



W. Thomas Purcell, MD, MBA



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Since stepping into the role of oncology service line director almost three years ago, three distinct health care systems have come together to build the most comprehensive oncology program in Colorado and surrounding states. It is my privilege to highlight some of what UCHealth Cancer Care and University of Colorado Cancer Center achieved in 2015. In December 2015, UCHealth Cancer Care was accredited as a Quality Oncology Practice Initiative® program, recognizing our commitment to excellence in cancer care and ongoing quality improvements in the outpatient clinical setting. This accreditation gives us the distinction of being only one of three oncology practices in Colorado that is QOPI-certified.

The journey to receiving this certification began in 2012. The process included a detailed review of how patients received care at all of our outpatient clinics, verifying that best practice standards had been implemented throughout all UCHealth Cancer Care sites. Furthermore, our staff from all regions successfully worked together across a large geographic area to ensure that patients receive the same standard of care regardless of location.

Integration between all of UCHealth sites and clinical providers continues to grow, benefitting both patient care and research programs. Patients can receive care in their local communities with access to the expertise and specialty care of CU Cancer Center. Furthermore, UCHealth provider collaboration in multidisciplinary clinics and the development of disease site specific teams working together across the Front Range has allowed for seamless cancer care. UCHealth Cancer Care's unique relationship between community cancer

programs and CU Cancer Center — a National Cancer Institute Comprehensive Cancer Center — means no other cancer provider in our region has this type of structure to offer their patients.

Offering clinical trials is essential to caring for patients with cancer. The best treatments and current standards of care come from researchers asking the "what if" questions, and then moving forward to determine if the intervention will improve a clinical outcome. As an academic center, CU Cancer Center faculty are developing clinical trials and have access to a broad trial portfolio, which is then able to be accessed by many sites within UCHealth Cancer Care. This relationship allows more opportunities for patients to match with appropriate, state-of-the-art clinical trials, which ultimately lead to better treatments.

In short, UCHealth Cancer Care allows patients residing in the Front Range and Mountain West to benefit from a world-class cancer program. This program has a proven quality of care, key clinical expertise and robust collaboration between academic and community providers offering a strong clinical trial portfolio and, of course, a team of dedicated staff who provides outstanding care to every patient.

We will continue to increase our geographical footprint in the coming year. Stay tuned for new challenges and accomplishments as we continue to build the very best oncology service line and cancer care program for patients in the Rocky Mountain region and western United States.





UCHEALTH CANCER CARE

UCHealth Cancer Care has the expertise that no other program in the region can offer — the unique partnership between academic center of University of Colorado Cancer Center /University of Colorado Hospital — an NCI designated facility; community hospitals in northern and southern Colorado and clinics throughout the state. This means patients benefit from the cutting-edge science and expertise of an academic center close to home.

Why an NCI designation matters

CU Cancer Center is one of only 45 designated comprehensive cancer centers in the country and the only one in Colorado. This means we are recognized as a world leader in cancer care because of our commitment to:

» Research: Our clinical and laboratory research shapes the future care of cancer.

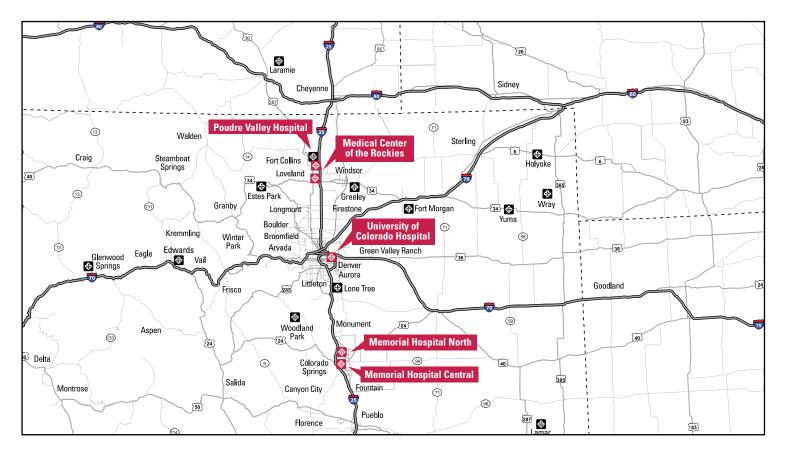
- » Innovation: We are leading the ways to develop new protocols and procedures for cancer care.
- » Future: We train and develop the future leaders of cancer care.
- » Clinical excellence: We provide patients with care designed specifically for their unique situation.

Physicians collaborate across regions, in areas such as clinical trials and multidisciplinary conferences, to provide the best care for patients. Through service line integration, we are developing standards of care across the Front Range, so the best treatment can always be delivered in the best place for patients. As patients from across the region may seek additional opinions at UCH, the electronic medical record enables plan consensus. This allows physicians to deliver seamless care as cancer patients often see multiple specialists who need to collaborate in real-time.



SERVICE AREA

We provide care at all five of our hospitals — Medical Center of the Rockies in Loveland; Memorial Hospital Central and Memorial Hospital North in Colorado Springs; Poudre Valley Hospital in Fort Collins; University of Colorado Hospital in Aurora — and multiple outpatient clinics and partnering locations throughout Colorado, eastern plains and southern Wyoming.







Colorado Springs

Memorial Hospital - Central Memorial Hospital - North Woodland Park Lamar

Metro Denver

UCH

Lone Tree

Shaw Regional Cancer Center in Edwards*

Callaway Young Cancer Center in Glenwood Springs*

St. Mary's Cancer Center in Grand Junction*

Northern Colorado

PVH

Fort Collins Cancer Center

MCR

Greeley

Estes Park

Laramie, WY*

Fort Morgan

Yuma

Wray

Holyoke

*Partner locations



ACCREDITATIONS, AFFILIATIONS AND AWARDS



UCH is the top ranked cancer hospital in Colorado and ranked No. 21 in cancer care by U.S. News and World Report, which analyzes data from nearly 5,000 hospitals across the U.S. Rankings are driven by measures including patient outcomes and patient safety and physician reputation by their peers.



UCHealth Cancer Care earned official certification as a Quality Oncology Program from the Quality Oncology Practice Initiative[®]. This prestigious recognition demonstrates a commitment to providing the highest level of quality care and a commitment to ongoing quality improvement.



Forty-two of our physicians sit on the National Comprehensive Cancer Network panels developing guidelines for cancer care throughout the care continuum.

UCHealth works with long term partnerships, such as the Denver Broncos, Colorado Rockies, Colorado Avalanche and Denver Nuggets to bring education, awareness and even certain services to Colorado communities, such as health screenings and 3-D mammography screenings via UCHealth's mobile coach, The Pink Lifesaver.













MARCH MAN-NESS, UCHEALTH

Statistics show that mortality rates decline when people take an active role in their health. March MAN-ness is a men's health event series hosted by UCHealth throughout Colorado. The event emphasizes the importance of disease prevention and early detection for men, featuring often ignored topics like prostate exams, colonoscopies, lung and skin cancer prevention and early detection screening recommendations. The discussions at March MAN-ness raise awareness of what men need to watch out for and motivate them to start conversations with their doctors.

In 2015 approximately 200 people attended this event in Northern Colorado.

Through 2016, we've had nearly 1,000 people attend. We've hosted events in Centennial, Colorado Springs, Fort Collins, Greeley, Longmont, Loveland and Windsor.

REGIONAL HIGHLIGHTS

Metro Denver



CARE Clinic: Improving the oncology patient experience and outcomes

After reviewing emergency department data, conducting an in/outpatient National Comprehensive Cancer Network survey and considering best practices of an urgent care-type clinic within a cancer center, UCH decided to open the CARE Clinic in early 2015.

The clinical assessment and rapid evaluation clinic, or CARE Clinic, was created to improve access and to keep patients out of the emergency department when the Cancer Center's clinic schedules are full.

Since the clinic opened, they have averaged nearly 9 patient visits a day, and 22 percent of the patients seen in the CARE Clinic avoided an emergency room visit. Not only has the clinical data shown an improvement in care, but patient feedback has confirmed why this was the right service to implement on this campus.

Colorado Springs



Memorial Hospital North offers 3-D tomosynthesis and radiation oncology

In 2015, Memorial Hospital North installed new 3-D tomosynthesis breast imaging equipment at our Briargate clinic. This is a revolutionary new approach to examine the breast tissue one layer at a time using high-powered computing to convert digital breast images into stacks of very thin layers or "slices" building a 3D image. Since implementing 3-D mammography, our detection rate has increased from 0.23 percent to 0.82 percent. Additionally, the department has seen an improvement in clinical quality and patient satisfaction levels.

In 2016, UCHealth extended it's radiation oncology services in Colorado Springs, adding a new facility at Memorial Hospital North. The state-of-the-art linear accelerator delivers ionizing radiation beams to the body. This treatment allows us to target radiation and shrink tumors without harming nearby healthy tissue.

Northern Colorado



Skin Cancer Screening

For the past twenty years, the cancer program, with the Aspen Club, provides annual skin cancer screenings that aims to decrease the number of patients with late-stage disease. The screening program is based on community needs and is consistent with evidence-based national guidelines and evidence-based interventions (American Dermatology Association). On May 2, 2015, skin cancer screening was coordinated by B. Lynn West, MD. During this event 321 patients were seen. Patients with positive findings were given a form to use at a referral treatment appointment.

Number of patients with clinical diagnoses

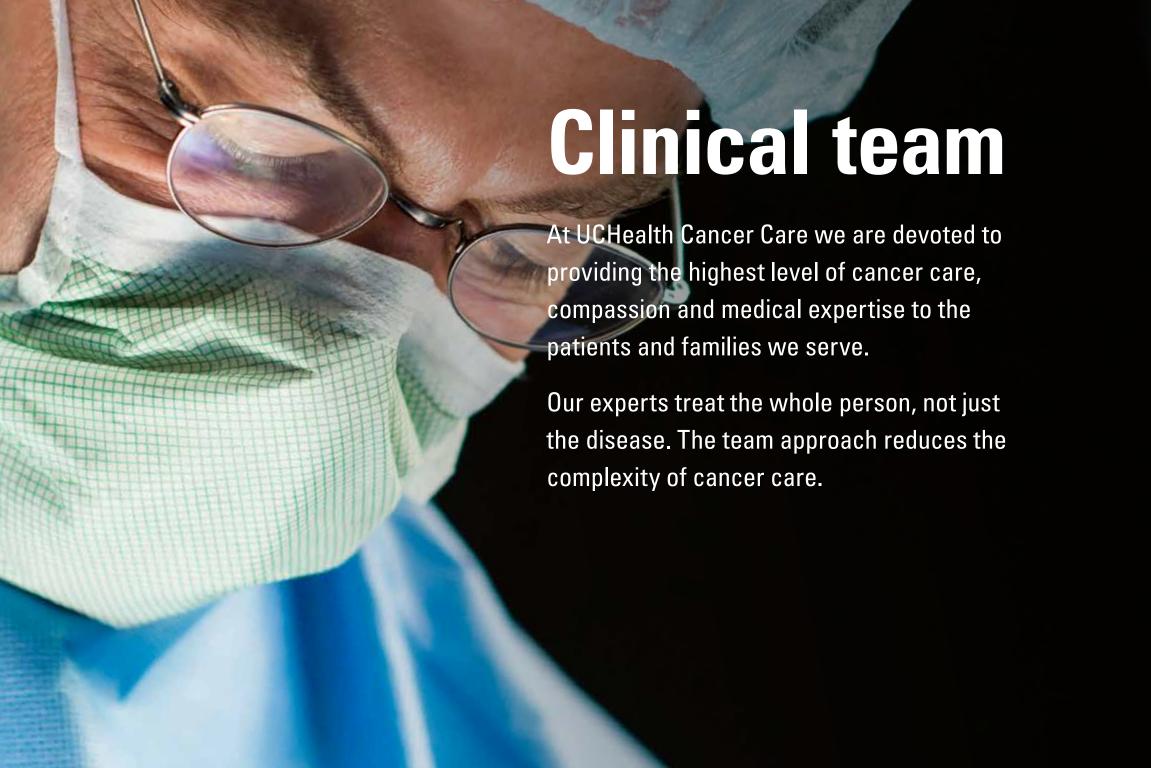
121 actinic keratoses.

33 basal cell carcinoma.

21 squamous cell carcinoma.

9 malignant melanoma.

9 dysplastic nevi.



PATIENT-CENTERED CARE



Accessibility

New appointments are routinely available within two days, providing adequate time to collect and review health records and ensure a complete consult



Emotional counseling, support groups and oncology psychiatry

We aim to help patients and their caregivers increase their feeling of well-being, while reducing depression and anxiety.



Genetic counseling

Our certified counselors work closely with patients and their medical team to identify genetic characteristics that help target treatment to the patient's specific genetic make-up.



Infusion Centers

We offer infusion treatment at all our locations



Massage therapy

Certified oncology therapists help with the physical and emotional impacts of cancer such as anxiety, pain relief, nausea control, fatigue and sleep.



Single entry

Patients and care givers can conveniently call one regional number for all their needs: Northern Colorado 970.237.7700 | Metro Denver 720.848.0300 | Colorado Springs 844.362.0400



Team approach through multidisciplinary clinics

Our multidisciplinary team rapidly evaluates each case, which reduces time to diagnosis and plan consensus. This results in faster time to treatment and survivorship. Patients can often see multiple providers at the same visit.



Surgery

Surgical oncology treatments focus on the surgical management of tumors.



Patient navigators

Certified oncology nurses help patients become educated on their disease and treatment options and stay connected with them from diagnosis through all phases of treatment to survivorship.



Therapy and observational clinical research

We provide access to innovative drugs and vaccines years before they are widely available.



Targeted therapy

Our advanced radiation therapy reduces the number and length of treatments, without harming nearby healthy tissue, speeding recovery.



Oncology social workers

This team helps patients and their caregivers address psycho-social issues and other non-clinical needs (e.g. finances, transportation and community resources)



Oncology financial services

Patients receive an estimate of costs, and financial assistance is offered when applicable.



Oncology nutrition

Our certified registered dietitians provide nutrition assessment, education and recommendations.



Rehabilitation

Programs address impairments that are associated with functional status and quality of life. These include; physical, occupational and speech therapies.



${\bf Survivorship\ transitions}$

We help cancer survivors make the transition from active treatment to life following cancer.

MULTIDISCIPLINARY CLINICS AND DISEASE SITE CONFERENCES

Beating cancer takes a team of experts that is why UCHealth offers numerous multidisciplinary clinics throughout the Front Range. Our MDCs are a highly specialized team of physicians, research staff, nurse navigators, genetic counselors and others. Our team rapidly evaluates each case, which reduces time to diagnosis and treatment plan consensus. This results in faster time to treatment and consolidates the number of appointments for the patient. Communication is provided to the patient's primary care physician (and other members of the care team) from the initial appointment through treatment and aftercare.

Patients are linked with a nurse navigator specializing in their cancer. This nurse will partner with the patient every step of the journey, providing education and emotional support as well as creating timely access to all specialists.

- » Bladder
- » Bone marrow/hematology
- » Brain
- » Breast
- » Esophageal and gastric
- » Gl
- » GYN
- » Head and Neck
- » Liver cancer

- » Lung
- » Melanoma
- » Orthopedic
- » Pancreas and biliary
- » Pituitary
- » Sarcoma
- >> Thyroid
- > Urologic oncology



A TEAM APPROACH TO CARE

It started with heartburn right around his 50th birthday, which he tamed with Tums and Zantac. Although his wife told him he should see a doctor, Doug Everett shrugged it off.

It was eight years until Everett brought it up with his doctor — Dr. David Gaspar of University of Colorado Hospital's AF Williams Family Medicine Clinic at Stapleton. Upon examination, Dr. Gaspar suspected something more and ordered tests for Everett. Within days, a team of UCH cancer specialists had diagnosed a primary pancreatic neuroendocrine tumor and assessed the treatment options in a multidisciplinary clinic.

Less than a month later, on May 30, 2014, Dr. Richard Schulick, surgical oncologist and chairman of the University of Colorado School of Medicine's Department of Surgery, removed a cancerous mass larger than a softball and fed by no fewer than five arteries. Schulick then reconfigured Everett's digestive tract in a Whipple procedure. In the ICU afterwards, Schulick told Everett, "I don't know how you ate."

Everett's story shows that a combination of ongoing care from a diverse team of specialists can help someone stay healthy — despite having the same cancer that killed Steve Jobs.

But that's not the end of the story. Neuroendocrine tumors may grow slowly, but they do grow, and they can spread to other organs. So patients like Everett undergo scans and blood tests every couple of months for the rest of their lives. In Everett's case, the imaging two months after surgery was clean, as was another round two months after that. But in November 2014, a scan showed tumors in his liver's right lobe.

Dr. Tom Purcell, executive director of UCH cancer services and CU School of Medicine medical oncologist treating Everett, took his case to a session of the University of Colorado Cancer Center's neuroendocrine multidisciplinary clinic at UCH. The group, which includes specialists in medical oncology, surgical oncology, radiation oncology, gastroenterology, interventional radiology, pathology, radiology and nuclear medicine, meets weekly to discuss complex cases like Everett's.

"No one physician can take care of neuroendocrine cancer patients," Purcell says. "It requires a diverse team of specialists that approach the patient together, each bringing treatment tools to the table."

The MDC's consensus was to start Everett on oral chemotherapy in December 2014. The tumors shrank, but so did Everett's blood-cell count. The MDC team changed the care plan to radiation therapy, which Dr. Tracey Schefter, a CU School of Medicine radiation oncologist, performed in March 2015. There's still a tumor visible in the liver, but it hasn't changed in appearance since, Everett says. Schulick tells him that removing part of the liver is a possibility, but they'll continue to watch and wait.

For Everett and his wife Char Sorensen, access to the MDC saved time and stress, but was also reassuring, Sorensen says. "I know we're going to get the opinion of the whole group and not just one person," she says. "It's such a relief that we have had this whole team behind us."

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UCHealth Cancer Care offers the latest trials and innovative cancer research so our patients can participate in cutting-edge care.

These studies test new ways to prevent, detect, diagnose or treat cancer. Patients that take part in trials have an opportunity to contribute to scientists' knowledge about cancer and to help in the development of improved cancer treatments.

Because the CU Cancer Center is one of the top cancer research institutes in the nation, UCHealth Cancer Care has access to clinical trials that may not be available to other regional institutions.

Regardless of where patients are seen, they all have access to new and innovative care. Each patient is evaluated for clinical trial eligibility. This provides access to advanced treatments, sometimes years before they are widely available.

Access to clinical trials is crucial for excellence in health care

Additionally, our participation drives progress by speeding accrual rates to achieve the required amount of study participants that help determine the efficacy of a new treatment. When a trial drug is proved effective, it becomes a standard-of-care treatment option. In other words, the advances in cancer treatment today are often the result of such previous trials.

In 2015, over 1,000 patients were enrolled in clinical trials within UCHealth Cancer Care.

UCHealth is a Lead Academic Participating Site

UCHealth is part of the Lead Academic Participating Site within the National Clinical Trials Network. The LAPS grant was awarded to UCHealth, which includes all of our hospitals, UCH, Poudre Valley Hospital, Medical Center of the Rockies and Memorial Hospital. The LAPS membership provides access to innovative NCI Cooperative Group phase II and III treatment and chemoprevention trials. LAPS positions UCHealth to offer the latest trials and innovative cancer research so people affected by cancer can participate in clinical trials close to home.

First patient in northern Colorado begins electric field therapy to slow brain cancer.

Kim Speaker remembers the moment her life felt like it stopped – just a few days after Christmas 2014 when she learned she had two large masses in her brain.

Kim began the recommended treatment for patients with the aggressive brain cancer glioblastoma multiforme. After surgery to remove the tumors, she received oral chemotherapy both during and after radiation. But Kim's treatment plan also included a new twist called Optune — something that recent clinical trials show could prolong survival.

Optune is a device made by the oncology company Novocure. Wired patches called transducer arrays are strategically placed on Kim's scalp. They send alternating electric fields across the upper part of the brain in different directions, zapping dividing cancer cells. It is a noninvasive therapy because it does its work from the outside of the body in, but Kim must wear it at least 18 hours a day and change out the arrays every three to seven days.

"Being that Kim is our first patient (to use the Optune), we are making note of the practicality of it," said Dr. Joshua Petit, Kim's radiation oncologist with the UCHealth Cancer Care in northern Colorado. Petit works alongside Kim's team of specialists including medical oncologist Dr. Ann Stroh and neurosurgeon Dr. Lars Widdel who all participate in a weekly brain and spine tumor

conference and clinic where all patient's treatments, including Kim's, are discussed and where patients meet with all of their doctors in one visit.

"In the past 15 years, despite extensive cancer trials and research, we have not been able to significantly change the outcome or average survival of patients with glioblastoma," Widdel said. "Novocure is the first element in many years introduced in the management of glioblastoma that has really made an impact on survival. We are very excited to be able to offer this new technology to our patients in our community without them needing to travel long distances."

Only a month before Kim's diagnosis, the FDA started allowing patients with newly diagnosed glioblastomas to use the device based on clinical trial results that showed earlier use slowed tumor growth.

"There are these types of investigational therapies now available in our community where patients don't have to travel," Stroh said. "With cancer patients, we must focus on quality of life. Now, they can stay in their community to get their treatments."

And though it's too early to tell if the treatment is working, Kim is happy to be able to try it.

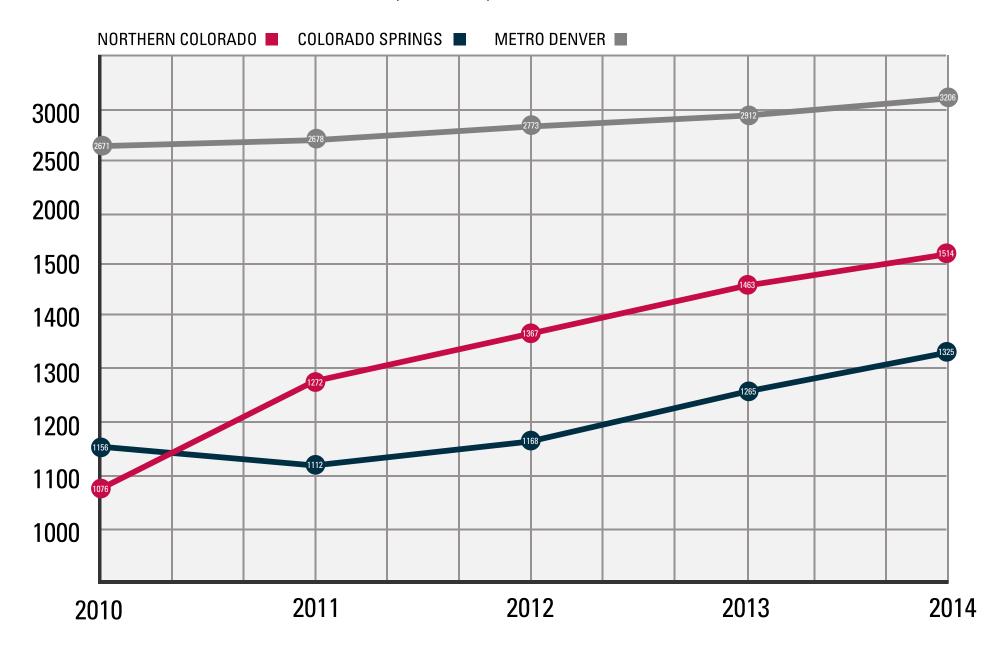
"This is something the patient uses as long as it is working," Stroh said. "We will repeat MRIs every two to three months to see how she is responding and look for changes in her symptoms. The goal is that she'll use this long term." Characteristically, Kim is even more optimistic.

"Everyone has been crazy supportive, and I'm so grateful this technology even exists. I'm going to wear it until they find a cure, so hopefully next year," Kim says with a smile.

In the past 15 years, despite extensive cancer trials and research, we have not been able to significantly change the outcome or average survival of patients with glioblastoma.

Lars Widdel, MD





2014 TOP PRIMARY SITES

NORTHERN COLORADO		COLORADO SPRINGS		METRO DENVER	
BREAST	309	BREAST	424	BREAST	332
PROSTATE	193	LUNG BRONCHUS	140	LUNG	269
LUNG BRONCHUS	131	MELANOMA	89	MELANOMA	275
COLON EXC RECTUM	78	COLON EXC RECTUM	74	PROSTATE	230
BLADDER	71	THYROID	49	PANCREAS	158

About UCHealth

UCHealth is a Front Range health system that delivers the highest quality patient care with the highest quality patient experience. UCHealth combines Medical Center of the Rockies, Memorial Hospital, Poudre Valley Hospital, University of Colorado Hospital and a network of more than 40 medical clinics into one organization, dedicated to health and providing unmatched patient care in the Rocky Mountain West. Separately, these institutions can continue providing superior care to patients and service to the communities they serve. Together, they push the boundaries of medicine, attracting more research funding, hosting more clinical trials and improving health through innovation.

Colorado Springs

Memorial Hospital - Central

Memorial Hospital - North

Woodland Park

Lamar

Metro Denver

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^{*}Partner locations