areas in Tennessee and South Carolina.

In the field of cancer, we understand those individuals that have been newly diagnosed may need results of genetic testing to help determine their plan of care, therefore we have established an appointment system that allows us to schedule those individuals on an urgent basis to help provide the best care possible.

The clinical team participates in weekly breast care conferences and is involved in the Mission High Risk Breast Care Program. We value our role in the Mission SECU Cancer Center and look forward to expanding that role as our understanding of the genetics of cancer continues to grow.

As genetic testing expands, it requires professionals with the background and experience to understand the available tests, costs and benefits to determine the best approach to genetic testing for each individual. The Fullerton Genetic Center staff is uniquely qualified to provide this service.
We are available to meet with patients at the request of referring physicians or at the patient’s request to review their personal and/or family history of cancer. We discuss the genetics of cancer and whether their history is suggestive of a hereditary cancer syndrome. If so, we review available testing options, and the benefits and limitations of genetic testing. If the patient elects to proceed with testing, we coordinate the process and provide thorough follow up on the results. Because genetic testing has implications for both the individual patient as well as their extended family, we spend time discussing the importance of sharing this information with their family. Genetic counselors ensure that patients have a good understanding of complicated information, provide detailed follow-up educational materials and are available for any future questions that may arise.

The clinical team includes: two medical geneticists and five certified master’s-level-trained genetic counselors, all of whom keep abreast of the most up to date information about the genetics of cancer by attending national conferences and having monthly journal clubs.

Cancer Counselling Referral Trend
With advances in genomic medicine, it is now standard of care in many advanced cancers to perform genetic/genomic testing of patient’s tumors to provide patients, health-care providers and health insurers with information that could minimize toxic side effects from cancer drug treatment and maximize cancer drug effectiveness. Testing for a patient’s response to drugs before they get the drug makes good clinical sense, meets best practices and FDA recommendations, and provides clinicians and patient key information to enhance patient drug management. It also holds the promise of optimizing patient experiences and quality of life, and decreasing cost of care. Replacing the trial and error approach to drug treatment and management of cancer and other chronic diseases with a scientifically, individually guided approach promises to improve the health of our population and save costs.

What is a Personalized Cancer Medicine Program?
A Personalized Medicine Program integrates all relevant information to enhance care for individuals and populations, including family history, lifestyle, demographic, genetic and genomic factors. Together with studies from clinical research, this information is utilized to individualize care and management of disease, especially for chronic conditions. Mission’s Personalized Cancer Program focuses on enhancing care for the cancer patient.

What are the goals and vision for this program?
Our overall goal is to enhance and optimize the quality, safety and effectiveness of the care of each individual cancer patient using evidence-based practices. Mission Health’s Personalized Medicine Program will initially focus on predicting an individual cancer patient’s response to anticancer drugs based on the genetic or molecular characteristics of the patient’s tumor. Whenever possible, we will also utilize genetic characteristics of the individual patient to minimize toxicity and maximize effectiveness of drug therapy.

How does personalized medicine work?
In cancer patients, tests are performed on the patient’s individual tumor to analyze mutations that are associated with tumor growth. We then try to match the tumor mutation(s) to drugs that target those mutations. By using “targeted therapy” we can utilize the most effective drug to target (and hopefully destroy) the tumor cells that carry the mutation, thereby not destroying normal cells in the process. This should lead to less toxicity and more effective management of the cancer. Image shows breast cancer tumor cells as seen through a microscope.
Why is this of value to patients and providers?
Using genetic and molecular information to guide treatment decisions provides a more science-based, rather than trial-and-error approach, to treating each individual cancer patient.

Providing these cutting-edge services at Mission gives patients and their families the opportunity to receive this care locally. Building on the existing expertise at Mission, the Personalized Medicine Program prepares our region for the practice of genomic medicine—utilizing the most important and evidence-based information to help manage our patients with cancer and other chronic diseases.

What services does the program provide?
A team of expert professionals, including Dr. Lynn Dressler, Director, and Dr. Gillian Bell, Clinical Pharmacist, provide education, training, access to testing, consultation and test interpretation for healthcare providers, patients and the community to enhance the care of each individual cancer patient. The Personalized Medicine Team interacts with and helps to integrate care across the different oncology services, including oncology, pathology, pharmacy, genetics, radiology and nursing.

What are the accomplishments for 2014?
The Personalized Medicine Program works with each disease group to meet and exceed national best practices, conducts quality improvement studies to ensure consistent and optimized care, brings in opportunities to translate cutting-edge care locally, including access to new clinical trials. Among the accomplishments in 2014 include enhancing care for lung, colorectal and breast cancer patients through tumor marker testing, providing educational conferences for physicians and community members and addressing safety concerns regarding pain management in our pediatric patients.

What is ongoing/planned for 2015?
Listed below is an example of two of several ongoing projects to better serve our community:

- Individualizing Cancer Treatment for Adults and Children with Advanced Cancers: Using panels of tumor markers instead of doing one marker at a time. This approach is faster, more comprehensive and, in many cases, leads to better outcomes. A comprehensive set of cancer genomics services are underway, including specific consultation and interpretation of results of testing and the opportunity to obtain the needed drug to match the patient’s tumor mutation.

- Personalized Medicine in Cancer Care of > 65 Year Olds: Cancer diagnosis increases with the age of the individual, and in western North Carolina, this segment of our population continues to grow. We want to be able to provide comprehensive personalized care for our cancer patients, many of whom have other chronic diseases at the time of their cancer diagnosis. This Personalized Medicine Program aims to address the patient’s cancer needs as well as their other chronic conditions, at the same time, treating the patient as a whole, applying evidence-based information, technology and expertise.

Lynn Dressler, DrPH
Director, Personalized Medicine
The Mission Cancer Center Pharmacy specialized in oncology and infusion therapy works collaboratively with the medical, nursing and ancillary staff to enhance medication safety, quality and patient experience through a continuum of care model. The pharmacy department is staffed with oncology-trained pharmacists (some of whom are board certified) and pharmacy technicians.

As active interdisciplinary participants, oncology pharmacists provided drug expertise in the development and approval of 150 evidenced-based oncology drug regimens that were built with best practice models for Computer Physician Order Entry. The approved regimens are targeted for specific cancer diagnosis and regionally adopted throughout Mission Health. To further enhance medication safety, oncology pharmacists review all prescribed medication orders for inpatient and outpatient infusions as well as prescriptions presented at the retail Cancer Center Pharmacy for adult and pediatric patients prior to dispensing and/or administration of medication.

Pharmacists contribute to medication decision making, safety and quality when rounding with the Interdisciplinary Cancer Center Team. To maintain future success, oncology pharmacists educate pharmacy students led by our oncology clinical faculty pharmacist. All medication compounding and preparation is customized to each patient’s individual need and delivered chair side to ensure that our patients receive their customized formula.

Our goal is to work on implementation of standardized processes across all Mission Health cancer centers.

Diane G Walter, PharmD
Director, Pharmacy
Mission Health recognizes the importance of Oncology Specialty Nurses within the Cancer Program. Mission Health Oncology Inpatient, SECU Adult, SECU Pediatric and Hope Women’s Cancer Center are proud to note we employ nurses who hold a certification in their field of expertise. Our infusion nurses have specialized training in chemotherapy and biotherapy, all required to complete the ONS Chemotherapy/Biotherapy Course. Our pediatric nurses have additional training from Mission’s Pediatric Certified Trainers on care of the oncology pediatric patient. Radiation oncology nurses also have additional training and competencies on care of the radiation oncology patients.

Our nurses are focused on a positive patient experience, which is reflected by our excellent customer satisfaction results. Nurses interact with all ancillary services such as dietary, social work, pharmacy, Integrative Health, navigators and survivorship to ensure we are meeting all our patients’ needs and providing optimal care. Our approach is personalized care because our patients are our mission.

Oncology nurses provide ongoing education to patients and their families to ensure patients are informed about their disease and their treatment plan.

Marika Loveless, RN, MHA, OCN
Executive Director, Mission Health Cancer Program
MISSION CANCER CENTER

Thoracic Oncology Program

Since the inception of the multidisciplinary Thoracic Oncology Clinic in 2012, our team of physician leaders in the field continues to provide comprehensive, evolving therapies for patients with lung cancer. The SECU Cancer Center continues to provide facilities that enable providers in the community to come together, offering a multidisciplinary approach to the diagnosis and treatment of lung cancer in the region.

We asked ourselves what matters most to cancer patients, and we listened to our patients. The number one response was access to a doctor who specializes in my particular cancer. The second most important feature for patients was that all of their care take place in one building. In response, we now have a multidisciplinary team comprised of regional experts in the treatment of lung cancer working for you at one location, the SECU Cancer Center. On average over the last two years, our team has been involved in the care of 336 new thoracic oncology patients annually, and the number continues to rise. Lung cancer continues to be the No. 1 cause of cancer deaths in North Carolina with 54.6 deaths per 100,000 population—more deaths than breast, colon and prostate cancer combined.

The complexity involved in developing an appropriate treatment plan for an individual patient in 2015 requires an extraordinary coordinated effort. Providers in our community, through focused devotion, and the support of Mission, are offering such service every day. I personally thank all of our participants, including physicians from pulmonary medicine, pathology, personalized medicine, radiology, medical oncology, radiation oncology and thoracic surgery for making this extra effort for our patients.

In addition, our physician team is supported by our nurse navigators, nutritionists and research coordinators. Nurse navigators provide “one point of contact” to help patients understand their care and provide guidance through this difficult life experience. Research coordinators also evaluate every patient for potential treatment trials, expanding available therapies if indicated. This is a unique care model in western North Carolina. Our team draws from a comprehensive experience, yet strives to maintain focus on individual patients.

Early diagnosis remains the key to cure in 2015. With the skill of our pulmonary medicine colleagues, using the most current imaging technologies and diagnostic tools, our goal is to diagnose lung cancer at the earliest stage possible. Stage at diagnosis directly impacts survival. Unfortunately, most patients with lung cancer continue to have advanced stage disease at the time of diagnosis. Our goal remains a coordinated effort in early diagnosis and minimal morbidity/mortality treatment to achieve the lowest rates of lung cancer mortality in the U.S.

While care plans are patient-centered, success in treatment at Mission benefits from high volumes and excellent outcomes. Whether single-, dual- or tri-modality, therapies involving thoracic surgery, medical oncology and/ or radiation oncology is necessary, each discipline performs at the highest level. In the following pages, we elucidate data regarding outcomes at Mission as compared to national standards. However, there’s more to success in dealing with lung cancer than just excellent treatment.
Medical providers play only part of the role in this fight against the leading cause of cancer mortality in the U.S. These efforts would not be possible without the support and contributions of our community leaders and the Mission’s Department of Philanthropy. Our survivorship program continues to be the foundation for our regional awareness. As numbers grow, efforts to educate our community expand. Please be part of this fight against lung cancer, as we continue to overestimate the level of awareness in the region. Your multidisciplinary thoracic oncology team will continue to make advancements, but we need all of your help to reach our goals. Together, we will lessen the impact of lung cancer in 2016.

As depicted below, the multidisciplinary Thoracic Oncology Clinic continues to serve increasing numbers of patients in the region; a testament to the need for more complex care for patients with lung cancer in 2015.

**Fig 1: The Role of the Mission Multidisciplinary Clinic**

![Graph showing the number of cases discussed at conference and the number of patients seen in the clinic from 2012 to 2014.](image-url)
While the majority of lung cancer patients served at SECU Cancer Center resides in Buncombe County, the incidence of lung cancer in the surrounding counties is essentially equal. Despite differences in population, the surrounding counties remain underserved by the multidisciplinary team. Efforts are being made to extend services to the region.

**Fig 2: The Role of the Mission Multidisciplinary Clinic and the Region**

The incidence of lung cancer diagnosed and treated at Mission is similar to national data. While uncommon in patients under 50 years of age, awareness is still important in patients with tobacco exposure. This graph emphasizes the importance of targeted lung cancer screening in the appropriate age groups.

**Fig 3: Lung Cancer Incidence by Age**
Early stage at the time of diagnosis remains the most important indicator of favorable outcomes. Unfortunately, most lung cancers are stage III or IV at the time of diagnosis, again emphasizing the need for further efforts in early diagnosis. At Mission, however, more patients are diagnosed with stage I and II disease, and fewer patients with stage IV disease as compared to the National Cancer Database (NCDB). Efforts at early diagnosis will continue to have a positive impact for the region.

Five-year survival rates with early stage lung cancer are higher at Mission as compared to the NCDB. However, survival for advanced stage disease remains poor as compared to early stage disease. Again efforts at early diagnosis and awareness will have the highest impact in survival rates with current therapies available.
Lung Cancer Screening and Diagnostics
Finding lung cancer early makes cure possible. However, finding lung cancer early enough has been difficult in practice due to the lack of symptoms associated with lung cancer and the often late presentations of the disease.

In 2011, a landmark trial changed how we detect lung cancer. A trial published in the New England Journal of Medicine demonstrated a 20 percent mortality benefit from the use of computer tomography (CT) imaging of the lung. The trial focused on the highest risk patients over the age of 55 – those that have smoked greater than 30 years and that are still smoking or recently stopped. In this population of patients, CT scanning was superior to standard chest X-ray in finding early lung cancers. The trial design was that of yearly CT scans of low dose from 55 to 74 years of age. The reduction in mortality was attributable to the discovery of cancers at an early stage allowing surgical resection to occur.

Mission SECU Cancer Center in conjunction with Asheville Radiology Associates have created a robust Lung Cancer Screening Program that is available to our patients. The program makes lung cancer screening easily accessible and couples it with the expert involvement of our multidisciplinary team at the SECU Cancer Center. Patients are enrolled in yearly CT scanning as part the program. After each CT, our community physicians and patients receive timely documentation of their findings and are assisted in interpretation and consultation if needed. Each abnormal CT scan is reviewed in our multidisciplinary conference and discussion with the referring physician ensures appropriate referral for workup and diagnosis of any abnormal findings.

Early detection allows diagnosis and treatment, but to do so you need the tools for diagnosis and detection. Fortunately, at Mission Health we are equipped with the tools necessary to diagnose small nodules of the lung. The availability of advanced diagnostic testing allows for more timely diagnosis and staging of lung cancer.

The current diagnostic technologies available include that of navigational bronchoscopy, endobronchial ultrasound (EBUS) and CT guided biopsy.
The screening of lung cancer by CT has allowed discovery of small nodules that may or may not be cancer. Appropriate biopsy of these nodules to confirm cancer allows for earlier curative therapy. Navigational bronchoscopy allows small nodules to be sampled with more accuracy and with less risk than conventional biopsy. The technology involves use of CT imaging coupled with advanced mapping software and real-time guidance using electromagnetic positioning during the procedure. This allows positioning of biopsy equipment to within millimeters of the nodule aiding in accurate tissue sampling. Furthermore, the technology allows placement of markers within the lung (fiducials) to easily identify the lesions at time of surgery or radiation therapy.

Endobronchial ultrasound is an extension of bronchoscopy, with the addition of a small ultrasound device at the end of the bronchoscope. This allows the bronchoscopist to “see” through the wall of the airway and sample small lymph nodes that exist in the middle of the chest. Accurate sampling of these lymph nodes allows staging of a lung cancer to occur. Staging of lung cancer is essential to direct therapy. Cancer that has spread to lymph nodes is more advanced and requires careful decisions regarding surgery, chemotherapy and radiation therapy.

CT guided biopsy of nodules or masses within the lung is an important diagnostic tool. Fortunately at Mission Health, we have advanced interventional radiologists allowing us to sample the lung safely and accurately.

Furthermore, education and counseling on smoking cessation have to be coupled with lung cancer screening to have the largest impact on the rate of lung cancer in the region. Mission Health and SECU Cancer Center are committed to reducing smoking by providing smoking cessation counseling to our patients as a necessary piece of the Lung Cancer Screening Program.

*Since January 2015 the Lung Cancer Screening Program enrolled more than 100 patients and helped to discover lung cancer. With the new tool of lung cancer screening, we will be able to provide a valuable service and move the curve from incurable to curable disease.*

Gregory Campbell, MD
Co-Director, Thoracic Oncology Clinic
Pulmonologist
Thoracic Surgery
For over three decades, the physicians at Asheville Heart have provided comprehensive surgical care for residents of western North Carolina and beyond. As the largest provider of surgical care for thoracic diseases in the region, we are committed to providing the highest quality care, while still maintaining focus on the individual and obtaining the best possible outcomes.

In 2015, Asheville Heart and Mission received the highest award in thoracic surgery from The Society of Thoracic Surgeons. Our 3-star rating in both thoracic and cardiac surgery was only shared by 4 percent of the 231 programs in the U.S. High volumes and quality outcomes generated the data to support this honor, an unsurpassed service we are proud to offer in western North Carolina.

Surgical resection remains the first line treatment in an attempt to cure an individual with lung cancer. Obtaining complete resection while maintaining a patient’s quality of life requires multiple surgical strategies. Minimally invasive approaches have to be achieved while still providing the best chance for cure.

Thoracic surgical services available at Mission:
- Mediastinoscopy and thoracoscopy for diagnosis and staging
- Minimally invasive lung resections including thoracoscopic lobectomy and pneumonectomy
- Combined laparoscopic/thoracoscopic esophagectomy
- Thoracoscopic thymectomy and treatment of mediastinal tumors
- Standard resections using limited muscle-sparing incisions
- Lung sparing bronchoplastic procedures to limit decrement in pulmonary function
- Treatment of advanced disease utilizing chest wall reconstruction
- Minimally invasive approaches for the treatment of the complications of malignancies (i.e., pleural and pericardial effusions)
- Use of multimodality therapy preoperatively to achieve resection

VATS vs Thoracotomy/Lobectomy/Wedge
- VATS to Open Wedge/Bx. 1%
- Thoracotomy Wedge 2%
- VATS Lobectomy 50%
- VATS Wedge/Biopsy 28%
- VATS to Open Lobectomy 13%
- Thoracotomy Lobectomy 6%
The treatment for lung cancer continues to evolve more rapidly than ever, emphasizing the need for a commitment to a disease-focused approach.

Lobectomy is often used as a benchmark to compare outcomes. From January 2012 to December 2014, Mission performed 1.9 times more lobectomies than the national average (Society of Thoracic Surgery).

In summary, Mission Hospital’s nationally recognized Thoracic Surgical Program has proven to deliver comprehensive care to our patients with great quality outcomes.

Oliver A.R. Binns, MD  
Co-Director, Thoracic Oncology Clinic  
Surgeon
Radiation Therapy in the Treatment of Lung Cancer
Radiation therapy in the treatment of lung cancer at Mission Hospital is part of a multidisciplinary approach. Radiation therapy for the treatment of lung cancer has been typically used in conjunction with chemotherapy in patients with locally advanced disease or in patients with stage IV disease for palliation. A large percentage of patients who are treated here still fit into these categories. Recent technological advances at Mission have allowed for more precise treatment in patients such as these. 4D CT simulation and treatment planning documents the tumor movement during respiration and allows for optimized treatment planning. Cone beam CT is utilized on the linear accelerator prior to treatment to ensure the most accurate reproduction of the treatment on a daily basis. These advances help to target the tumor as accurately as possible and minimize the radiation dose to the normal surrounding structures. This has the potential to both improve tumor control and treatment tolerance.

Since 2006, Mission has had an active multidisciplinary CyberKnife radiosurgery lung cancer program. Radiosurgery is a noninvasive alternative to surgery in patients with early stage lung cancer. CyberKnife radiosurgery uses hundreds of focused radiation beams to deliver high doses of radiation to ablate the targeted tumor. The CyberKnife system is unique in that it tracks a moving tumor in real-time using a linear accelerator on a robotic arm to deliver the prescribed radiation dose precisely to the tumor. This approach has provided an excellent treatment choice for many nonsurgical patients who had few other options. Since the start of the Thoracic Oncology Multidisciplinary Clinic in 2012, over 200 patients have been treated to the chest with CyberKnife radiosurgery. These treatments are performed jointly with the corresponding physicians in Pulmonary Medicine and Thoracic Surgery. A recent evaluation of our patients with T1 tumors treated with this approach between 2010 and 2013 revealed an approximately 95 percent local control.

Matthew Hull, MD
Radiation Oncologist

Personalized Medicine and Molecular Markers
Mission’s Personalized Medicine Program, directed by Dr. Lynn Dressler, works with the Thoracic Cancer Program to provide expertise and education to ensure consistency in meeting or exceeding best practices and national guidelines for tumor marker testing, conducting quality improvement studies, enhancing access to clinical trials with genomic components and translating cutting-edge, evidenced-based testing into routine patient care. The Personalized Medicine Team works with the Thoracic Cancer Team and participates in the Thoracic Multidisciplinary Tumor Conference to provide each patient with enhanced individualized care based on the molecular makeup of their tumor. In 2014, we instituted routine molecular marker testing of advanced non-small cell lung cancers, including single marker testing and panels of marker to help identify mutations promoting tumor growth and match those mutations to drugs or clinical trials -- 81 stage IV patients, NSCLC, nonsquamous histology were eligible for testing. In 2015, we plan to expand testing to include not only the tumor molecular characteristics, but also the inherited characteristics of the patient that may enhance the selection of anticancer therapy, as well as supportive care (e.g., for treating pain, nausea, peripheral neuropathy).
The Pediatric Hematology-Oncology Program at Mission Health (located at the Zeiss Children’s Cancer Center in the SECU Cancer Center) is the only program in western North Carolina dedicated to caring for children, adolescents and young adults with cancer and blood disorders. Approximately 30 - 40 newly diagnosed cancer patients are treated at this facility each year by a multidisciplinary team.

The Pediatric Hematology-Oncology Team consists of board certified pediatric hematologist oncologists, nurse practitioners, dedicated group of pediatric oncology trained nurses, social workers, child-life specialists, pediatric oncology pharmacist and experienced office staff. This program is able to treat all varieties of childhood cancer (including leukemia, lymphoma and solid tumor) and benign blood disorders (including sickle cell anemia, hemophilia and blood clots) enabling patients and their families to receive state-of-the-art care close to home. In addition, the program has close collaborative relationships with major research centers such as Duke University and the University of North Carolina at Chapel Hill.

Listed below are some of the awards and programs offered in the Pediatric Hematology-Oncology Program at Mission Health:

**Research**
The Pediatric Hematology-Oncology Program is also part of Mission Children’s Hospital, and patients who are admitted to the hospital are treated on a dedicated unit at Mission Hospital, where they are cared for by a nursing staff specially trained to care for children with cancer. Our program is a full-member of the Children’s Oncology Group (COG), the world’s largest organization dedicated to the treatment and cure of all forms of childhood cancer.

*Mission Hospital is the only COG member institution in western North Carolina. Over 90 percent of children in the U.S. diagnosed with cancer are treated at a COG member institution. The efforts of the Children’s Oncology Group have improved the survival of children with cancer to 80 percent. Because of our membership in COG, children in western North Carolina who are diagnosed with cancer can receive the most effective known treatments close to home, without having to leave family and friends to travel halfway across the country.*

There are currently over 65 clinical trials open at Mission Hospital, covering a broad range of childhood cancers. These clinical trials include development of new treatments for cancer, management of side effects of cancer treatments and investigations into the origins of childhood cancer. On average, Mission Hospital’s Pediatric Hematology-Oncology Program has over 30 clinical trial enrollments per year.
**Pediatric Specific Pharmacists**
In September 2014, the outpatient oncology pharmacy designated specific pharmacists to pediatric patients.

**Patient Satisfaction**
Mission Health caregivers make a difference every day in big and small ways. Some caregivers have gone above and beyond in the areas of service excellence, quality, teamwork and leadership. These caregivers have been recognized by their leaders, peers and national healthcare institutions. Annually, Profession Research Consultant (PRC), a national healthcare marketing firm recognizes hospitals, health systems, units and individual providers that rank in the top percentiles nationally for patient experience and overall quality of care. Mission Health was recognized in three categories: 4-Star, 5-Star and Overall Top Performer for excellence in patient experience and quality of care. 5-Star performers are healthcare facilities, providers, outpatient service lines and inpatient units that score in the top 10 percent (at or above the 90th percentile) for excellent scores. The Pediatric Hematology-Oncology Program has received this prestigious distinction in 2013 (for scores from 2012) and 2015 (for scores from 2014). These scores are determined by patients and families that are seen and/or treated in the pediatric hematology oncology clinic.

**Sickle Cell**
The Mission Pediatric Sickle Cell Program provides comprehensive care to children and young adults with sickle cell disease. We are a recognized treatment center by the state of North Carolina and serve approximately 35 patients in the western North Carolina region. Our clinic provides routine care as well as acute care and blood product transfusions, and is staffed with pediatric-trained nurses, child-life specialists, social workers, and nurse practitioners and physicians specifically trained to treat pediatric patients with sickle cell disease.

**Transition to Adult Care**
The purpose of the transition program from a pediatric setting to an adult setting is to provide quality of care along a continuum targeting disease-specific follow up, surveillance of potential late effects of treatment in a multidisciplinary setting and health promotion with a future goal to decrease overall healthcare expenditure and improve quality of life. Approximately 66 percent of survivors of pediatric cancer present with at least one chronic health problem with 25-40 percent being a severe or life threatening condition. The overall survival rate of pediatric cancer is 80 percent, and there is a growing amount of evidence-based literature to support the need for long-term follow up for these survivors. It is recommended that these survivors maintain regular contact with a healthcare provider who understands the potential long-term complications from treatment and how these complications can arise throughout the life span. Successful transition is outlined well by a position statement by Society of Adolescent Medicine, which includes the following standards:

- The healthcare setting must be chronologically developmentally appropriate
- Common concerns of young adulthood must be addressed in addition to specialty care needs
- Transition should promote autonomy, personal responsibility and self-reliance in young adults
- Transition programs must be flexible to meet the needs of young adults
- A designated professional must take responsibility for the transition process in conjunction with the young adult and their family
**Family Advisory Council**

“To effectively collaborate with families and integrate their ideas as a means to provide the highest quality family-centered patient care.”

The Mission Pediatric Hematology-Oncology Family Advisory Council is a group of approximately 14 patients and their family members that are willing to share their experiences and provide suggestions and ideas to help improve our program. The purpose of our family advisory council is to promote family-centered care by integrating ideas directly from our patient families into our practice. We have multidisciplinary staff involvement to try to represent all of the different aspects of our program. We hold monthly meetings and are currently discussing plans for next September (Childhood Cancer and Sickle Cell Disease Awareness Month), plans for the pediatric hematology oncology teen room and Mission Health orientation requirements. Once our council members complete the necessary Mission Health systemwide requirements, they will also provide support and guidance to newly diagnosed patients within our program.

**Arts For Life**

“Inspiring Courage Through Creativity”

Arts For Life is a 501c(3) nonprofit organization dedicated to supporting people facing serious illnesses and disabilities. By providing educational art programs, we enrich patients’ lives, nurture their minds and spirits, and encourage positive healthcare experiences for children and their families. In 2014, Arts For Life at Mission Health provided 4,091 direct service hours, which is the equivalent of 6,967 individual art, music and writing lessons. We served 1,998 patients, siblings and family members.

**Friends of Santa Claus**

Friends of Santa Claus is a nonprofit 501c(3) organization formed in western North Carolina in 1993 for the sole purpose of serving children with cancer and their families. We provide a summer camp called “Camp Merry Times” each year for kids with cancer and their siblings. Friends of Santa Claus also organize fall and spring fun days for families, and a big Christmas party each December. Friends of Santa Claus is an organization of compassionate and energetic people who feel called to stand by your side and provide support when and where we can.

**Physician Champions**

Krystal Bottom, MD
Pediatric Hematology & Oncology

Douglas Scothorn, MD
Pediatric Hematology & Oncology

Lindsey Gouker, MD
Pediatric Hematology & Oncology
The Nicotine Dependence Program

"According to CDC - Smoking is the leading cause of preventable death in the United States, and kills nearly half a million Americans a year. More than 16 million Americans have smoking-related diseases, which cost $132 billion a year in direct healthcare expenses."

"According to the Department of Health and Human Services - There is no clinical treatment available today that can reduce illness, prevent death and increase quality of life more than effective tobacco treatment interventions."

Since the introduction of the Nicotine Dependence Program at Mission Health in 1995, the program has served thousands of people and helped many achieve greater success in quitting tobacco. Programs are developed to suite each individual participant. All staff members are certified Nicotine Dependence Specialists and continue to follow the latest studies, news and evidenced-based cessation methods, including education in a variety of other medical disciplines that impact our field of work. As ex-tobacco users, we have a personal understanding of what it means to quit tobacco and the healing process. Our program is open to everyone.

Many types of cancers and diseases, as well as psychological disorders, are caused or worsened by tobacco and non-FDA-approved nicotine use. Our team of Nicotine Dependence Specialists provides assistance to people who have been diagnosed with a variety of diseases caused by tobacco use or worsened by tobacco use and can help them understand exactly how their health has been affected. Tobacco use interferes with treatments, the effectiveness of medications and the body’s natural healing processes. We work to support area doctors in their efforts to improve or maintain the health of their patients. We use evidence-based practices and educate patients in a language they can understand.

Almost everyone who chronically or predictably uses tobacco and non-FDA-approved nicotine products has a physical addiction. Over time, as tobacco products are used, strong behavioral, psychological and social patterns are developed. This is a lot to overcome, and withdrawal symptoms are not pleasant. Cravings can overpower people who normally have an enormous sense of self-discipline and willpower. Many people cannot bear to display or experience irritability and the mood changes that occur during cessation. With the proper training, however, everyone can endure this period of discomfort and successfully free themselves of actively indulging this addiction.
We use a variety of techniques such as Motivational Interviewing to help patients assess their own willingness for change. Intrinsic Coaching methods help patients discover their deepest and most positive desires for themselves, leading to their next best step for achieving their desires. We employ techniques such as mindfulness training, breathing exercises, progressive relaxation and meditation, and give them guidance for exploring a wide range of healing techniques. Quitting is very difficult but the methods do not have to be unpleasant.

Relapse prevention planning is an evolving process as the patient moves through the process of cessation. We work with patients over a period of time to ensure they can maintain their tobacco-free and nicotine-free life. We have all heard the cliché that the only thing in life that we can count on is change. We want to make sure that each patient has the skill to face those changes and challenges without relapsing back to tobacco use. Slips and relapses are a major part of this disease, but we can be proactive in preventing them. Patients diagnosed with cancer, including cancers not caused by tobacco, have a greater chance of surviving cancer by quitting tobacco and non-FDA-approved nicotine. They will be more successful with their treatments and recoveries. Almost every patient will have a better quality of life for the rest of their lives, and many will live longer than expected.

**Quitting tobacco lowers the risk of the cancer returning and of other cancers forming. Coping with an illness as serious as cancer is tough enough without adding tobacco cessation to the regimen, but cancer patients are among the most successful at quitting tobacco. Stress-reduction techniques can be used for a variety of reasons, such as coping with cancer and quitting tobacco.**

Now is a good time to reach out and try a professional program to help end the cycle of addiction to tobacco. We work with insured and uninsured patients alike. No one is ever too sick, or too old, or has used tobacco for too long. Everyone can quit and enjoy better health and well-being. For more information or to join the program, please call (828) 213-5527.

**Donna Borowski, LPN, TAS, BA**  
Team Leader, Certified Intrinsic Coach

**Ladies Night Out Program**  
Ladies Night Out activities this year included free breast examination and mammography to promote education, screening and early detection of breast cancer. A total of 538 women were provided services. Of the 538 women, three were diagnosed with breast cancer. Patients were referred to local specialists for further diagnostic and treatment work-up. Ladies Night Out is organized by Mission Foundation, Mission Cancer Services, Asheville Radiology (Asheville Imaging) Breast Center, Buncombe County Health Center’s Breast and Cervical Cancer (BCCCP), the Asheville Buncombe Institute of Parity Achievement and the YWCA. This program provides free mammograms and health screenings for Buncombe County women who are uninsured or underinsured between the ages of 40 and 64. During the event, women are offered free breast exams, mammograms, blood pressure and cholesterol screenings, health education, interpreter service and transportation. Follow-up for the participants who have abnormal screening results include referral, tracking and follow-up per regulations of the North Carolina BCCCP. This consists of case management for reporting of screening, referral, follow-up and treatment services. Participants are informed of normal and abnormal results (i.e., additional films, ultrasound, biopsy or other diagnostic work-up). For participants diagnosed with breast cancer, referrals with patient choice are made to local specialists (i.e., initial surgical consult and oncology follow-up treatment). All screening and diagnostic work-up are financially covered by Mission Hospital. For patients diagnosed with breast cancer, treatment is covered through BCCCP Medicaid.
**Camp Bluebird**

There are times in our lives when we don’t have a lot of hope and we are very unsure about our future. That is certainly the way most people feel after they have been diagnosed with cancer. But did you know that there is a very special program that is sponsored by the Mission Healthcare Foundation, the AT&T Telecom Pioneers and the American Cancer Society that specializes in restoring hope to cancer patients and improving their quality of life? It is called Camp Bluebird, and it has made a difference in the lives of many cancer survivors in western North Carolina. Camp Bluebird is a three-day adult retreat held twice a year that brings cancer patients and survivors together in a unique situation full of emotional support, encouragement, understanding, laughter and tears—not to mention singing and dancing too! All the shared emotions and experiences help cancer patients learn to enjoy life again. Bonclarken Assembly in Flat Rock, North Carolina, has been the comfortable, serene setting for Camp Bluebird since the program’s inception in 1993. Anyone over the age of 18 with a cancer diagnosis is invited to attend. There are generally 50 campers per session, half new to Bluebird and half returning. Campers benefit from support, medical education, nutritional advice, physical therapy, art therapy classes, spirituality workshops, Reiki and massage therapy sessions, live entertainment, recreational activities and much more. Counselors include healthcare professionals from Mission Health, area physicians’ offices and health agencies, as well as volunteers from the AT&T Telecom Pioneers. A dedicated nurse and chaplain are on duty the entire time, and each counselor is the “buddy” of just two campers to ensure plenty of personal attention.

**Shine a Light on Lung Cancer**

Founded by a lung cancer survivor and caregiver, Shine a Light on Lung Cancer is the largest coordinated awareness event for lung cancer in the United States, providing hope, inspiration and support for all of those touched by lung cancer. Mission Cancer Program is proud to be one of the 300 hosts of this year’s event across the nation, as part of the Lung Cancer Awareness Month in November. There were over 40 participants -- patients, family members and staff. Our expert speakers touched on the benefits of CT screening, nicotine cessation and surgery for early stage lung cancer. A lung cancer survivor gave a heartfelt testimony of her personal journey with lung cancer. The lighting of the flashlights to honor survivors and loved ones was the highlight of the evening - symbolizing hope and reducing the stigma associated with lung cancer.
Mission Cancer Program strives to offer comprehensive, coordinated and compassionate care to patients and families facing cancer. We offer a full spectrum of support services that include but not limited to:

**Navigation Services**
In the attempt to overcome certain healthcare barriers and facilitate timely access to quality medical and psychosocial care, the nurse navigators at the SECU Cancer Center offer personalized support and advocacy through each phase of diagnosis, treatment and survivorship while working closely with the multidisciplinary team. Other services provided by the nurse navigators include:
- Assistance with coordination of care
- Customized education about individual cancer diagnosis and treatment options
- Assistance in making informed decisions about treatment and care
- Navigation of resources offered by Mission and throughout the community
- Emotional support
- Coordination of weekly multidisciplinary conference with the patient’s medical care team

**Survivorship Program**
From the day individuals are diagnosed with cancer they are considered cancer survivors. Not everyone likes that label but it is important that everyone is given the tools to take charge of their health. Cancer Care of WNC is committed to supporting individuals who have cancer as they move forward in this journey. An important part of the support that is offered is delivered in the Cancer Survivor Clinic.

When individuals with cancer and their family are preparing for treatment they will be seen by a survivorship nurse practitioner in Asheville, Sylva, Franklin or Spruce Pine to help prepare them on what to expect and how to take better care of themselves while on treatment. This is an individualized assessment and covers a wide range of topics from practical problems, coping, physical symptom management and understanding their treatment plan.

Just as important as starting treatment is completion of treatment. Individuals meet with a nurse practitioner to discuss side effect management, late effects of treatment, health promotion and what to expect going forward. Fear of recurrence, returning to work, when and what kind of test will be monitored are all areas that are addressed. Patients are given a summary of their treatment and a copy is also sent to their primary care physician.
The survivor clinic offers annual follow-up for survivors who no longer need to see their primary oncologist but have high risk of late effects or disease recurrence. This includes pediatric oncology patients who are now adults. When you know you are getting the appropriate surveillance you can have greater peace of mind.

In 2014 and 2015, the Cancer Survivor Clinic nurse practitioners were involved in multiple areas of outreach such as:

- Survivorship guest speakers at the Casting for Hope Retreat
- Survivorship guest speakers at the NC Comprehensive Cancer Program Survivorship Summit
- Caregiving guest speakers at the Land of Sky Post-Polio Resource/Support Group
- ONS Clinical Project Grant – development of survivor services in rural areas
- APOS Distress Screening Grant – training and planning to implement distress screening in rural areas
- UNC Lineberger and Duke Endowment Grant – implementing the Livestrong Cancer Transition Course in Sylva and Spruce Pine
- Making contacts and developing list of resources for our rural areas
- Serving on survivorship steering groups and joining WNC Cancer Consortium

Patient Testimonials:

“Hi Penny - Thanks so much for this information. I feel like I received such a wealth of information from you on Friday. You answered every question we proposed, and I can't tell you how pleased my husband and I are at this time with every aspect of our treatment at your facility.” -- Charlotte

“Dear Debbie - Thank you so much for your listening ear and gentle guidance yesterday. I woke up today feeling much more at peace. Each day is only as Good as you allow it to be!!! I am grateful I have days left to remember and realize this.” -- Morgan
Psychosocial Services:
Clinical social workers at SECU Cancer Center and Hope Women’s Cancer Center collaborate to develop a uniform program to respond to the psychosocial needs of cancer patients and their families throughout Mission Health. Both partner with American Cancer Society and the community to broaden our offerings of support groups, patient matches, exercise classes, nutritional services and social work case management. A licensed clinical social worker joined the staff of Mission SECU Cancer Center in 2014. The focus of her role has been to guide the development of policy to address psychosocial needs of cancer patients and to shepherd the implementation of the Distress Screening Self-Assessment (PDSA) tool.

Nutrition Services:
Hippocrates once stated “Let thy food be thy medicine and thy medicine be thy food.” Nowhere is this statement more important than for a patient receiving treatment or survivorship for cancer. Now that the oncology nutrition program at Mission SECU Cancer Center has been operational for over 2½ years, it is time for a more detailed review. The intention of this summary is to provide a review of the oncology nutrition services as well as activities for 2014. Also, it will be worth providing a comparison of the oncology nutrition services and activities from 2013. This report will cover nutrition screening, nutrition consultation for evaluation and management of those patients in active treatment or survivorship, nutrition education as well as multidisciplinary and community benefit.

In terms of nutrition screening, Mission SECU Cancer Center utilizes a nutrition screening tool known as the malnutrition screening tool (MST) within the multidisciplinary lung and radiation therapy areas. This evidenced-based nutrition screening tool is specific and sensitive to the oncology population for identifying nutrition risk. The tool consists of three questions regarding a patient’s appetite, weight status and quantifying a patient’s weight loss. A score of 2 or greater would indicate a patient’s risk for nutrition risk prior to starting or within treatment. The intention of this nutrition screening is to identify those patients in need of a nutrition consult with an oncology specific dietitian/nutritionist. In 2013, 126 patients were identified at nutrition risk from the following areas outpatient infusion, pediatrics and radiation therapy. In 2014, the MST continues to be utilized within the multidisciplinary lung and radiation therapy areas only. Several opportunities exist for 2015. First, it would be of great benefit to utilize the MST throughout the entire cancer service line to be able to determine the population base level of nutrition risk. Furthermore, with the full implementation of the nutrition screening tool would carry over to its affiliates and ambulatory clinics. The next added benefit would be to determine the level of nutrition risk based on cancer specific site.
In 2013, the nutrition oncology program at Mission SECU Cancer Center started capturing the number of nutrition consults performed across 20 different cancer specific sites. 259 initial nutrition consults for evaluation and treatment were performed or 10 percent of the analytic cases of 2013. Lung, breast, head and neck, hematopoietic and colorectal cancers made up 75 percent of the cases while 46 percent of the volume received dual treatment of chemotherapy and radiation therapy. In 2014, 257 initial nutrition consults for evaluation and treatment were performed or 9.5 percent of the analytic population. Breast, head and neck, lung, colorectal and hematopoietic cancers made up greater than 66 percent of the cases while 53 percent of the volume received dual treatment of chemotherapy and radiation therapy. Again, several opportunities exist for 2015. Implementing the Academy of Nutrition and Dietetics Oncology Nutrition Dietetic Practice Group evidenced-based nutrition tool kit is a high priority to evaluate outcome measures across the 20 different cancer specific sites. Another priority would be to determine the rate of malnutrition based on standardized malnutrition criteria across the 20 different cancer specific sites.

Also in 2013, the nutrition oncology program began to distinguish those patients’ transitioning from treatment into survivorship. Again, the same 20 different cancer specific sites were utilized to evaluate the data. 48 initial nutrition consults for survivorship and management were performed in 2013. Breast, head and neck, hematopoietic, colorectal and other cancers made up 75% of the cases for 2013. 64 initial nutrition consults for survivorship and management were performed in 2014. Breast, ovarian, colorectal and endometrial cancers made up greater than 66% of the cases for 2014. This was a 25% increase in volume for survivorship with regards to nutrition consultation from 2013 to 2014. Several opportunities exist for 2015. Implementing the Academy of Nutrition and Dietetics Oncology Nutrition Dietetic Practice Group survivorship nutrition care plans throughout the system and its affiliates is a top priority. Also, correcting and addressing the identified malnutrition in those patients moving from treatment into survivorship is another top priority.
In 2013, the Academy of Nutrition and Dietetic Oncology Nutrition Dietetic Practice Group released its standardized nutrition education material regarding the intervention of nutrition impact symptoms. In 2014, the nutrition education material was distributed throughout the Mission SECU Cancer Center to the breast and lung navigators, outpatient infusion, radiation therapy and research areas. In 2015, the nutrition impact symptom nutrition education material would be distributed to Mission’s affiliates and updated on the hospitals’ website for patients, families and staff to access.

Finally in 2014, the oncology nutrition program at Mission SECU Cancer Center began capturing the number of multidisciplinary and community benefit hours provided per calendar year. The multidisciplinary hours for the calendar year totaled 79 hours, which included breast and cancer conference attendance, nutrition screening for the multidisciplinary lung clinic and attendance at oncology service line committee meetings. The community benefit hours for the calendar year totaled 49 hours. Below is a list of the community activities for the oncology nutrition program for 2014:

- Buncombe County YMCA LiveSTRONG Program
- Hope Women’s Cancer Center Ovarian Cancer Support Group
- Mission Hospital SECU Cancer Center Breast Cancer Support Group
- Mission Hospital SECU Cancer Center Camp Bluebird
- Mission Hospital SECU Cancer Center Eating for Treatment Support Group
- Mission Hospital SECU Cancer Center Eating for Survivorship Support Group
- Mission Hospital SECU Cancer Center Leukemia and Lymphoma Support Group
- University of North Carolina at Asheville Leadership Asheville Program
- Western North Carolina Prostate Support Group

Jeffrey Whitridge, RDN, CSO, LDN
Clinical Nutritionist Education
Integrative Health Services
The Integrative Healthcare Department at Mission SECU Cancer Care offers evidence-based, holistic nursing interventions provided by trained board certified holistic nurses who are also board certified in healing touch. The department sees about 270-300 patients per month. The therapies available include: breathing techniques, healing touch, guided imagery, massage therapy and aromatherapy.

- Breathing techniques include a variety of breathing patterns that can help improve physical, mental and spiritual well-being.
- Healing touch is an energy therapy based on current nursing theory used to promote relaxation, healing and the balancing of mind, body and spirit. The practitioner uses a light therapeutic touch focusing on areas of discomfort, tension and illness or injury.
- Guided imagery is a range of techniques that involve using the imagination to create a healing environment in the body. It can improve relaxation and coping with medical procedures and treatments, help alleviate pain and may decrease the need for additional medications.
- Massage therapy is the use of hands directly on the body and can relieve muscle tension, increase circulation and promote relaxation. Studies show massage can decrease pain and anxiety, and elevate mood.
- Aromatherapy is the use of essential oils and can encourage relaxation and healing. Aromatherapy is often helpful in reducing anxiety, stress and nausea. It has also been shown to improve mood, increase calmness and decrease insomnia. The modalities that are offered have been shown to help decrease pain, nausea and anxiety, and increase relaxation-related to treatment. The nurses see the patients that come in for outpatient treatment in Radiation Therapy and Infusion Therapy.

Patient Testimonials:
“I feel better all over...thank you so much”
“That was wonderful...I feel very peaceful”
“Wonderful! I so look forward to seeing you when I come for my chemo”
“Pure Heaven”
“This is the best part of chemo”
“It makes me relax”
“No more nausea and headache!”
“That was so relaxing...thank you. This will remind me to do some yoga and get more massages.”
“I’m going to miss you so much. You have helped me through this radiation treatment”
“Significant decrease in my burning pain following hormonal therapy. I’m so surprised.”
“Thank you for being a major part of my journey”
Leukemia, Lymphoma and Multiple Myeloma Support Group
Mission Health has offered a monthly Leukemia, Lymphoma and Multiple Myeloma Patient and Family Support Group since 2004. This support group is hosted by Leslie Verner, Clinical Research Nurse and Community Outreach Coordinator. It meets on the 2nd Monday of every month from 4 to 5:30 p.m. here at the Mission SECU Cancer Center. The purpose of the group is to provide education and support to patients with blood cancers and their caregivers. We discuss a different topic each month and host a variety of speakers throughout the year who are extremely knowledgeable in their field. New participants are always welcomed by the group.

In Good Company Support Group
In Good Company Support Group is sponsored by the SECU Cancer Center and is facilitated by the breast nurse navigators. It is a support group for women with cancer (the majority of the women have breast cancer). It meets the 3rd Thursday of each month at the SECU Cancer Center from 4:30 to 5:30 p.m. The function of the group is to provide education and support. Speakers present each month, and topics include nutrition, treatment such as chemotherapy and hormonal blockade, sexuality, survivorship, lymphedema treatment, financial resources, integrative health care, managing stress and open discussions. It is free, and healthy snacks are provided for the women.

American Cancer Society Partnership with Mission Hospital
Mission Hospital is one of only two locations in North Carolina that has an American Cancer Society Patient Resource Navigator on-site. The Patient Resource Navigator is truly making a difference in the quality and outcomes of the treatment experience. Since the inception of this program in March 2007, we have served 2,717 patients. The navigation program at Mission is clearly reaching the right population, with over 21 percent falling into the uninsured/Medicaid category. This program provides several resources and educational information tailored to meet the patient or caregiver’s needs, such as transportation, lodging, wigs, financial assistance and insurance, prescription assistance and other community resources.
On Integrative Healthcare...

“I just wanted to take this opportunity to thank and APPLAUD the Mission Hospital Foundation Program for considering to grow your Integrative Healthcare Program... During radiation treatment, I have enjoyed and benefited from healing touch (massage and Reiki). There are many stresses, both on your mind and your body, during the long treatment for cancer. Your Integrative Health program is instrumental in helping our minds and bodies to fight the fight and to help heal itself. I know that it has helped me, and for that I am extremely grateful!!! I hope that you will continue to give these folks the tools that they need to help their patients. I feel quite fortunate to live in this area and to have such great care facilities at my back door. I am fully aware that other places do not offer their cancer patients Integrated Health or other services that are offered at SECU during their treatments. For this reason, I hope that you continue to strive to make this program and others available to other cancer patients. Thank you for supporting such a beneficial program in cancer care! It is MUCH APPRECIATED!!!
Sincerely,
Kacia Stuart (Breast cancer SURVIVOR!!!!)"

“My name is Inez Whiteside, and I have recently been receiving radiation at SECU. I have had the extreme pleasure of receiving integrative services (massages, Healing Touch, and Aromatherapy) by Ms. Linda Silwedel, RN. She and this service have been PRICELESS!! As you are aware, thousands of individuals have been diagnosed with cancer; I never thought that I would be one of those statistics. Cancer is a devastating and life altering experience for the patient and families/caregivers. The problem with having surgery, chemotherapy, and radiation has been a very traumatic experience for me. I have developed neuropathy as a result of having chemotherapy, which compounded the stress of having cancer. Through all of my medical challenges, Ms. Silwedel and her Integrative Therapy techniques have been the most rewarding and the most positive experience during my devastating health period. Her knowledge, personality, professionalism, and active listening skills demonstrates her effectiveness with the patients. She and the Integrative Healthcare program provide a level of healing that every patient should have the opportunity to experience. The Integrative Healthcare program reduces stress in the body and in the mind, and is a program which I believe is vitally important for cancer patients. Unfortunately, many patients are on fixed incomes and without the Integrative Healthcare program, these patients would not be able to afford these services on a private pay basis. Without the Integrative Healthcare program, the cancer patients would suffer a huge loss in their recovery process. Again, I must say that the Integrative Healthcare program has been the most positive outlook on my life since I was diagnosed with cancer in July 2014”
On Patient Navigation…

“Sally helped me to apply for variety of financial aid to help with my exorbitant medical bills and prescription medications. She also put me in touch with other free services, including support groups, nutritionist, and yoga for cancer patients. When I lost all my hair from chemo, Sally made quick work getting a dark brown wig to me for free. She is so accommodating and compassionate and always makes me feel welcome when I call or come to her office as if I’m a friend. She has been a rare bright spot during this ordeal of cancer.”
– Karen Chavez, cancer patient at Mission Hospital

“I was feeling pretty helpless. Someone at the Cancer Center told me that Sally Kodaras could help me. She took me under her wing and helped me with everything. I could not have managed without her. She helped me get all my bills straightened out. I did not know where to start. She made all my phone calls, and got me the help I needed. I was so relieved after my first visit. She kept me encouraged so much. I appreciate her so much.” - Dianne King, cancer patient at Mission Hospital

“I was so overwhelmed because I thought I was just having a hysterectomy, but they found cancer. Sally helped me with my meds when I had no funds, and she helped me get some much needed finances, and when I lost my hair, she gave me a wig and a scarf, social security. She helped me get my Medicaid. She made sure I had everything I needed and assured me that if I needed anything, she was just a phone call away. She is my guardian angel.” - Belinda Allen, cancer patient at Mission Hospital

“Dear Denise,
I want to thank you for all you have done to help me on my journey with breast cancer. All of these would have been so much harder without your help. You were informative, re-assuring and encouraging just when I needed it most. Were fortunate to have you and the Breast Program in our community. Blessings to you always.” -JM

“Dear Denise,
In early December following surgery, you appeared with your smile, boldness, passion. Please know and never under-estimate what your presence, gifts and thoughtfulness means to people whose lives are turned upside down. My remembrance of you will always be one of thanksgiving, admiration and joy. Thanks also for helping me with bras and prosthesis.” -CB
COMPREHENSIVE CARE THROUGH A
Multidisciplinary Team of Experts

Patient

Nurse Navigators
Physician Experts
Nurses
Pharmacists
Nutritionist
Genetic Counseling & Personalized Medicine
Research Nurses
Cancer Data Analysts
Physical & Speech Therapists
Radiation Therapists
Integrative Health Services
Survivorship
Financial Counselor
Social Workers
Other Support Staff