

Welcome

Welcome to Portneuf Cancer Center, southeast Idaho's only comprehensive oncology clinic. We know that cancer is a personal journey. Your experience as a survivor won't be exactly like any one else's. On the other hand, many of the things you will need during the time you spend with us are the same as other patients. We are consistently refining our patient care to make sure we deliver to you an entire array of what is required during this important time.

Of course our care starts with finding the precise treatment for your ailment. A big part of this will involve learning all you can about cancer itself and how the treatments will affect you and the disease. This line of communication is vital and we will encourage questions and interaction from you.

Although you are on a personal journey, you'll have a team of experienced caregivers by your side every step of the way. We take great pride in the fact that we are prepared to assist you in everything from monetary issues and diet to your emotional well-being.

We call what we do "patient focused care." In short, we have brought together all the knowledge we've gained from all the survivors that have passed through our doors. Today we offer that collective insight and personal attention to you, conveniently in one location, and promise to do everything possible to help you succeed.

Patient Guidebook

Table of Contents

I. Welcome	
<i>Mission, Vision, and Values</i>	<i>i-1</i>
<i>Physician & Staff Letter</i>	<i>i-2</i>
<i>Physician Biographies</i>	<i>i-3</i>
<i>Staff Biographies</i>	<i>i-7</i>
<i>Collaboration</i>	<i>i-9</i>
<i>Contact Information</i>	<i>i-10</i>
II. Support Services	
<i>Cancer Center Support Services</i>	<i>ii-11</i>
<i>Social Work Services</i>	<i>ii-14</i>
<i>Financial Support Services</i>	<i>ii-15</i>
<i>Clinical Trials</i>	<i>ii-16</i>
<i>Tumor Registry</i>	<i>ii-18</i>
<i>Support Groups/Programs</i>	<i>ii-19</i>
III. Treatment Options	
<i>General Side Effects</i>	<i>iii-21</i>
<i>Radiation Therapy Potential Side Effects</i>	<i>iii-25</i>
<i>Chemotherapy Potential Side Effects</i>	<i>iii-29</i>
<i>Genetic Testing</i>	<i>iii-40</i>
<i>Nutrition During Treatments</i>	<i>iii-41</i>
IV. Survivorship	
<i>Survivorship</i>	<i>iv-43</i>
<i>Survivor Stories</i>	<i>iv-45</i>
<i>My Story</i>	<i>iv-51</i>
<i>My Journal Entries</i>	<i>iv-53</i>

Table of Contents (cont.)

V. Resources

<i>Retreats</i>	<i>v-55</i>
<i>More Information</i>	<i>v-57</i>
<i>Commonly Used Terms</i>	<i>v-58</i>

VI. My Treatment Plan

<i>Oncology Appointments</i>	<i>vi-69</i>
<i>Treatment Plan</i>	<i>vi-72</i>
<i>Treatment Calendar</i>	<i>vi-73</i>
<i>List of Medications</i>	<i>vi-78</i>

Mission, Vision, Values

Mission Statement

Portneuf Medical Center provides world class quality health care in collaboration with other community and regional providers.

Vision Statement

Portneuf Medical Center is a comprehensive regional referral center committed to providing the finest in competent, courteous, and compassionate care.



Values

We believe compassion is the best clinical practice.

We recognize that carelessness, avoidance, and judgment of others are enemies of quality care.

We ask ourselves, "What do our guests and coworkers see, hear, and feel?"

We seek every opportunity to engage others in a personal way.

We work together to create positive memorable experiences for our patients.

Physician and Staff Letter

Dear Patient,

At Portneuf Cancer Center, all of the staff is here to partner with you and your caregivers through your treatments and beyond. Along with the Cancer Center physicians, nurses, and therapists, we have a strong support staff to assist you and your family with problems, questions, or concerns.

If your diagnosis warrants a consultation with a medical oncologist, you will see either Dr. Michael Francisco or Dr. David Ririe. For more information on these professionals, see the following biographies in this section. These physicians specialize in the diagnosis, management and surveillance of hematological disorders, cancers of the blood or lymph system and solid tumors. Should chemotherapy be recommended for your treatment, our staff includes certified oncology nurses that have more than 35 years of combined experience delivering this care.

If your diagnosis warrants a consultation with a radiation oncologist, you will see Dr. Michael Callaghan. As you will read in his biography, he is committed to providing quality cancer care to the people in his community. Should radiation therapy be recommended as part of your treatment, Dr. Callaghan and his team of radiation therapists, dosimetrist and physicist will use their extensive training and state of the art equipment for your care.

In some cases, our clinic has the ability to schedule combined appointments with both a medical oncologist and radiation oncologist. This is a unique option not available to many patients nationwide, but you can find it here in Pocatello.

Should you have any questions or concerns during your course of treatment, please do not hesitate to alert any of the Cancer Center staff. Our goal is to not only meet your expectations, but to exceed them.

We also welcome your suggestions for improving our patient care.

**Best Regards,
Physicians & Staff,
Portneuf Cancer Center**

Physician Biography



Michael Callaghan, M.D.

Radiation Oncologist

Dr. Callaghan, a native of Butte, Montana, was raised in and around the Intermountain West. As an undergraduate he attended Westminster College in Salt Lake City, majoring in biology. While at Westminster, he played on the varsity soccer team. He graduated from the University of Utah Medical School, which was followed by a residency in radiation oncology at the Indiana University Medical Center in Indianapolis. Dr. Callaghan established his practice in Pocatello in 1997. He is board-certified in radiation oncology and is president of Intermountain Radiation Oncology. He is married to Cheryl Callaghan, M.D., a Pocatello gynecologist. The Callaghan's have two children. He is a dedicated family man who enjoys outdoor recreations, including fishing and hiking, as well as being involved in the activities of his children. Dr. Callaghan is the past Chief of Medical Staff of Portneuf Medical Center where he worked successfully with his colleagues to redesign the quality and credentialing processes. Dr. Callaghan is an advocate of a collaborative approach to the practice of medicine; one that embraces the participation of physicians, support staff, and facilities in optimizing the care of the patient.

Physician Biography



Michael Francisco, M.D.

Medical Oncologist and Hematologist

Dr. Francisco, a native of the East Coast, predominately the New York region, came to Pocatello in the early 90's when he joined the Pocatello Clinic of Internal Medicine. He established a full-time practice with the Portneuf Cancer Center in January 2005. Dr. Francisco completed undergraduate studies at State University of New York at Potsdam, New York, majoring in biology. He attended medical school at the University of Liege in Belgium. This was followed by an internal medicine residency at Bridgeport Hospital in Bridgeport, Connecticut. Dr. Francisco was a fellow in hematology and oncology at the University of Massachusetts Medical Center, Worcester, Massachusetts, prior to his moving to Pocatello. Dr. Francisco is board-certified in internal medicine, hematology, and oncology. From 1995-1996 he served as the Chief of Medicine for Bannock Regional Medical Center. He was the Medical Director of the Portneuf Cancer Center in 2007. Dr. Francisco, his wife, and two children are an avid outdoor family who enjoys tennis, skiing, and gardening.

Physician Biography



Steven Todd, M.D.

Radiation Oncologist

Dr. Todd is a radiation oncologist who has joined Intermountain Radiation Oncology and is practicing with Drs. Michael Callaghan and Calvin McAlister. He received his medical degree from the University of Utah School of Medicine and did his family practice internship at the University of North Dakota Family Practice Center. Dr. Todd completed radiation oncology training at Loma Linda University in Loma Linda, California. He and his family moved to Southeast Idaho from Helena, Montana where he worked at the St. Peter's Hospital Cancer Treatment Center. Dr. Todd sees patients at both the Portneuf Cancer Center in Pocatello and the Cancer Center in Idaho Falls. Dr. Todd has a rather unique hobby in that he is an amateur rocketeer. He can often be found, weather permitting, blasting rockets into the heavens near the Dillon, Montana, area.

Physician Biography



David Ririe, M.D.

Medical Oncologist and Hematologist

Dr. Ririe is originally from Salinas, California. After graduating from Brigham Young University in 1985, Dr. Ririe entered active duty military service, attending the Uniformed Services University of the Health Sciences (USUHS). He earned his medical degree from USUHS in 1989. He did internal medicine training at Wright-Patterson Air Force Base in Dayton, Ohio, followed by a fellowship in hematology and medical oncology at Wilford Hall Medical Center in San Antonio, Texas.

While in San Antonio, Dr. Ririe led the stem cell transplant service for over 10 years. At the time of his retirement, he was serving as chief of the hematology and medical oncology service at the Air Force's medical center in San Antonio. Additionally, he served as chief of the medical staff on two separate tours at the largest DoD hospital in Iraq in 2005 and again in 2008. Dr. Ririe has particular interests in leukemia, lymphoma, and myeloma. However, his practice at Portneuf includes all areas of hematology and medical oncology.

Dr. Ririe is married with 4 children. He enjoys the outdoors and exercise of all kinds. He considers eastern Idaho a "home away from home" because of many family relations that reside in the area.

Staff Biography



Jennifer Robinson, PA-C, MPAS

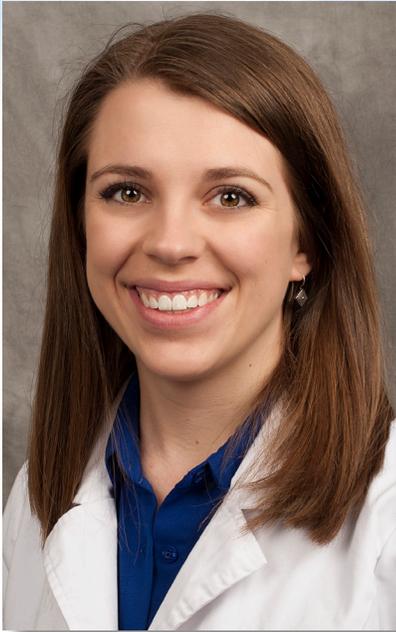
Certified Physician Assistant

Jennifer has worked in Portneuf's Cancer Center since 2002 as a nationally certified Physician Assistant. She spent seven years working in the Radiation Oncology department before transitioning to the Hematology/Medical Oncology department. As a physician assistant, her duties include meeting with established patients, ordering and interpreting lab or radiologic tests, and prescribing medications including chemotherapy all with physician oversight. She works closely with the other members of the health care team within Portneuf Cancer Center.

Jennifer also co-facilitates the HOPE Cancer Survivor Support Group.

Jennifer received her undergraduate training at ISU, earning a BS in Health Education. She then completed the ISU PA program in 2002. She went on to complete her Master's in Physician Assistant Studies through Oregon Health Science University in 2007. When she isn't working, she loves to spend time with her husband and three children.

Staff Biography



Natalie Miller, PA-C, MPAS

Certified Physician Assistant

Natalie is a nationally certified Physician Assistant who joined Portneuf Cancer Center in 2014. She works as a part of the Medical Oncology team where she meets with and provides education for patients, reviews and orders laboratory and radiologic tests, and prescribes medications including chemotherapy.

Natalie grew up in both Alaska and Montana. She attended Montana State University in Bozeman, Montana, majoring in Cell Biology and Neuroscience. She and her husband moved to Pocatello in 2012 where Natalie attended ISU's Physician Assistant Program, graduating with a Master's of Physician Assistant Studies. She and her husband are both avid hunters, and also enjoy fishing, hiking, and exploring the Southeast Idaho region.

Physician Collaboration

Tumor Conferences

Quality health care provided by a team of knowledgeable professionals includes cross-discipline collaboration. In addition to staff at our cancer center, the oncologists participate in tumor conferences. Tumor conferences are meetings that take place 2-4 times per month in which more complex patient cases are presented to oncologists, surgeons, pathologists, radiologists and internal medicine physicians so that a consensus can be reached in regards to the best plan of care for a patient. These conferences allow for sharing of information and experience of many professionals to maximize the best treatment course for some patients. Portneuf physicians meet twice monthly for general tumor conference (in which cases of all types of diagnoses can be discussed) and meet once monthly each for conferences dedicated to breast cancer and to pulmonary/ thoracic cancers.

Rural Oncology Clinics

Another aspect of collaborative care spearheaded by our oncology physicians is the concept of satellite cancer clinics in rural areas. As a clinic, we are aware that many of our valued patients travel great distances to receive adequate care at our facility. Our physicians have recently collaborated with medical facilities in Blackfoot, Malad, Salmon, Soda Springs and Afton to provide onsite oncology services to these areas. In many cases, chemotherapy can be administered at these clinic sites as well. This is a great service to patients who would otherwise have to travel long distances frequently to get the care they need. By bringing cancer treatment to these rural communities, Portneuf oncologists can reduce the burden of an already difficult experience.

Contact Information

To contact our providers or nursing staff, please contact the Cancer Center reception staff at 239-1720. Our office hours are 8:00 AM to 4:30 PM Monday through Thursday, and 8:00 AM – 1:00 PM on Fridays. Our physicians offer an on call service after hours which can be accessed using the same number of 239-1720. Should you have any questions or concerns during your course of treatment, please do not hesitate to alert any of the cancer center staff. Our goal is to not only meet your expectations but to exceed them.



Please don't hesitate to call with any questions you may have.

Support Services

High quality cancer care includes more than just medications or radiation therapy. Cancer doesn't just impact a person's physical health but also their emotional and financial health. Our center is committed to providing support that addresses this impact for our patients and for their caregivers. On the following pages, you will find more information about the services offered at Portneuf Cancer Center that go beyond traditional care.

Our center employs **financial advisors** who can help identify financial resources for patients, can preauthorize recommended treatments and can apply for programs that may benefit patients who cannot afford certain aspects of their care. Also on staff is a registered dietician that can answer questions regarding best dietary practices for patients going through treatment. A **registered dietician** is beneficial to patients who may have special dietary needs or who have alternative nutritional supports such as a feeding tube.

Also on staff is our **patient navigator** who can facilitate the implementation of a treatment plan as agreed upon by the patient and physician. This navigator can schedule important appointments, provide initial education, and help authorize interventions or further tests. Last but not least, we have a dedicated **licensed clinical social worker** who can not only



provide counseling services but help mobilize resources for patients and their families.

Also available to our patients is the great support of the **Cancer Patient Assistance Fund**. This is a fund made possible by the generous donations of patients, caregivers and community members with the purpose of providing financial support to those getting treatment for cancer who may need help with expenses of life apart from medical bills, such as rent, gas, food and utilities. This has been a great asset to patients in dire circumstances and is a testament to the compassion of southeast Idaho residents.

Please see the following pages for more information on the professionals here at the cancer center who may be able to help you or your loved ones along this journey.

Jenni A. Adams, RN, BSN, OCN

Oncology Nurse Navigator



Once the patient and managing physician team come to an agreement on a plan of care, a patient is referred to Portneuf's Oncology Nurse Navigator, Jenni Adams, RN. As a navigator, Jenni's primary focus is to assist oncology patients in the following ways:

- Serve as an essential link between patients and all other care providers within Portneuf Cancer Center and the community.
 - Coordinate treatment planning conferences among various physicians for patient care.
 - Develop concise summaries of the plan of care for use by the patient and their providers (with documentation of the nationally recognized treatment guidelines of such standardized care protocol).
 - Assist patients and their families in understanding the diagnosis, treatment options and the resources available to them during and after the cancer journey.
- Stay connected with patients and make appropriate additional referrals as needed (i.e., social work, financial advisor, dietician).
 - Educates patient and families on medications, chemotherapy protocols, radiation therapy, and side effect management.

In short, a navigator partners with patients, families, the Cancer Center team, and community providers to ensure well-coordinated, timely, compassionate care. Jenni's approach when caring for a patient with cancer is best described by Dr. Harold Freeman who coined the Nurse Navigator concept; "No person with cancer should spend more time fighting their way through the health care system than fighting their disease."

Jenni A. Adams received her Associate Degree of Science, Nursing at the College of Southern Idaho in 1993, Bachelor of Science Nursing in 2008 from Idaho State University. She has been an Oncology Certified Nurse since 2007 and in 2012 she was one of the first in Idaho to earn a Radiation Oncology Certificate from the Oncology Nursing Society. The past 11 years of her nursing career has been solely spent working with and caring for the oncology patient and their family.

Jenni is married to a wonderful man who is also a nurse. Their 2 young daughters are very active in softball, competitive dance, competitive swimming, and gymnastics. With 2 parents as nurses they can't get away with using the excuse of being sick instead of going to school. As a family their favorite activities to do are camping, traveling and watching college football—GO DUCKS!

Robb Dye, LCSW, MSW



I am a Licensed Clinical Social Worker at the Portneuf Cancer Center in Pocatello, ID. I have been practicing social work since 1998, and have worked in a variety of settings prior to coming to Portneuf in 2008. My education includes a Bachelor's of Social Work from Idaho State University and a Master's of Social Work from New Mexico State University in Las Cruces.

The most important and fulfilling aspect of my role at the Cancer Center is to provide counseling to cancer patients and their families. Although depression, anxiety, loss, and relationship issues are common experiences amidst a cancer diagnosis, these experiences do not have to be faced alone. In addition to the other staff here at Portneuf Cancer Center, I am glad to be able to offer help in strengthening a person's existing coping mechanisms as well as developing new coping strategies to work through these experiences. I am available to meet with individual patients, patients with their caregivers, or even patients and their families. I also facilitate a structured support group for patients, caregivers and those with specific diagnoses.

I have personally felt the effects of cancer in my own life and I consider it a privilege to be able to help others through this difficult journey. I have a fabulous wife, an amazing son, and a wonderful daughter that provide great joy and support in my own life. I value faith, family, friends, freedom, and fajitas. I enjoy mountain biking, back country skiing, food, humor, and music.

As an oncology social worker I would be glad to help you and your family...

- *Learn new ways to cope with cancer*
- *Manage emotions such as anxiety or sadness*
- *Improve communication with your health care team*
- *Talk to your family about cancer*
- *Find reliable information*
- *Find useful resources in your community*
- *Manage financial challenges*
- *Maximize your existing support system*
- *Adjust to illness*
- *Work through end-of-life issues*
- *Deal with grief and loss*
- *Make decisions for future medical care (advanced directives)*
- *Face the challenges of caregiving.*

Throughout our lives, each of us face a variety of demands, losses, and challenges that test our ability to cope. A diagnosis of cancer can be overwhelming with all of its physical, emotional, and financial demands on patients and their loved ones, but remember: here at Portneuf Cancer Center, you don't have to go through these experiences alone.

Social Work Services

Robb Dye, LCSW, is also able to assist with the following:

Emotional Care – Cancer patients often experience depression and anxiety as they adjust to life with cancer and face issues in survivorship. Our social worker is qualified and experienced in providing counseling to patients and/or family members whose lives have been impacted by cancer. Our social worker works closely with psychiatrists at the Portneuf Behavioral Health program to assist in the treatment of depression, anxiety, or other behavioral health needs. If you or a family member experience depression or anxiety please notify your physician, social worker, or nurse.

Relationships – The affects of cancer and its treatment can have an impact on relationships given the increase in stress and the changes in roles. Counseling to address these issues can be beneficial for the patient and for family members whose relationships have been affected.

Support Group – The cancer support group meets on Mondays from 5:00 - 6:30 p.m. in PMC's Bannock Creek Conference Room. Our group is made up of cancer patients, supporters, and caregivers of different ages and with many different types of cancer.

Advanced Directives for Health Care – The social worker can help you understand and complete a Living Will and Durable Power of Attorney.

Living/Care Facilities – The social worker can help with placement needs for patients and family. They will work with the patient and family to find an appropriate placement including transitional



care, skilled nursing facility, long term care, or assisted living.

Guest House – PMC's Guest House is available for patients and family members who are from out of town and need a place to stay during treatments. The house provides comfortable accommodations in close proximity to the Cancer Center and the hospital.

Home Health and Hospice – The social worker is available to help you understand the home health and hospice programs and how they may be beneficial to you. The social worker is able to help set up any of your home health needs including nursing care, physical therapy, occupational therapy, speech therapy, aide care, or hospice.

Durable Medical Equipment – The social worker is available to help with obtaining needed medical equipment, including arranging for oxygen, a walker, wheelchair, etc...

Financial Support Services



Hello,

Allow me to introduce myself. I am CaeDee Astin and I am a financial advisor here at Portneuf Cancer Center. I am here to help you navigate the financial side of cancer care for patients. I am here to help patients focus stay on being well, and less on financial matters.

Many patients have insurance coverage and I can provide help in understanding the benefits of individual policies. Cancer treatment can be costly. It is always in a patient's best interest to understand what their responsibility will be concerning the cost of treatment. I can help explain co-pays, deductibles, and the maximum out of pocket associated with insurance policies. This can also help determine other resources for which a patient may be eligible to access.

It is best to address financial concerns early during cancer care. If a patient does not have insurance coverage, I can advise of other forms of assistance that may help cover the costs of treatment.

There are government programs as well as lost cost insurance plans available through the insurance exchange, Medicaid and Medicare. Portneuf Medical Center has trained professionals that will help to determine your best option.

I feel it is truly a privilege to work with each of our patients at the Cancer Center. I am here to help develop a plan to manage costs so patients can "Be Well."

CaeDee Astin, Financial Advisor

(208) 239-1704

Clinical Trials

Clinical Trials at Portneuf Cancer Center

What are cancer clinical trials?

Clinical trials, or research studies, are an important aspect of Cancer Treatment. Clinical trials help to move the basic scientific research from the laboratory into treatments for people. By evaluating the results of these trials, we can find better ways to prevent, detect, and treat cancer. But very few adults with cancer (about three percent) actually participate in clinical trials. We need to test the best cancer prevention, detection, and treatment ideas in the shortest time possible, and this can only happen with participation.

Here at Portneuf Cancer Center, we offer the choice of participating in clinical trials as one of the options for cancer treatment. Different studies may be available at various times at our facility. We can also assist our patients with referrals to trials that may not be offered here. We can also assist patients with referrals for participation in studies available at other institutions.

Portneuf Cancer Center is an affiliate of the Southwest Oncology Group (SWOG). SWOG was founded in 1956 and is a large national cancer research group funded by the National Cancer Institute. SWOG's mission is to make progress in the prevention and cure of cancer through clinical research studies. Our SWOG affiliation is made possible by Huntsman Cancer Institute and the University of Utah Health Sciences Center who sponsor our clinical trials program.

The National Cancer Institute has made a wealth of information available to better explain the clinical trials process. We invite you to explore the NCI's

website and read more about the opportunity that research provides. Please visit www.cancer.gov and select the Clinical Trials section.

Most patients have many questions about the prospect of participating in a clinical trial. These range from safety and confidentiality to financial concerns. We encourage you to speak to Keri Kearns, CRA in the Clinical Trials office at (208) 239-1778 with any questions you may have.

Clinical trials often compare the most accepted cancer treatment (standard treatment) with a new treatment that doctors hope will be better.

Each study has rules about who can and cannot participate – such as age, sex, or type of cancer. Think about asking your doctor if you can take part in a study.

Additional Information on Clinical Trials

What kind of information will I get if I want to take part in a clinical trial?

Before you join a study, a doctor, nurse, or other person on the research team will explain why the study is being done, and what will happen during the study. You can ask any questions you have about the study.

You will also be given a consent form to read. The consent form will explain:

- *The exact plan for each step in the study.*
- *What side effects you may have.*
- *How the study may affect your daily life.*

Clinical Trials (cont.)

You should ask questions about any part of the consent form you do not understand. If you decide to take part in the study, you will be asked to sign the consent form.

Even if you sign the consent form, you can still change your mind and stop at any time.

Who makes sure my rights are protected?

Groups of experts at the national and local levels approve research studies before they begin. One of the most important groups is called an Institutional Review Board (IRB).

The IRB's job is to review research studies and make sure they are run safely and fairly. All clinical trials should be reviewed by an IRB, which includes doctors, nurses, and people from the community.

What are some benefits of being part of a research study?

If you join a study that compares treatments, you will get either:

- *The best accepted treatment for the kind of cancer you have (called standard treatment).*
- *A new treatment that doctors hope will be better than the standard treatment.*

What doctors learn in studies also helps people who may get cancer in the future.

What are some risks to being part of a research study?

- *It is not known for sure if the new treatment in the study will help you more than the standard treatment for your cancer.*
- *Treatments in studies have side effects.*
- *Research studies have costs, and health insurance does not always pay for all your costs in a study. It's important to talk about these costs with a doctor, nurse, or social worker.*

Do I have to take part in a clinical trial?

No. Taking part in a research study is up to you. It is important to look at all of your treatment options with the help of your family and doctor. This will help you decide if a study is the best way to treat your cancer.

You and your family should ask questions before you decide to take part in a research study. Be sure to get all the information before you decide if you want to take part.

More Information

To find out more about clinical trials (research studies) in your area, ask your doctor or call NCI's Cancer Information Service at 1-800-4-CANCER. You can also visit the web at www.cancer.gov.

Tumor Registry



Portneuf Cancer Center Tumor Registry

I would like to take a moment and explain the Portneuf Cancer Center Tumor Registry. Portneuf's Cancer Center maintains a Tumor Registry as part of our organization. As with many health care institutions, our registry maintains data on all patients diagnosed and/or treated for cancer at our facility. We then report cancer cases to the state cancer registry in Boise as required by law. Tumor Registry documents all the significant elements of a patient's history and treatment and acts as a depository for this information. We only have access to patient information for those patients diagnosed or treated at PMC. All information is treated with the same confidentiality as with any other medical record.

You might be asking yourself why is a Cancer Tumor Registry important? Maintaining a Cancer Registry ensures that health officials have accurate and timely information, while also ensuring the availability of data for treatment, research, and educational purposes. Ongoing follow-up is an important aspect of the cancer registry. It serves as a reminder to physicians and patients to schedule regular clinical examinations. Local, state, and national cancer agencies use registry data to make important public health decisions that maximize the effectiveness of limited public health funds, such as the placement of screening programs. Accumulated data provided to the Central Tumor Registry (Cancer Data Registry of Idaho (CDRI)) is used for fundamental research of cancer. The Cancer Center's medical staff also uses the data for analysis of treatment so they can periodically evaluate the quality of care.

How do cancer patients benefit from a Tumor Registry? Physicians have learned from long experience that follow-up care is an important part of a patient's overall care plan. Each patient's condition should be reviewed periodically for evidence of tumor recurrence; extension or spread of disease; development of new or second tumors; assessment of rehabilitation possibilities; and institution of preventative measures.

In essence we are a "silent partner" in the promotion of patient care and in the long-term quest for effective cancer treatment. Please report any changes in your address to the registry or Cancer Center by phone or mail.

*Sincerely,
Melanie Wilks
Certified Tumor Registrar*

H.O.P.E.

Cancer Advocacy and Support Group



Welcome,

You are in for the ride of your life, but hang on – a cancer diagnosis is not necessarily the death certificate you might feel it to be. We know. We've been there. We've come out the other side and have news for you!

We are the members of the H.O.P.E. Cancer Support Group, and we would like to take this opportunity to welcome you as a survivor of cancer. Once you are diagnosed with any type of cancer, you are at that moment a survivor. You are now one of us. You are not alone.

Our group is made up of many different people, of different ages, and with many different types of cancer. Some of us have completed treatment years ago, while others of us are just beginning. Some of us jumped at the opportunity to join a group, some of us had to be prodded to come to just one session. It only took one though, and we all found H.O.P.E. Many of us now believe that group is just as vital to a successful treatment regimen as making a daily radiation therapy or having your next chemotherapy treatment.

Group is unique in that we all share a common bond not understood by those without a cancer diagnosis. We consider ourselves similar to a family who can laugh together, share with each other, and grow alongside one another through this experience. Each one of us contributes to the healing of each other and everyone has something to gain. Group is also a safe haven for others affected by a cancer diagnosis: your family and friends.

We invite you to feel the same encouragement, strength, and support that we all do when we meet together. Give it a try just once and you'll see what we are talking about. Currently group meets every Monday evening, 5:00 to 6:30 p.m., in the Bannock Creek Conference Room at Portneuf Medical Center. For more information, contact our group facilitators, Robb Dye, LSW at 239-1754 or Jennifer Robinson, PA-C at 239-1767.

Treatment

The Portneuf Cancer Center is the only hospital based cancer treatment center in southeast Idaho that provides medical and radiation oncology plus important patient support services like infusion therapy and innovative clinical trials. Our clinic is nationally accredited by the Commission on Cancer and has earned a full three-year approval award from the American College of Surgeons (ACOS) with Commendation.

A multidisciplinary approach implements the most current guidelines in cancer therapy. Personal care plans, coordinated by a team of physicians, may include chemotherapy, radiation therapy, hormone therapy or a combination of treatments. Radiation therapy is considered a local treatment. Radiation therapy uses high-energy particles or waves to destroy or damage cancer cells in a specified area. For most people, treatments are given 5 days a week for 1 to 7 weeks. The number of treatments you need depends on the size and type of cancer, where the cancer is, how healthy you are, and what other treatments you are getting. External radiation therapy is like getting an x-ray. It is painless and only takes a few minutes. The side effects of radiation therapy vary depending on where the radiation is directed.

Chemotherapy differs from radiation in that it's used as a systemic treatment. This means the drugs travel throughout the body to reach cancer cells wherever they are. Chemotherapy includes a variety of medications, some of which directly destroy cancer cells and some that are able to target cancer cells while avoiding normal tissues. In many cases, chemotherapy needs to be administered into a vein either through an IV or specialized venous device such as a "port" or "PICC." Your physician will discuss this with you when you choose a chemotherapy regimen.

Radiation and chemotherapy can also affect normal cells, but normal cells can repair themselves while cancer cells cannot. It is the impact on the body's various normal systems that manifest as side effects. The following pages may help you understand and prepare for some of those side effects. You will also have opportunities to discuss your regimen with a medical professional to review side effects unique to your treatment before starting as well as throughout your therapy course.

Please note that at any time you have questions or concerns, do not hesitate to contact our staff at (208) 239-1720.

Potential Side Effects

General Side Effects & Tools to Manage Them

The following side effects may occur with either chemotherapy or radiation therapy. The most important aspect to managing your side effects is to communicate them with your health care providers. Be sure to keep notes of your side effects on your treatment calendar, as this will help to determine if the treatments may be the cause of your side effects.

Fatigue

Fatigue is one of the most common side effects experienced during cancer treatment. It is important to manage fatigue as it can contribute to feelings of depression, lack of appetite, or increased pain.

Fatigue can be minor or quite severe, depending upon your health before treatment as well as the severity of your treatment regimen. Fatigue for one person may mean having to go to bed a little earlier, whereas fatigue for another person could mean not enough energy to prepare meals, bathe, or visit with company.

Nearly all people who have chemotherapy have some fatigue. Although variable, your white blood cell count drops between treatments and is usually at its lowest 10 to 14 days after you have your chemo infusion. Doctors call this point the 'nadir'. You may feel very tired at this time. Your energy usually improves right before your next chemotherapy treatment; however, knowing that you will get tired again can make you feel anxious and frustrated. Your treatment may also affect your red blood cells. If these get too low it can cause a condition called anemia. Because your blood is carrying less oxygen, you may have shortness of breath, tiredness, and lack of energy.

It is important to communicate with your oncologist your level of fatigue as there may be ways to improve your blood counts.

Fatigue is also a common side effect of radiation therapy. It usually occurs after two weeks of treatment as a gradual decline in energy rather than an abrupt loss. Most people experience this fatigue as needing a short mid-day nap, going to bed earlier, or rising later in the morning. Others describe it as having less stamina for their normal daily activities. Again, be sure to discuss your level of fatigue with your radiation oncologist.

What can you do?

Fatigue is usually best managed with a combination of adequate rest and adequate activity. Rather than completely eliminating any form of exercise from your schedule, be sure to get 15-20 minutes of continuous, gentle activity at least three to four times per week. Walking, recumbent stationary bicycle, or even gentle housework/gardening would qualify. Swimming, especially in chlorinated water, is not recommended while you are going through radiation therapy.

Along with activity, fatigue is managed with adequate rest. While many patients can continue their normal work schedule, be sure to alert your employer that you are receiving cancer treatment and may need a reduced schedule. When family or friends offer to help in any way, don't be afraid to give them your grocery list, have them vacuum, or drive to pick up the kids. By giving these chores to your friends, you not only reserve your energy for more important

Potential Side Effects (cont.)

activities, but you give others a chance to show their support for you in a meaningful way. Speaking of driving, consider having a family member or friend drive you for your daily treatments, especially if you must travel longer than fifteen minutes to get to the Cancer Center.

Your treatment will most likely cause fatigue, but you can manage it with these simple tips as well as with the support and care of your team here at Portneuf Cancer Center. Please let your health care providers know if you have any further questions.

Hair Loss – Will I lose my hair?

This is a common question amongst patients considering cancer treatment. While some patients see this as a minor side effect, others consider it very daunting. Most cancer treatments, including chemotherapy and radiation therapy, damage rapidly dividing cells (such as cancer cells), but can damage rapidly dividing healthy cells too. Hair follicles happen to be one such normal rapidly dividing group of cells in our bodies.

Hair loss from either chemotherapy or radiation therapy typically begins two or three weeks after your first treatment. This hair loss is almost always temporary. Some chemotherapy agents do not cause hair loss so be sure to ask your oncologist. In regards to radiation therapy, hair loss only occurs for hair that may be in the treatment fields. Chemotherapy agents, however, can cause hair loss throughout the body.

What can you do?

Again, remember that most hair loss is temporary. Hair usually begins growing back about two or three weeks after finishing chemotherapy or radiation. In the meantime, here are some tips you can try:

1. *Cut your hair before it falls out. If you expect to lose all of your hair, cutting it first may be easier to handle emotionally than watching it fall out.*
2. *Plan ahead. Shop for a wig before your hair is gone, especially if you want to match your hair color. Some insurance companies will even cover the cost of a wig.*
3. *Try hats or head scarves. These can be good alternatives to wigs, especially in warmer weather.*
4. *Remember to cover your head or use sunscreen when outside. Your scalp may be particularly sensitive to the sun if certain chemotherapy drugs are included in your treatment, or if you are receiving radiation therapy to your scalp.*
5. *You can obtain a free copy of the American Cancer Society's "Look good... feel better," brochure which gives you additional hints on scalp coverings and care. Simply contact the Cancer Center or call 1-800-395-LOOK.*
6. *"Wigs on Loan" is also available through the Idaho State University Cosmetology Department, which allows patients to borrow wigs during their treatment. Talk to the oncology nurse for more information on this particular program.*
7. *Remember, when your hair does grow back, it may have a different texture, color, or style.*

Potential Side Effects (cont.)

Pain – Is this going to hurt?

Pain is one of the most common and feared symptoms of cancer or its treatment. If not adequately managed, pain can have a tremendous impact on your quality of life. It is important to remember that you should always notify your oncologist if you have pain or if it is increasing. Pain is usually your body's way of telling you that something is wrong, so do not ignore it or assume that it is a necessary part of your treatment.

Defining pain

In order to best treat your pain, it is important for your health care providers to understand your pain. You will be asked, if you haven't already, to quantify your pain using the Pain Scale of 0-10. 0 is the absence of pain and 10 is your perception of the worst possible pain. Based on this number, your provider can then determine the best way to intervene and control your pain.

Make it stop!

Treatments for pain can range from a change in your treatment regimen, to medications, to non-drug treatments like massage or counseling.

Perhaps the most common treatment for pain is in pill form, and you may already be on medication for pain. Your provider may recommend medications as easily obtained as Tylenol, or medications that may require a written prescription, like Morphine. Pain medications can be oral, intravenous, or even transdermal (through a patch placed on the skin). Most cancer patients do not become addicted to pain medicine; if you are reluctant to use pain medicine because of this concern, be sure to talk with your provider.

Non-drug treatments for pain can also be effective, but be sure to talk with your oncologist about these forms of treatment before you use them.

Imagery – Using your imagination to create mental pictures of situations, like a deliberate daydream, with specific attempts at using all of your senses.

Acupuncture – Always make sure you see a licensed specialist, as this technique requires significant knowledge of where and how deep to place the needles.

Massage – Many forms of massage can help reduce pain. Self-massage is also possible. Look for a masseuse with proper certification.

Meditation – Meditation is the practice of quieting your mind and focusing it on the breath or on a mantra; this can help focus your mind on something other than the pain.

Exercise – It may sound strange, but regular exercise can help your body control certain levels of pain. Exercise prompts your body to release chemicals called endorphins which block pain signals from reaching your brain. Endorphins can also relieve anxiety and depression, both of which can worsen pain.

Emotional support and counseling – As mentioned above, anxiety and depression can make your pain seem worse. Conversely, pain can worsen your anxiety or depression. In order to break this cycle, you may benefit from talking with a counselor or mental health professional. Be sure to ask your doctor for referrals as some counselors specialize in oncology patients.

Radiation Therapy

Potential Side Effects & Tools To Manage Them

Skin Changes

One of the most common side effects of radiation therapy can be skin changes. These occur because radiation has to pass through your skin in order to treat the area of cancer. Sometimes your skin is the target for radiation therapy. Most skin changes are manageable and temporary.

Most skin changes appear after the second week of treatment and begin as mild redness (erythema), similar to a sunburn. The redness may increase gradually to a dry, peeling stage (desquamation) and may feel more like a rugburn, especially if the irritation is on a part of your body with natural folds in the skin (i.e., under your arm). Rarely will skin changes be so severe that “blistering” can occur (wet desquamation). The radiation therapists, nurse, and physician will closely monitor your skin changes.

During radiation therapy, there are actions you can take to help reduce overall skin changes:

1. *When you wash, use only lukewarm water and mild soap; pat dry.*
2. *Wear loose clothing specifically in the area of treatment.*
3. *Avoid rubbing or scratching skin in the treatment area.*
4. *Avoid putting hot or cold packs on the skin in the treatment area.*
5. *Use only approved moisturizing products on your skin, i.e., clear aloe vera gel.*

6. *Do not apply any skin lotions or aloe vera within two hours prior to treatment.*
7. *Avoid direct exposure of the treated area to sunlight. Wear protective clothing as well as a gentle sunblock.*

The majority of skin changes resolve after two to three weeks following radiation therapy. In some cases, skin in the treatment area can remain slightly darker and be more sensitive to sun exposure. Be sure to alert your radiation oncology staff of any skin changes you experience during treatment. Before starting the treatment, you will be asked to sign a consent form. You should be given all the facts about treatment including the drugs you will be given and their side effects before you sign the consent form.

Nausea and Vomiting

Nausea can be a very debilitating side effect of radiation therapy that can be experienced if you receive radiation to your stomach or upper abdomen. In some cases, you can experience nausea if you are receiving treatment to your brain. In either instance, be sure to alert the radiation oncology staff if you become nauseous during your treatment course.

Nausea can occur from increased intestinal motility, irritation to the stomach, or from stimulation of the nausea center in the brain. Nausea can occur before treatment (i.e., anticipatory nausea) or after treatment. The best way to treat nausea is to first determine the cause and secondly to prevent the nausea.

Radiation Therapy Potential Side Effects (cont.)

There are many medications that can treat nausea, these are called antiemetics. You may have to try more than one type (or a combination of several) to find which works for you. These drugs often block the signal to the nausea center in your brain. Other types of medications, such as antacids, may also help to reduce your nausea. Be sure to talk to your doctor before trying other medications for your nausea.

Other ways to manage nausea are:

- 1. Eat small portions of bland foods with frequent sips of uncarbonated fluids throughout the day.*
- 2. Avoid fried or fatty foods, spicy foods, or very sweet foods.*
- 3. If possible, have someone else prepare your foods.*
- 4. Do not eat your favorite foods when you are nauseated.*
- 5. Eat foods at room temperature rather than hot or cold. Cooled foods may give off less aromas.*
- 6. Consider shakes or meal replacement drinks to help maintain your nutrition.*
- 7. Take any prescribed medications exactly as directed by your oncologist.*

Oral Side Effects

If you receive radiation therapy to your head or neck region, you may experience oral side effects. One of the most common oral side effects is dry mouth. Radiation can reduce the functioning of some of the salivary glands around your mouth and can thus reduce saliva. Not only can this be uncomfortable, it can lead to loss of appetite in the short-term, and possibly increased dental problems in the long-term.

Good oral care during radiation therapy can help manage dry mouth as well as prevent dental problems. Often your radiation oncologist will encourage you to visit with your dentist for a checkup prior to starting head and neck radiation. You may be encouraged to use fluoride treatments after finishing radiation therapy.

Here are some ways to care for your mouth during treatment:

- 1. Avoid spices and coarse foods such as raw vegetables, nuts, or crackers.*
- 2. Avoid acidic foods and liquids that can irritate your mouth and throat.*
- 3. Don't smoke, chew tobacco, or drink alcohol.*
- 4. Clean your mouth and teeth often, using the method your dentist recommends and a soft toothbrush.*
- 5. Use only alcohol-free mouthwash.*
- 6. Don't wear dentures if it is painful.*
- 7. You can freshen your mouth using a salt and/or baking soda solution – 1 tsp salt or 1 tsp of baking soda (or both) in 8 oz. of warm water.*
- 8. Artificial saliva and mouth moisturizing agents are available, just talk with your oncologist.*

Should you develop mouth sores or have pain with swallowing, be sure to let your oncologist know. Occasionally, patients can get infections in their mouth that need medication for treatment. There are also mouthwashes available by prescription that can numb your mouth and throat. It is very important that you maintain your nutrition and hydration during treatment, and so it is important to take care of your mouth and throat so that you feel like eating and drinking.

Radiation Therapy Potential Side Effects (cont.)

Bowel Changes

Diarrhea can be a common side effect of radiation therapy directed to the abdomen or pelvis. It is important to control diarrhea so that you do not develop dehydration, rectal pain, or rectal bleeding. Diarrhea can result from increased intestinal movement as a response to the radiation. Increased intestinal movement can result in soft or liquid stools, as the water within the stool is not able to be absorbed as thoroughly as if you were not receiving radiation therapy.

Diarrhea does not usually start until the third or fourth week of radiation therapy and you may be able to prevent it by just making adjustments to your diet. A low fiber diet such as no raw fruits or vegetables, no beans or nuts, and no wholegrain breads or cereals can prevent diarrhea for many patients. If you experience diarrhea even after changing your diet, you may want to try over-the-counter Imodium. Talk with your oncologist about how to best use this medication for diarrhea.

Diarrhea can cause rectal irritation. Nonalcoholic baby wipes can be very gentle on the skin while keeping you clean. Talk with your oncologist if you note any rectal bleeding. Sometimes, hemorrhoids or frequent diarrhea stools can cause small tears in the rectal or anal tissues and cause scant bright red blood in association with stool.

Along with increased intestinal movement, patients can experience increased bloating or flatulence during

radiation therapy. Again, avoiding foods high in fiber can reduce this as can over-the-counter Imodium or simethicone. Be sure to talk with your oncologist regarding how to use these medications.

Very rarely will patients experience constipation during radiation therapy, unless the constipation is caused by another source, such as pain medications. Be sure to alert your oncologist should you experience constipation.

Urinary Changes

For patients who receive radiation therapy to the pelvis, changes in urination can occur. Often this does not happen until the third or fourth week during treatment, but if radiation irritates the bladder, a patient can experience pain with urination, frequency, urgency, incontinence, or rarely, bleeding.

If you experience pain with urination, please alert your oncologist. There are medications that can ease the discomfort or improve your urine flow. You may be asked to provide a urine sample if your oncologist suspects a urinary tract infection.

If you note urinary frequency or urgency, there are medications that can help reduce these symptoms until you finish radiation therapy. If you note difficulty with incontinence, alert your oncologist as this can also be improved with medication or may be a sign of urinary tract infection. Kegel exercises to improve pelvic floor muscles may also be helpful in controlling your urinary symptoms.

Radiation Therapy Potential Side Effects (cont.)

Sexual and Reproductive Side Effects

Women receiving radiation therapy to the pelvis may have vaginal side effects. Dryness, itching, and redness are common and manageable. Be sure to let your oncologist know of any of these changes. Depending upon the dose and target of the radiation, you may experience temporary, if not permanent, reduction in ovarian function, which can contribute to vaginal changes. Some women may experience hot flashes as their hormone functioning declines. Often these symptoms do improve after radiation therapy.

You may want to avoid intercourse while undergoing radiation therapy to the pelvis. Vaginal tissue can be more sensitive and friable (i.e., easily irritated) during

this time, and intercourse may be painful. For comfort, unscented nonalcoholic baby wipes can be easier on your tissue than plain toilet paper.

Men receiving radiation therapy may experience erectile dysfunction. Ejaculation can also be more painful and slightly bloody. Be sure to talk with your oncologist regarding continuing sexual activity during your treatment if you are being treated to the pelvis. Often, you will be counseled to use birth control methods for the first year following radiation therapy to the pelvis and/or scrotum so as to prevent the possibility of birth defects. If you are hoping to conceive but know that you will be receiving pelvis radiation as part of your treatment, talk with your oncologist about options for sperm banking.

Chemotherapy

Potential Side Effects and the Tools to Manage Them

What Causes Side Effects?

Because cancer cells may grow and divide more rapidly than normal cells, many anticancer drugs are made to kill growing cells. But certain normal, healthy cells also multiply quickly, and chemotherapy can affect these cells, too. This damage to normal cells causes side effects. The fast-growing, normal cells most likely to be affected are blood cells forming in the bone marrow and cells in the digestive tract (mouth, stomach, intestines, esophagus), reproductive system (sexual organs), and hair follicles. Some anticancer drugs may affect cells of vital organs, such as the heart, kidney, bladder, lungs, and nervous system.

You may have none of these side effects or just a few. The kinds of side effects you have and how severe they are, depend on the type and dose of chemotherapy you get and how your body reacts. Before starting chemotherapy, your doctor will discuss the side effects that you are most likely to get with the drugs you will be receiving. Before starting the treatment, you will be asked to sign a consent form. You should be given all the facts about treatment including the drugs you will be given and their side effects before you sign the consent form.

How Long Do Side Effects Last?

Normal cells usually recover when chemotherapy is over, so most side effects gradually go away after treatment ends, and the healthy cells have a chance to grow normally. The time it takes to recover from side effects depends on many things, including your overall health and the kind of chemotherapy you have been taking.

Most people have no serious long-term problems from chemotherapy. However, on some occasions, chemotherapy can cause permanent changes or damage to the heart, lungs, nerves, kidneys, reproductive, or other organs. Additionally, certain types of chemotherapy may have delayed effects, such as a second cancer, that shows up many years later. Ask your doctor about the chances of any serious, long-term effects that can result from the treatment you are receiving (but remember to balance your concerns with the immediate threat of your cancer).

The side effects of chemotherapy can be unpleasant, but they must be measured against the treatment's ability to destroy cancer. Medicines can help prevent some side effects such as nausea. Sometimes people receiving chemotherapy become discouraged about the length of time their treatment is taking or the side effects they are having. If that happens to you, talk to your doctor or nurse. They may be able to suggest ways to make side effects easier to deal with or reduce their severity.

Chemotherapy Potential Side Effects (cont.)

Anemia

Chemotherapy can reduce the bone marrow's ability to make red blood cells, which carry oxygen to all parts of your body. When there are too few red blood cells, body tissues do not get enough oxygen to do their work. This condition is called anemia. Anemia can make you feel short of breath, very weak, and tired. Call your doctor if you have any of these symptoms:

- *Fatigue (feeling very weak and tired).*
- *Dizziness or feeling faint.*
- *Shortness of breath.*
- *Feeling as if your heart is "pounding" or beating very fast.*

Your doctor will check your blood cell count often during your treatment. He or she may also prescribe a medicine that can boost the growth of your red blood cells. Discuss this with your doctor if you become anemic often. If your red count falls too low, you may need a blood transfusion or a medicine called erythropoietin to raise the number of red blood cells in your body.

Things you can do if you are anemic
(See the section "Fatigue")

- *Get plenty of rest. Sleep more at night and take naps during the day if you can.*
- *Limit your activities. Do only the things that are essential or most important to you.*
- *Ask for help when you need it. Ask family and friends to pitch in with things like child-care, shopping, housework, or driving.*
- *Eat a well-balanced diet.*
- *When sitting, get up slowly. When lying down, sit first and then stand. This will help prevent dizziness.*

Central Nervous System Problems

Chemotherapy can interfere with certain functions in your central nervous system (brain) causing tiredness, confusion, and depression. These feelings will go away once the chemotherapy dose is lowered or you finish chemotherapy. Call your doctor if these symptoms occur.

Infection

Chemotherapy can make you more likely to develop infections. This happens because most anticancer drugs affect the bone marrow, making it harder to make white blood cells (WBCs), the cells that fight many types of infections. Your doctor will check your blood cell count often while you are getting chemotherapy. There are medicines that may be used to help speed the recovery of white blood cells, shortening the time when the white blood count is very low. These medicines are called colony stimulating factors (CSF). Raising the white blood cell count greatly lowers the risk of serious infection.

Most infections come from bacteria normally found on your skin and in your mouth, intestines, and genital tract. Sometimes, the cause of an infection may not be known. Even if you take extra care, you may still get an infection. But there are some things you can do.

How can I help prevent infections?

- *Wash your hands often during the day. Be sure to wash them before you eat, after you use the bathroom, and after touching animals.*
- *Clean your rectal area gently but thoroughly after each bowel movement. Ask your doctor or nurse for advice if the area becomes irritated or if you have hemorrhoids. Also check with your doctor before using enemas or suppositories.*

Chemotherapy Potential Side Effects (cont.)

- Stay away from people who have illnesses you can catch, such as a cold, the flu, measles, or chicken pox.
- Do not cut or tear the cuticles of your nails.
- Be careful not to cut or nick yourself when using scissors, needles, or knives.
- Maintain good mouth care.
- Do not squeeze or scratch pimples.
- Take a warm (not hot) bath, shower, or sponge bath daily. Pat your skin dry using a light touch, do not rub.
- Use lotion or oil to soften and heal your skin if it becomes dry and cracked.
- Clean cuts and scrapes right away and daily until healed, with warm water, soap, and an antiseptic.
- Avoid contact with animal litter boxes and waste, bird cages, and fish tanks.
- Avoid standing water, for example, bird baths, flower vases, or humidifiers.
- Wear protective gloves when gardening or cleaning up after others, especially small children.
- Do not have any immunizations, such as flu or pneumonia shots, without checking with your doctor first.
- Do not eat raw fish, seafood, meat, or eggs.
- Use an electric shaver instead of a razor to prevent breaks or cuts in your skin.
- Loose bowel movements.
- Frequent urgency to urinate or a burning feeling when you urinate.
- A severe cough or sore throat.
- Unusual vaginal discharge or itching.
- Redness, swelling, or tenderness, especially around a wound, sore, ostomy, pimple, rectal area, or catheter site.
- Sinus pain or pressure.
- Earaches, headaches, or stiff neck.
- Blisters on the lips or skin.
- Development of any type of skin rash.
- Mouth sores.

Report any signs of infection to your doctor right away, even if it is in the middle of the night. This is especially important when your white blood cell count is low. If you have a fever, do not take aspirin, acetaminophen, or any other medicine to bring your temperature down without checking with your doctor first.

Blood Clotting Problems

Anticancer drugs can affect the bone marrow's ability to make platelets, the blood cells that help stop bleeding by making your blood clot. If your blood does not have enough platelets, you may bleed or bruise more easily than usual, even without an injury.

Call your doctor if you have any of these symptoms:

- Unexpected bruising.
- Small, red spots under the skin.
- Reddish or pinkish urine.
- Black or bloody bowel movements.
- Bleeding from your gums or nose.

Symptoms of Infection

Call your doctor if you have any of these symptoms:

- Fever over 100.5° F or 38° C.
- Chills, especially shaking chills.
- Sweating.

Chemotherapy Potential Side Effects (cont.)

- *Vaginal bleeding that is new or lasts longer than a regular menstrual period.*
- *Headaches or changes in vision.*
- *Warm to hot feeling of an arm or leg.*

Your doctor will check your platelet count often while you are having chemotherapy. If your platelet count falls too low, the doctor may give you a platelet transfusion to build up the count. There are also medicines called colony-stimulating factors that help increase your platelets.

How to help prevent problems if your platelet count is low:

- *Check with your doctor or nurse before taking any vitamins, herbal remedies, including all over-the-counter medicines. Many of these products contain aspirin, which can affect platelets.*
- *Before drinking any alcoholic beverages, check with your doctor.*
- *Use a very soft toothbrush to clean your teeth.*
- *When cleaning your nose blow gently into a soft tissue.*
- *Take extra care not to cut or nick yourself when using scissors, needles, knives, or tools.*
- *Be careful not to burn yourself when ironing or cooking.*
- *Avoid contact sports and other activities that might result in injury.*
- *Ask your doctor if you should avoid sexual activity.*
- *Use an electric shaver instead of a razor.*

Mouth, Gum, and Throat Problems

Good oral care is important during cancer treatment. Some anticancer drugs can cause sores in the mouth and throat, a condition called stomatitis or mucositis. Anticancer drugs also can make these tissues dry and irritated or cause them to bleed. Patients who have not been eating well since beginning chemotherapy are more likely to get mouth sores.

In addition to being painful, mouth sores can become infected by the many germs that live in the mouth. Every step should be taken to prevent infections, because they can be difficult to fight during chemotherapy and can lead to serious problems.

How can I keep my mouth, gums, and throat healthy?

- *Talk to your doctor about seeing your dentist at least several weeks before you start chemotherapy. You may need to have your teeth cleaned and take care of any problems such as cavities, gum abscesses, gum disease, or poorly fitting dentures. Ask your dentist to show you the best ways to brush and floss your teeth during chemotherapy. Chemotherapy can make you more likely to develop cavities, so your dentist may suggest using a fluoride rinse or gel each day to help prevent decay.*
- *Brush your teeth and gums after every meal. Use a soft toothbrush and a gentle touch. Brushing too hard can damage soft mouth tissues. Ask your doctor, nurse, or dentist to suggest a special toothbrush and/or toothpaste if your gums are very sensitive. Rinse with warm salt water after meals and before bedtime.*
- *Rinse your toothbrush well after each use and store it in a dry place.*

Chemotherapy Potential Side Effects (cont.)

- Avoid mouthwashes that contain any amount of alcohol. Ask your doctor or nurse to suggest a mild or medicated mouthwash that you might use. For example, mouthwash with sodium bicarbonate (baking soda) is nonirritating.

If you develop sores in your mouth, tell your doctor or nurse. You may need medicine to treat the sores. If the sores are painful or keep you from eating, you can try these ideas:

How can I cope with mouth sores?

- Ask your doctor if there is anything you can apply directly to the sores or to prescribe a medicine you can use to ease the pain.
- Eat foods cold or at room temperature. Hot and warm foods can irritate a tender mouth and throat.
- Eat soft, soothing foods, such as ice cream, milkshakes, pureed food, soft fruits (bananas and applesauce), mashed potatoes, cooked cereals, soft-boiled or scrambled eggs, yogurt, cottage cheese, macaroni and cheese, custards, puddings, and gelatin. You also can puree cooked foods in the blender to make them smoother and easier to eat.
- Avoid irritating, acidic foods and juices, such as tomato and citrus (orange, grapefruit, and lemon); spicy or salty foods; and rough or coarse foods such as raw vegetables, granola, popcorn, and toast.

How can I cope with mouth dryness?

- Ask your doctor if you should use an artificial saliva product to moisten your mouth.

- Drink plenty of liquids.
- Ask your doctor if you can suck on ice chips, popsicles, or sugarless hard candy. You can also chew sugarless gum. (Sorbitol, a sugar substitute that is in many sugar-free foods, can cause diarrhea in many people. If diarrhea is a problem for you, check the labels of sugar-free foods before you buy them and limit your use of them.)
- Moisten dry foods with butter, margarine, gravy, sauces, or broth.
- Dip or soak crisp, dry foods in mild liquids.
- Eat soft and pureed foods.
- Use lip balm or petroleum jelly if your lips become dry.
- Carry a water bottle with you to sip from often.

Diarrhea

When chemotherapy affects the cells lining the intestine, it can cause diarrhea (watery or loose stools). If you have diarrhea that continues for more than 24 hours, or if you have pain and cramping along with the diarrhea, call your doctor. In severe cases, the doctor may prescribe a medicine to control the diarrhea. If diarrhea persists, you may need intravenous (IV) fluids to replace the water and nutrients you have lost. Often these fluids are given as an outpatient and do not require hospitalization. Do not take any over-the-counter medicines for diarrhea without asking your doctor.

Chemotherapy Potential Side Effects (cont.)

How can I help control diarrhea?

- Drink plenty of fluids. This will help replace those you have lost through diarrhea. Mild, clear liquids, such as water, clear broth, sports drinks such as Gatorade, or ginger ale, are best. If these drinks make you more thirsty or nauseous, try diluting them with water. Drink slowly and make sure drinks are at room temperature. Let carbonated drinks lose their fizz before you drink them.
- Eat small amounts of food throughout the day instead of three large meals.
- Unless your doctor has told you otherwise, eat potassium-rich foods. Diarrhea can cause you to lose this important mineral. Bananas, oranges, potatoes, and peach and apricot nectars are good sources of potassium.
- Ask your doctor if you should try a clear liquid diet to give your bowels time to rest. A clear liquid diet does not provide all the nutrients you need, so do not follow the diet for more than three to five days.
- Eat low-fiber foods. Low-fiber foods include white bread, white rice or noodles, creamed cereals, ripe bananas, canned or cooked fruit without skins, cottage cheese, yogurt without seeds, eggs, mashed or baked potatoes without the skin, pureed vegetables, chicken, or turkey without the skin, and fish.
- Avoid high-fiber foods, which can lead to diarrhea and cramping. High-fiber foods include whole grain breads and cereals, raw vegetables, beans, nuts, seeds, popcorn, and fresh and dried fruit.
- Avoid hot or very cold liquids, which can make diarrhea worse.

- Avoid coffee, tea with caffeine, alcohol, and sweets. Stay away from fried, greasy, or spicy foods, too. They are irritating and can cause diarrhea and cramping.
- Avoid milk and milk products, including ice cream, if they make your diarrhea worse.

Constipation

Some anticancer medicines, pain medicines, and other medicines can cause constipation. It can also occur if you are less active or if your diet lacks enough fluid or fiber. If you have not had a bowel movement for more than a day or two call your doctor, he may suggest taking a laxative or stool softener. Do not take these measures without checking with your doctor, especially if your white blood cell count or platelets are low.

What can I do about constipation?

- Drink plenty of fluids to help loosen the bowels. If you do not have mouth sores, try warm and hot fluids, including water, which work especially well.
- Check with your doctor to see if you can increase the fiber in your diet (there are certain kinds of cancer and certain side effects you may have for which a high-fiber diet is not recommended). High-fiber foods include bran, whole-wheat breads and cereals, raw or cooked vegetables, fresh and dried fruit, nuts, and popcorn.
- Get some exercise every day. Go for a walk or you may want to try a more structured exercise program. Talk to your doctor about the amount and type of exercise that is right for you.

Chemotherapy Potential Side Effects (cont.)

Nerve and Muscle Effects

Sometimes anticancer drugs can cause problems with your body's nerves. One example of a condition affecting the nervous system is peripheral neuropathy, where you feel a tingling, burning, weakness, or numbness or pain in the hands and/or feet. Some drugs can also affect the muscles, making them weak, tired, or sore.

Sometimes, these nerve and muscle side effects, though annoying, may not be serious. In other cases, nerve and muscle symptoms may be serious and need medical attention. Be sure to report any nerve or muscle symptoms to your doctor. Most of the time, these symptoms will get better; however, it may take up to a year after your treatment ends.

Some nerve and muscle-related symptoms include:

- *Tingling.*
- *Burning.*
- *Weakness or numbness in the hands and/or feet.*
- *Pain when walking.*
- *Weak, sore, tired, or achy muscles.*
- *Loss of balance.*
- *Clumsiness.*
- *Difficulty picking up objects and buttoning clothing.*
- *Shaking or trembling.*
- *Walking problems.*
- *Jaw pain.*
- *Hearing loss.*
- *Stomach pain.*
- *Constipation.*

How can I cope with nerve and muscle problems?

- *If your fingers are numb, be very careful when grasping objects that are sharp, hot, or otherwise dangerous.*
- *If your sense of balance or muscle strength is affected, avoid falls by moving carefully, using handrails when going up or down stairs, and using bath mats in the bathtub or shower.*
- *Always wear shoes with rubber soles (if possible).*
- *Ask your doctor for pain medicine.*

Effects on Skin and Nails

You may have minor skin problems while you are having chemotherapy, such as redness, rashes, itching, peeling, dryness, acne, and increased sensitivity to the sun. Certain anticancer drugs, when given intravenously, may cause the skin all along the vein to darken, especially in people who have very dark skin. Some people use makeup to cover the area, but this can take a lot of time if several veins are affected. The darkened areas will fade a few months after treatment ends. Your nails may also become darkened, yellow, brittle, or cracked. They also may develop vertical lines or bands.

While most of these problems are not serious and you can take care of them yourself, a few need immediate attention. Certain drugs given intravenously (IV) can cause serious and permanent tissue damage if they leak out of the vein. Tell your doctor or nurse right away if you feel any burning or pain when you are getting IV drugs. These symptoms do not always mean there is a problem, but they must always be checked at once. Don't hesitate to call your doctor about even the less serious symptoms.

Chemotherapy Potential Side Effects (cont.)

Some symptoms may mean you are having an allergic reaction that may need to be treated at once. Call your doctor or nurse right away if:

- You develop sudden or severe itching.
- Your skin breaks out in a rash or hives.
- You have wheezing or any other trouble breathing.

How can I cope with skin and nail problems?

Acne

- Try to keep your face clean and dry.
- Ask your doctor or nurse if you can use over-the-counter medicated creams or soaps.

Itching and dryness

- Apply corn starch as you would a dusting powder.
- To help avoid dryness, take quick showers or sponge baths. Do not take long, hot baths. Use a moisturizing soap.
- Apply cream and lotion while your skin is still moist.
- Avoid perfume, cologne, or aftershave lotion that contains alcohol.
- Use a colloid oatmeal bath or diphenhydramine (Benadryl) for generalized pruritis.

Nail problems

- You can buy nail-strengthening products in a drug store. Be aware that these products may bother your skin and nails.
- Protect your nails by wearing gloves when washing dishes, gardening, or doing other work around the house.

- Be sure to let your doctor know if you have redness, pain, or changes around the cuticles.

Sunlight sensitivity

- Avoid direct sunlight as much as possible, especially between 10 a.m. and 4 p.m. when the sun's rays are the strongest.
- Use a sunscreen lotion with a skin protection factor (SPF) of 15 or higher to protect against sun damage. A product such as zinc oxide, sold over-the-counter, can block the sun's rays completely.
- Use a lip balm with a sun protection factor.
- Wear long-sleeve cotton shirts, pants, and hats with a wide brim (particularly if you are having hair loss), to block the sun.
- Even people with dark skin need to protect themselves from the sun during chemotherapy.

Kidney and Bladder Effects

Some anticancer drugs can irritate the bladder or cause temporary or permanent damage to the bladder or kidneys. If you are taking one or more of these drugs, your doctor may ask you to collect a 24-hour urine sample. A blood sample may also be obtained before you begin chemotherapy to check your kidney function. Some anticancer drugs cause the urine to change color (orange, red, green, or yellow) or take on a strong or medicine-like odor for 24-72 hours. Check with your doctor to see if the drugs you are taking may have any of these effects.

Always drink plenty of fluids to ensure good urine flow and help prevent problems. This is very important if you are taking drugs that affect the kidney and bladder. Water, juice, soft drinks, broth, ice cream, soup, popsicles, and gelatin are all considered fluids.

Chemotherapy Potential Side Effects (cont.)

Tell your doctor if you have any of these symptoms:

- Pain or burning when you urinate (pass your water).
- Frequent urination.
- Not being able to urinate.
- A feeling that you must urinate right away (“urgency”).
- Reddish or bloody urine.
- Fever.
- Chills, especially shaking chills.

Flu-Like Symptoms

Some people feel as though they have the flu for a few hours to a few days after chemotherapy. This may be especially true if you are receiving chemotherapy in combination with biological therapy. Flu-like symptoms — muscle and joint aches, headache, tiredness, nausea, slight fever (usually less than 100°F), chills, and poor appetite — may last from one to three days. An infection or the cancer itself can also cause these symptoms. Check with your doctor if you have flu-like symptoms.

Fluid Retention

Your body may retain fluid when you are having chemotherapy. This may be due to hormonal changes from your therapy, to the drugs themselves, or to your cancer. Check with your doctor or nurse if you notice swelling or puffiness in your face, hands, feet, or abdomen. You may need to avoid table salt and foods that contain a lot of salt. If the problem is severe, your doctor may prescribe a diuretic medicine to help your body get rid of excess fluids.

Effects on Sexual Organs

Chemotherapy may — but does not always — affect sexual organs (testis in men, vagina and ovaries in women) and functioning in both men and women. The side effects that might occur depend on the drugs used and the person’s age and general health.

Men: Chemotherapy drugs may lower the number of sperm cells and reduce their ability to move. These changes can result in infertility, which may be temporary or permanent. Infertility affects a man’s ability to father a child, but not a man’s ability to have sexual intercourse. Other possible effects of these drugs are problems with getting or keeping an erection and damage to the chromosomes, which could lead to birth defects.

What you can do:

- Before starting treatment, talk to your doctor about the possibility of sperm banking — a procedure that freezes sperm for future use — if infertility may be a problem. Ask about the cost of sperm banking.
- Use birth control with your partner during treatment. Ask your doctor how long you need to use birth control.
- Use a condom during sexual intercourse for the first 48 hours after the last dose of chemotherapy because some of the chemotherapy may end up in the sperm.
- Ask if chemotherapy will affect your ability to father a child. If so, will the effects be temporary or permanent?

Women: Effects on the ovaries. Anticancer drugs can affect the ovaries and reduce the amount of hormones

Chemotherapy Potential Side Effects (cont.)

they produce. Some women find that their menstrual periods become irregular or stop completely while having chemotherapy. Related side effects may be temporary or permanent.

- **Infertility:** *Damage to the ovaries may result in infertility, the inability to become pregnant. The infertility can be either temporary or permanent. Whether infertility occurs, and how long it lasts, depends on many factors, including the type of drug, the dosage given, and the woman's age.*
- **Menopause:** *A woman's age and the drugs and dosages used will determine whether she experiences menopause while on chemotherapy. Chemotherapy may also cause menopause-like symptoms such as hot flashes and dry vaginal tissues. These tissue changes can make intercourse uncomfortable and can make a woman more prone to bladder and/or vaginal infections. Any infection should be treated right away. (See "Infection.") Menopause may be temporary or permanent.*

Help for hot flashes:

- Dress in layers.
- Avoid caffeine and alcohol.
- Exercise.
- Try meditation or other relaxation methods.

Relieving vaginal symptoms and preventing infection:

- Use a water or mineral oil-based vaginal lubricant at the time of intercourse.
- There are products that can be used to stop vaginal dryness. Ask your pharmacist about vaginal gels that can be applied to the vagina.

- Avoid using petroleum jelly, which is difficult for the body to get rid of and increases the risk of infection.
- Wear cotton underwear and pantyhose with a ventilated cotton lining.
- Avoid wearing tight slacks or shorts.
- Ask your doctor about prescribing a vaginal cream or suppository to reduce the chances of infection.
- Ask your doctor about using a vaginal dilator if painful intercourse continues.

Pregnancy

Although pregnancy may be possible during chemotherapy, it still is not advisable because some anticancer drugs may cause birth defects. Doctors advise women of childbearing age, from the teens through the end of menopause, to use some method of birth control throughout their treatment, such as condoms, spermicidal agents, diaphragms or birth control pills. Birth control pills may not be appropriate for some women, such as those with breast cancer. Ask your doctor about these contraceptive options.

If a woman is pregnant when her cancer is discovered, it may be possible to delay chemotherapy until after the baby is born. For a woman who needs treatment sooner, the possible effects of chemotherapy on the fetus need to be evaluated.

Feelings About Sexuality

Sexual feelings and attitudes vary among people during chemotherapy. Some people find that they feel closer than ever to their partners and have an increased desire for sexual activity. Others experience

Chemotherapy Potential Side Effects (cont.)

little or no change in their sexual desire and energy level. Still others find that their sexual interest declines because of the physical and emotional stresses of having cancer and getting chemotherapy. These stresses may include:

- *Worries about changes in appearance.*
- *Anxiety about health, family, or finances.*
- *Side effects of treatment, including fatigue, and hormonal changes.*

A partner's concerns or fears also can affect the sexual relationship. Some may worry that physical intimacy will harm the person who has cancer. Others may fear that they might "catch" the cancer or be affected by the drugs. Both you and your partner should feel free to discuss sexual concerns with your doctor, nurse, social worker, or other counselor who can give you the information and reassurance you need.

You and your partner also should try to share your feelings with each other. If talking to each other

about sex, cancer, or both, is hard, you may want to speak to a counselor who can help you talk more openly. People who can help include psychiatrists, psychologists, social workers, marriage counselors, sex therapists, and members of the clergy.

If you were comfortable with and enjoyed sexual relations before starting chemotherapy, chances are you will still find pleasure in physical intimacy during your treatment. You may discover, however, that intimacy changes during treatment. Hugging, touching, holding, and cuddling may become more important, while sexual intercourse may become less important. Remember that what was true before you started chemotherapy remains true now: There is no one "right" way to express your sexuality. You and your partner should decide together what gives both of you pleasure.

Genetic Testing

Genetic testing may be recommended by your oncologist if it can help determine therapeutic options or if it could help reduce potential cancer risk for you or your descendants. Currently, there are a few genetic tests that can be submitted by the Cancer Center after you have discussed this option with your oncologist. The results are shared only with you, the patient. For more elaborate testing, your oncologist may recommend you visit with a genetic counselor.

Genetic testing looks for specific inherited changes in a person's chromosomes, genes or cell proteins that have been linked to certain cancers. Inherited genetic mutations can increase a person's risk of developing cancer but overall only 5-10% of cancers can be linked to a direct inherited syndrome. Again, your oncologist understands the screening guidelines for when to check for inherited syndromes and will make recommendations to you usually during your consultation or the initial phases of determining a therapeutic plan.

Current genetic tests offered at Portneuf Cancer Center include:

Hereditary Breast Ovarian Cancer Syndrome

This test can determine presence of the famed BRCA1 and 2 genes. These genes have been found in 5-7% of people diagnosed with breast cancer. Criteria include:

early age of onset of diagnosis of breast or ovarian carcinoma (usually <50 yrs), multiple relatives with associated cancers, or relatives with multiple associated cancers during their lifetime, and more. Certainly, if you are related to someone in your family who is a known carrier of the BRCA 1/2 gene, you would be eligible for testing. Men with a breast cancer diagnosis would also meet the criteria for BRCA 1 and 2 testing.

Lynch Syndrome (or Hereditary Nonpolyposis Colorectal Carcinoma)

Lynch syndrome is the most common form of genetic mutations in multiple genes that account for up to 4% of all cases of colorectal cancers. If someone is a Lynch carrier, the lifetime risk of developing a colorectal carcinoma is 80%. There are various criteria for eligibility including age of onset of a diagnosis of colorectal cancers, the molecular characteristics of the tumor tissue, the location of the tumor within the colon, and of course, the presence of family members with cancer diagnoses related to colorectal cancers in this syndrome. Your oncologist can tell you if you meet this criteria.

Nutrition During Treatments

General Nutrition During Chemotherapy and Radiation Treatments

As a patient of the Portneuf Cancer Center, you have a variety of supportive care options available to you. One of the most important and easy to access is the supportive care of our specially trained dietitians who are available to answer your questions and to provide you with some of the tools you will need to successfully combat cancer.

Importance of Eating Well and Maintaining Weight

A lot of patients hear that cancer treatment can lead to weight loss and say “Great, I could stand to lose a few pounds,” however, weight loss during your treatment can have significant consequences. Maintaining a healthy weight is a wonderful life goal, but getting to your healthy weight should be postponed until your treatment is finished. Eating well and maintaining your weight are the two biggest nutritional goals during your treatment because research shows that patients are better able to tolerate the side effects of treatment when they eat well. Eating well means trying to eat a variety of foods including carbohydrates, proteins, fats, vitamins, and minerals to promote weight maintenance and good health during treatment. Sometimes it is difficult to eat well during your treatment and your diet may need to be customized by the dietitian for the duration. You will be weighed regularly throughout your treatments, but please feel free to discuss any nutrition concerns you may have at any time during your treatment.

Nutrition Suggestions for Managing Side Effects

Many times, the oncology health care team doesn't find out that a patient is having a difficult time managing the side effects of treatment until after the patient has suffered silently. Side effects like loss of appetite, weight loss/gain, sore mouth or throat, dry mouth, changes to smell or taste, nausea, vomiting, diarrhea, constipation, and fatigue can all be relieved or eliminated. The dietitian has specific handouts with nutrition suggestions and tips to help you manage these side effects and successfully prepare your body for treatment and recovery.

Special Diets

“An ounce of prevention is worth a pound of cure” could easily apply to some of the missteps that can be made by patients with what and how much they eat. You may need to follow a special diet during your treatment to help minimize potential side effects some foods may cause. For example, a soft diet may be recommended if you have a sore throat, mouth, or esophagus to eliminate the discomfort of chewing and to minimize the abrasion to your mouth and throat. Other special diets include fiber restricted, high calorie/protein, clear liquid, and full liquid. The dietitian will provide the diet instruction if a special diet is recommended. Also, please let the dietitian know if you follow a special diet at home (i.e., diabetic, cardiac). Your diet may need to be liberalized during your treatment.

Nutrition During Treatment (cont.)

Nutritional Supplements

If you are eating everything you can and following the advice of the health care team and are still losing weight, the dietitian will assist you by providing education and samples of nutritional supplements. These supplements will provide the calories and protein that your body needs but is unable to get from your current diet and nutritional limitations. A wide variety of commercial nutrition supplements are available at your local supermarket or pharmacy. Examples include Carnation Instant Breakfast®, Ensure®, and Boost®. Nutrition supplements are helpful when you experience a loss of appetite, weight loss, or just can't eat enough at one time. You can mix a commercially available supplement, make your own high calorie and high protein recipe at home, and/or the dietitian can assist you with other lists of recipes and helpful advice.

At the Portneuf Cancer Center, we encourage you to take full advantage of the trained professionals that we have gathered to support you in your cancer care. If at any time you have questions about your disease, your treatment, or any other aspect of your care, please ask anyone for assistance and they will help to direct you to the appropriate personnel.

Vitamins and Minerals

There is no scientific research that shows that vitamins/minerals prevent or stop cancer from reoccurring. In fact, during your treatment, large doses of antioxidants are usually not recommended because they may limit the effectiveness of your treatment by protecting cancer cells as well as healthy cells. Examples of antioxidants include vitamin C, vitamin E, beta-carotene, and selenium. Please discuss any vitamins or herbal supplements with your health care team.

Survivorship

survivorship(ser-VY-ver-ship) – In cancer, survivorship covers the physical, psychosocial, and economic issues of cancer, from diagnosis until the end of life. It includes issues related to the ability to get health care and follow-up treatment, late effects of treatment, second cancers, and quality of life.

“An individual is considered a cancer survivor from the time of diagnosis, through the balance of his or her life. Family members, friends, and caregivers are also impacted by the survivorship experience and are therefore included in this definition.” National Cancer Institute

Definitions vary, but survivorship is a unique journey for each person. There is no single definition for true or correct survivorship. But there are many more survivors than people realize. There are approximately 12 million Americans alive with a history of cancer—some considered cured, others in remission or receiving treatment. The overall survival rate for all types of cancer is 66%. And each person surviving their diagnosis of cancer believes their lives to be changed. How it is changed can depend upon their approach to “survivorship.”

A cancer diagnosis often leads to a change in priorities, relationships, goals, or spirituality. Survivors speak of a greater appreciation of life, a greater acceptance of self, and a greater appreciation of others. Many survivors choose to focus on the good that has resulted from their cancer experience rather than the bad. Many survivors describe their journey after cancer as a daily experience rather than staying alive until their next doctor checkup. Whatever your definition of survivorship, it can greatly affect how you see your life taking course after cancer treatment.

At the completion of treatment, the “safety net” of regular contact with your health care team ends. Anxieties may surface as you try to adjust and live with uncertainty. Fear of your cancer coming back is normal for cancer survivors. It is simply hard to know what is “normal” and what needs to be reported to your doctor. Remember that your oncology team is still available to help. Discuss your concerns with them and attend your scheduled follow-up visits so that your journey is not directed by feelings of anxiety and helplessness. Often times, your oncology team can provide you with information that can be empowering so you can live life without worry, knowing that your team is watchfully behind you. The Portneuf Cancer Center interdisciplinary team will provide you with a Treatment Summary and Survivorship Plan as you finish your cancer treatments. The plan provides a summary of your cancer treatments, recommended follow-up appointments, and support staff contact information.

Survivorship (cont.)

Relationships

Relationships with family and friends may be tested during this transition. Some friends may become closer, while others distance themselves. Families can become overprotective, or may have exhausted their ability to be supportive. Marital problems that may have been ignored before cancer can surface. The entire family is changed by the cancer experience, but may not recognize the positive or negative changes. Open communication is key to adapting to life and shifting relationships after cancer.

Getting Back to “Normal”

Returning to work is a sign of returning to normal and away from the role of being sick. Most people need their job and the medical insurance it provides. Eighty percent (80%) of people with cancer return to work after a cancer diagnosis. Studies show little, if any, difference in the work performance of survivors. Although outright discrimination has decreased, there is still subtle discrimination. When planning your return to work, it may be helpful to anticipate questions from coworkers, and decide how to answer these questions in advance. Coworkers may want to help, but not know how. It may be up to you to start the conversation and set the limits. Disclosing a diagnosis is a personal decision.

Sharing Your Story

Each cancer survivor has a story to share when the time or situation is right. Some are more inclined to share information about their cancer diagnosis and its treatment. Others may prefer to keep details private or may feel uncomfortable discussing certain parts of the body. Or, the topic may be too painful or too recent to discuss. Telling other people about a cancer experience involves sharing personal information. This is an individual choice. It is always your decision how much to share, regardless of any probing or intrusive interest or questions.

Survivor Stories

Myrna – Breast Cancer

At age 64, I was diagnosed with stage I breast cancer, January 3, 2005. This was a huge shock to my husband, Dave, and I as there was no history of breast cancer in my family that I was aware of. My husband has been a very large part of my treatment and recovery. He did all the chemo with me, listened to me whine on the down times, reminding me I could be as miserable as I wanted. I had it in my head that I was a lost cause in the beginning when I was told we were going to do the chemo up front. The doctors and staff explained that doing the chemo up front was to shrink the tumor before surgery. It worked very well, as the tumor was reduced to the size of a pea by the end of the chemo treatments.

I hid that I was coming down with a cold at my first chemo session on March 2nd. The very next night, Dave and I came down with the crud that was going around. We were down for eight days. Then I became worse in the next three days. Dave called the doctor and was told to bring me in. I was in the hospital for a week with pneumonia. The doctor took excellent care of me. That is when we were truly acquainted with the oncology social worker. She tried to get us involved in the support group, but we put it off until mid-May. We have made so many good friends there. We are like a family caring about each other. Had it not been for me having cancer, our lives would not have crossed paths.

We were very impressed with the social functions. The annual Cancer Center picnic is great and the Relay for Life is awesome. During my first one, I was in mid-chemo with low energy but walked five laps. We missed the luminaries as had to leave before dark. This year, I was able to do it all; it was so moving.



I did the lumpectomy on September 6. I started radiation on September 28. The staffs of the radiation oncology department were as loving and caring as in the chemo department. We are very fortunate to have such a great cancer center here.

I lost all my hair a week after the first chemo. That wasn't as upsetting as losing my eyebrows and eyelashes. I am glad to say that they came back and my hair came back curly! I had some low days but managed to work through them.

I have been a walker everyday and pushed to go if only a couple of blocks. I tried to do something to be as normal as possible. The fear of cancer returning is not present as often as in the beginning. I still have times I worry, but not as often. I thank God I am still here and doing what I want. I have made life more simple now. I take a day at a time, do what I feel is important that day, enjoy the blue sky, sunset, flowers, birds, and having another day to love someone and to be loved.

Survivor Stories

Becky – Non-Hodgkin’s Lymphoma

January 31, 2006 – I was admitted to the hospital thinking I had an acute case of pneumonia. However, after a CT scan revealed a tumor the length of my spine I underwent surgery and was diagnosed with B-cell non-Hodgkin’s Lymphoma, stage III on February 7, 2006. This was also my 59th birthday.

During my hospitalization, my doctor and numerous support staff from the Cancer Center met with my family and myself. They never failed in answering our numerous questions and addressing our concerns. Upon my doctor’s recommendation, I began my battle against cancer with an aggressive chemotherapy treatment on February 9. My special cocktail was R-CHOP. At that time I didn’t realize the

impact, negative and positive, cancer would have on my life, let alone the lives of my loved ones. However, being the optimistic person that I am, I’m following Winston Churchill’s famous quote of: “A pessimist sees the difficulty in every opportunity, an optimist sees the opportunity in every difficulty.” This is not to say that I didn’t fall into being a pessimist at times, especially when my hair began

falling out. Although, that’s when I first realized I enjoyed wearing ball caps. There were many days during treatment I didn’t or couldn’t get out of bed to face a new day. With the aid of acupuncture and the support of family and friends, “we” forged ahead.



Almost a year later, my hair has grown back with curl, and I’m in remission. To help me stay in remission, I’ll continue Rituxan chemotherapy treatments every six months. What seemed to me as a bitter trial I’ve learned is often a blessing in disguise because I pay attention to the smaller things in life. I “stop to smell the roses” so to speak. I believe I have a renewed outlook about life in general.

Also, I’ve met many new friends at the Cancer Center and at the Support Group, friends I would never have met otherwise. Pocatello is very fortunate to have such a progressive cancer treatment center,

employing a compassionate, knowledgeable staff. I truly believe I couldn’t have received better care anywhere in the world. In fact, I may have just been a “number” at a larger medical institution. A quote I’d like to end with is from Albert Einstein: “Learn from yesterday, live for today, hope for tomorrow.”

Survivor Stories

Judy – Breast Cancer

My name is Judy, and I would like to introduce my cancer story to you. I was holding my 8-month-old grandson on September 11, 2004. He fell asleep on the left side of my chest and arm as I held his bottle with my right hand. As we cuddled, I became aware of something that felt like twisted cloth or a button between the baby and me causing me discomfort. I probed and discovered a very small lump in my left breast.

My identical twin sister had inflammatory breast cancer in 1991 at the age of 32. She was fortunate to have access to very good cancer treatment in the Modesto area. Against the odds, my sister fought the cancer and at present is still in remission. As I am my sister's genetic duplicate, I have had a sense that the chances were good that my time to fight cancer would eventually come. Strangely, I had calm come to me that if it was cancer, I could put up a good fight as my sister did.

I began seeing doctors and having tests to determine what the lump was. Eventually, I ended up with a local surgeon who didn't like the results of the tests to that point, so she ordered a biopsy. The biopsy came back positive.



On October 4, 2004, I reported to the hospital to undergo a lumpectomy. As the lump was small, we had hoped for no lymph node involvement. However, the analysis from the lab showed the cancer in a few of the nodes. On October 7, I returned to the operating room to remove the lymph nodes under my arm.

Because of the lymph node involvement, I began chemotherapy shortly after my surgery. I finished after sixteen weeks on February 7, 2005. I was instructed by the doctor to rest, avoid stress, and not get sick because in three weeks my radiation treatments would begin. In the midst of all this, on February 16, my father was killed in an industrial accident.

Some days I wondered if I would make it through all of this. I was fortunate to have great family support and doctors who really cared. I was also fortunate to be involved in the support group at the Cancer Center. My husband and I have learned a lot and have been nourished by the care and concern of people who know and understand intimately what it means to face cancer. Would get phone calls out of the blue, cards indicating others cared, and questions of when would I be back at group because they missed me! That is how I came through, and can safely say to anyone facing this illness, we need you and I think we can help get you through it in a better way.

Survivor Stories

Michael – Non-Hodgkin’s Lymphoma

My name is Mike. I am a 55-year-old father and grandfather, an active member of the PMC Cancer Support Group and a cancer survivor living with Non-Hodgkin’s Lymphoma. At this time I am two and a half years out of my primary treatments and one year out of a relapse and secondary treatment. I am now in remission.

Yes it has been challenging. But I have had wonderful treatment here at PMC. The support group has become for me an adjunct to that treatment and an emotional support I could not have received otherwise. And I have made deep, true friendships that I can count on for strong support.

So while challenged, I am also truly grateful. Cancer was a turning point in my life. I am grateful that it turned me in this direction.



Survivor Stories

Nancy – Carcinoid Tumor

My name is Nancy and it has been one year and six months since I was diagnosed with a carcinoid tumor. I was fine on Friday night when I went to bed, but then woke at 4:00 a.m. Saturday with abdominal pain and vomiting. When these symptoms continued all morning, I knew that I didn't have the flu and asked my husband to drive me to the emergency room. It was Labor Day weekend. We had a long wait. After x-rays and a CT scan, the doctor told us that he could see a mass in my mesentery area that could be a tumor or an aneurysm. Surgery was planned for Sunday morning.

There wasn't much time to get used to the idea of surgery. When the surgery confirmed a carcinoid tumor, it was my husband who had to give permission for the surgeon to remove it along with approximately 18 inches of my small intestine. I learned the diagnosis when I woke up after the surgery.

I know that this was hard for my family to deal with. That's one of the difficulties with any major illness. You need to deal with your own feelings and with those of family and friends all at the same time.



Five days in the hospital were necessary before I could go home. The nurses would come in on every shift asking if I had passed gas yet. I told them that I couldn't imagine anyone but a nurse asking such a question. They told me that it was a requirement for being sent home. (I'm told it is an indication that the intestines are ready to function normally.) One of my discharge requirements was to walk. It's a requirement that I love to follow and I think that it has speeded my recovery and supported my health.

Carcinoid tumors don't respond to either "chemo" or radiation, so we just monitor for any reoccurrence with CT scans and lab work. So far, all tests have been negative and I'm feeling fine.

After discussion with my husband our decision was that I would take an early retirement and he would follow five months later. We both are happy with that decision. We find we are thankful for each day and enjoy the simple things like long walks, beautiful western skies, the sound of birds in the back yard, and visiting with friends and family. We no longer take time for granted.

Survivor Stories

Paul – Non-Hodgkin's Lymphoma

In September of 2010 I began to experience a level of fatigue and exhaustion that was beyond anything I had ever known before in my life. I had just four months earlier turned 58 years old, actively working in the field of Law Enforcement in a newly promoted position. In keeping with the mandates of the job, I maintained a consistent workout and exercise routine in an attempt to keep up with the rigors of the job.

One day in early September, I was returning from a walk in the ravine adjacent to our home here in Pocatello. Something was very wrong; I was completely out of breath and struggling with much effort just to make it up the small hill to our home. My wife Dorothy thought I was playing as she was watching me slow walking and stopping every few steps, the fact was that I was serious, I could barely make it.

At that time I agreed to see a doctor. After a thorough examination the next morning, I was sent for a CT scan where a soft ball size mass was identified in my lower right quadrant. My doctor recommended I see Medical Oncologist Dr. Michael Francisco and his team of professionals at the Portneuf Cancer Center. It was there that I began to receive the very best lifesaving cancer treatment available. Dr. Francisco's and Radiation Oncologists Dr. Michael Callahan's caring and highly specialized cancer treatment began to be put in motion. I was diagnosed with stage three Non-Hodgkin's Lymphoma. Dr. Francisco drained two quarts of fluids from my chest cavity that had collapsed my right lung and was severely affecting my ability to breath. During surgery to remove problematic lymph nodes from my neck, they discovered

that all my lymph nodes were full of cancer from my neck down through my back.

Dr. Francisco determined I should begin a regiment of Chemo-therapy treatments consisting of Rituxan, one treatment every three weeks which took up to 6 hours to complete each treatment. The chemotherapy would continue for a period of four months, culminating with a radiation treatment consisting of one very powerful, highly radioactive single shot of Consolidated Zevalin Isotopes. I was the second person in South East Idaho to receive this treatment. The effects of which has freed me from any sign of cancer for the past four years. I continue to see Dr. Francisco every six months for follow-ups. I feel great and very thankful for the tremendous care I received at the Portneuf Cancer Center and especially from Dr. Francisco, his Medical Assistant Mary who always greeted me with a smile and comforting care, N.P. Carol for great recommendations, Robb Dye for emotional and spiritual support and Chemotherapy



Nurse Jenni who with gentle care and professionalism administrated my Chemo and Radiation treatments. I have nothing but praise and respect for this great team of caring professionals who together saved my life.

Finally, and most importantly, I thank God who provided me with the physical strength and ability to be receptive to the treatments, He confirmed my faith in the Lord Jesus Christ and His faithfulness throughout this entire process and gave me an inner peace that surpasses all understanding. I can testify to the faithfulness of the Lord and His loving mercy and therefore I give all praise and glory to Him.

Retreats

Many cancer survivors benefit from participation in a cancer survivor retreat. Below you will find some local retreat options. If you have questions or would like more information you can visit the website of each retreat or contact Robb Dye, LCSW at (208) 239-1754 or robbd@portmed.org.



Idaho 2 Fly is an Idaho registered non-profit organization using fly-fishing related activities as a basis for bringing men with cancer and other life impacting illnesses together to be supported and improve their outlook on life. We are 100%

volunteer supported and 100% contribution funded. We offer fly-fishing retreats, support groups, and are working to build a community of men who can support, be supported and add values to each other's lives. Retreats include meals, lodging, and fly-fishing equipment and are offered at no cost to the participants. Contact Dick Wilson at (208-866-2415) visit: www.idaho2fly.org



REEL RECOVERY is a national non-profit organization that conducts fly-fishing retreats for men recovering from cancer. Our purpose is to help men in the recovery process by sharing with them the healing powers of the sport of fly-fishing, while providing a safe, supportive environment

to explore their personal experiences with cancer, with others who share their stories. Retreats are offered at no cost to the participants and are led by professional facilitators and expert fly-fishing instructors. Reel Recovery provides all meals, lodging and fly-fishing equipment, and no previous fishing experience is required. info@reelrecovery.org 1-800-699-4490



Casting for Recovery: We provide an opportunity for women whose lives have been profoundly affected by Breast Cancer to gather in a natural setting and learn the sport of fly fishing. Just as importantly, the retreats offer an opportunity to meet new friends, network, exchange information, and have fun. Our weekend retreats

Retreats (cont.)

incorporate counseling, educational services, and the trained facilitators that staff each retreat, including a psycho-social therapist, a health care professional (e.g., physical therapist, nurse), as well as fly-fishing instructors and river helpers. www.castingforrecovery.org



First Descents offers young adult cancer fighters and survivors (ages 18 to 39) a free outdoor adventure experience designed to empower them to climb, paddle and surf beyond their diagnosis, defy their cancer, reclaim their lives and connect

with others doing the same. For more information, find us at www.firstdescents.org



River Discovery Experience nature during this 7 day / 6 night program. Meet other adults while rafting and camping on beautiful sand beaches along the Salmon River. Hiking, swimming and kayaking are just some of the activities offered along with plenty of time to relax and enjoy the serenity found in the wilderness. No

camping or rafting experience required and any fitness level is welcome; activities are customized to accommodate each participant. The program is free although an application fee of \$50 is required. www.riverdiscovery.org

Web Resources

Recommended web sites for more information:

General

American Cancer Society	www.cancer.org
Medline	www.medlineplus.gov
National Comprehensive Cancer Network	www.nccn.org
Oncolink	www.oncolink.com
People Living With Cancer	www.plwc.org
Patient Resources	www.patientresource.com
Radiation Therapy	www.rtanswers.org

Support

Cancer Support Community	www.cancersupportcommunity.org
CANCER Care	www.cancercare.org

For the Caregiver

Strength for Caring: A place for caregivers	www.strengthforcaring.com
Well Spouse Association	www.wellspouse.org

Survivorship

Cancer Survivor Network	www.csn.cancer.org
-------------------------	--

Commonly Used Terms

Acute: Having the abrupt onset of symptoms and a short course – not chronic.

Adenoma: A noncancerous tumor.

Adjuvant therapy: Treatment given after the primary treatment to increase the chances of a cure. Adjuvant therapy may include chemotherapy, radiation therapy, or hormone therapy.

Aggressive: A fast-growing cancer.

Angiogenesis: Blood vessel formation. Tumor angiogenesis is the growth of blood vessels from surrounding tissue to a solid tumor. This is caused by the release of chemicals by the tumor.

Antibody therapy: Treatment with an antibody, a substance that can directly kill specific tumor cells or stimulate the immune system to kill tumor cells.

Aspiration: Removal of fluid from a cyst or cells from a lump, using a needle and syringe.

Atypical hyperplasia: Cells that are both abnormal (atypical) and increased in number.

Average risk: A measure of the chances of getting cancer without the presence of any specific factors known to be associated with the disease.

Benign: Not cancerous – cannot invade neighboring tissues or spread to other parts of the body.

Biological therapy: Treatment to stimulate or restore the ability of the immune system to fight infection and disease. Also known as immunotherapy, biotherapy, or biological response modifier (BRM) therapy.

Biomarkers: Substances sometimes found in an increased amount in the blood, other body fluids, or tissues and that may suggest the presence of some types of cancer.

Biopsy: The removal of a sample of tissue or cells for examination under a microscope for purposes of diagnosis.

Brachytherapy: A procedure in which radioactive material sealed in needles, seeds, wires, or catheters is placed directly into or near a tumor. Also called internal radiation, implant radiation, or interstitial radiation therapy.

Cancer: A general name for more than 100 diseases in which abnormal cells grow out of control. Cancer cells can invade and destroy healthy tissues, and they can spread through the bloodstream and the lymphatic system to other parts of the body.

Carcinoma: Cancer that begins in tissues, lining, or covering the surfaces (epithelial tissues) of organs, glands, or other body structures. Most cancers are carcinomas.

Carcinoma in situ: Cancer that is confined to the cells where it began, and has not spread into surrounding tissues.

Chemoprevention: The use of drugs or vitamins to prevent cancer in people who have precancerous conditions or a high risk of cancer, or to prevent the recurrence of cancer in people who have already been treated for it.

Chromosomes: Structures located in the nucleus of a cell, containing genes.

Computed tomography (CT) scanning: An imaging technique that uses a computer to organize the information from multiple x-ray views and construct a cross-sectional image of areas inside the body.

Commonly Used Terms (cont.)

Core needle biopsy: *The use of a small cutting needle to remove a core of tissue for microscopic examination.*

Cyst: *Fluid-filled sac.*

Excisional biopsy: *The surgical removal (excision) of an abnormal area of tissue, usually along with a margin of healthy tissue, for microscopic examination.*

False negative: *Test results that miss cancer when it is present.*

False positive: *Test results that indicate cancer is present when the disease is truly absent.*

Fine needle aspiration: *The use of a slender needle to remove fluid from a cyst or clusters of cells from a solid lump.*

Frozen section: *A sliver of frozen biopsy tissue. A frozen section provides a quick preliminary diagnosis but is not 100 percent reliable.*

Gene: *Segment of a DNA molecule and the fundamental biological unit of heredity.*

Genetic change: *An alteration in a segment of DNA, which can disturb a gene's behavior and sometimes leads to disease.*

Higher risk: *A measure of the chances of getting cancer when factor(s) known to be associated with the disease are present.*

Hormones: *Chemicals produced by various glands in the body, which produce specific effects on specific target organs and tissues.*

Hyperplasia: *Excessive growth of cells.*

Incisional biopsy: *The surgical removal of a portion of an abnormal area of tissue, by cutting into (incising) it, for microscopic examination.*

Infection: *Invasion of body tissues by microorganisms such as bacteria and viruses.*

Infiltrating cancer: *Cancer that has spread to nearby tissue, lymph nodes, or other parts of the body (same as Invasive cancer).*

Inflammation: *The body's protective response to injury (including infection). Inflammation is marked by heat, redness, swelling, pain, and loss of function.*

Invasive cancer: *Cancer that has spread to nearby tissue, lymph nodes, or other parts of the body (same as Infiltrating cancer).*

Lymphatic system: *The tissues and organs that produce, store, and transport cells that fight infection and disease.*

Magnetic resonance imaging (MRI): *A technique that uses a powerful magnet linked to a computer to create detailed pictures of areas inside the body.*

Malignancy: *State of being cancerous. Malignant tumors can invade surrounding tissues and spread to other parts of the body.*

Margin: *The edge or border of the tissue removed in cancer surgery. The margin is described as negative or clean when the pathologist finds no cancer cells at the edge of the tissue, suggesting that all of the cancer has been removed. The margin is described as positive or involved when the pathologist finds cancer cells at the edge of the tissue, suggesting that not all of the cancer has been removed.*

Commonly Used Terms (cont.)

Monoclonal antibody: Laboratory-produced substances that can locate and bind to cancer cells wherever they are in the body. Many monoclonal antibodies are used in cancer detection or therapy; each one recognizes a different protein on certain cancer cells. Monoclonal antibodies can be used alone, or they can be used to deliver drugs, toxins, or radioactive material directly to a tumor.

Mutation: A change in the number, arrangement, or molecular sequence of a gene.

Needle biopsy: Use of a needle to extract cells or bits of tissue for microscopic examination.

Palpation: Use of the fingers to press body surfaces, so as to feel tissues and organs underneath.

Pathologist: A doctor who diagnoses disease by studying cells and tissues under a microscope.

Permanent section: Biopsy tissue specially prepared and mounted on slides so that it can be examined under a microscope by a pathologist.

Phytochemicals: Naturally occurring chemicals found in plants that may be important nutrients for reducing a person's cancer risk.

Positron emission tomography (PET scanning): A technique that uses signals emitted by radioactive tracers to construct images of the distribution of the tracers in the human body.

Rad: A unit of measure for radiation. It stands for radiation absorbed dose.

Radiation: Energy carried by waves or by streams of particles. Various forms of radiation can be used in low

doses to diagnose disease and in high doses to treat disease. (See X-rays).

Radiologist: A doctor with special training in the use of diagnostic imaging such as CT, MRI, PET, and ultrasound, to image body tissues and to treat disease.

Risk: A measure of the likelihood of some uncertain or random event with negative consequences for human life or health.

Risk factors (for cancer): Conditions or agents that increase a person's chances of getting cancer. Risk factors do not necessarily cause cancer; rather, they are indicators, statistically associated with an increase in likelihood.

Specimen x-ray: An x-ray of tissue that has been surgically removed (surgical specimen).

Surgical biopsy: The surgical removal of tissue for microscopic examination and diagnosis. Surgical biopsies can be either excisional or incisional.

Tumor: An abnormal growth of tissue. Tumors may be either benign or cancerous.

Tumor markers: Proteins (either amounts or unique variants) made by altered genes in cancer cells that are involved in the progression of the disease.

Ultrasound: The use of sound waves to produce images of body tissues.

X-ray: A high-energy form of radiation. X-rays form an image of body structures by traveling through the body and striking a sheet of film.

Oncology Appointments

Feel free to utilize this page to organize your thoughts and questions in anticipation of any appointments at the Cancer Center.

Date: _____ Provider: _____

Reason for visit (i.e., consultation for radiation, chemotherapy treatment, etc): _____

My questions: _____

Notes from visit: _____

Treatment plan: _____

Next appointment date: _____ **Time:** _____

Date: _____ Provider: _____

Reason for visit (i.e., consultation for radiation, chemotherapy treatment, etc): _____

My questions: _____

Notes from visit: _____

Treatment plan: _____

Next appointment date: _____ **Time:** _____

Oncology Appointments

Feel free to utilize this page to organize your thoughts and questions in anticipation of any appointments at the Cancer Center.

Date: _____ Provider: _____

Reason for visit (i.e., consultation for radiation, chemotherapy treatment, etc): _____

My questions: _____

Notes from visit: _____

Treatment plan: _____

Next appointment date: _____ **Time:** _____

Date: _____ Provider: _____

Reason for visit (i.e., consultation for radiation, chemotherapy treatment, etc): _____

My questions: _____

Notes from visit: _____

Treatment plan: _____

Next appointment date: _____ **Time:** _____

Oncology Appointments

Feel free to utilize this page to organize your thoughts and questions in anticipation of any appointments at the Cancer Center.

Date: _____ Provider: _____

Reason for visit (i.e., consultation for radiation, chemotherapy treatment, etc): _____

My questions: _____

Notes from visit: _____

Treatment plan: _____

Next appointment date: _____ **Time:** _____

Date: _____ Provider: _____

Reason for visit (i.e., consultation for radiation, chemotherapy treatment, etc): _____

My questions: _____

Notes from visit: _____

Treatment plan: _____

Next appointment date: _____ **Time:** _____

Treatment Plan

Last updated: _____ Diagnosis: _____ Stage: _____

Radiation Therapy

Your cancer may require local treatment with radiation. In order to safely and effectively treat you, a series of planning must take place before delivering radiation.

CT Simulation **Date:** _____

A CT scan of the part of your body needing treatment will be done in the Radiation Oncology department. This gives us a digital picture of you from which we develop a treatment plan.

Verification Simulation (usually 3-5 business days after the CT Sim)

Once a treatment plan is developed and approved by your physician, you will return to the radiation department for the verification simulation, which is done on the treatment machine. Radiation therapists will help position you on the treatment table and take X-rays, which will be verified by the physician as accurate positioning. Once this is approved, you will be administered your first radiation treatment. The verification simulation can take approximately 30-45 minutes.

Treatment Planned # of Daily Treatments: _____

After the verification simulation, or "V-sim," daily radiation therapy is usually completed within 15 minutes, 30 minutes for more complex treatments. You may be required to change into a gown for your treatments. Although unlikely, the number of treatments may change and your physician will inform you if this is necessary.

Treatment Effects

Your physician has estimated that your therapy will be:

Treatments: _____ **Planned Dose:** _____

Your treatment will occur M-F usually at the same time everyday. You will have the opportunity to meet with the physician or physician assistant weekly, or more often if necessary, for any questions or to discuss side effects.

Common side effects of radiation therapy include, but are not limited to; fatigue, skin irritation in the area of treatment, temporary loss of hair in the area of treatment only, or discomfort in the area of treatment.

Other side effects:

Patient label:

Treatment Calendar

Name: _____

Month: _____

Treatment Calendar

Name: _____

Month: _____

Treatment Calendar

Name: _____

Month: _____

Treatment Calendar

Name: _____

Month: _____

Treatment Calendar

Name: _____

Month: _____

