Annual Report
2012 Cancer Treatment Program at Confluence Health

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. The following report is an analysis of our program in 2013 and includes statistical data abstracted from the previous year.

We recognize that cancer is a complex group of diseases and that each diagnosis is a life-changing event for every patient. And this is why we firmly believe that setting goals, monitoring activity and evaluating our services are critical components to improve patient care.
Confluence Health was formed in 2013 as an affiliation between Wenatchee Valley Medical Center and Central Washington Hospital, to create an integrated rural healthcare delivery system that includes two hospitals, multi-specialty care in over 30 service lines and primary care in ten communities across North Central Washington. With over 225 physicians and 100 advanced practice clinicians, we serve an area of approximately 12,000 square miles, and cover nearly every corner of this region through specialty outreach.

The Confluence Health Cancer Program offers a full range of medical services along with a multidisciplinary team approach to patient care. We provide state-of-the-art pretreatment evaluation, staging, treatment and clinical follow-up for many hundreds of patients each year. Our Cancer Program includes: Medical Oncology, Radiation Oncology, Nurse Navigators, Surgery, Survivorship Program, and Palliative Care, as well as outreach and infusion services provided in Omak and Moses Lake.

Our Story
Keeping Standards High

The Cancer Registry plays a vital role in establishing and maintaining standards set by the American College of Surgeons for the Comprehensive Community Cancer Program at Confluence Health. The Cancer Registry manages an extensive data system that collects, analyzes and reports information on all cancer patients diagnosed and/or treated at Confluence Health. Data collection and lifetime follow-up on each cancer patient seen began in 2005. To date, our Cancer Registry maintains a total of 7,914 unique cases in the database and more than 4,600 are actively followed.

Growing demand for data collection, higher standards required by the American College of Surgeons and implementation of clinical trials require a dedicated staff in the Cancer Registry. The primary responsibility of the Cancer Registrars is to assure that complete and accurate data are collected and maintained for all cancer patients diagnosed and/or treated at Confluence Health’s Comprehensive Community Cancer Program.

Our Team

Cancer Registrars are essential members of the health care team. They work closely with physicians, hospital administrators and health care planners to maintain ongoing records of the cancer patient’s history, diagnosis, therapy and outcome. The Registrar is a specialist in data collection, records management, and analysis of cancer data. Through continuing education, CTR’s keep abreast of new developments in the field of oncology, and is involved in cancer program activities in the hospital and in our communities.

Our registry staff includes: Mary Gunkel, RN, Registry Supervisor and Data Quality Coordinator. Sharmen Dye, CTR, on staff since 2005 is the Registry Lead and Clinical Cancer Conference Coordinator. Rachelle Boyd, CTR on staff since 2010 and Cancer Committee Member. Lisa Larson, on staff since 2011, Registry Assistant and manages all the follow-up data.
Our Cancer Care Program

Ancillary Services:
Financial Services, Nutrition Services, Behavioral Health Services, Physical and Occupational Health Services, Rehabilitation Services, Pharmacy Services, Social Services, Palliative Care, and referrals to Genetic Counselors and Pastoral Care.

Outreach:
Treatment provided by Medical Oncologists, Nurse Practitioners, and Oncology Certified Nurses at Wenatchee Valley Medical Center’s Moses Lake Clinic and Omak Clinic. Infusion services are also provided at both Moses Lake and Omak.

Cancer Committee:
Provides leadership over operations and continually evaluates cancer program. See Cancer Committee Members on the following pages.

Research:
Access to promising investigational and innovative therapies through participation in national and institutional trials, including trials through our affiliation with the Seattle Cancer Care Alliance.

Cancer Registry:
Provides collection of data through abstraction on all patients diagnosed with and/or treated for cancer at Wenatchee Valley Medical Center into an electronic database.

Support Services:
American Cancer Society, Wellness Place and Resource Center, Support Groups, Exercise Programs, Housing Assistance Services and other community resources to help with cancer prevention and early detection.

Medical Staff:
A complete range of Medical, Surgical and Radiation specialty departments involved in the care of cancer patients. Our core of board-certified specialists includes Medical Oncologists, Radiation Oncologists, Hematologists, General Surgeons, Radiologists, Breast Imaging Specialists, Pathologists and Nurse Practitioners.

Survivorship Program:
A special program to enhance the care for our cancer survivors and augment communication with the providers who care for cancer survivors.

Oncology Certified Nursing:
Nurse Navigation, Case Management and Infusion Nurse Services available to patients throughout their cancer care.

Tumor Board:
A weekly multidisciplinary conference that includes Medical and Radiation Oncologists, Primary Care Physicians, Specialists, Surgeons, Radiologists, Pathologists and Tumor Registrars to approach case consultation from different perspectives.
MEMBERS
- of the -
CANCER COMMITTEE

1 Kate Kraemer
Quality Coordinator

2 Thomas Carlson, MD
Radiation Oncology

3 Kathy Schweitzer, RN
Breast Care Coordinator

4 Kristine Mathison, RN
Surgery Manager

5 Adrienne Hansen, MD
Diagnostic Imaging

6 Derek Weiss, MD
Palliative Care

7 Cindy Phillippi, RN
Hospice

8 Ginny Heinitz, RN
Palliative Care

9 Sharmen Dye, CTR
Tumor Registry
Cancer Conference Coordinator

10 Mary Gunkel, RN
Manager Outpatient Oncology Program
TR QC Coordinator

11 Susie Ball, CGC
Genetic Counselor
**ACCOMPLISHMENTS**

*For Cancer Committee for 2013*

- **Implemented**
  - Monthly report from Epic on the percentage of time distress screening was done for new patients.

- **Implemented**
  - Outpatient palliative care service.

- **Improved**
  - Volunteer visits in Hospice from 17.6 to 22.71.
  - (National Average = 20)

- **General Surgery**
  - Began routine monthly Mortality and Morbidity rounds.

- **Dosimetry TAT**
  - Dropped from 10 to 3.5 days in Radiation Oncology.

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**Quarterly Results for Cancer Care:**

**Surgery**
- Percentage of instances where fewer than 12 Regional LNs* were removed and pathologically examined for resected Colon Cancer (CWH surgery analytical for WVMC).

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<thead>
<tr>
<th>Quarter</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
<td>Q1</td>
<td>79%</td>
<td>75%</td>
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<tr>
<td>Q2</td>
<td>80%</td>
<td>95%</td>
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<tr>
<td>Q3</td>
<td>95%</td>
<td>95%</td>
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<tr>
<td>Q4</td>
<td>96%</td>
<td>96%</td>
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**ROTC**
- Percentage of instances XRT* administered within 1 year of diagnosis for women under age 70 receiving breast conserving surgery for Breast Cancer.

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<td>98%</td>
</tr>
<tr>
<td>Q3</td>
<td>95%</td>
<td>91%</td>
</tr>
<tr>
<td>Q4</td>
<td>96%</td>
<td>96%</td>
</tr>
</tbody>
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Oncology

Percentage of times adjunctive chemotherapy was considered or administered within 4 months of diagnosis for patients age under age 80 with stage III node positive Colon Cancer.

- Q1 Q2 Q3 Q4
  - Q1: 77%
  - Q2: 100%
  - Q3: 100%
  - Q4: 100%

Percentage of times combination chemotherapy was considered or administered within 4 months of diagnosis for women <70, stage IIC - Stage III Hormone Receptor Negative Breast Cancer.

- Q1 Q2 Q3 Q4
  - Q1: 99%
  - Q2: 100%
  - Q3: 100%
  - Q4: 100%

Percentage of time Tamoxifen or third generation AI was considered or administered within 1 year of diagnosis for women with Stage IIC - Stage III hormone receptor Positive Breast Cancer.

- Q1 Q2 Q3 Q4
  - Q1: 67%
  - Q2: 75%
  - Q3: 63%
  - Q4: 88%

General Surgery implemented a pancreatic surgery program.

Initiated a new protocol for ventilator withdrawal in a dying patient at CWH.

Acquired and began to use a portable specimen mammography device to improve access (doubles the available OR time to treat breast cancer).

Acquired new stereotactic bx unit with improved resolution and the ability to perform either stereotactic or tomosynthesis bx procedures.

Developed a Behavioral Health Algorithm for patients who are in crisis to get intervention as quickly as possible.

Improved lost to follow up rate in registry from 6% to 4%.

Provided end of life training for all nursing staff at CWH.

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Oncology Report | Confluence Health
Colorectal Cancer is the fourth most common malignancy diagnosed in the United States. In 2012 it is estimated that 40,290 new cases of rectal cancer (23,500 men; 16,790 females) will be diagnosed in the United States. Colorectal Cancer is the second leading cause of death from cancer. In 2012 it’s estimated that 51,690 people will die from colorectal cancer.

Overall, the number of new colorectal cancer cases diagnosed, when adjusted for population size (incidence per 100,000 population), has decreased between 1976 and 2005. Fortunately the number of patients dying from colorectal cancer (mortality rates) has decreased by approximately 35% from 1990 to 2007. This is likely a result of patients getting diagnosed earlier thanks to more widely available screening programs and improved outcomes thanks to better treatment modalities.
Clinical Evaluation/Staging

The initial clinical evaluation of patient’s newly diagnosed with rectal cancer provides valuable preoperative information regarding clinical stage which influences subsequent decisions regarding primary treatment including surgical technique and consideration for preoperative chemoradiation. Clinical staging includes information gathered from physical exam, laboratory testing (CBC, CEA), imaging modalities such as endorectal ultrasound, endorectal MRI and CT scans. Staging procedures include total colonoscopy to evaluate for other simultaneous tumors elsewhere in the colon and rectum; rigid proctoscopy to determine the location of the cancer which can determine surgical approach required; endoscopic ultrasound (EUS) which can assess depth of tumor penetration into the rectal wall and the presence of local lymph node metastasis.

Pathologic Staging

Pathologic staging provides important prognostic information and is based on examination of the specimen after surgery. Important pathologic factors include: 1) gross tumor description, 2) grade of the cancer, 3) depth of penetration and extension to adjacent structures (T-stage), 4) number of regional lymph nodes evaluated, 5) number of positive lymph nodes (N-stage), 6) presence of distant metastasis, 7) status of proximal, distal and circumferential surgical margins, 8) neoadjuvant treatment effect, 9) lymphvascular invasion, 10) perineural invasion, 11) number of tumor deposits.

The staging of Rectal Cancer is in accordance with the AJCC (American joint committee on cancer).
EUS

EUS pairs the technologic capabilities of ultrasound with the ability of endoscopy to navigate the upper and lower GI tract. EUS allows ultrasonic evaluation of the GI tract wall as well as of adjacent soft tissues and lymph nodes. It can determine the depth of tumor involvement to assist in staging rectal cancers. It also has the capability of sampling adjacent structures and lymph nodes which also assists in the staging process. In our patient population treated at Confluence Health, 9 diagnosed between 01/01/2012-12/31/2012 underwent endoscopic ultrasound (EUS) as part of their staging workup.

Until recently our patients had to travel to Seattle or Spokane to have this procedure performed. After the arrival of Dr. Jennifer Jorgensen to the Wenatchee Valley, who has special training and expertise using EUS, Confluence Health was able to offer this important service to our patients.

TNM Stage Distribution

At Confluence Health, 50% of our patients diagnosed with rectal carcinoma in 2011 were determined to be stage I-II, at presentation, compared to 46% of patients nationally. Our percentage of patients presenting with stage III disease (25%) was similar to national benchmark data (20%).

Neoadjuvant Treatment

Preoperative therapy of stage II (T3-4, node negative with tumor penetration through the muscle wall) or stage III (node positive without distant metastasis) often includes local regional treatment due to the relative increased risk of local regional recurrence with surgery alone. At Confluence Health, 63% of our patients with rectal carcinoma underwent preoperative chemo-radiation prior to surgical resection.

Type of Surgery

At our institution 6% of patients had a Transanal Endoscopic Microsurgery (TEM), 44% Low Anterior Resection (LAR), 13% had an Abdominal Perineal Resection (APR).

Types of Surgeries for Rectal Carcinoma
At Confluence Health

<table>
<thead>
<tr>
<th>Surgery Type</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>TEM</td>
<td>6%</td>
</tr>
<tr>
<td>LAR</td>
<td>13%</td>
</tr>
<tr>
<td>APR</td>
<td>44%</td>
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Nodal Evaluation

For patients with rectal cancers undergoing surgery as initial treatment, two studies have reported 14 and >10 lymph nodes as the minimum number to accurately identify early stage (stage I-II) rectal cancers. For patients undergoing preoperative chemoradiation, the NCCN Guidelines recommend evaluation of >12 lymph nodes be examined. At WVMC 70% of our patients achieved this.

Margin Status

Circumferential resection margin (CRM) status is considered very important pathologic staging parameter. Involvement of the CRM has been shown to be a strong predictor of both local recurrence and overall survival. This is predictive for both patients undergoing primary surgery and those undergoing preoperative chemoradiation.

Treatment Effect

The College of American Pathologists Guidelines require that the pathology report comment on treatment effect of preoperative (chemoradiation) therapy. Minimally this should be a yes or no, but ideally would grade the response. At WVMC 100% of our patients response to neoadjuvant therapy was assessed.

Management

The preoperative information gleaned from the clinical workup is used to direct decisions regarding the choice of primary treatment, surgical intent (curative or palliative), surgical approach, and whether to incorporate preoperative chemo-RT. The treatment pathway that is selected requires multidisciplinary input from the patient’s Surgeon, Medical and Radiation Oncologist.
Telepharmacy

As the pharmacy service line continues to evolve and expand, the Confluence Health Pharmacy department has implemented innovative processes to improve our patients’ safety and quality of care within our many infusion centers. One of these recent improvements is the implementation of telepharmacy at the Moses Lake campus.

Telepharmacy is a process of support, utilizing audio video technology, in both the compounding cabinets and mixing room. This direct visual line of communication allows the Infusion Center in Wenatchee to deliver high-valued care remotely with trained and competent pharmacy staff. Our telepharmacy support to the Moses Lake Infusion Center consists of both on-site pharmacy technicians with national oncology certifications and remote Wenatchee pharmacists with advanced oncology residency training and board certifications.

Utilizing the Confluence Health electronic medical record (EMR), pharmacists are able to monitor laboratory tests and verify chemotherapy orders and doses. Through audio video technology, pharmacists can monitor each step in the physical preparation of patients’ chemotherapy drugs prior to dispensing. Consulting with the patients’ physicians, chemotherapy regimens are adjusted based on the current laboratory data to minimize their therapy and minimize adverse reactions. Images of the chemotherapy compounding process are captured for historical documentation and quality review. Since implementing the telepharmacy program in February 2013, the pharmacy staff has remotely managed medication therapy for over 1,200 patient encounters and captured over 4,300 images.

Telepharmacy for oncology infusion support is surly an innovative practice in Washington State. The program was approved by the Board of Pharmacy in November 2012, making it the first of its kind in the state. With the success we have experienced in Moses Lake, we are now planning to expand our telepharmacy support to the Omak Infusion Center in the summer of 2014.
On May 28th, 2013, the Breast Imaging Section of Wenatchee Valley Hospital’s Department of Radiology and Central Washington Hospital’s Women’s Healthcare Imaging Center merged to form a dedicated breast imaging facility serving all of North Central Washington.

Our new service is staffed by two dedicated breast imagers, who not only cover our patient population, but also provide readings for Coulee Medical Center, Lake Chelan Hospital, and Cascade Medical Center. We are working to standardize the practice of breast imaging at all of these sites, creating subspecialization resulting in both high quality care and sustainable expertise. We are dedicated to providing exceptional quality services to women through digital mammography, bone density testing (DEXA), breast ultrasound, breast MRI, and multi-modality image-guided breast procedures and needle localization. We will be acquiring a new digital stereotactic biopsy unit at the end of this year, and aim to begin our conversion to 3D breast tomosynthesis in 2014.

The dedicated space for Women’s Imaging has been newly renovated to both promote wellness and relaxation and to encourage women to obtain their regular screening mammograms. With the help of our nurse navigator, we also provide a nurturing atmosphere for those undergoing invasive procedures or surveillance after treatment for breast cancer.

According to our latest local statistics, only 25% of women aged 50-75 participate in regular screening. The percentage is even less for women aged 40-49, who account for one in six diagnosed breast cancers. It is the goal of our physicians and staff to change these statistics by promoting wellness through regular screening mammograms. Our experience staff is dedicated to creating an environment where our patients will receive the highest technical skill coupled with excellent customer service.