

Legacy Cancer Institute Annual Report 2021 Colorectal Cancer



Legacy Cancer Institute



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Are You Regular?

By Nathalie Johnson, MD, FACS; breast surgical oncologist; medical director, Legacy Cancer Institute and Legacy Breast Health Centers

"Are you regular?" is one of the most important questions we ask in the world of gastroenterology. And you guessed right: This year's annual report is



focused on colorectal cancer.

In the world of colorectal cancer management, this question is important in two ways. The first is because a regular bowel movement is an integral part of healthy gastrointestinal (GI) function.

This is often reflective of a healthy diet filled with high fiber fruits and veggies. A change in bowel habits can be a signal of left-sided colon cancer. Chronic constipation is not good and may be associated with elevated colon cancer risk.

The second reason this question is important is because it relates to regular colorectal cancer screening. We prefer a colonoscopy because it screens for early cancers, but more importantly, it detects any pesky polyps that can be removed during the colonoscopy. The screening serves the role of prevention as well.

But the pandemic threw a big wrench in the screening wheel. So many people were impacted. We are predicting a national increase in the number of colorectal cancers and higher stage lesions in the next couple of years as we scurry to get people caught up on regular screenings. To this end, we participated in the Commission on Cancer's Return to Screening quality initiative to return to pre-pandemic screening rates. Though we are not back to pre-pandemic rates, we are slowly making progress and seeing improvement in the number of people being screened.

What is a regular screening and how do we define it? Great question! A regular screening depends on your risk for colorectal cancer. Some people are at higher risk than others. A family history of colorectal, endometrial or breast cancer can be clues to an inherited risk.

This gives me an opportunity to share that Legacy Cancer Institute has the largest and most geographically diverse genetic risk assessment program in the Portland area. People with a family history of cancer can be referred and considered for testing to determine if they have a mutation that increases their colorectal cancer risk.

We are now aware of many more genetic mutations that increase risk for colorectal cancer over and above HNPCC, FAP or APC. Additional genetic mutations to be aware of include CHEK2 and MUTYH, both of which are quite common. Having one of these mutations would mean having a colonoscopy at two- to three-year intervals versus the standard 10-year interval for the average risk person. Finding certain types of polyps during a colonoscopy can also signal a need for more frequent screening.

Please reach out to the Legacy Cancer Institute High Risk Program and Cancer Genetics Clinic at 503-413-6534 for more information.

Last, but certainly not least, we are proud of the high level multidisciplinary care delivered at Legacy Cancer Institute. We have expertise in medical, surgical and radiation oncology. This is all supported by our GI team specializing in pathology, imaging, clinical research and our Oncology Nurse Navigation Program and Cancer Healing Centers.

We've got GI screening, diagnosis, treatment and survivorship covered from top to bottom!

Comprehensive Cancer Services

For more information about our services, please visit legacyhealth.org/cancer.

Cancer care and treatment

Cancer care conferences/tumor boards
 Cancer care inpatient unit
 Cancer data management/cancer registry
 Cancer rehabilitation services
 Cancer screening and prevention
 Interventional radiology
 Legacy Breast Health Centers
 Legacy Cancer Healing Center
 Legacy Genetics Services
 Legacy Hospice
 Legacy Medical Group—Colon and Rectal Surgery
 Legacy Medical Group—Gynecologic Oncology
 Legacy Medical Group—Pulmonary
 Legacy Medical Group—Radiation Oncology
 Legacy Medical Group—Reconstructive Surgery
 Legacy Medical Group—Surgical Oncology
 Legacy Pain Management Centers
 Legacy Palliative Care Services
 OHSU Knight-Legacy Health Cancer Collaborative
 Pathology
 Wound and ostomy care

Cancer programs and specialty areas

Autologous stem cell transplant program
 Bladder cancer
 Blood cancers
 Brain and spinal tumors
 Breast cancer services
 Children's cancer and blood disorders program
 Colorectal cancer
 Esophageal cancer
 Gynecologic cancers
 Oral, head and neck cancer
 Hepatobiliary and pancreatic cancer
 Kidney cancer
 Lung cancer
 Melanoma
 Prostate cancer
 Stomach cancer

Clinical trials and research

Oncology clinical research
 Tumor bank

Support services — adult

American Cancer Society Gift Closet
 Cancer support groups and classes
 Cancer survivorship
 Expressive arts therapy
 Green Gables Guest House
 Integrative care and symptom management
 Lymphedema management
 Nutrition
 Oncology nurse navigation
 Pharmacy navigator
 Oncology psychology services
 Oncology social work
 Stress management
 Volunteer program

Support services — pediatric

Child Life Therapy
 Family Lantern Lounge
 Family Wellness Center
 Music Rx® Program
 Pediatric development and rehabilitation
 Ronald McDonald House
 School program
 Survivorship services and KITE Clinic
 Volunteer program

Legacy Cancer Institute Overview: Highlights from 2021

By Alizah Rotramel, MD, MS, FACS; colorectal surgeon; chair, Integrated Network Cancer Committee, Legacy Cancer Institute

Defining survivorship

In 2021, the Legacy Integrated Network Cancer Committee (INCP) made a crucial pivot. We



updated our definition of “cancer survivorship” to focus not just on life after cancer treatment, but on meeting the needs of individuals across the cancer care continuum — from diagnosis through treatment and extending into post-

treatment follow up.

2021 was also our first full calendar year of the COVID-19 pandemic. Together, we continued to be survivors of this global catastrophe, finding ways to recover and thrive despite the disappointing reality that the pandemic wasn’t, and isn’t, yet over. We masked up, rolled up our sleeves and mastered new technology to make virtual visits with our patients and each other comfortable and productive.

Here are just a few highlights from the year:

- Cancer screening, which is critical to cancer prevention and early intervention, had decreased in 2020. Then screening rates across our sites began to increase through 2021. Staffing issues and high turnover became an issue, a trend that was widespread across our region and the nation. Staffing issues also caused tremendous strain across clinics and hospitals, with administration and staff working tirelessly to ensure availability of surgical and medical oncologic treatments and support services.
- Legacy Cancer Institute’s support services continued to provide consistent patient support with remote staffing and virtual visits. Our oncology nurse navigation and Legacy Cancer Healing Center teams continued to offer patients virtual visits. Not surprisingly, our teams identified “financial toxicity” as a critical barrier to care, with around 18% of patients indicating insurance/

financial concerns. The oncology pharmacy navigation team helped provide financial assistance to patients and we utilized the patient assistance fund to help with co-pay assistance, free supplements, OTC medications, gas and food. Financial toxicity will continue to be a barrier for care evaluation in the upcoming year.

- In the face of the pandemic, we also found ways to leverage new remote technology and the expertise of our team, including the new systemwide multidisciplinary Legacy Gastrointestinal Oncology Conference. We incorporated a genetic counselor at the monthly urology multidisciplinary cancer case conference and increasing genetics referrals for prostate cancer patients. We are improving access to cancer treatment, now including high-dose prostate brachytherapy at the Legacy Cancer Institute.

Survivorship is a complex process for the ongoing care of individual cancer patients. Survivorship also reflects the ongoing process of providing cancer care in the face of the global pandemic and the innumerable obstacles with which we are presented. We continue working to meet the needs of our patients, our cancer teams and each other.

I hope you enjoy learning more about the Legacy Cancer Institute in this year’s report, and we appreciate the opportunity to share our work with you.

Legacy Health Cancer Site Analysis: Colorectal Cancer

By Joseph Frankhouse, MD, FACS; colorectal surgeon; medical director, Legacy Medical Group—Colon and Rectal Surgery

Legacy Health has a long and proud history of providing care for patients and families afflicted with malignancies of the lower digestive system.



Quite frankly, the advances at our institution and the care we provide remains at the forefront in colorectal cancer care. When we look back at how care was provided 30 years ago compared to today, the differences are astonishing.

Surgery was often the only option for patients. Colostomy rates and complications occurred in roughly one-fourth of our patients. There was only one chemotherapy regimen in use (5 Fluorouracil and Leucovorin) and post-operative radiation was being explored for rectal cancer due to high rates of recurrence.

At the time, patients were diagnosed by a gastroenterologist and sent to a surgeon. Invariably, the patient would have surgery and then see the oncologist. There was essentially no communication between the team until after surgery. Much of the treatment was based on tradition dating back many years. Patients would have large incisions and spend 7–10 days in the hospital. Due to high complication rates, many would not recover well enough to tolerate post-operative chemotherapy or radiation.

Fast forward to 2021. We have multidisciplinary GI cancer care conferences (which we started here in 2005) with specialists in radiation oncology,

medical oncology, colon and rectal surgery and hepatobiliary surgery. The multidisciplinary team comes together to discuss the treatment plans for our patients. We have input from physicians in radiology and pathology. The physicians are supported by our team in Legacy Cancer Services, including nurse navigators, researchers and staff in genetics and palliative care. Patient volumes for colorectal cancer from 2020 (the most current and complete year of data), as well as all other tumor sites, is provided in Table 1, Legacy Health 2020 Primary cancer sites by body system, all ages (*see page 5*).

Patient treatment plans are based on the most up-to-date guidelines from the National Comprehensive Cancer Network (NCCN). Physicians are constantly reviewing the latest updates from national and international meetings and considering the best options for all patients, many of whom have unique circumstances that must be considered. Guidelines, which are based on treatment outcomes, are discussed among our groups and followed as rigorously as possible. Treatment goals to consider are adjuvant chemotherapy for all patients with colon cancer that has spread to lymph nodes (Stage III). We also strongly advise preoperative combination chemoradiation for all locally advanced or lymph node positive patients with rectal cancer (Stage II and III). Tables 2 and 3 (*below*) provide the stage at diagnosis for colon and rectal cancer patients treated at Legacy Cancer Institute compared to all

TABLE 2 Legacy vs. Commission on Cancer AJCC Major Stage Groups — Colon

AJCC Stage	Legacy 2020*	CoC 2019*
Stage 0	1.3%	3.7%
Stage I	18.7%	17.7%
Stage II	29.0%	24.1%
Stage III	25.8%	23.7%
Stage IV	12.9%	22.0%
NA or Unk	12.3%	8.8%

TABLE 3 Legacy vs. Commission on Cancer AJCC Major Stage Groups — Rectum

AJCC Stage	Legacy 2020*	CoC 2019*
Stage 0	0.0%	3.5%
Stage I	13.5%	17.8%
Stage II	19.2%	16.7%
Stage III	41.4%	31.2%
Stage IV	15.4%	16.5%
NA or Unk	10.6%	14.2%

*Most current data available

other Commission on Cancer accredited programs nationally.

For rectal cancer care, in particular, the science behind treatment management has quickly evolved. Rectal cancer has had historically higher rates of both systemic and local pelvic recurrence compared to colon cancer. Now, we have advanced to the point where surgery is not the first treatment for such patients. Chemotherapy and radiation are provided as the first steps for management. Previously, we had stepwise improvement in outcomes with chemoradiation before surgery, as further chemotherapy was provided afterwards. Now, much improved success is seen with a completely neoadjuvant (pre-surgery) approach to rectal cancer. Patients tolerate this approach better, and tumors shrink remarkably. Using such an approach has allowed us to begin treating a portion of rectal cancers non-operatively. In other words, the cancers disappear (also known as complete responders or CR) with chemoradiation up front, thus sparing the patients the need for major life altering surgery. Some centers are seeing up to 30% of patients with a CR. Our data suggests the CR rate for us is over 35%. We choose completely nonoperative therapy in about 13% of patients based on confidence of follow-up exams. Others undergo surgery only to discover no cancer in the specimen. Clearly, this has been one of our major advances as we evolve in the treatment of rectal cancer. As we gain more experience in our post-treatment evaluation, we will begin offering more patients a non-operative approach for rectal cancer.

Immunotherapy has been evolving along with traditional chemotherapy. We have recently found a new and exciting role in colorectal cancer management. Reports of complete responders with immunotherapy alone for certain kinds of rectal cancer are an intriguing development. These experiences are in their initial phases but Legacy and our colleagues in the Cancer Alliance will participate in trials and use immunotherapy when appropriate. We expect much more to come regarding immunotherapy advances.

The treatment delivered at Legacy Cancer Institute for both colon and rectum patients is in line with treatment delivered at all other Commission on Cancer Accredited cancer programs nationally (see Tables 4 and 5, page 7).

Legacy Medical Group—Colon and Rectal Surgery and The Oregon Clinic Hepatobiliary Surgery Group are closely aligned with the physicians working within the Legacy Cancer Alliance. This includes oncologists from Legacy, Oregon Health & Science University and The Vancouver Clinic. Working together in a collaborative and multidisciplinary fashion has been an important and fundamental advance in cancer management and is now a widely accepted approach.

Still, there is some concern. Like the rest of the U.S., we are experiencing higher rates of rectal cancer and cancers of the distal colon in younger patients. We presented our data on this trend showing that 12% of our patients present with colorectal cancer before the usual age of 50. In our most current data, most of these patients show no family history and no occurrence in the distal colon or rectum. Age 50 had been the recommended screening age for many years, but our reports and national data were a helpful impetus to decrease the screening age to age 45. Our efforts have included better education of our primary care doctors to be aware of symptoms of concern in younger patients.

Overall, there has been a slight decrease in the rate of colorectal cancer due to more acceptance of colonoscopy as a screening tool. Our gastroenterologists serve an important role in providing this service. However, the goal of having 80% of our community compliant with colorectal cancer screening has not quite been achieved. Much of the public still have fears of the bowel prep and the procedure itself. Many people falsely believe that if colon cancer has not occurred in any close family members, they are safe. So there is still education we need to deliver. Simply, if you have a colon, you are at risk. Over 85% of colon cancers do not have any link to family history. The other key message is that colonoscopy and polypectomy

are the most important components to colorectal cancer prevention. Other tests that advertise the use of blood or abnormal DNA in the stool do not provide the prevention benefit of colonoscopy and removal of pre-malignant polyps.

Surgery has also advanced. We rarely do “open surgery” as was done 30 years ago. Minimally invasive surgery has progressed. Laparoscopic surgery entered practice in the early 2000s and became the most common type of surgery shortly thereafter. Robotic surgery has now evolved alongside laparoscopic surgery and can offer both surgeons and patients improvements in performing and recovering from the more complex surgeries for rectal cancer. The Legacy colorectal surgery team has been a strong leader in

performing and improving upon colon and rectal cancer surgery outcomes with robotic surgery. We had previously developed and adopted better methods of pre-and post-operative management using what we initially called “enhanced recovery after surgery,” or ERAS principles. Our success with this program in colorectal surgery has influenced others to adopt similar approaches in all forms of surgical care. Better pain and nausea management and minimizing fasting before and after surgery have led to quicker discharge from the hospital. That is critical in this time of limited resources and hospital capacity. The boundaries will continue to be pushed in regards to improving the care of the colorectal cancer patient.

TABLE 4 Colon malignancies, first course of treatment, Legacy vs. Commission on Cancer

Treatment	Legacy 2019*	CoC 2019*
Surgery only	61.4%	54.0%
Surgery, chemotherapy	26.0%	28.0%
Chemotherapy only	6.1%	6.7%
Surgery, radiation, chemotherapy	1.1%	0.7%
Radiation only	0.0%	0.3%
Surgery and radiation	0.0%	0.1%
Other therapy	0.5%	1.8%
No first course treatment	4.9%	8.4%

* Most recent data available from the Commission on Cancer National Cancer Data Base (NCDB)

TABLE 5 Rectum malignancies, first course of treatment, Legacy vs. Commission on Cancer

Treatment	Legacy 2019*	CoC 2019*
Surgery only	34.0%	32.6%
Surgery, chemotherapy	3.8%	5.0%
Radiation, chemotherapy	13.2%	12.8%
Surgery, radiation	0.0%	1.0%
Surgery, radiation, chemotherapy	37.7%	32.5%
Radiation only	1.9%	2.0%
Chemotherapy only	7.6%	5.4%
Other; no treatment	1.8%	8.7%

* Most recent data available from the Commission on Cancer National Cancer Data Base (NCDB)

Advances in Colorectal Cancer Screening and Surgery

By Khyree Butler, MD; colorectal surgeon, Legacy Medical Group—Colon and Rectal Surgery

Colorectal cancer is the third most common cancer diagnosed in the United States and accounts for approximately 50,000 deaths a year. However,



colorectal cancer screening is associated with decreased colorectal cancer death and early detection.

Historically, screening for colorectal cancer for average risk patients started at ages 50–75. Over the last decade, changes in the demographics of new colorectal cancer diagnosis has led to multiple guideline adjustments with respect to the timing of colorectal cancer screening. Most recently, the U.S. Preventive Services Task Force (USPSTF) lowered the recommend screening to age 45 as this is associated with moderate net benefit based on quality and strength of available evidence. Additionally, USPSTF determined that offering conditional colorectal cancer screening for people between ages 76–85 offers some net benefit based on quality and strength of available evidence.

While direct visualization tests remain the gold standard, there are a variety of colon cancer screening modalities available for patients. The stool-based tests include FIT, FOBT and sDNA-FIT tests. Generally, these stool-based tests are recommended to be completed annually. While there are also a variety of direct visualization tests available, we recommend a colonoscopy as the screening study of choice.

Minimally invasive colorectal surgery is the cornerstone of surgical therapy for Legacy Medical Group—Colon and Rectal Surgery. While not all patients are appropriate for minimally invasive surgery, the vast majority of patients can be offered these techniques. This includes hand-assisted laparoscopic surgery, laparoscopic surgery and robotic-assisted laparoscopic surgery. Together with a robust Enhanced Recovery After Surgery (ERAS) program, patients are able to discharge from the hospital safely in fewer days.

Genetics of Colorectal Cancer

By Therese Tuohy, PhD; certified genetics counselor, Legacy Genetics Services

Colorectal cancers are the third most diagnosed cancers in both males and females. Moreover, about 5–10% of these cases have a detectable



genetic component.

Current National Comprehensive Cancer Network (NCCN) assessment guidelines for evaluation for a hereditary colorectal cancer syndrome include consideration of personal or family history of adenomatous, hamartomatous and serrated polyps, as well as of Lynch syndrome and multiple other

non-Lynch syndrome genes.

Because “every gene has its own personality” and many colorectal cancer predisposition genes are also associated with extracolonic cancer, contemporary testing panels usually start with a broad panel of high- and moderate-risk genes. Secondly, they include specific additional genes based on personal and family history.

Traditionally, the threshold to refer patients for genetic evaluation was three or more cases of colorectal polyps or cancers, including one diagnosis made under age 50. However, because recent data suggests that only about 22% of

patient clinical medical records include sufficient family history to identify high-risk patients for further evaluation, the threshold for suspicion for a genetic component to a patient's future risk should be commensurately lowered.

A recent study from the Mayo Clinic of 361 patients with CRC undergoing universal genetic testing (microsatellite instability or MSI) and immunohistochemistry to identify abnormal expression of mismatch repair genes (MMRs) reported 15.5% of patients as having a genetic mutation associated with cancer predisposition. More recent perspectives have raised the potential value of replacing universal immunohistochemistry (IHC) with universal panel genomic testing.

As of 2021, there are about 20 genes that are known to be associated with increased risks for several different types of polyps and colorectal and related cancers, as well as associated benign growths, including APC, AXIN2, BMPR1A, CDH1, CHEK2, EPCAM, GREM1, MLH1, MSH2, MSH3, MSH6, MUTYH, NTHL1, PMS2, POLD1, POLE, PTEN, SMAD4, STK11 and TP53. However, founder mutations have skewed the population's risks in specific communities, while racial and ethnic disparities persist in referral and testing profiles among different subpopulations.

Germline testing can complement somatic testing, as recent evidence highlights the efficacy of multiple next-generation drugs in the context of specific mutations. For example, vemurafenib (Zelboraf) in cases of BRAF mutation, especially when combined with cetuximab (Erbix) and irinotecan (Camptosar) ([frontiersin.org/articles/10.3389/fonc.2022.852927/full](https://www.frontiersin.org/articles/10.3389/fonc.2022.852927/full)).

Recently heralded technology is now emerging to offer early detection of cancer using tumor-derived cell-free DNA. This new technology offers screening, not diagnosis, of cancers and promises to detect otherwise invisible traces of cancer before clinical diagnoses can be made. It has the potential to detect precursors to cancer, and to thus allow a zoomed-in measure of therapeutic response or even pre-clinical recurrence of tumors that appear cured by established clinical measures. However, real-world sensitivity and specificity are not yet known in this regard, and not all tumors shed the cells that this technology follows.

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Colorectal Cancer: A Medical Oncology Perspective

By Eric Anderson, MD, PhD; medical oncologist, OHSU Knight Cancer Institute, Northwest Portland, part of the OHSU Knight-Legacy Health Cancer Collaborative

Colorectal cancer is the third most common cancer in the United States among both men and women and is also the second leading cause of cancer related deaths.



Approximately 140,000 new cases of colorectal cancer (CRC) are diagnosed in the U.S. each year. Site distribution varies with 70% of cases of CRC arising from the proximal, mid, distal and sigmoid colon,

while the remaining 30% are tumors of the rectum. This anatomical distribution is relevant because treatment and prognosis varies based on anatomical site.

Notably, there also exists significant racial and ethnic variability in both CRC incidence and mortality with Black Americans diagnosed with CRC at a rate 20% higher than white Americans and deaths from CRC in Black Americans 40% greater than white Americans. Americans of Asian and Pacific Islander background have overall lower rates of CRC than white Americans, as do Native Americans as a whole. But it should be noted that Alaskan Natives have CRC incidence and mortality rates that are more than double those of other Native groups and white Americans and 80% higher than Black Americans. The reasons for these disparities are broad and include increased poverty or lower socio-economic status, increased medical comorbidities, decreased screening and general lack of health care access.

While localized cancers of the colon are treated with surgery followed by adjuvant chemotherapy when indicated (lymph node involvement or highly locally advanced primary tumors), rectal cancer is generally managed in a multidisciplinary fashion involving chemotherapy, radiation therapy and surgery. The standard management of localized rectal cancer was established based on results from the German Rectal Cancer Study Group (NEJM 2004), which showed a five-year local relapse

rate of 6% and a five-year overall survival (OS) rate of around 75% with the use of pre-operative fluoropyrimidine-based chemoradiotherapy followed by surgery. This compares to a 13% local recurrence rate for post-operative chemoradiotherapy. The addition of adjuvant chemotherapy to chemoradiotherapy and surgery, based on data extrapolated from the colon cancer literature, had not significantly improved relapse or survival rates in rectal cancer. But it has become the international guideline supported standard of care.

More recently, questions about sequencing and timing of pre-operative chemoradiotherapy, chemotherapy and surgery, as well as the need for surgery at all (which typically requires a temporary or permanent ileostomy/colostomy and multiple surgical procedures over the course of a year or more of treatment) have been evaluated.

Data from the recently published Organ Preservation in Rectal Adenocarcinoma (OPRA) trial of total neoadjuvant therapy (TnT) with six weeks of fluoropyrimidine-based chemoradiotherapy followed by four months of fluoropyrimidine/oxaliplatin (FOLFOX/CapeOx) chemotherapy and repeat staging with CT scans, MRI of the pelvis and/or endoscopy showed that for patients with a complete response (CR) to chemo/radio-therapy, more than half remain disease free at three years. For those who initially have no evidence of disease but who later develop local recurrence and require surgery, outcomes are identical to those who have surgery initially. Furthermore, the three-year overall survival for all patients in this study was identical to historical controls of about 75%, suggesting that there is no risk in adopting a watchful waiting strategy rather than radical surgery in patients who undergo TnT.

Finally, the small subset of patients with CRC who have underlying mutations in DNA mismatch repair proteins, commonly known as Lynch Syndrome (around 10%), have been shown in multiple studies in metastatic CRC and other tumor

types, to respond extremely well to treatment with monoclonal antibodies (mAb) to PD-1/PD-L1 (commonly known as immunotherapy). A recent small, Phase 2 study of the anti-PD-1 mAb dostarlimab in 12 patients with Lynch syndrome and localized rectal cancer showed that 100% had a CR with the use of dostarlimab alone and that, at 6–12 months after the start of treatment, none had required chemotherapy, chemoradiotherapy or surgery. This suggests an exciting treatment opportunity for that small subset of patients.

For the past 15–20 years, the management of localized rectal cancer has been fixed and has focused on a tri-modality (chemotherapy, radiation and surgery) treatment. Newly emerging and exciting data for both non-operative and chemotherapy/radiation therapy sparing treatment in select populations is revolutionizing the management of rectal cancer and doing so almost in real time.

Palliative Care Services

By Ruth Medak, MD; medical director, Legacy Medical Group—Palliative Care and Hospice

Colon cancer is one of the most common cancers and the second most common cause of death due to cancer in the United States. The disease



and treatment cause not only physical symptoms, but also emotional distress for patients and their families.

Legacy Palliative Care is a multidisciplinary support system for patients and families focused on optimizing quality of life. Research has shown that patients and families referred to palliative care early in their disease have improved quality and longevity of life.

The palliative care team includes providers, social workers and chaplains. The team assists the patient's oncologist, primary care provider and other providers in managing pain, nausea, fatigue, loss of appetite and other symptoms. They also give patients a safe space to ask questions about the disease and treatment, address concerns about the future, get assistance for arranging additional physical care support and assess needs and opportunities for financial support.

The palliative care team helps people consider short- and long-term goals of care, complete advance care directives, designate health care representatives, share and address family conflicts and develop plans to avoid crises.

For some patients, cancer will progress, and troubling symptoms will then develop despite best possible treatment. The palliative care team is there to support changing physical and psychosocial needs while working in collaboration with other members of the patient's care team to develop an effective treatment plan.

When life expectancy decreases to less than six months due to disease progression or a decision to stop or forgo life prolonging treatment or palliative chemotherapy, patients are eligible for hospice care. Among the many benefits of hospice care is a delivery model that allows care to come to the patient's home, wherever home may be. Hospice care is provided by an integrated team of nurses, providers, bath aides, social workers and chaplains at no cost to patients for treatments and services related to metastatic colon cancer. Services include hospice nurse visits, bath aide care, provider oversight, 24/7 telephone support, and home visits from providers, social workers and chaplains as needed. Hospice also provides medications, equipment and some advanced treatments on a case-by-case basis.

Hospice providers and nurses develop care plans to avoid crises, are available to manage symptoms in times of crisis, and always strive to give patients and families the best possible quality of life and comfort.

Inpatient palliative care is provided in all Legacy hospitals except Legacy Silverton and Legacy Mount Hood medical centers. Legacy Mount Hood will launch an inpatient service in the spring of 2023. Outpatient in-person palliative care is currently provided at the Legacy Good Samaritan and Meridian Park medical centers and will be available at Legacy Salmon Creek Medical Center starting in November of 2022.

Telehealth visits are available for people who are unable to come to the office.

For more information about palliative care services, call Legacy Medical Group–Palliative Care directly at 503-413-6862.

Legacy Hospice provides care for Oregon patients in patients' homes, adult foster care homes, assisted living facilities and nursing facilities throughout the Portland metro area (as far as Salem and Scappoose). For more information about hospice care, call Legacy Hospice at 503-220-1000.

Legacy Oncology Clinical Research

by David Hoang, research student, Legacy Cancer Institute

The American Cancer Society estimated that in 2021 there would be 104,270 new cases of colon cancer and 45,230 cases of rectal cancer. These estimates



indicated that approximately one in 23 men and one in 25 women would be diagnosed with colorectal cancer.

In Oregon, colorectal cancer was reported as the fourth most common type of cancer, with estimates of around 1,850 cases

in 2022. Researchers supported by the National Cancer Institute (NCI) are attempting to improve our knowledge of how to prevent, detect and treat colorectal cancer as well as enhance current standard treatments to improve patient care.

Although the number of colorectal cancer cases has been decreasing in the United States since the 1980s due to increased screening, incidence can be seen rising among younger adults. The reason for the increase in colorectal cancer among young adults is unknown to experts. However, they are aware of some risk factors, such as obesity, inactivity and smoking, for colorectal cancer in older patients. Identifying the root causes and risk factors for early onset colorectal cancer would assist in prevention, screening and treatment strategies.

The pandemic has impacted the process of enrollment in clinical trials, as well as cancer diagnosis and treatment for colorectal cancer.

According to a study done in June 2021, the percentage of diagnostic tests and colorectal cancer diagnoses had declined. The study reported a delay in colorectal cancer diagnosis ranging from 5.4–26%. Additionally, the amount of time spent treating colorectal cancer had greatly decreased or been postponed. All treatments — including surgery, chemotherapy and long-term radiation therapy — showed this reduction and delay.

In 2021, Legacy's oncology research conducted several studies on how to treat colorectal cancer. One of these was NRG-Gloo2, a Phase II clinical trial, "Neoadjuvant therapy (TNT) in locally advanced rectal cancer (LARC) — Pembrolizumab experimental arm (EA) primary results." This was a randomized Phase II trial that studied the effects of veliparib (or pembrolizumab), which is used in the treatment of individuals with rectal cancer that has progressed from the site of origin to adjacent tissue or lymph nodes. The trial explored the effects of veliparib when used in combination with chemotherapy and radiation therapy, with results showing that this combination may increase tumor cell death, shrink the tumor and lessen the need for surgical removal of healthy tissue.

A second study that was conducted at Legacy Health was a Phase II/III study of circulating tumor DNA as a predictive biomarker in adjuvant chemotherapy in stage IIA colon cancer (COBRA).

Circulating tumor cells, or ctDNA, are released into the blood by malignancies. Finding ctDNA in the blood indicates that there are likely still some trace quantities of malignancy following surgery.

Because of this, after surgery ctDNA testing may assist in differentiating colon cancer patients who will benefit from chemotherapy and those who will not.

Oncology Nurse Navigation Program

By Jill Carrillo, BSN, RN, OCN; oncology nurse navigator, Legacy Cancer Institute

Dealing with a cancer diagnosis is stressful and overwhelming for both patients and their loved ones. Legacy Cancer Institute is fortunate to have



a comprehensive Oncology Nurse Navigation (ONN) program to help ease the burden of cancer and guide patients and families through the cancer care experience.

Oncology nurse navigation services, offered at no charge, are available across Legacy Health.

Legacy's ONNs are highly trained nurses with extensive oncology experience. Each ONN holds national Oncology Certified Nurse (OCN) certification. The ONNs at Legacy are cancer type-specific which enable them to be subject matter experts and to cultivate strong relationships with physicians and cancer care teams. Required to stay current with best practices and evidence-based guidelines, ONNs participate in continuing education courses, conferences (national, regional and local) and weekly multidisciplinary cancer case conferences (tumor boards).

The role of the ONN is to provide in-depth education about the cancer diagnosis, procedures and diagnostic workup, treatment options, help with what to anticipate, and how best to prepare. The ONN connects patients with resources and facilitates collaboration between patients and medical providers, social workers, dietitians, genetic counselors, cancer rehabilitation specialists and other members of the multidisciplinary cancer care team. Early referral is key to the ONNs identifying a patient's needs, helping ease the fear and anxiety

that often goes along with a cancer diagnosis and facilitating timely access to appropriate care.

Support begins with an ONN contacting patients at or near the time of their cancer diagnosis. The initial conversation often includes an explanation of the role of the ONN, review of the plan of care and next steps, and then a discussion about the different cancer care team members.

Patients are encouraged to utilize the ONN as an ongoing resource and key point of contact throughout their cancer journey. We serve as an advocate for patients and liaison to foster communication and coordination of care across multiple departments and locations.

The ONN identifies and works to remove barriers that may delay or impact cancer care such as financial and insurance concerns, perceptions and beliefs about treatment and tests, psychosocial issues and other challenges. We make appropriate referrals and connect individuals with the Legacy Healing Center and support services as well as national and community-based resources.

Another significant aspect of the ONN role is to provide timely, appropriate, patient-centered education. This includes educating patients about the Enhanced Recovery After Surgery (ERAS) protocol used by Legacy colorectal cancer surgeons.

ONN works closely with providers and staff in the surgery, radiation, and medical oncology clinics and with all members of the cancer care team. We navigate patients across the cancer care continuum and contact them at key pivotal times to ensure smooth and timely transitions of care.

Receiving a colorectal cancer diagnosis often represents a difficult and complex time in the

lives of newly diagnosed patients and their loved ones. The support, education and guidance that ONN provides can facilitate adjustments to the significant impacts colorectal cancer and its treatment can have on their overall quality of life.

It is an honor to serve in the unique role of a colorectal cancer oncology nurse navigator focused on helping patients and families cope with the disease throughout the cancer care experience.

Cancer Survivorship

By Laurie Christensen, RN, OCN; oncology nurse navigator; survivorship program coordinator, Legacy Cancer Institute

A cancer survivor is a person living with a diagnosis of cancer no matter where they are in the course of their disease. Not everyone who has (or has



had) cancer uses the word “survivor.” Some may feel more comfortable defining themselves as “a person who has had cancer,” “a person living with cancer” or another description altogether.

Over the past 50 years in the United States, early detection methods and cancer treatments have improved. This has resulted in an increase in the number of cancer survivors. In the early 1970s, there were about 3 million cancer survivors. In 2022, there were approximately 18 million people living with a history of cancer in the United States alone.

While many patients say they are relieved when treatment ends, adjusting to life after cancer can be stressful, as the effects of cancer are realized and there are longer gaps between provider visits. They adjust to new feelings, new problems, changes in support and different ways of looking at the world. At Legacy Cancer Institute, we understand that the impacts of cancer simply don't end when treatment does. It's why we offer various support services, cancer classes and cancer specific support groups through Legacy Cancer Healing Center.

Additionally, we have a survivorship committee composed of members from various disciplines.

The committee's focus is to provide care to all of our cancer survivors, from diagnosis through the period after treatment. One of our recent projects was surveying more than 800 Legacy cancer survivors to hear about their specific needs after cancer treatment ended. The feedback we received will play an invaluable role in guiding future programming and ensuring that our offerings reflect the collective needs of survivors across the cancer care continuum.

In 2022, we will offer various classes specific to the post-treatment phase of the cancer journey. Topics include: cultivating courage, returning to one's self, taking care of oneself (which is a five-part workshop series focusing on wellness) and cancer superfoods. Moving forward, we will be taking a deeper dive into the impacts of cancer treatment on sexuality and intimacy by providing educational workshops that already began in the fall of 2022.

As the cancer survivorship program coordinator, I look forward to ongoing collaboration with the survivorship committee and Legacy Cancer Institute leaders to regularly evaluate and enhance our programs and services to best fit the evolving needs of our survivors. Our commitment is to listen to those served by our cancer program and to put their needs at the forefront of all we do.

We are here for our cancer survivors, every step of the way, across the continuum of care from diagnosis into post-treatment.

Legacy Cancer Support Services

By Niani Dunner, MPH; coordinator, Legacy Cancer Healing Center

In addition to world-class medical care at Legacy Health, colorectal cancer patients and their families have access to a myriad of supportive services, with



the aim of improving quality of life before, during and after treatment.

In this article we highlight just four of the dozens of support services offered at the Legacy Cancer Institute and Legacy Cancer Healing Center. We

bring a whole-person approach to caring for our patients, because we understand that patients are more than just a diagnosis.

Licensed clinical social workers Our social workers help address practical and logistical barriers to cancer treatment, provide emotional support and link to internal and external resources. They assess individual needs and connect patients and families to resources, including mental health counseling, financial assistance, transportation to-and-from treatment, home health or long-term care and more. Our social workers have extra training and certifications in addressing the multi-faceted needs of oncology patients, including those going through colorectal cancer treatment and recovery.

Integrative nurse practitioner The integrative nurse practitioner offers patients holistic assessment and symptom management throughout active treatment and into survivorship. An individual integrative care plan offers options from both Western and Eastern medicine, to help with issues such as memory, sleep, pain, fatigue, poor appetite, stress, sexual health, as well as future cancer risk reduction through suggested lifestyle modifications. They help assess the safety and efficacy of alternative treatments outside of traditional Western medicine and serve as trusted sources for evidence-based integrative therapy referrals, such as acupuncture, supplements and mind-body modalities.

Oncology certified dietitians These specialized dietitians offer individual consultations in nutritional counseling as well as group nutrition classes. They help assess and address an individual's barrier to eating, drinking, digesting and absorbing nutrients, heading off treatment delay or disruption, and ensuring colorectal patients maintain a healthy weight throughout treatment. Post-treatment nutrition counseling and classes offer nutrition recommendations with ongoing symptom management, education on dietary modifications and the latest research on anti-cancer foods and popular diets.

Physical therapy and rehabilitation Care options are available for colorectal patients who are recovering from the disease and its treatment. Oncology trained rehabilitation specialists can help address treatment side effects, including neuropathy, fatigue, weakness and lymphedema. Pelvic floor therapists assist with incontinence and concerns around sexual function. Our trained specialists develop personalized exercise plans to help patients regain strength and endurance to return to daily activities.

Cancer support groups, classes and events

These offerings help patients socially, emotionally and physically as they adapt to their cancer diagnosis, treatment and survivorship. In addition to nutrition- and art-based groups, we offer weekly exercise groups including yoga, t'ai chi, qigong and pilates, six different monthly cancer support groups and special events, like those on yoga nidra for deep relaxation and cancer superfoods.

Groups, classes and events for cancer patients offered in 2021

Support groups

- Brain tumor support group
- Women's metastatic and advanced cancer support group
- Breast cancer support groups

- Gynecological cancer support group
- Head and neck cancer support group
- Prostate cancer support group

Movement classes

- Yoga for adults with cancer
- Yoga for healing from cancer
- Pilates for adults with cancer
- T'ai chi and qi gong for adults with cancer

Art therapy groups

- Virtual open art studio
- Finding Center: Art for Mindfulness and Stress Reduction

- Words for Healing: Monthly Writing Series
- Returning to Self: Exploring Grief and Resilience Through the Creative Process
- Artist-in-residence program

Mind-body classes and special events

- Yoga nidra for deep relaxation
- Mindfulness meditation
- Cancer superfoods
- Cultivating Courage: An Empowering Series for Cancer Survivors

Quality and Process Improvement

By Mindy Ansteth, BS, CTR, CPHQ; manager, cancer data management and quality improvement consultant, Legacy Cancer Institute

In 2021, Legacy Cancer Institute (LCI) continued its longstanding commitment to process improvement to deliver quality, patient-centered care.



Quality performance indicators, quality studies and patient feedback are some of the methods used by Legacy's Colorectal Cancer Program to monitor compliance with patient care best practices.

In partnership with the Legacy Population Health and the Medical Home Teams, LCI voluntarily participated in a 2021 quality initiative sponsored by the American College of Surgeons (ACoS) Commission on Cancer (CoC) to restore cancer screening to pre-pandemic rates. The pandemic caused sharp declines in screenings across the nation, which means early stage cancers are going undetected and more lives lost to the disease. LCI selected colon cancer screening as one of the tumor sites of focus for this initiative. While significant progress was made over the course of the year, we know we have more work to do.

The Legacy Colorectal Cancer Program participates in the Surgical Care Outcomes and Assessment Project (SCOAP). Compliance with several best practices are monitored, with each surgeon reviewing his or her own compliance with select quality indicators. SCOAP results show an improvement in glucose management and fewer post-operative complications, such as patients returning to the operating room and fewer infections in hospitalized patients.

Enhanced recovery after surgery (ERAS) is a cornerstone of colorectal surgery at Legacy. ERAS is comprised of patient-centered, evidence-based care pathways to reduce the patient's surgical stress response, optimize their physiologic function and facilitate recovery. ERAS includes the entire continuum of care as the patient moves through the pre-hospital/pre-admission, pre-operative, interoperative and postoperative phases of surgery and then home again. The result is shorter lengths of stay, fewer narcotics used, reduced pain pump time and fewer post-operative complications.

While regular quality and process improvement work supports the maintenance of Legacy's national

oncology-focused certifications and accreditations, LCI also maintains a colorectal cancer quality dashboard to monitor several unique quality indicators for safety, quality and barriers to care. The dashboard benchmarks Legacy’s performance against national best practices and identifies any variation in care across Legacy hospitals.

LCI ranks among the nation’s best cancer programs based on outcomes and quality of care. The most recent data released by the American College of Surgeons (ACoS) Commission on Cancer

(CoC) National Cancer Database (NCDB) reflects Legacy’s commitment to quality care and following evidence-based treatment guidelines. As provided in Table 6 below, LCI exceeds the CoC quality measure benchmarks for colon and rectal cancer.

Legacy Cancer Institute remains steadfast in its commitment to quality care and patient safety. The LCI Colorectal Cancer Program will continue its quality and process improvement efforts to provide the highest quality care, for the best possible patient outcomes.

TABLE 6 2019* CoC Accreditation Quality Measures — Colon and Rectum

Primary Site	Quality Measure	CoC Benchmark	LCI Performance
Colon	At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.	85%	96%
Rectum	Preoperative chemo and radiation are administered for clinical AJCC T3N0, T4N0, or stage III; 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 age 80 receiving resection for rectal cancer.	85%	95%

*Most recent data available by the CoC at the time of this report’s publication.

Legacy Cancer Data Management

By Jessica Haughey, BS, CTR; certified tumor registrar, Legacy Cancer Data Management

The first modern cancer registries were established in the early 1900s by individual physician offices or as institutional projects.



In 1956, the American College of Surgeons (ACS) formally adopted a policy to encourage the development of hospital-based cancer registries. It was believed that periodic review of the results of cancer treatment regimens might reveal

weaknesses in local patterns of care and ultimately develop a better understanding of the disease and its treatment. Initially these registries were, for the most part, unorganized and inaccessible with most data collected in unused card files.

The advent of computer registry systems in the 1980s created an opportunity for making registry information more beneficial. Standardization of data collection has made it possible to pool data from multiple registries across multiple cities, states and nations. That’s where we come in.

The cancer data management (CDM) team is an integral component of Legacy Cancer Institute (LCI). The team helps bridge the information gap by capturing a complete summary of a patient’s disease from diagnosis to death. We find, collect and analyze data from all six Legacy hospitals, Legacy Hospice Services, nine imaging centers and hundreds of provider offices throughout Oregon, Washington and beyond. Every year, our team ensures that accurate and complete cancer data

is collected and maintained within the centralized registry database.

Cancer data collection is a time and labor-intensive effort. Our team consists of nationally certified tumor registrars (CTR) and CDM technicians. In 2021, through multiple avenues of case finding, more than 6,000 patients were reviewed for a possible cancer diagnosis. Of those cases with a diagnosis or treatment within the Legacy system, CTR's captured more than 340 data points per case. In 2021 alone, the team collectively abstracted more than 3,500 cases.

The field of cancer data management is ever-evolving, and the Legacy team keeps up with the rapid growth and change through continued education and quality assessment processes. Educational opportunities, along with dozens of online webinars and presentations, are vital to keeping up with changes in the field. These opportunities help meet the required education hours for the renewed CTR certification while also meeting the education requirements for the LCI cancer program accreditations.

Following patients for years past their first course of treatment is an important function of the

cancer data management team. In 2021, the team researched and collected recurrent and survival data on more than 26,000 patients within our registry. We continue to achieve a high patient follow-up rate of 90% for patients diagnosed since 2005, and 93% for patients diagnosed within the last five years.

Each month our team manages 33 multi-disciplinary cancer case conferences across our six Legacy hospitals, discussing hundreds of patients in our care. The information presented, shared and processed within these conferences are associated with improved clinical decision making, clinical outcomes and patient experience. Additionally, in 2021 the team provided more than 100 data requests from research staff, physicians and cancer program administrations.

Access to quality data is essential to Legacy Cancer Institute to monitor and advance cancer treatments and patient outcomes, conduct research and improve cancer prevention and screening programs. The cancer data management team is committed to excellence in providing accurate and complete quality data to assist in Legacy's continued effort in the fight against cancer.

Community Involvement 2021

Prevention and screening education and activities

Return to Screening Quality Initiative, sponsored by the American College of Surgeons Commission on Cancer and the American Cancer Society

Rural Adolescent Vaccine Enterprise (RAVE) Project — partnership with Oregon Rural Practice-Based Research Network (OPRN) and American Cancer Society for prevention of HPV-caused precancerous changes in the cervix, penis, anus and oral cavity

Ongoing

Lung cancer screening program for high-risk Individuals

Tobacco-cessation counseling for those in lung screening program

High Risk and Genetics Clinic for cancer risk assessments, genetic counseling, preventive care and early cancer detection for high-risk individuals

Cancer patient care conferences (tumor boards)

Brain/CNS tumors (Legacy Good Samaritan Medical Center)

Breast care (Legacy Good Samaritan Medical Center, Legacy Meridian Park Medical Center, Legacy Mount Hood Medical Center and Legacy Salmon Creek Medical Center)

Breast cancer radiology/pathology correlation (Legacy Good Samaritan Medical Center)

Gastrointestinal tumors (Legacy Health)

General cancer conference (Legacy Meridian Park Medical Center, Legacy Mount Hood Medical Center, Legacy Salmon Creek Medical Center)

Gynecologic cancers (Legacy Good Samaritan Medical Center)

Head and neck tumors (Legacy Good Samaritan Medical Center)

Metastatic breast care (Legacy Good Samaritan Medical Center)

Pediatric oncology (Randall Children's Hospital)

Thoracic tumors (Legacy Health)

Urologic/prostate tumors (Legacy Good Samaritan Medical Center)

Groups, classes, and events for cancer patients offered in 2021

Support groups

Brain Tumor Support Group

Women's Metastatic and Advanced Cancer Support Group

Breast Cancer Support Groups

Gynecological Cancer Support Group

Head and Neck Cancer Support Group

Prostate Cancer Support Group

Movement classes

Yoga for Adults with Cancer

Yoga for Healing from Cancer

Pilates for Adults with Cancer

T'ai Chi and Qi Gong for Adults with Cancer

Art therapy groups

Virtual Open Art Studio

Finding Center: Art for Mindfulness and Stress Reduction

Words for Healing: Monthly Writing Series
Returning to Self: Exploring Grief and Resilience Through the Creative Process
Artist in Residence Program

Mind-body classes, nutrition classes and special events

Yoga Nidra for Deep Relaxation

Mindfulness Meditation

Cancer Superfoods

Cultivating Courage: An Empowering Series for Cancer Survivors

Outreach via social media

Legacy's community relations and marketing department is an important partner with the cancer program in reaching the community through social media messaging, website content and banners and targeted direct mail. Facebook posts, often related to cancer awareness months, aim to engage and motivate readers toward healthy behaviors.

Legacy Cancer Institute Integrated Network Cancer Committee Members 2021

Eric Anderson, MD, PhD; medical oncologist, OHSU Knight Cancer Institute, Northwest Portland

Mindy Ansteth, BS, CTR, CPHQ; manager, cancer data management and quality improvement consultant, Legacy Cancer Institute

Sara Butler, MSW, LCSW, OSW-C; oncology social worker, Legacy Cancer Institute

Allen Cheng, MD, DDS; oral/head & neck surgeon, medical director, Legacy Head & Neck Cancer Program

Laurie Christensen, RN, OCN; oncology nurse navigator, Legacy Cancer Institute

Alison Clarke, DO; palliative care physician, Legacy Medical Group–Palliative Care

Dawn Cox, CTR; supervisor, cancer data management, Legacy Cancer institute

Maryam Farinola, MD; anatomic and clinical pathologist, medical director, anatomic pathology, Cascade Pathology

Nathalie Johnson, MD, FACS; breast surgical oncologist, medical director, Legacy Cancer Institute and Legacy Breast Health Centers

Pam Kilmurray; director, Legacy Cancer Service Line, Legacy Good Samaritan Medical Center Rehabilitation Services, Legacy Breast Health Centers and Legacy Hospice

Jutta Kress, BSN, RN, OCN; nurse education and practice specialist, Legacy Cancer Institute

Alizah Rotramel, MD, FACS; colorectal surgeon, Legacy Medical Group–Colon and Rectal Surgery

Mark Schray, MD; radiation oncologist; medical director, Legacy Medical Group–Radiation Oncology

Danielle Shoemaker, RN, BSN, OCN; ambulatory oncology nurse, Legacy Salmon Creek Medical Center

Leslie Sorenson, CCRP; manager, oncology research, genetics, autologous stem cell transplant, high risk, oncology psychology, and lung cancer screening program, Legacy Cancer Institute

Henry Veal, MD; interventional and diagnostic radiologist, Diagnostic Imaging NW, Legacy Good Samaritan Medical Center

Subcommittees of the Integrated Network Cancer Committee

Cancer Data Management Quality Committee

Cancer Quality Advisory Council

Cancer/Public Professional Education and Marketing Council

Cancer Program and Quality Committees

Brain and Spinal Tumor Program Committee

Breast Program Leadership Committees at Legacy Good Samaritan, Legacy Meridian Park, Legacy Mount Hood and Legacy Salmon Creek medical centers

Center for Colorectal Cancer at Legacy Good Samaritan Medical Center

Colorectal Cancer System-Wide Quality and Operations Meeting

Gynecologic Oncology Program Development

Oral, Head and Neck Program Planning

Hospice Quality (QAPI)

Lung Cancer Screening

Radiation Oncology Quality Committee

Thoracic Program Development

Honors and Accreditations 2021



Legacy Health ranked among the nation's best cancer programs, according to the American College of Surgeons' (ACS) Commission on Cancer, a respected authority on cancer care. The commission also awarded Legacy's cancer program its Outstanding Achievement Award in the last four accreditation surveys.



Legacy Cancer Institute was the first in the United States to receive Network Cancer Program accreditation from the ACS. Patients can receive the same award-winning care at any of our campuses, closer to home.

The Legacy Breast Health Centers at Legacy Good Samaritan, Legacy Meridian Park, Legacy Mount Hood and Legacy Salmon Creek medical centers earned the prestigious accreditation for excellence in the care of patients with breast cancer and benign breast disease from the American College of Surgeons' National Accreditation Program for Breast Centers (NAPBC).



In addition, the Legacy Breast Health Centers at Legacy Good Samaritan, Meridian Park, Mount Hood and Salmon Creek medical centers were designated Breast Imaging Centers of Excellence by the American College of Radiology. To achieve this distinction, a facility's imaging services had to be fully ACR-accredited in mammography, stereotactic breast biopsy, breast ultrasound and ultrasound-guided breast biopsy.



Legacy Cancer Institute was one of only three nationally accredited blood and bone marrow transplant providers in Oregon. Learn more about FACT, the Foundation for the Accreditation of Cellular Therapy, which evaluates programs nationwide.



Legacy Medical Group–Radiation Oncology at Legacy Good Samaritan, Legacy Mount Hood and Legacy Salmon Creek medical centers was accredited by the American College of Radiology (ACR) Radiation Oncology Practice Accreditation (ROPA) program. Legacy Health's radiation oncology staff, equipment, treatment planning and treatment records, as well as patient-safety policies and quality control/quality assessment activities were assessed to maintain ROPA accreditation. ACR accreditation provides Legacy's radiation oncologists with valuable third-party, impartial peer review and evaluation of patient care.



Legacy's lung cancer screening program at Legacy Good Samaritan Medical Center was accredited by the American College of Radiology (ACR) as an ACR Designated Lung Cancer Screening Center. To achieve this designation, Legacy's lung cancer screening program had to maintain active ACR CT Accreditation in the ACR Chest Module and meet very specific requirements related to the screening population, staff qualifications, the ACR Lung Reporting and Data System (Lung-RADS), patient smoking cessation, CT equipment, quality control and imaging protocol.



Legacy Laboratory Services and Legacy Tumor Bank achieved College of American Pathologists (CAP) accreditation, which ensures high standards for quality and consistency in collecting, processing and storing tumor specimens.



Legacy Oncology Clinical Research received approval for NRG Oncology research group main membership.



Legacy Oncology Clinical Research was recognized by National Cancer Institute leadership as a high-performing site based on accrual.

Legacy Cancer Institute

503-413-8050

legacyhealth.org/cancer

