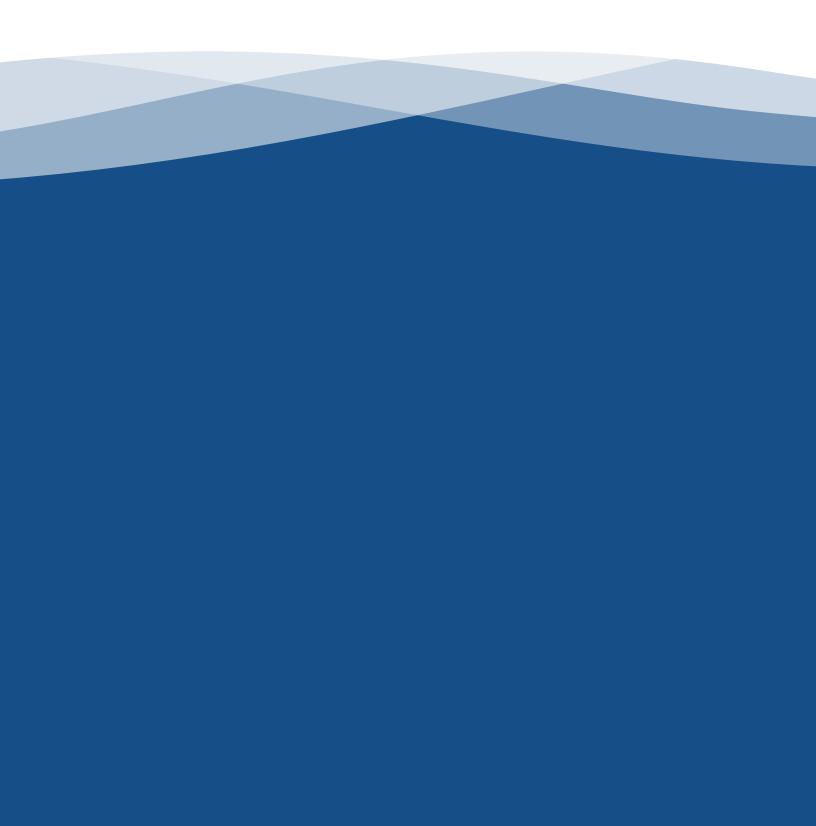
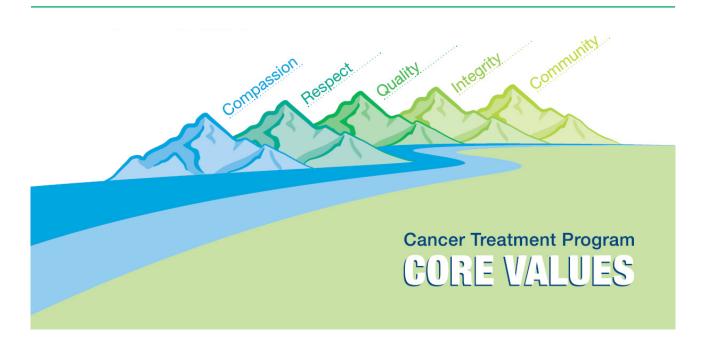


2017 Cancer Service Line \mid *Annual Report*





Cancer Committee Members

Julie C. Smith, MD

Chair Cancer Committee, Medical Director Oncology Service Line

Mary Gunkel, RN

Co-Chair Cancer Committee, Director Oncology Service Line, Cancer Program Administrator, Tumor Registry Quality Coordinator

Jeanine Allen, SR VP Specialty Care

Cici Asplund M

Cici Asplund, MD Primary Care

Susie Ball, MS, GC Genetic Counselor

Rachelle Boyd

Tumor Registry

Vaishali Bhide, RN

Practice Manager Medical Oncology and Infusion

Jane Budden

Quality Improvement Coordinator

Thomas Carlson, MD Radiation Oncology

Diane Davis

Oncology Research, Clinical Research Coordinator

Ed DePersio, MD

Radiation Oncology

Carl Kjobech, MD

Wellness Place

Sharmen Dye, CTR

Tumor Registry, Cancer Conference Coordinator

Keta Evans

Practice Manager Radiation Oncology, Community Outreach Coordinator

Susan Fletcher, RD

Nutrition/Dietician

Anna Hansen, MD

Radiology, Women's Imaging

Ginny Heintz, RN

Palliative Care

Eric Liedtke, DO

General Surgery, Cancer Liaison Physician

Louise Jackson, MD

General Surgery, Cancer Liaison Physician

Jessie Sanders

American Cancer Society

Jennifer Jorgensen, MD

Gastroenterology

Barbara Kane, RN

Hospice

Katie Kemble, DNP

Medical Oncology, Survivorship Program

Daniel Kerr, MD

Pathology

Jennifer Mason, RN

Inpatient Oncology

Thomas Tucker, MD

Medical Oncology

Mary Vargas, MSW

Oncology Social Work,
Psychosocial Services Coordinator

Kim Hinson, RN

Oncology Nurse Navigation

Celeste Van Houten, MA-C

Breast Care Coordinator

Accreditation

The Confluence Health Cancer Program has accreditation by the American College of Surgeons Commission on Cancer as a Comprehensive Community Cancer Program with several areas of commendation. The areas of commendation are:

- Clinical Trial Accrual
- Nursing Care

- Adherence to the College of American Pathologist Protocols
- Accuracy of our data

- Education of Cancer Registry Staff
- Participation in Rapid Quality Reporting System

Our Approach

The Cancer Program at Confluence Health offers a full range of medical services along with a multidisciplinary team approach to patient care. Our program and treatment center is affiliated with the Seattle Cancer Care Alliance, and accredited by the Commission on Cancer, which sets stringent guidelines to improve patient outcomes and promotes consultation among surgeons, medical and radiation oncologists, pathologists, and other cancer specialists.

We provide state of the art pretreatment evaluation, staging, treatment and clinical follow-up for many hundreds of patients each year.

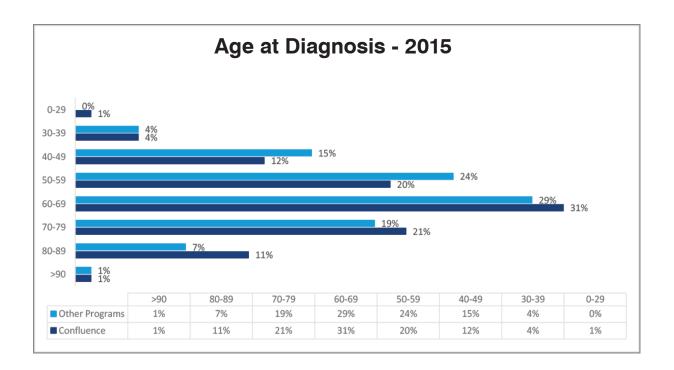
We recognize that cancer is a complex group of diseases and that each diagnosis is a life-changing event for every patient. This is why we firmly believe in setting quality goals, monitoring activity and continually evaluating our service and the needs of the communities we serve. These are critical components to improve our patient care.

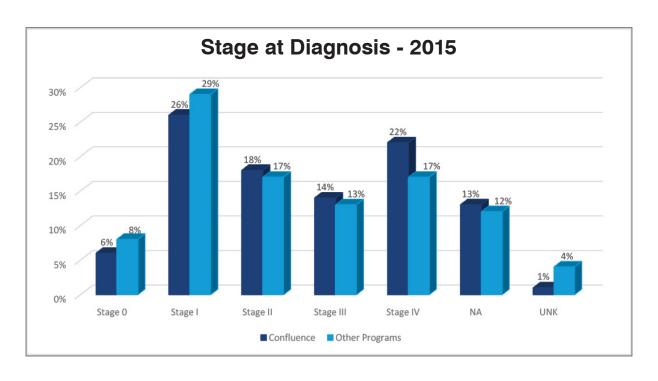
Cancer Committee 2017 Quality Dashboard

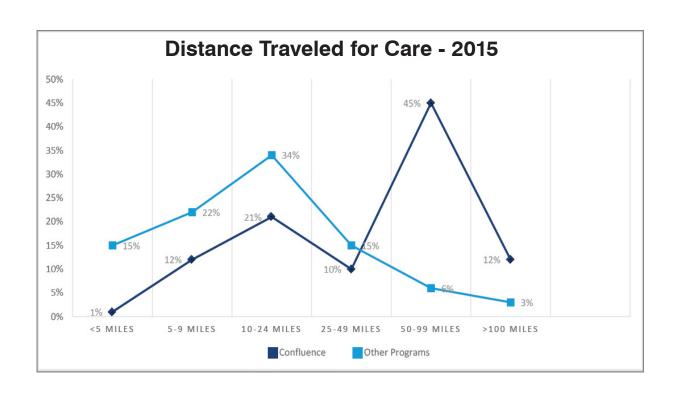
WVH&C Cancer Care Quality Measures Dashboard 2008 - 2017 Data

National Comparison Data

Our cancer statistics, in comparison to national data, as published by American College of Surgeons Commission on Cancer are shown here. Our Cancer program has an active tumor registry, with local data, case by case abstracting, staging, treatments, and outcomes reported to the Commission on Cancer. Shown below are comparison tables of age of cancer, stage of cancer, and distance traveled by patients to receive care in North Central Washington.

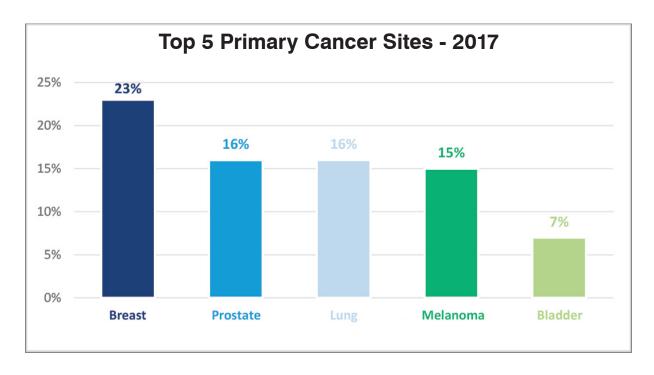






Top sites of cancer diagnosed at Confluence Health

Similar to other Comprehensive Community Cancer programs within the United States, our top five sites of cancer diagnosis include: Breast Cancer (23% of cases), Prostate Cancer (16% of cases), Lung Cancer (16% of cases), Melanoma (15 % of cases), and Bladder Cancer (7% of cases).



Site Specific Study Colon Cancer

Focus on Prevention, Evaluation, Staging and Treatment



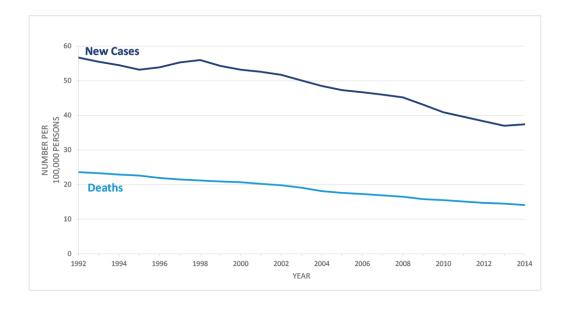
Jennifer Jorgensen, MD Gastroenterology Wenatchee



Julie Smith, MD Oncology Wenatchee

Colorectal cancer (CRC) is the second leading cause of cancer death in the United States and accounts for 8% of all new cancer cases. It affects one in 22 people during their lifetime for an incidence of 4.3%. Approximately 135,000 Americans are diagnosed with CRC annually and a little over 50,000 people die of CRC each year (SEER.cancer.gov). Of those diagnosed with CRC, 95,500 have colon cancer and 40,000 patients have rectal cancer (cancer.org).

This is a tragedy because CRC is a uniquely preventable cancer. While most cancer screening tests aim to identify cancer at an early stage to improve treatment outcomes, we have the opportunity to prevent CRC by identifying pre-cancerous polyps and removing them before they have a chance to progress to cancer. At least in part due to improved screening efforts in the US, CRC mortality has decreased by 2.7% per year over the last 10 years (SEER.cancer.gov).



Unfortunately, only two-thirds of eligible Americans are participating in CRC screening. This means 23,000,000 eligible Americans have not had appropriate screening for CRC (nccrt.org). We found at Confluence Health (CH), only 57% of our patients are undergoing screening and the rate for our Hispanic patients is even lower at 44%. For this reason, in 2016 CH joined the National Colorectal Cancer Roundtable "80% by 2018" initiative with the goal of substantially increasing our rates of CRC screening. Therefore, in addition to reviewing CH's standards of practice for staging, evaluation and treatment of colon cancer, the recent changes made to improve our CRC screening program are also included.

CRC is diagnosed in one of two ways: as a result of symptoms or during screening. Symptoms of CRC may include visible blood in the stool, abdominal pain, weight loss, change in stool caliber or consistency, and symptoms of anemia such as fatigue shortness of breath or dizziness. Unfortunately colon cancer usually remains symptomatically silent until it has progressed to a stage large enough to cause symptoms. For that reason, patients who present with symptoms are three times more likely to die from colon cancer compared to patients who are diagnosed via screening.

Screening options include colonoscopy, flexible sigmoidoscopy, hemoccult testing, fecal immunochemical testing (FIT), CT colonography and fecal DNA testing. There are many guidelines with recommendations for CRC screening. The most recently published guideline comes from the U.S. Multi-Society Task Force of Colorectal Cancer (MSTF), which represents the American College of Gastroenterology, the American Gastroenterological Association, and The American Society for Gastrointestinal Endoscopy. The MSTF has designated colonoscopy and fecal immunochemical test (FIT) as the top tier options. Because of this endorsement, as well as logistical and practical factors, CH has chosen to offer these two tests to our patients.

Over the past year, CH has made the following changes in an effort to increase the number of eligible patients screened for CRC.

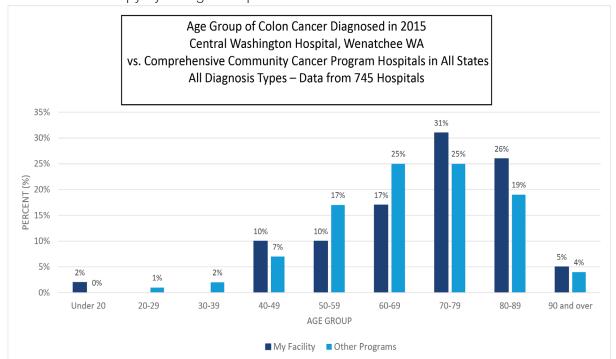
- Changed our FIT test from a three-card test to a single sample test which can be performed at home and mailed back to the lab.
- Modified our electronic medical record (EMR) to make the difference between FIT and hemoccult clear to the ordering provider.
- Educated our providers on the difference between FIT and hemoccult testing and when each should be used.
- Created a patient provider shared decision making handout to help guide them in choosing the screening test best for them. This was shared with our partners at Columbia Valley Community Health.
- Advertised the goal of screening 80% of patients for CRC on intranet and internet.
- Our providers spoke about CRC screening, evaluation and treatment at community outreach talks in English and Spanish and also participated in a local news program that highlighted the importance of screening and evaluation of symptoms of CRC.
- To better reach our Hispanic population, we are running an ad on our local Hispanic radio station encouraging people to get screened for CRC.
- We are working with our EMR specialists so that CRC screening rates will be reported to primary care providers, gastroenterologists, general surgeons and oncologists. We have also requested that annual FIT testing be added to our healthcare maintenance dashboard.

There are many risk factors for CRC. One of the strongest risk factors is a family history of CRC, especially if there is a polyposis syndrome such as Familial Adenomatous Polyposis or Hereditary Non-Polyposis Colon Cancer syndrome. For this reason, at CH all CRC biopsies are tested for microsatellite instability to help direct the need for further genetic testing. Having a first-degree family member younger than 60 at the time of diagnosis or multiple second degree family members with CRC also increases ones risk. Patients with a history of CRC or precancerous polyps have increased risk. African Americans, older patients, smokers and those who consume excessive alcohol have higher rates of CRC. Patients with inflammatory bowel disease, a history of abdominal radiation, diabetes and obesity are also at increased risk. Regular exercise, a high fiber diet and regular use of aspirin or non-steroidal anti-inflammatory drugs appear to be protective.

Although we screen for colon and rectal cancers similarly, staging and treatment options are often different. Therefore, the remainder of this report will focus on colon cancer.

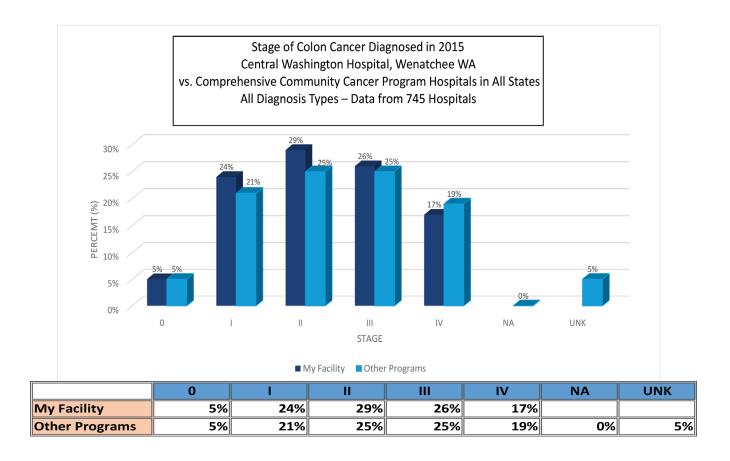
Diagnosis of colon cancer is usually made at the time of colonoscopy by taking small pinch biopsies. Sometimes the cancer causes partial obstruction, which does not allow passage of the colonoscope beyond the tumor. Occasionally, a diagnosis is made because of bowel obstruction in which case the patient may go directly to surgery. In both situations the remainder of the colon cannot easily be examined for metachronous lesions prior to surgery. Therefore, if this occurs the surgeon palpates the remaining colon at the time of surgery and a clearing colonoscopy is performed postoperatively as soon as clinically appropriate. Our data suggests that 79% of our patients have a complete colonoscopy prior to or within a year of surgery. Many of our patients are referred by primary care physicians and surgeons who perform colonoscopy in nearby rural clinics. This likely accounts for most of the 21% of patients who did not have a colonoscopy in our system.

In 2015 at Confluence Health (CH) there were 47 patients diagnosed with colon cancer. Nationally and across Washington State, most patients are diagnosed with colon cancer between 60 and 79 years of age. At CH we are seeing an older population at the time of diagnosis with most patients being diagnosed a decade later between the ages of 70 and 89.



	Under 20	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90 and over
My Facility	2%			10%	10%	17%	31%	26%	5%
Other Programs	0%	1%	2%	7%	17%	25%	25%	19%	4%

Overall CH patients have a similar stage at the time of diagnosis of colon cancer compared to other health systems within Washington State and across the Nation.



Staging for colon cancer is based on the TNM (tumor, node, metatastes) system. After diagnosis and prior to surgery, patients should undergo a CT scan of the chest, abdomen and pelvis to look for evidence of metastatic disease (M). At CH a staging CT is obtained 92% of the time. The exception is typically for patients requiring urgent or unplanned surgery for bowel obstruction. Likewise, 95% of our patients have a preoperative CEA in our system. Again, patients who must go urgently to the OR likely explain the small number of patients who are missing this data.

The depth of tumor invasion (T) and the lymph node status (N) is obtained from the pathologic evaluation of the surgical specimen. The following information is included in our pathology reports: tumor grade, depth of penetration and extension to adjacent structures, number of regional lymph nodes evaluated and number that are positive, the presence of distant metastases to other organs or to non-regional lymph nodes, the status of proximal, distal, radial, and mesenteric margins, lymphovascular invasion, perineural invasion and tumor deposits. At CH 96% of patients have greater than 12 regional lymph nodes evaluated by pathology.

Accurate staging for colon cancer is important as the stage correlates with 5 year survival as follows (cancer.org). This data also demonstrates another reason why screening is so important because for the most part, earlier stage disease portends a much better prognosis.

Stage	5-year survival				
I	92%				
IIA	87%				
IIB	63%				
IIIA	89%				
IIIB	69%				
IIIC	53%				
IV	11%				

Colon Cancer Treatment

Treatment options for patients with Colon Cancer are determined by many factors, including pathologic and clinical stage of the Colon Cancer, genetic markers and mutations found within the tumor by pathologic testing, underlying health and co-morbidities, age, and life expectancy. National guidelines are used, with multidisciplinary input to determine the appropriate treatment options for an individual patient. Shared decision making regarding treatment options is essential when developing a treatment plan. The treatment of Colon Cancer is generally related to the stage of that cancer and other features as listed above.

Invasive Colon Cancers confined within a polyp (adenoma) are generally appropriate for removal either by colonoscopy, or by surgery, dependent on features found by direct pathologic evaluation.

Stage 1 and stage 2 Colon Cancers are typically treated with surgical resection, followed by observation.

Some stage 2 Colon Cancers are appropriate to have treatment both with surgical resection, consideration of chemotherapy for high risk tumors (these features include, but are not limited to: perforation of the colon at time of diagnosis, obstruction of the colon at time of diagnosis, less than 12 lymph nodes removed at the time of surgery, poorly differentiated histology, invasion of the lymphatics or nerves or vasculature, and those with close or positive pathologic margins).

Stage 3 Colon Cancers (those with lymph node involvement) are typically felt to benefit from adjuvant chemotherapy. The extent of chemotherapy (3 vs 6 months), and chemotherapy medications used are dependent upon the pathologic features of those cancers, the genetic markers, and underlying health of the patient.

For patients with stage 3 Colon Cancer diagnosed and treated at Confluence Health, approximately 80% of those patients do undergo treatment with recommended chemotherapy. Factors taken into consideration of the chemotherapy regimen and medications delivered include underlying co-morbidities, performance status, life expectancy, and the distance traveled to receive medical care safely. We work closely with community support services such as Our House (Cancer Care of North Central Washington) to facilitate lodging for patients traveling long distances for treatment, Wellness Place to facilitate lodging and support such as gas cards, and Social Services/MSW regarding other community resources to aid patients and families receiving treatment. See attached graph regarding average distance traveled of patients receiving treatment at Confluence Health, as compared to other Comprehensive Community Cancer Centers within the United States.

Stage 4 Colon Cancers (those that have spread or metastasized to other organs such as liver, lung, or unresectable lymph nodes) have multiple treatment options, including: surgery, chemotherapy, targeted therapy, anti-angiogenic therapy, immunotherapy, radiation therapy, and in some cases interventional radiology procedures including microwave ablation of metastases. and Trans-arterial chemoembolization of metastases. Surgery is often performed initially, if appropriate, to remove the primary Colon Cancer, chemotherapy to treat cancer which has spread to distant organs systemically (including but not limited to regimens including CAPECITABINE, FOLFOX, FOLFIRI), and targeted therapies are also given, dependent on genetic mutations and markers (including but not limited to BEVACIZUMAB, CETUXIMAB, PANITUMUMAB, REGORAFENIB,

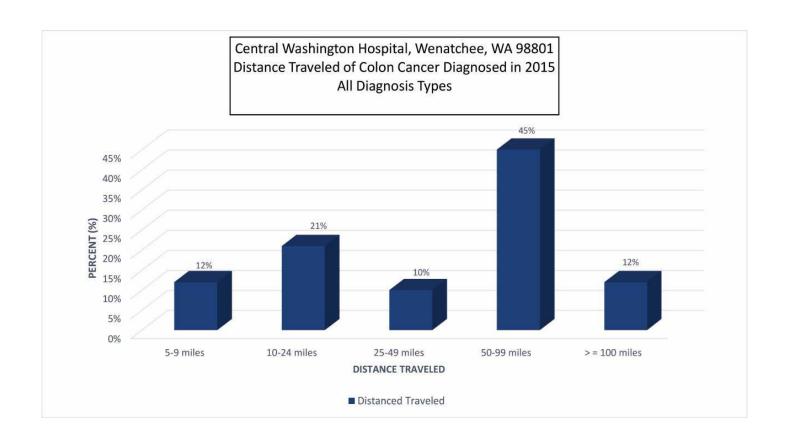
TRIFLURIDINE + TIPIRACIL). Immunotherapy is now an option for some patients with metastatic Colon Cancer (including but not limited to NIVOLUMAB or PEMBROLIZUMAB). Radiation therapy may also benefit some patients with metastatic colon cancer, to symptomatic metastases to aid with symptom control, or to isolated metastases when appropriate, using techniques such as Stereotactic Body Radiation Therapy (SBRT).

Clinical trials are also an important treatment option for many patients, and typically utilize standard treatments with or without novel agents, targeted therapies, or immunotherapies. Clinical trials are options for many patients treated at Confluence Health. The Cancer program at Confluence Health participates in national cooperative group clinical trials, available through the Seattle Cancer Care Alliance, and pharmaceutic company trials. It is encouraged that all patients that qualify for clinical trials have a discussion with their Oncologist regarding those treatment options.

Both Supportive Care and Palliative Care are important aspects of treatment for patients with Colon Cancer, whether those patients are receiving active treatment or not, to help aid symptoms from the disease process (cancer), side effects of treatment, prevention of side effects, monitoring for safety, etc. Some patients may transition their treatments over time, with involvement of palliative care, and even hospice care when treatments are ineffective, or decision to not undergo treatment, or discontinue anti-cancer treatments.

Survivorship after a Colon Cancer diagnosis includes discussion and education regarding appropriate surveillance and monitoring, management of late sequelae of the disease or treatments, cancer screening for other cancers, counseling regarding healthy lifestyle and wellness, and health behavior recommendations. The development of a survivorship care plan is a benefit of those patients enrolled in the Cancer Survivorship and Wellness Program at Confluence Health.

We also offer a Cancer Survivorship Rehabilitation and Wellness Program, which is a 12-week program in conjunction with the YMCA, Central Washington University, and Confluence Health including experts certified to work with cancer survivors in the fields of wellness, nutrition, and exercise. Patients enrolled in this program receive individual pre and post physical fitness testing, individualized exercise prescriptions, educational classes, nutritional education and counseling, and cardiovascular/strength and flexibility training.



Improvements and Accomplishments OSL in 2017

In Medical Oncology, we have developed care teams and shared practice models with Oncologists (Physicians that specialize in the diagnosis, and treatment of cancers) and Nurse Practitioners. This places patient care at the center of all encounters and visits within Oncology, with every patient having a team overseeing their treatment and care. The Oncologist is a Medical Doctor (Physician) who is board certified in Medical Oncology, trained to diagnose and treat cancers and blood disorders. This includes developing and overseeing a treatment plan in collaboration with the patient, family, and other members of the care team. The Nurse Practitioners in Oncology are highly training Advanced Registered Nurse Practitioners (ARNPs) and Doctor of Nurse Practice (DNPs), specializing in the care of cancer patients.

Together, the Physician and Nurse Practitioner work together to treat patients with a new diagnosis, those in active treatment, those in long term follow up, and those in palliative treatment pathways. They oversee the safe delivery of the outlined treatment, ensure that patients and families have education regarding their diagnosis, treatment options, and treatment plan. They ensure that symptom management, supportive care, and ancillary services are utilized as needed for each patient.

Our practice teams include:

Dr. Mitchell Garrison, teamed with Katie Kemble, DNP





Dr. Lindsay Overton, teamed with Susan Butler, ARNP





Dr. Julie Smith, teamed with Maggie Ellings, DNP





Dr. Thomas Tucker, teamed with Sandra Youngworth, ARNP





Other Accomplishments and Improvements:

- We have integrated behavioral health specialists in our clinics which allows patients access to this service as they need it. They work closely with social work and palliative care to support our patients in their psychosocial journey with cancer.
- We developed and implemented a quality task force that combines operations and quality to better assess and implement quality studies and improvements in our cancer service line.
- Developed tools in our electronic medical record to standardize documentation of our lab review safety check prior to the initiation of chemotherapy administration.
- Implemented standard work in our prior authorization workflow that creates efficiencies and decreases denials and financial toxicity for our patients.
- We added additional support services in our outreach sites of Omak and Moses Lake: Nutrition, Nurse Navigation, Behavioral Health and Palliative Care.
- We increased utilization of treatments in Radiation Oncology that increase access for patients while decreasing the time the patient spends in the machine receiving treatment.
- Improved care coordination between Medical Oncology and Radiation Oncology with the development of an electronic white board, accessible to both departments that includes pertinent information on shared patients.

- Implemented a standard format for nursing communication and documentation utilizing SBAR (Situation, Background, Assessment, Recommendation). This allows for an easy and focused way to set expectations for what and how information will be communicated. This develops teamwork and fosters a culture of patient safety.
- Implemented an Air Mat system and a lift in Radiation Oncology which improves staff and patient safety and comfort during transfers to the treatment machine.
- Installed additional Barco monitors in Dosimetry in Radiation Oncology. These are diagnostic quality monitors that provide a higher level of safety in patient treatment planning.
- Implemented Epic Enterprise which gives Confluence Health one electronic medical record across the system. This allows for the patient to have their medical record easily accessible across the health care system.
- Developed an Oncology Service Line Regional Plan based on a needs assessment and analysis. This ensures we are planning for the needs of patients in all four counties that we serve and that we are aligned with Confluence Health's organization priority of meeting regional care needs.

Screening and Prevention

- The 2017 cancer program's focus was on Colorectal Cancer Screening and Prevention. Two events, titled "Colorectal Cancer-A Preventable and Curable Cancer if Found Early", were held in June and November respectively.
- The event in June had a panel of physicians who screen and treat patients for Colorectal Cancer. Physicians presented information which spanned screening, prevention and the treatment of colorectal cancer. The event was attended by 29 community members and was well received as 100% of those who attended found the information understandable and useful. Over half were likely to contact their Primary Care Provider to discuss screening. One of participants commented that they liked the descriptions of anatomy and development of cancer cells as well as the suggestions for healthy choices to prevent and minimize chance of cancer.
- The event in November focused on our Hispanic population. The event was held at the Hispanic Community Center and the presentation and educational materials were translated into Spanish. Available at this event were screening test kits called FIT test kits and a representative from our BCCHP program who was able to sign up those who qualify for free screening. There were 15 people who attended and three participants who qualified for our BCCHP program and are in process of getting applicable screenings. Participants commented, "I can't wait to share this information with my parents" and "I did not realize this cancer could be so easily prevented" which illustrate that event was a success.
- BCCHP is our Breast, Cervical and Colon Health Program and Confluence Health is the prime contractor for our four-county region with a mission to prevent breast, cervical and colon cancer by providing free cancer screening services to uninsured or underinsured men and women who are age

- and income eligible. 764 individuals were enrolled in their program in the past year. Their services include initial screenings with follow up test to find out if additional treatment is needed. Their services also include assistance with finding resources for treatment. They provided 529 clinical breast exams, 591 mammograms, 328 pap smears, 217 HPV tests and 46 colon cancer screenings. Of these there were three diagnoses of cancer.
- In November, a Breast Cancer Screening and Awareness event was held in conjunction with the Wenatchee Wild's annual Pink at the Rink night. This event is a fundraiser for Wellness Place, a non-profit that supports our oncology patients and caregivers. At the event, Confluence Health mammogram brochures were available. The brochures help patients make shared decisions with their provider for their screening needs.
- We held our annual "Journey to Wellness" which is a cancer survivorship workshop that focuses on survivors and caregivers having an improved quality of life and learning how to reduce their risk of cancer recurrence by implementing lifestyle modifications that they learn. It had 60 participants and was one of the most successful workshops to date. The participants fill out evaluation forms and stated that objectives were met. There were multiple positive comments like "This was THE BEST conference I have gone to!" and "Numerous strategies and tips were offered that require participants to delve into the material in order to internalize and develop healthier habits.".