

2016 CANCER REPORT TO THE COMMUNITY

It Takes a Team



IN PARTNERSHIP WITH







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It Takes a Team...

A team is a group of individuals who work together to achieve a similar goal. Since 1988, the Boulder Community Health (BCH) Cancer Program has brought to the Boulder area a multidisciplinary team of cancer professionals, all working together towards one goal: ensuring quality, patient-centered care from diagnosis through treatment and beyond. Since 2007, BCH's partnership with Boulder Rocky Mountain Cancer Centers has increased our team's members and resources.

The BCH cancer team combines a compassionate approach to care with remarkable treatment, technology, and support services. Our team addresses the needs of the whole patient, taking in to consideration not only the patient's need for chemotherapy and radiation therapy, but also psychosocial distress screening, cancer navigation, cancer education, genetic counseling, physical therapy, palliative and pain treatment, cancer conferences, and

clinical trials. In addition, our team includes providers of complementary therapies, such as acupuncture, massage therapy, and Health Touch/Reiki. The survivorship phase is just as important as other phases of a cancer patient's journey. After a patient has completed treatment, any additional needs that may exist are assessed, and follow-up care is addressed to improve quality of life beyond treatment.

Our cancer program is accredited with the American College of Surgeons' (ACoS) National Accreditation Program for Breast Centers (NAPBC) and Commission on Cancer (CoC). Our last CoC re-accreditation was in 2014, for which we received commendation, the "gold standard" in cancer program excellence, which means we exceeded the standards for 100% of the areas in which the award qualifies. Our next survey for re-accreditation will take place in March 2017, and we expect to maintain our status of providing above-average cancer services to the Boulder community.



Cancer Committee

The Cancer Committee is an integral part of the BCH Cancer Program. The cancer committee is responsible for goal setting, planning, initiating, implementing, evaluating, and improving all cancer-related activities in the BCH Cancer Program. The care of patients with cancer requires a multidisciplinary approach and encompasses numerous physician and non-physician professionals. Therefore, the membership of the BCH cancer committee is multidisciplinary, representing physicians from diagnostic and treatment specialties and non-physicians from administrative and supportive services. In addition, members within the committee are designated as coordinators who are responsible for specific areas of cancer program activity.

2015 Cancer Committee Members:

Physician members:

Medical Oncologists: Mark Sitarik, MD (Program Chair) and David Andorsky, MD

Cancer Liaison Physicians: Dr. Lori Jensen, MD (Medical Oncologist) and Jenny Fox, MD (Medical Oncologist)

Radiation Oncologist: Andrew Antell, MD

Diagnostic Radiologists: Paul King, MD and

David Oppenheimer, MD

Pathologists: William Howland, MD and

Rob Forsythe, MD

General Surgeons: Sandra Taylor, MD (Quality Improvement Coordinator) and Susan Hagen, MD



Non-physician members:

Barbara Hamlington, MS, CGC, Genetic Counselor

Beth Reasoner, Chief Quality Officer

Cheryl Napier, MS (Clinical Research Coordinator)

Cheryl Varela, CTR (Registry Data Coordinator)

Christa Gaines, BS, CTR (Cancer Conference Coordinator)

Claire McCorrison, MS, Case Management (Psychosocial Services Coordinator)

Jamie Beachy, MDiv, PhD, Palliative Care

Jill Mitchell, PhD, LCSW, OSW-C, Social Work

JoAnn Keefer, RN, OCN, Inpatient Oncology Nursing

Jody Barnett, RN, OCN (Cancer Conference Coordinator)

Michele Sternitzky, RN, BSN, Director of Medical/ Surgical Nursing

Nanna Bo Christensen, RN, OCN, Breast Cancer Navigator, Program Quality Management

Nick Molliconi, FACHE, FHFMA, MBA, MS (Cancer Program Administrator)

Patti Sedano, Marketing/Public Relations

Rich Sheehan, Director of Marketing/Public Relations (Community Outreach Coordinator)

Susan Spitz, RN, OCN (Oncology Nursing)

Terry Olson, BSN, RN, CPHQ, Core Measures and Quality Data Manager

The Cancer Conference Team

BCH has a weekly conference made up of a multidisciplinary group of cancer professionals to discuss the prospective treatment plans for individual cancer patients. BCH has four cancer conferences: breast, colorectal, neurological, and other cancers.

The multidisciplinary team is made up of:

- Medical Oncologists
- Radiation Oncologists
- Pathologists
- Radiologists
- Genetic Counselors

- Clinical Researchers
- Oncology Nurses
- Nurse Navigators
- · Social Workers
- Palliative Care Professionals

Attendance is monitored by the cancer committee to ensure that every discipline in the cancer team is represented consistently for the discussions.

The weekly meetings contain discussions regarding appropriate stage, prognostic indicators, and national, evidence-based treatment guidelines.

Patients discussed may include those who are:

- Newly diagnosed and have not received treatment
- · Previously diagnosed and additional treatment is needed, or
- Previously diagnosed and are in need of supportive or palliative care

Patients may be discussed more than once based on each individual's needs. The cancer committee monitors the cancer conference to ensure that the needs of our patients continue to be met through the goals set for cancer conference.



Nurse Navigators

Guiding patients through complex care

Cancer care is a journey — sometimes a long and complex one. That's why we have nurse navigators in our cancer program. Our nurse navigators are nursing professional who serves as a vital point of contact for patients — one person, knowledgeable and responsive, who can coordinate services, answer questions, provide education, and give patients and their families both practical and emotional support.

Contact Nurse Navigators:

Nanna Bo Christensen, RN, OCN, CBCN, BCH Breast Cancer Navigator 303-415-7057 or nchristensen@bch.org

Susan Hall, RN, BSN, OCN, BCH General Oncology Navigator 303-415-7196 or shall@bch.org





What is an oncology nurse navigator?

Oncology nurse navigators provide individualized assistance to patients, families, and caregivers to aid them in effectively navigating through the health care system.

Our navigators are registered nurses with oncology-specific training who offer education and resources to facilitate informed decision making and timely access to quality healthcare from the time of diagnosis throughout survivorship

Boulder Community Health is committed to providing our community with local access to an expansive range of up-to-date treatments for cancer.

We provide the highest quality inpatient care for acutely ill cancer patients and their families.

What does an Oncology Nurse Navigator Do?

- Acts as the single point of contact to help coordinate care
- Assists in resolving any barriers to care
- Assesses physical, emotional, financial and spiritual needs
- Connects you to rehabilitation services, counseling, support groups and complementary therapies
- Provides education to ensure cancer information is available and understandable so that you can participate fully in your care
- Facilitates communication and acts as a liaison between you and your health care team





See article in Woman's Day magazine: www.womansday.com/health-fitness/womens-health/a56666/breast-cancer-navigator/















David Andorsky, MD Leslie Busby, MD John Fleagle, MD Jenny Fox, MD Lori Jensen, MD Patrick Moran, MD Mark Sitarik, MD

from top left:

Medical Oncology Team

BCH, in partnership with Rocky Mountain Cancer Centers (RMCC), serves those living in Boulder and the surrounding areas, providing the latest in oncology care in a comfortable community setting.

Board-certified oncologists provide oncology consultations and treatments based on national evidence-based guidelines. Patients requiring chemotherapy or biologic/targeted therapies may receive their treatments in the RMCC infusion center. Highly qualified oncology certified nurses (OCNs) provide care for the patients. The staff works together, utilizing the principles of team work in order to provide the optimal care for each patient.

When patients require hospitalization during their treatment course, it is a seamless transition. The physicians follow the patient's care from RMCC to the inpatient admission and to hospice care if needed. When necessary, palliative care is also available to patients. All of this provides a continuity of oncology care that helps with the quality of patient management.

Radiation Oncology Team

The Radiation Oncology Department at RMCC is dedicated to providing patients with advanced evidence-based treatments using technologically sophisticated equipment. The department staff is made up of radiation oncologists, oncology nurse specialists, radiation therapists, medical physicists, medical dosimetrists, and support staff who work collaboratively to ensure the patients seen are receiving the best possible care. The department's greatest assets are the dedicated people who come to work every day to provide patients and their families the compassionate, professional care that they have come to expect.





Radiation Oncologists from left: Andrew Antell, MD and Patrick Richard, MD

Inpatient Oncology Department

The BCH Cancer Program provides the highest quality inpatient care for acutely ill cancer patients and support for their families.

The BCH Cancer Program has been recognized by the Commission on Cancer of the American College of Surgeons, which is the College's seal of approval indicating that patients treated by Boulder Community Health will receive comprehensive, quality care close to home.

In July of 2007, Boulder Community Health, in partnership with Rocky Mountain Cancer Centers, opened a state of the art outpatient center, The Tebo Family Medical Building, at Foothills Hospital. This 30,000 square foot facility offers the most recent advances in medical care and complementary therapies at one location.



The BCH Cancer Program offers extensive diagnostic and treatment services; including medical oncology, advanced radiation therapy, diagnostic imaging including PET/CT, clinical trials of new cancer fighting drugs, and expanded support services for patients and families.

The philosophy of the inpatient staff is to encourage patients and their families to participate in discussions and decision making about their treatment with their physicians and nurses. People may feel helpless when cancer is diagnosed. Giving patients and loved ones a voice in their care helps to restore a sense of control, which is an important key to maintaining a positive outlook.

The broad range of physicians affiliated with the BCH Cancer Program provide our patients access to a comprehensive array of medical and surgical treatments. Multidisciplinary cancer meetings held twice weekly improve collaboration among physicians and health care team members and lead to better patient outcomes.

Staff take pride in creating a supportive and healing environment for patients and family. Cancer patients receive treatment, care and support from many specialists throughout the hospital. This full complement of hospital cancer services for cancer patients addresses each individual's physical, emotional, social and spiritual needs.

Outpatient Chemotherapy

Outpatient Infusion:

The outpatient oncology department at the RMCC Outpatient Infusion Therapy Department provides infusion therapy primarily to oncology/hematology patients. The following services are offered: administration of chemotherapy, monoclonal antibodies, IV fluids, antibiotics, anti-emetics, colony stimulating factors, and other medications. Experienced, certified oncology nurses provide patient and family education, symptom management and emotional, spiritual and psychosocial support.

In-Office Dispensing of Oral Chemotherapy

At RMCC, some cancers may be treated with an oral chemotherapy regimen, eliminating or reducing the need for infusion therapy at the RMCC infusion center. For more information about oral chemotherapy at RMCC, please visit: https://www.rockymountaincancercenters.com/cancer-treatments/chemotherapy/.



Radiologists

The Imaging Department plays a vital role in diagnosing and treating cancer. Foothills Hospital's radiologists have state-of-the-art equipment to use in making diagnoses, including "3D" Tomosynthesis mammography and a relatively new technology called "Low dose CT scanning."

Low Dose CT Scan:

Historically, there has been no reliable imaging technique for screening for lung cancer. However, a new technology, called low dose computed tomography, or low dose CT, has been found to be a much more reliable method of screening individuals who are at high risk for lung cancer. In this test, the body is scanned with low doses of radiation to make detailed pictures of the lungs.

Patients who are at high risk for lung cancer are those who:

- · Have a history of heavy smoking, and
- Smoke now or have quit within the past 15 years
- Are between 55 and 80 years old.



3D or Breast Tomosynthesis Mammography

3D or breast tomosynthesis mammography is best utilized for patients with moderately dense or very dense breast tissue (density 3-4 or C-D noted on prior mammogram reports). It is beneficial for patients at increased risk for breast cancer. Patients who have had a prior false positive mammogram may also elect to have a 3D mammogram, since the technology decreases call backs (additional imaging) by at least 15%. Patients may wish to check with their insurance companies to determine coverage, which is in a state of flux.

The dose on our GE systems is the same as a conventional digital mammogram. It consists of one 2D and one 3D view.

The 3D breast imaging technology provides more information to the radiologists and is most beneficial for patients with dense breast tissue; however, 2D digital mammography remains the gold standard in screening breast mammography and provides ample information for quality care of most patients. It remains equally important that patients be proactive and perform regular monthly SBE's (self breast exams), annual CBE's (clinical breast exams) and continue with routine annual mammogram screenings.

In addition to the Low-dose CT scanner and Tomosynthesis mammography, we offer:

- PET Scanner
- Magnetic Resonance Imaging (MRI)
- CT scans
- Nuclear medicine

- Ultrasound
- Stereotactic breast biopsy
- Mammography
- BSGI (Breast Specific Gamma Imaging)

Our professional staff takes pride in delivering quality, personalized care to our patients. We utilize an advanced reporting and integration system to ensure timely delivery of test results to ordering clinicians. Our 12 board-certified radiologists use the latest technologies to diagnose and treat a wide variety of medical problems.

Foothills Hospital has the only breast center north of Denver that is fully accredited by the National Accreditation Program for Breast Centers (NAPBC). We also offer a top-of-the-line 3 Tesla MRI scanner with a large internal opening and a state-of-the-art 128 slice CT scanner with low-dose radiation capabilities.

Other specialized equipment and imaging services include magnetic resonance imaging (MRI) breast biopsy/localization, an interventional suite, mammographic stereotactic breast biopsy, nuclear medicine and progressive ultrasound capabilities.

Boulder Community Health employs a full time medical physicist who regulates and monitors all radiation doses to ensure that every patient receives the least amount of radiation required during exams and procedures. We participate in accreditation programs through the American College of Radiology. These programs require that Boulder Community Health Imaging meets nationally recognized standards for personnel, radiation dose and image quality.

Pathology Department

Board certified clinical and surgical pathologists in the BCH laboratory analyze tissue samples to help physicians with tumor diagnosis and cancer care. Tissues received from surgery are analyzed for malignancy or premalignant conditions. For highly specialized tests, the hospital's pathologists have access to the major reference laboratory affiliated with the Mayo Clinic. The BCH Laboratory is accredited by the College of American Pathologists.

The BCH Department of Pathology supports cancer diagnosis and management with specialty tests, including expanded cytogenetic services and molecular tests, performs clinical research, performs cytology, fine needle aspiration, frozen section diagnosis, and uses specially designed information systems for standardization in cancer diagnosis and treatment. Pathology staff specializing in the areas of breast, gynecology, digestive, thyroid, genitourinary, lung, melanoma, sarcoma, leukemia, and lymphoma provide disease management team support. In addition, they participate in cancer committee program meetings and site specific cancer conferences.

Surgery

Surgery is an important part of oncology treatment. A surgeon who uses national evidence-based guidelines for the surgical treatment of cancer is essential in ensuring a successful outcome for a patient's cancer journey. Our oncology team consists of general surgeons and surgeons who are trained in specific sites where cancer may originate.

Cardiovascular Surgeon

Cardiovascular surgeons specialize in surgeries to the cardiovascular system, such as lung cancer.

Boulder Heart at Anderson Medical Center

- · Bryan Mahan, D.O.
- Terry Embaugh, PA-C
- · Anna Roe, PA-C

Ear, Nose and Throat Physicians

This specialty, Otolaryngology, encompasses medical and surgical treatment of ear, nose and throat cancers.

Boulder Medical Center/ENT

- Mark Allan Hunter, MD
- Angela Cogburn Paddack, MD

Boulder Valley Ear, Nose and Throat

- Andrew Goldman, MD
- David Morrissey, MD
- Douglas Warren, MD
- Myra Baker, PA-C
- Melissa J. Guerri, PA-C

Gastroenterologists

Gastroenterologists are specially trained in the management of disorders of the digestive system. More specifically, they are concerned with the esophagus, stomach, small and large intestines (colon), pancreas and liver. After finishing their general medical education, gastroenterologists complete several years of additional training in internal medicine and conditions of the digestive tract.

Boulder Medical Center/Gastroenterology

Robert H. Levine, MD

Gastroenterology of the Rockies

- Dennis Ahnen, MD
- Korina Bersentes, MD
- Steven Chetham, MD
- Daniel D. Cornett, MD
- Robert Dolan, MD
- David Gatof, MD
- Matthew Karowe, MD
- Peter Kaye, MD
- Daus Mahnke, MD
- J. Andy Mengshol, MD
- Joel Montbriand, MD
- Richard H. Moseley, MD
- Tamas Otrok, MD
- · Reena S. Patel, MD
- Ramu Raju, MD
- Nathan J. Susnow, MD
- Caroline R. Tadros, MD
- · Emily Ward MD

General Surgeons:

Alpine Surgical

General, vascular and thoracic surgery

- Richard Fox, MD
- Akin Beckley, MD

Boulder Medical Center/General Surgery

- Stephen Johs, MD
- Christopher Pohlman, MD
- Sandra Taylor, MD

Boulder Valley Surgical Associates of BCH

- Susan Skaff Hagen, MD
- · Charles Jones, MD
- Kyle J. Marthaller, MD

Ross M. Leibovitz General Surgery

Neurosurgery

Neurosurgeons perform surgeries on cancers that originate from the nervous system, such as brain cancers.

Alpine Spine Center

Cathleen Van Buskirk, MD

Boulder Neurosurgical & Spine Associates

- Alan T. Villavicencio, MD
- Lee Nelson, MD
- Andrew Bauer, MD
- Sharad Rajpal, MD
- Kara Beasley, DO
- · Sigita Burneikiene, MD

Orthopedics

Front Range Orthopedics

Matthew R. Gerlach, MD

Mapleton Hill Orthopaedics, P.C.

- Daniel Master, MD
- Gordon Yee, MD

Plastic Surgeons

Plastic Surgeons perform surgeries on patients who have had cancers that have affected their appearance and often their ability to function. Plastic surgeons often perform surgeries on patients who have had breast cancers and head and neck cancers.

Boulder Plastic Surgery

- Winfield Hartley, MD
- · Hans R. Kuisle, MD
- Justin B. Maxhimer, MD

Boulder Valley Plastic Surgery

- Jeffrey Swail, MD
- Claude H. Burrow, MD

Urologic Surgery:

Urologists are physicians who have specialty training in the diagnosis and treatment of diseases related to the urinary tract, urinary system and the male reproductive system. Urologists often perform surgeries on patients who have bladder cancer or prostate cancer.

Alpine Urology

- Charles Cragin Anderson, MD
- · James E. Clark, MD
- John C. Kefer, MD, PhD
- Sam H. Melouk, MD
- Chris Webster, MD
- · Katherine Olson, PA-C

Boulder Medical Center

· Larry C. Munch, MD



Rehabilitation Team

BCH rehabilitation offers a comprehensive range of inpatient and outpatient services to help cancer patients during and after treatment. Patients may receive therapy from one or more disciplines. The staff assist patients with a variety of conditions, such as weakness related to lymphoma, neurological deficits caused by brain or spinal cord tumors, and speech deficits caused by tumors in the throat. Oncology patients who are significantly limited by pain have access to the Pain Management Program.

Our outpatient rehabilitation department offers services during all phases of cancer rehabilitation:

- Preventative: Assessment, education and early treatment before development of disability (known as "prehabilitation" or "prehab")
- Restorative: After surgery, radiation or chemotherapy to restore to prior level of function [work, activities of daily living (ADLs), cognition, driving, recreation, social]
- Survivorship: Integrated rehabilitation following active cancer treatment, designed to improve both quality of life and physical and psychological states
- Supportive: Care during ongoing disease
- Palliative: Addressing disabilities, discomfort and quality of life with patient and caregivers

Cancer rehabilitation has been proven to enhance the quality of life of the cancer survivor, and to minimize or stabilize adverse effects experienced during cancer survivorship. Impairments effectively treated by cancer rehabilitation include:

- Cognitive impairment
- Balance or coordination deficits
- Bladder or bowel dysfunction
- Fatique
- Lack of energy
- Loss of endurance or strength
- Loss of range of motion
- Lymphedema

- Pain
- Peripheral neuropathy
- Psychological concerns
- Scarring and adhesions
- Sexual dysfunction and/or stenosis
- Speech and voice impairments
- Swallowing difficulty

Our therapists are qualified to treat patients with various cancer diagnoses, and we are pleased to provide specialty cancer services for problems associated with:

- · Brain tumors
- Breast Cancer
- Head and Neck Cancer

- Lymphedema
- Pelvic Cancer including gynecologic, prostate and colon

BCH Rehabilitation: Prehabilitation, Lymphedema and L-Dex

"Prehabilitation" or "prehab" is a service provided by BCH that prepares patients physically and emotionally for surgical procedures that can impair movement or other abilities. Addressing possible needs prior to cancer treatment helps reduce complications. For example, patients with head and neck cancer may learn swallowing exercises. Those with breast cancer work on arm movement and range of motion, and prostate cancer patients may build pelvic area muscles to control incontinence.

Lymphedema is a complication commonly experienced after breast cancer surgery. Lymphedema is a build-up of lymph fluid in the fatty tissues just under the skin. Today, most lymphedema is not diagnosed until it is visually apparent. By this point, fibrotic changes and lipid deposition caused by protein rich extracellular fluid stasis have already begun.

In 2016, BCH implemented a prehab program for the early detection and treatment of lymphedema in breast and pelvic cancer patients, the most common group of cancer patients to suffer lymphedema. The prehab program obtained a new technology called L-Dex U400, which helps detect lymphedema at early states.

L-Dex is an advanced tool approved by the FDA for aiding in the clinical assessment of unilateral lymphedema of the arm and leg in women and the leg in men. The L-Dex uses bioimpedance spectroscopy, which measures the characteristics of current flow changes through the extracellular fluid in the patient's limb. These changes can assist in assessing for the early signs of lymphedema. The L-Dex software provides tracking of these changes at prescribed intervals.

The prehab program for lymphedema can help reduce the severity of lymphedema and its physiological and psychological impact. Patients can more quickly return to the lifestyle they enjoyed prior to surgery, knowing that their healthcare team can clinically assess and treat the early signs of lymphedema. Health insurance providers benefit from reduced costs because of the preventive approach to an otherwise chronic lifelong condition with significant medical risks.



Genetic Counselors

Introduction

The Genetic Risk Assessment Program is offered by BCH and RMCC under the direction of a Certified Genetic Counselor. This service provides cancer risk assessment and genetic counseling to participants at risk for genetic predisposition to a hereditary cancer syndrome. Testing is offered for all cancer susceptibility genes, including breast, ovarian, colon, endometrial, thyroid, kidney, adrenal, and others.

Overview of the Link Between Cancer and Genetics

The etiology of cancer is multifactorial, with genetic, environmental, medical, and lifestyle factors interacting to produce a given malignancy. Knowledge of cancer genetics is rapidly improving our understanding of cancer biology, helping to identify at-risk individuals, furthering the ability to characterize malignancies, establishing treatment tailored to the molecular fingerprint of the disease, and leading to the development of new therapeutic modalities. As a consequence, this expanding knowledge base has implications for all aspects of cancer management, including prevention, screening, and treatment.

Family history may identify people with a modest to moderately increased risk of cancer or may serve as the first step in the identification of an inherited cancer predisposition that confers a very high lifetime risk of cancer. Correctly recognizing and identifying individuals and families at increased risk of developing cancer is one of countless important roles for primary care and other health care providers. Once identified, these individuals can then be appropriately referred for genetic counseling, risk assessment, consideration of genetic testing, and development of a management plan. When medical and family histories reveal cardinal clues to the presence of an underlying familial or genetic cancer susceptibility disorder (see list below), further evaluation may be warranted.

Candidates for Genetic Testing

In the individual patient:

- Multiple primary tumors in the same organ.
- Multiple primary tumors in different organs.
- Bilateral primary tumors in paired organs.
- Multifocality within a single organ (e.g., multiple tumors in the same breast all of which have risen from one original tumor).
- Younger-than-usual age at tumor diagnosis.
- Tumors with rare histology.

- Tumors occurring in the sex not usually affected (e.g., breast cancer in men).
- Tumors associated with other genetic traits.
- Tumors associated with congenital defects.
- Tumors associated with an inherited precursor lesion.
- Tumors associated with another rare disease.
- Tumors associated with cutaneous lesions known to be related to cancer susceptibility disorders (e.g., the genodermatoses).

In the patient's family:

- One first-degree relative with the same or a related tumor and one of the individual features listed.
- Two or more first-degree relatives with tumors of the same site.
- Two or more first-degree relatives with tumor types belonging to a known familial cancer syndrome.
- Two or more first-degree relatives with rare tumors.
- Three or more relatives in two generations with tumors of the same site or etiologically related sites.

Advantages of Counseling and Genetic Testing

Concluding that an individual is at increased risk of developing cancer may have important, potentially life-saving management implications and may lead to specific interventions aimed at reducing risk. Information about familial cancer risk may also inform a person's ability to plan for the future (lifestyle and health care decisions, family planning, or other decisions). Genetic information may also provide a direct health benefit by demonstrating the lack of an inherited cancer susceptibility. Knowledge about a cancer-predisposing mutation can be informative not only for the individual tested but also for other family members.

Pharmacy Professionals

The Pharmacy Department at BCH, in partnership with Rocky Mountain Cancer Centers, is recognized as an integral part in the multidisciplinary approach to patient care to its hematology and oncology patients. Committed to ensure safe and effective medication use, the BCH Cancer Program houses a USP 797-compliant pharmacy that provides chemotherapy compounding and dispensing services with patient safety being the top priority.

Psychosocial Professionals

The BCH and RMCC psychosocial professionals provide many services for cancer patients and their families, including distress screenings, mental health counseling, physical, social, spiritual, and financial support needs. The BCH and RMCC psychosocial professionals consist of social workers and licensed mental health therapists who have experience with cancer patients and their needs. They are part of the patient's cancer journey from the beginning of treatment and beyond in to the survivorship phase of treatment.

Nutritionists

At BCH, nutrition therapy is an integral part of an oncology patients' care. Our registered dieticians work with the oncology patients to formulate each patient's individualized nutrition plan. They calculate patient's nutritional needs, provide diet education, and coach patients on developing healthy eating habits.

Many patients with cancer have nutritional problems requiring the involvement of a registered dietitian. Nutrition care may improve the patient's tolerance of cancer therapies and assist in providing an enhanced quality of life. The multitude of side effects that can arise from traditional cancer therapies (e.g. taste changes, nausea, and vomiting, decreased appetite) can cause a significant change in the cancer patient's nutritional status. Being proactive in nutritional care can prevent or reduce the complications typically associated with the treatment of cancer. Whether patients are undergoing active therapy, recovering from cancer, or in remission and striving to avoid cancer recurrence, the benefit of optimal caloric and nutrient intake are well established.





Complementary Therapies and Other Support

Team Players: Providers of complementary therapy and other support services

Our comprehensive approach to cancer treatment combines the most advanced treatments with education, support services and complementary therapies.

The Tebo Family Medical Building was designed with a holistic concept in mind. Our patient focused philosophy is served by the center's beautiful architecture and a host of services that span the full range of emotional needs. Patients and families with a need for information about cancer can take advantage of the Resource Center offering personal assistance with Internet research. Those needing a space for reflection or relaxation can walk outside to a small meditation garden made even more beautiful by a fountain with a waterfall.

Center for Integrative Care

The Tebo Family Medical Building houses the Center for Integrative Care, an array of complementary therapies that can aid healing and recovery. All services are evidence based, integrated with conventional care, and provided by certified and licensed practitioners. The effectiveness of these therapies is supported by clinical research. They reduce stress and anxiety, and improve clinical outcomes by enhancing wound healing, reducing the need for pain medication, and shortening hospital stays.

The Center provides services for individuals currently undergoing cancer treatment and cancer survivors, as well as their family members and caregivers. The center has massage therapy and acupuncture rooms, a small meditation garden, and access to support groups and counseling services. Available services include acupuncture, massage therapy, Healing Touch/Reiki therapy, nutritional consultation with a registered dietitian, and wellness & integrative care consultations.

Urban Zen:

BCH introduced a new program based on the principles and techniques of Urban Zen Integrative Therapy. Integrative Medicine is an approach to care that seeks to combine the best of Western medicine with a broader understanding of the nature of illness, healing and wellness.

Patients in the inpatient and outpatient setting are provided integrative techniques of Reiki, gentle yoga, aromatherapy and contemplative practices that can help patients deal with specific symptoms such as pain, anxiety or insomnia. These approaches can offer patients self-directed and holistic ways to address their symptoms while reducing the need for medications with their possible side effects.

Support Groups, Classes and Services

Grillo Health Information Resource Center: The Grillo Health Information Center, located on the 1st floor of Tebo Family Medical Building, can confidentially research your personal health questions using the latest medical resources to help you make informed health care decisions. Submit a health question in person, over the phone, 720-854-7293, or via the website, www.GrilloCenter.org.

Caregivers and Loved Ones Support Group:

Caregivers talk with other caregivers and loved ones who are supporting family and friends journeying through cancer.

Breast Cancer Support Group: This group is for breast cancer patients who would like to connect with other women as they travel through the breast cancer journey.

Life After Treatment Group: Completing treatment is a major milestone and for many, it means that its time to resume regular activities and go back to the lives they had before cancer. This class provides counseling and education on practical issues surrounding cancer survivorship.

Grillo Health Information Resource Center: The Grillo Health Information Center, located on the 1st floor of Tebo Family Medical Building, can confidentially research your personal health questions using the Acupuncture Clinic: Acupuncture clinic provided by Boulder Community Health's Center for Integrative Care. 20-30 minute acupuncture treatment in a group setting.

Valued Living Group for Post-treatment Survivors Experiencing Distress: This is a class for patients who have completed primary treatment and are experiencing cancer survivorship related distress, depression, or anxiety. It is a paid seven-week evidence based skill building group and research study. The goal of the program is to help cancer patients cope skillfully and move forward living a life that they value.

American Cancer Society's Look Good...Feel Better class: An American Cancer Society group providing women with a consultation for how to look one's best while going through cancer treatment and recovery.

Leukemia and Lymphoma Support Group: This group is for patients, family members and friends affected by a diagnosis of a blood cancer including leukemia, Hodgkin and non-Hodgkin lymphoma, and multiple myeloma.

Ovarian and Gynecological Cancer Support Group (Nickis Circle): Support group for patients/survivors with ovarian or other gynecological cancers.



Palliative Care Professionals

The palliative care professionals of the cancer team are a multidisciplinary group of physicians, nurses, mental health professionals, social workers, and spiritual counselors provide palliative care services.

Palliative care addresses the well-being of patients and families coping with serious medical illness. Palliative care may also be called supportive care. The goal is to address suffering and improve quality of life. In the past, the term palliative care was mainly used to describe the act of promoting comfort when aggressive treatment was no longer working – the care given at the end of life. Today, palliative care, or supportive care, can be provided at any time during the cancer experience. It focuses on helping relieve the symptoms caused by serious illness; things like nausea, pain, fatigue or shortness of breath.

Spiritual Care Clinicians

Spiritual Care clinicians are here to support BCH's patients, families and staff as part of the interdisciplinary health care team. BCH chaplains are integral to a whole person approach to health. Chaplains incorporate evidence-based assessments and interventions drawn from a wide circle of spiritual practices such as mindfulness, guided meditation, deep listening, prayer, wellness coaching and many other practices that support health and healing. BCH chaplains represent a diversity of spiritual and religious traditions and are trained to provide respectful care to people of all cultural and religious (or non-religious) backgrounds. Chaplains are available to listen and support patients and families as they make the journey through illness, health and treatment decisions.

Based on a patient's and family's particular needs, chaplains provide:

- Culturally sensitive care and advocacy
- Advance directive planning
- Ethical decision-making
- Palliative care coordination
- Grief support
- Spiritual practices and wellness coaching

- Referrals to religious and spiritual groups in the Boulder community
- Debriefing of traumatic events
- Rituals, prayers and spiritual practices
- A daily silent mindfulness meditation from noon to 12:20 (M-F) in the Foothills chapel.
- Staff support and care

Chaplains provide spiritual care as an integral part of the health care team. Spiritual care is available on an on-call basis 24 hours/day. Please contact Spiritual Care at 303-415-7811 if you would like to make a request to see a chaplain.



Cancer Registry

National Accreditation

The BCH Cancer Registrars have expertise in the standards that need to be fulfilled and reported by the BCH Cancer Program to achieve national accreditations. Through their expertise in accreditation standards, the BCH Cancer Registrars work with physicians, administrators and health care planners to provide support for cancer program development and ensure compliance of reporting standards. They serve as a valuable resource for cancer information with the ultimate goal of preventing and controlling cancer. In addition, cancer cases are submitted to the ACoS' Commission on Cancer's National Cancer Data Base (NCDB). The NCDB is a comparative database for ongoing assessment of cancer patient care and is a joint project of the ACoS and the American Cancer Society.



War on Cancer

The BCH Cancer Registrars also ensure that data is correctly reported to the state registry, which in turn provides data that is reported by national organizations such as the American Cancer Society and the Centers for Disease Control. As required by law, all active cancer cases are reported to the Colorado Central Cancer Registry (CCCR). The data submitted is shared with the North American Association of Central Cancer Registries (NAACCR) and the Center for Disease Control and Prevention's National Program of Cancer Registries (CDC-NPCR).

Certified Cancer Registrars

The BCH Cancer Registrars are both certified by the National Cancer Registrars Association (NCRA), and participate in ongoing cancer-related education every year, which includes local, state and regional or national events. The NCRA serves as the premier education, credentialing and advocacy resource for the cancer data professionals.

The BCH Cancer Registrars are an integral part of the BCH Cancer Program and are a solid foundation for developing effective cancer treatments and prevention initiatives in the War on Cancer.

Cheryl Varela, CTR
Cancer Registry Lead

Christa Gaines, BS, CTRCancer Registry Co-Registrar

2015 Site-Stage Distribution Report

Stages									
FIPS Site	0	ı	П	III	IV	UNK	NA	Total	% Total
Bone						ONIX	IVA		
Bones and Joints	0	0	1	0	0	0	0	1	0.10%
Defice and counts	0	0	1	0	0	0	0	1	0.10%
								1	0.1076
Brain/Nervous System									
Brain	0	0	0	0	0	0	13	13	1.80%
Other CNS	0	0	0	0	0	0	25	25	3.40%
	0	0	0	0	0	0	38	38	5.10%
Breast									
Breast	43	79	44	18	11	2	0	197	26.70%
	43	79	44	18	11	2	0	197	26.70%
Digestive System									
Esophagus	0	0	4	1	3	0	0	8	1.10%
Stomach	0	1	4	1	1	1	0	8	1.10%
Small Intestine	0	0	0	1	1	0	0	2	0.30%
Colon	0	11	9	11	9	1	0	41	5.60%
Rectosigmoid Junction	0	0	0	0	0	0	0	0	0.00%
Rectum	0	1	3	3	5	0	0	12	1.60%
Anus	0	0	2	1	2	0	0	5	0.70%
Liver	0	4	1	2	1	0	1	9	1.20%
Intrahepatic Bile Duct	0	1	0	0	0	0	0	1	0.10%
Gallbladder	0	0	0	0	1	0	0	1	0.10%
Other Biliary	0	1	0	0	2	0	0	3	0.40%
Pancreas	0	3	12	2	19	1	0	37	5.00%
Retroperitoneum	0	0	0	0	0	0	0	0	0.00%
Peritoneum/Omentum/Msntry	0	0	0	2	0	0	0	2	0.30%
Other Digestive	0	0	0	0	0	0	1	1	0.10%
	0	22	35	24	44	3	2	130	17.60%
Eye									
Eye and Orbit	0	0	0	0	0	0	0	0	0.00%
	0	0	0	0	0	0	0	0	0.00%
Female Genital System									
Cervix	0	0	0	0	0	0	0	0	0.00%
Uterus	0	3	0	2	2	0	0	7	0.90%
Ovary	0	2	1	4	2	0	0	9	1.20%
Vagina	0	0	0	0	0	0	0	0	0.00%
Vulva	0	0	0	0	0	0	0	0	0.00%
Other Female Genital	0	0	0	2	0	0	0	2	0.30%
	0	5	1	8	4	0	0	18	2.40%

	Stages						1		
FIPS Site	0	1	Ш	III	IV	UNK	NA	Total	% Total
Head and Neck						<u> </u>			
Lip	0	0	0	0	0	0	0	0	0.00%
Tongue	0	3	0	1	8	0	0	12	1.60%
Salivary Gland	0	0	3	0	1	0	0	4	0.50%
Floor of Mouth	0	0	0	0	0	1	0	1	0.10%
Gum & Other Mouth	0	0	0	0	0	0	0	0	0.00%
Nasopharynx	0	0	0	0	0	0	0	0	0.00%
Tonsil	0	1	0	0	2	0	0	3	0.40%
Oropharynx	0	0	0	0	0	0	0	0	0.00%
Hypopharnyx	0	0	0	0	0	0	0	0	0.00%
Pharynx/Other Oral	0	0	0	0	0	0	0	0	0.00%
	0	4	3	1	11	1	0	20	2.70%
Hemic and Lymphatic									
Hodgkin Lymphoma	0	1	2	2	0	0	0	5	0.70%
Non-Hodgkin Lymphoma	0	11	3	6	13	2	0	35	4.70%
Plasma Cell Tumors	0	0	0	0	0	0	16	16	2.20%
Leukemia	0	0	0	1	0	0	25	26	3.50%
	0	12	5	9	13	2	41	82	11.10%
Male Genital System									
Prostate	0	2	18	5	7	2	0	34	4.60%
Testis	0	8	1	2	0	0	0	11	1.50%
Penis	0	0	0	0	0	0	0	0	0.00%
Other Male Genital	0	0	0	0	0	0	0	0	0.00%
	0	10	19	7	7	2	0	45	6.10%
Respiratory System									
Nose/Nasal Cavity/Mid Ear	0	0	1	0	1	0	0	2	0.30%
Larynx	0	0	2	1	3	1	0	7	0.90%
Lung-Small Cell CA	0	0	0	0	1	0	0	1	0.10%
Lung-Non-Small Cell CA	0	16	7	6	19	0	0	48	6.50%
Lung-Other Types	0	1	0	0	0	0	0	1	0.10%
Pleura	0	0	0	0	0	0	0	0	0.00%
Trachea/Mediastinum/Other	0	0	0	0	0	0	0	0	0.00%

FIDC Cite	Stages						T -4-1	O/ Total	
FIPS Site	0	I	II	III	IV	UNK	NA	Total	% Total
	0	17	10	7	24	1	0	59	8.00%
Skin									
Melanoma-Skin	2	15	7	2	1	2	0	29	3.90%
Other Non-Epithelial Skin	0	2	0	0	0	0	0	2	0.30%
	2	17	7	2	1	2	0	31	4.20%
Soft Tissue									
Soft Tissue and Heart	0	0	0	0	2	0	0	2	0.30%
	0	0	0	0	2	0	0	2	0.30%
Thyroid/Endocrine									
Thyroid	0	17	0	7	9	1	0	34	4.60%
Endocrine	0	0	0	0	0	0	15	15	2.00%
	0	17	0	7	9	1	15	49	6.60%
Urinary System									
Bladder	11	3	3	0	3	1	0	21	2.80%
Kidney and Renal Pelvis	0	9	1	1	1	0	0	12	1.60%
Ureter	0	0	0	1	0	0	0	1	0.10%
Other Urinary	0	0	0	0	0	0	0	0	0.00%
	11	12	4	2	4	1	0	34	4.60%
Other/Unknown									
Other and Unspecified	0	0	0	0	0	0	32	32	4.30%
	0	0	0	0	0	0	32	32	4.30%
Totals									
All Sites	56	195	129	85	130	15	128	738	100%

Accountability and Quality Improvement Measures defined by the Commission on Cancer (CoC)

A CoC-accredited hospital such as Boulder Community Health must adhere to many of the CoC's quality of care standards to maintain accreditation. Two very important standards that accredited hospitals must meet are "Accountability Measures, Standard 4.4" and "Quality Improvement Measures, Standard 4.5."

Accountability Measures, CoC Standard 4.4:

The CoC's accountability measures promote improvements in care delivery and are the highest standard for measurement. An accountability measure is the standard of care derived from evidence-based data, including multiple randomized control trials.

	Measure	CoC's Expected Performance Rate	2012	2013	2014
Breast					
НТ	Tamoxifen or third generation aromatase inhibitor is recommended or administered within 1 year (365 days) of diagnosis for women with AJCC T1c or stage IB-III hormone receptor positive breast cancer	90%	94.90%	98.60%	94.20%
MASTRT	Radiation therapy is recommended or administered following any mastectomy within 1 year (365 days) of diagnosis of breast cancer for women with >= 4 positive regional lymph nodes	90%	100.00%	100.00%	90.00%
BCSRT	Radiation is administered within 1 year (365 days) of diagnosis for women under the age of 70 receiving breast conservation surgery for breast cancer	90%	97.30%	93.90%	93.40%

Quality Improvement Measures, Standard 4.5:

The CoC uses quality improvement measures to ensure that each of its accredited programs are internally monitoring specific areas of treatment that are nationally accepted and supported through experimental studies, not randomized control trials. The CoC identifies which cancer sites and treatments that are to be measured each year, and any program that falls below the expected performance rate is expected to implement quality improvements to ensure compliance.

	Measure	CoC's Expected Performance Rate	2012	2013	2014
Breast					
nBx	Image or palpation-guided needle biopsy to the primary site is performed to establish diagnosis of breast cancer	80%	86.90%	95.30%	86.90%
Colon					
12RLN	At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer	85%	90%	90.90%	88.20%
Gastric					
G15RLN	At least 15 regional lymph nodes are removed and pathologically examined for resected gastric cancer	80%	100%	0.00%2	no data¹
Lung					
LCT	Systemic chemotherapy is administered within 4 months to day preoperatively or day of surgery to 6 months postoperatively, or it is recommended for surgically resected cases with pathologic lymph node-positive (pN1) and (pN2) NSCLC	85%	75%²	100%	no data¹
LNoSurg	Surgery is not the first course of treatment for cN2, M0 lung cases	85%	0.00%2	100%	100%
Rectum					
RECRTCT	Preoperative chemo and radiation are administered for clinical AJCC T3N0, T4N0, or Stage III; or Postoperative chemo and radiation are administered within 180 days of diagnosis for clinical AJCC T1-2N0 with pathologic AJCC T3N0, T4N0, or Stage III; or treatment is recommended; for patients under the age of 80 receiving resection for rectal cancer	85%	100%	100%	100%

1: no data=no cases qualified for this measure

2: measure was below expected performance rate and quality improvement was addressed by the BCH Cancer Committee.

Cancer Resources

Boulder Community Health General Information

303-415-7000 • www.bch.org

Outpatient Oncology	
Rocky Mountain Cancer Center	303-385-2000 • www.rockymountaincancercenters.com
Support and Rehabilitation	
Center For Integrative Care	303-415-7292 • www.bch.org/cancercare
Breast Health Nurse Navigator — Nanna Bo Chris	tensen, RN, CBCN, OCN 303-415-7057
Oncology Nurse Navigator — Susan Hall, RN,BSN	,OCN 303-415-7196
Oncology Rehabilitation	303-415-4400
Oncology Data and Information	
Cancer Registry, Cheryl Varela, CTR	303-415-7732
Grillo Health Information Center	303-415-7293 • www.grillocenter.org
Clinical Trials-Jennifer Gaertner	303-415-7296
Community Support and Services	
American Cancer Society	1-800-ACS-2345 • www.cancer.org
Boulder County Services and Programs	303-441-1617 • www.bouldercountyhelp.org
Susan G. Komen	303-744-2088 • www.komencolorado.org)
Diagnostic Imaging	
BCH Foothills Hospital, 48th and Arapahoe, Boul	der 303-415-5170
Community Medical Center, 1000 W. South Bould	der Rd., Lafayette 303-415-5170
Medical Imaging Center, 36 Garden Center, Broom	mfield 303-466-1234
Women's Imaging Centers (Mamm	ography)
BCH Foothills Campus, 48th and Arapahoe, Boul	der 303-415-5170
Community Medical Center, 1000 W. South Bould	der Rd., Lafayette 303-415-5170

Inpatient Oncology

Boulder Medical Center, 2750 Broadway, Boulder

Medical Imaging Center, 36 Garden Center, Broomfield

Oncology Unit, Foothills Hospital	303-415-7199
Oncology Nurse Manager-Susan Spitz, RN	303-415-7333

303-415-4240

303-466-1234



bch.org/cancer