

Committed to improving cancer care

Sanford Bemidji Cancer Center
2016 Annual Report



Mark Ricci was diagnosed with prostate cancer at a young age, 40, but through early detection, surgery and regular follow ups with his providers he is cancer free.

Sanford Bemidji Cancer Center

Medical Oncology,
Hematology & Infusion
Center and Pharmacy
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John Bollinger, MD
Sanford Bemidji Cancer
Committee Chair
Radiation Oncologist

A letter from Committee Chair Dr. Bollinger

Expanding cancer care for our patients

Sanford Bemidji Cancer Center is one of the premier cancer care facilities in the Upper Midwest, thanks to the expansion of programs, care, facilities, staff and our total commitment to patients.

We now have three medical oncologists: Dr. Jasmine Kamboj and Dr. Elie Chalhoub joined Dr. Peter Friedell, Beth Ann Korczak, PA-C, and the team this summer. Both are very dynamic, skilled and patient-oriented oncologists whose knowledge and talents will make our medical team even stronger.

Our screening assessment program enables us to identify patients who may be at high risk for cancer and to direct them to their proper treatment options. Our accredited breast cancer center, complete with the newly installed 3D mammography and breast MRI equipment as well as Athena, an online high-risk breast screening tool, continues to expand our ability to diagnose and treat our patients.

Sharing information is a key element in successfully treating cancer. Through programs such as our urology multidisciplinary support teams, plus the survivorship programs for breast, gastro-intestinal and lung cancers, we can address follow-up plans and special needs, assess the long-term effects of treatment and improve the patient's quality of life. Every decision is made with our commitment to our cancer patients as the driving force.

Planning for our expanded Sanford Joe Lueken Cancer Center also is underway, and when completed, it will be the equal of any other facility in the Sanford family.

These are exciting times for Sanford Bemidji and for our patients. I'm proud of where we are and of the accomplishments we have made. And I look forward to continued successes.



The journeys a father and son make through prostate cancer

Mark Ricci of RP Broadcasting is celebrating more than 30 years behind a mic, he is also celebrating beating prostate cancer. Mark was diagnosed at a young age, 43, but through early detection and surgery, Mark is able to focus on delivering music, news and entertainment to area listeners.

The father and son duo of Mark and Ray Ricci has been informing and entertaining people from their perch behind a radio station console for a combined 80 years. Ray retired following a 50-year career on the airwaves after working in many different locales, including stations in Wyoming, Bemidji and Moscow.

Ray's son, Mark, followed in his footsteps. Bemidji area listeners of RP Broadcasting may not know Mark's face, but they will recognize his voice as the versatile radio personality who has been bringing the news and playing music for everyone within earshot.

"In August, I celebrated my 30th year as a radio broadcaster. I started at 16 at a station in Wyoming," said Mark, who is the operations manager for RP Broadcasting in Bemidji. "To this date, I still get excited, and I get butterflies in my stomach when I turn on the microphone."

The father and son are professionally linked by their presence on the airwaves, but the two also have something else in common. Like most 43-year-old men, Mark was not thinking about prostate cancer when he visited Dr. William Muller, family medicine physician, for his annual physical at Sanford Bemidji in 2013. Fortunately, however, Mark's wife, Trista, was.

About 10 years ago, Ray had been diagnosed with prostate cancer, and that episode prompted Trista to have Dr. Muller check Mark's prostate specific antigen (PSA) levels.

"With a PSA of 0.7 or less at 40 years of age, your risk of prostate cancer is pretty small," explained Sanford Bemidji urologist Dr. John Kosko. "But when the PSA is 1.8 to 2.0 at age 40, I think you should do a biopsy."

In March of 2013, Mark's PSA level was 3.10, and the next time it was checked, it had risen to 3.52.

"At 43 years of age, I was pretty young to have PSA numbers that high," Mark said. "We decided to (initially) treat it with antibiotics, but my number was still high (3.44) after the treatment, so we did a biopsy. On the day before my birthday in June, the doctors told me that one of my 12 biopsies had cancer, and Dr. Kosko recommended surgery. Scans had shown that I didn't have cancer anywhere else, so surgery was my best option."

Prostate cancer strikes one in eight American men and kills about 20,000 each year. It is most often present in men in their 70s and 80s, and as the population ages, more and more prostate cancer cases are being diagnosed.

Although uncommon in men as young as Mark, prostate cancer in his family history made him a likely candidate to become one of the 220,000 men in the United States diagnosed with prostate cancer in 2013.

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“It is pretty unusual for someone as young as Mark to be diagnosed with prostate cancer, but there is a one-in-three chance of that happening if a family member has been diagnosed,” Dr. Kosko said.

Mark’s victory over prostate cancer can be traced to the early detection of the disease. Without the diagnosis and the surgery, Dr. Kosko believes Mark’s future would not have been bright.

“Early screening for prostate cancer leads to successful treatment,” Dr. Kosko said. “In Mark’s case, if he had never been treated, the cancer might have killed him when he was in his 50s.

“There is no doubt that screening saves lives. In the early 1990s, the death rate for prostate cancer was 40,000 a year. But now, in the screening era, the rate has dropped as low as 20,000 per year,” Dr. Kosko continued. “I think prostate cancer screening definitely saves lives, but we need to get better at implementing it. There is no question that screening saved Mark’s life.”

A visit to the physician also saved Ray’s life. “I actually have to thank Dr. Brian Livermore (a retired family medicine physician) for saving my life,” Ray stated. “Ten years ago he did a prostate exam, and he found no bumps, no lumps and nothing that would point to prostate cancer. But he did find that one-half of the prostate felt leathery. And he wanted that checked.”

“Dr. Frank Labadie (a retired Sanford Bemidji urologist) did the biopsy, and initially he said that it was good that we checked it, but he also said he didn’t think there was anything to worry about. But a few days later, he called back and said that I had cancer,” Ray said.

Although both Mark and Ray had the same disease, their treatments differed. Mark’s cancer was attacked with surgery, while Ray had an initial treatment of female hormones to lower his testosterone levels. The hormone program was followed by 35 radiation treatments under the guidance of Sanford Bemidji radiation oncologist Dr. John Bollinger.

“No one size fits all in terms of treating prostate cancer,” Dr. Kosko explained. “It’s a complicated decision. Each patient is 100 percent individualized as far as treatment is concerned.”

“The Bemidji clinic had just opened a new radiation oncology department, so I was able to have the 35 radiation treatments here,” Ray said. “When we started the treatments, I remember Dr. Bollinger telling me that 50 percent of beating cancer is attitude, and I had a great attitude about it because he said we had an excellent shot of the radiation working.”

“I think my background in radio was a plus when I went through the treatments,” Ray continued. “When you are on the air, you have to project a positive attitude. You have to be positive. And being positive carried me through the cancer treatments.”

Mark and Ray took the journey through cancer together. From supporting one another through cancer to a mutual love of radio broadcasting, the father and son share not only genetics, but also their cancer experience and the excitement of being cancer free.

Fortunately, both treatments proved successful, and Mark and Ray have resumed their normal lives.

“I was very fortunate that people cared,” Mark stated. “I am very lucky that Trista asked Dr. Muller to check my PSA. I’m in my 40s, and it is tough to picture the horrible death I might have had. And now, to sit home and find out that my PSA is 0, that’s very good news.”

The role genetics plays in cancer development

The Ricci family has more than a love of broadcasting in their family history



Jennifer Leonhard,
MS, CGC
Certified Genetic
Counselor

“When we see a family history of cancer, especially a history that can be traced to successive generations or includes an onset of cancer at a young age, we wonder if there is something going on. We wonder if there is a predisposition of cancer in the family that could be traced to genetics or to a genetic environment,” explained Jennifer Leonhard, a certified genetic counselor at Sanford Bemidji.

“If you have a family history of cancer, talk to your medical provider, and he or she may send you to someone like me. I will talk to you about your family history, and we will see if there’s something genetic that would indicate an increased risk of cancer. And if there is, we will see if we can do something to lessen that risk.”

Miranda and Jillian Ricci of Bemidji are among those with cancer in their family history. In 2013 their father, Mark, was diagnosed with prostate cancer. A

knowledgeable of what can happen. And they both plan to stay on top of things.”

Researchers with the Women’s Health Initiative Clinical Trial and the Women’s Health Initiative Observational Study have gathered information from more than 161,600 postmenopausal women between the ages of 50 and 79. The goal is to look for links between health, diet, lifestyle and genetic factors and health problems, such as cancer. The findings indicate:

- Breast cancer risk is 14 percent higher than average in women with a first-degree relative, such as a father, brother or son who had been diagnosed with prostate cancer.
- Breast cancer risk is 78 percent higher than average in women with first-degree relatives who had been diagnosed with breast cancer or prostate cancer.

Researchers are learning more about cancers and their treatments every day. Among the more exciting aspects of research is discovering what role genetics plays in the overall picture.

decade ago, Mark’s father, Ray, also dealt with prostate cancer, and this summer their grandmother on their mother’s side, Margie Volk of Gillette, Wyo., won her battle with breast cancer.

“As soon as we found out that Margie had breast cancer, the girls discussed the risk and how they should handle that news,” said Mark. “With my cancer, my dad’s cancer and their grandmother’s cancer, the girls know they are at a higher risk of having breast cancer. Both of the girls are aspiring (for careers) in the medical industry — Miranda, 24, plans to be a pharmacist; while Jillian, 20, is studying to become a physical therapist — so they are

“The connection between cancer and genetics is a continuing science, and we are discovering that there are always changes,” Leonhard continued. “The more we learn, the more we can personalize testing, medicines and treatment to work with genetics.”

Sanford Bemidji Cancer Committee Membership

Cancer Committee Chair

Radiation Oncologist

John Bollinger, MD

Diagnostic Radiologist

Michael Thurgood, MD

Pathologist

Arif Azam, MD

General Surgeon

Cancer Liaison Physician

Allan Campbell, MD

Medical Oncologist

Peter Friedell, MD, FACP

Jasmine Kamboj, MD

Cancer Program

Shari Hahn, RN, MSN

Oncology Nurse

Jen Gourneau, RN, BSN

Rebekah Kraft, RN

Social Worker

Paula Woods, MSW, LISW

Certified Tumor Registrar

Jennifer Monsebroten, CTR

Quality Improvement

Kim Boysen, RN, BSN, PHN

Carrie Zimmerman, MA, CPHQ

Clinical Research

Susan Hudson, BS, BA, CCRP

Community Outreach

Janel Olson, RTT

Navigation Nurse

Terri Bentler, BSN,

RN, OCN, CN-BN

Genetic Counselor

Jennifer Leonhard, MS, CGC

Cancer Registrar

LaRayne Olson

Administration

Joy Johnson

American Cancer Society

Pamela Mason

Rehabilitation Services

Brad Neis

Nutrition

Heather Knutson, MS,

RD, CSO, LD

Marketing

Lindsey Wangberg

Pharmacy

Karla Eischens, R.Ph.

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Proven quality

Sanford Bemidji Cancer Center holds several accreditations, a voluntary process in which outside reviewers closely examine our program and our results to verify we meet or exceed specific standards in order to receive a stamp of approval. For patients and families, accreditation is an important measure of quality, ensuring our center is held to the highest standards of care.

Our accreditations include:

- The American College of Surgeon's Commission on Cancer.
- The National Accreditation Program for Breast Centers (NAPBC) through the American College of Surgeons.
- The American College of Radiology for:
 - Radiation Oncology
 - Stereotactic breast biopsy
 - Breast ultrasound

NAPBC[®]

NATIONAL ACCREDITATION PROGRAM FOR BREAST CENTERS
ACCREDITED BREAST CENTER



Sanford Bemidji Cancer Center team

Our cancer center offers the most advanced care available in northern Minnesota. Our patients have access to world-class clinicians and an expert team of professionals ready to provide innovative treatments and compassionate care for you and your loved ones.



John Bollinger, MD
Radiation Oncology



Allan Campbell, MD
Surgical Oncology



Elie Chalhoub, MD
Medical Oncology
Hematology



Peter Friedell, MD, FACP
Medical Oncology
Hematology



Jasmine Kamboj, MD
Medical Oncology
Hematology



Beth Ann Korczak, PA-C
Medical & Radiation Oncology
Hematology
Breast Health

Our expertise

Ensuring the highest level of care

- Comprehensive care
 - Cancer survivorship
 - Cancer registry
 - Clinical trials
 - Diagnostic imaging
 - Financial services
 - Genetic counseling
 - Hematology
 - Infusion center
 - Infusion pharmacy
 - Medical oncology
 - Nutrition therapy
 - Pain management
 - Palliative care
 - Pathology
 - Patient navigators
 - Pharmacy
 - Psychological services
 - Radiation oncology
 - Rehabilitation
 - Research
 - Social services
 - Spiritual care
 - Surgical oncology
 - Tumor conferences
- Team of experts**
- Board-certified diagnostic radiologists
 - Board-certified genetic counselor
 - Board-certified interventional radiologists
 - Board-certified medical oncologists/hematologists
 - Board-certified pathologist
 - Board-certified radiation oncologist
 - Board-certified surgeons
 - Cancer survivorship experts
 - Certified clinical breast examiner
 - Clinical psychologist
 - Clinical researchers
 - Fellowship-trained surgical oncologist
 - Fellowship-trained women's imaging radiologist
- Financial counselor
 - Nurses (trained in chemotherapy, radiation, infusion, oncology and palliative care)
 - Oncology-certified registered dietitian
 - Outreach specialists
 - Patient navigators
 - Pharmacists
 - Pharmacy technicians
 - Physician assistant
 - Radiation therapists
 - Rehabilitation therapists
 - Social workers
 - Spiritual advisor
 - Support staff
 - Tumor registrars

Look Good, FEEL BETTER

Group workshops held at Sanford Bemidji Medical Center

Look Good Feel Better[®] is a free program from the American Cancer Society designed for women dealing with hair loss and skin changes from chemotherapy and radiation.

Learn specific techniques to help make the most of your appearance while undergoing treatment. The cosmetic tools needed during the workshop will be provided to participants free of charge.

Registration is required. Call the American Cancer Society at (866) 460-6550.

Supporting you through every step

Sanford Bemidji Cancer Center is here for you through each stage of your personal cancer journey. We are dedicated to discovering innovative approaches to predict, prevent, diagnose and treat cancer in every patient. We work closely with you, your family and your friends who are lending their support during every step. Our goal is to transform our patients' quality of life today and into tomorrow.

The future home of the Sanford Joe Lueken Cancer Center is set to open in 2018. Construction will begin in 2017 at the southeast corner of the Sanford Bemidji Main Clinic. The new center will expand cancer services at one centralized location.



A vision begins to take shape

The Sanford Joe Lueken Cancer Center opens in 2018

From its earliest days, Sanford Bemidji has set the benchmark for patient-centered care, constantly innovating, growing and leading. That legacy has ushered in a new era in cancer care in the Bemidji region and will reach a new milestone with the opening of the Sanford Joe Lueken Cancer Center.

Made possible with the generous support of donors to the ongoing Care Without Limits campaign, the new center is projected to break ground in 2017 and open in 2018. Located at the southeast corner of the Sanford Bemidji Main Clinic, the \$12 million, 20,500-square-foot facility will include more than 20 infusion suites, 15 exam rooms, on-site pharmacy and lab services, a boutique and other patient-focused amenities.

Twenty years ago, cancer care wasn't even available in Bemidji. Patients had to travel far from home to receive essential care. Our community has come a long way since then. Through the support of visionary donors, we have built a comprehensive, cutting-edge cancer program that meets patient needs from early detection through survivorship.

Today, this cancer program has gained recognition as a Nationally Accredited Cancer Program and Breast Cancer Program by meeting national safety

and quality care standards. And most importantly, we have saved and transformed thousands of lives.

The new center will take our cancer program to the next level. The Sanford Joe Lueken Cancer Center will bring all of Sanford Bemidji's cancer services together, under one roof, for a more convenient, seamless patient experience.

It will also help enhance and expand existing services, such as chemotherapy, high-dose radiation and palliative care. It will allow for investment in the most leading-edge technology and equipment, and also grow our research infrastructure. As a result, our community will be able to continue attracting and retaining leading expertise in cancer research and treatment.

The opening of the Sanford Joe Lueken Cancer Center will be a transformative turning point in the history of health care in Bemidji and beyond. We will truly provide care without limits, saving more lives, right here, close to home.

To join this crucial project today and support the Care Without Limits campaign, visit sanfordhealthfoundation.org.

Restoring healthy eating through nutrition therapy



Heather Knutson, MS, RD, CSO, LD
Clinical Oncology Dietitian

1705 Anne St. NW
Bemidji, MN 56601
(218) 333-4844

Cancer and its treatment may change your appetite, your ability to eat foods and the way your body uses nutrients. Sanford Bemidji Cancer Center has a specialized dietitian who focuses in nutrition therapy, helping you create a plan with personalized goals specific to your needs.

A dietitian can help with:

- Changes in taste, smell and tolerance
- Constipation, diarrhea, bloating
- Difficulty chewing and swallowing
- Faster healing after surgery
- Loss of appetite
- Nausea and vomiting
- Weight change and loss of strength

Proper nutrition will help:

- Decrease hospitalizations and length of stay
- Improve tolerance to chemotherapy and radiation
- Keep the immune system working well
- Lower infection and complication rates
- Prevent weight and muscle mass loss



Makes 1 serving
Per serving: 120 calories,
0 g total fat (0 g saturated fat),
30 g carbohydrate, 0 g protein,
0 g dietary fiber. 8 mg sodium

Ginger-turmeric-cider

Rejuvenate with a delicious recipe for the whole family

Rich in antioxidants, unique in flavor and made with plant-based whole foods, this recipe is both health supporting and tasty. Grab a glass to warm up this winter, or serve this guilt free treat at your next holiday party.

Ingredients

- 1 cup fresh sweet apple cider
- 1 tsp. grated fresh ginger
- 1 tsp. grated fresh turmeric

- 1 1/2-inch by 1/2-inch strip lemon peel, white part included

Directions

- In small saucepan, combine cider, ginger, turmeric and lemon peel.
- Heat over medium-high for about three minutes, until a ring of bubbles appears around the edge of pan.
- Cover pan and set aside to steep for five minutes.
- Pour hot-spiced cider through a fine tea strainer into a mug.
- Serve immediately.

Recipe from aicr.org

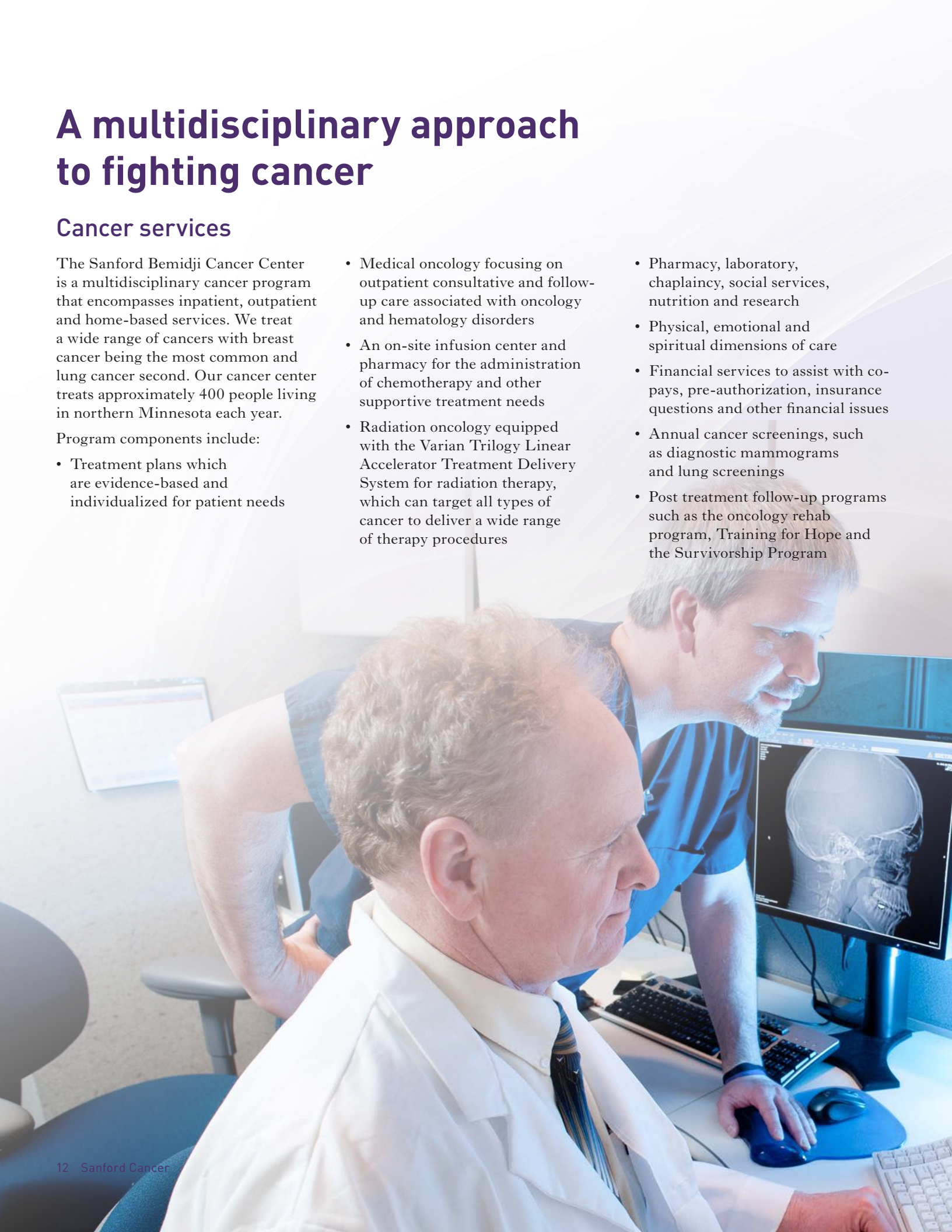
A multidisciplinary approach to fighting cancer

Cancer services

The Sanford Bemidji Cancer Center is a multidisciplinary cancer program that encompasses inpatient, outpatient and home-based services. We treat a wide range of cancers with breast cancer being the most common and lung cancer second. Our cancer center treats approximately 400 people living in northern Minnesota each year.

Program components include:

- Treatment plans which are evidence-based and individualized for patient needs
- Medical oncology focusing on outpatient consultative and follow-up care associated with oncology and hematology disorders
- An on-site infusion center and pharmacy for the administration of chemotherapy and other supportive treatment needs
- Radiation oncology equipped with the Varian Trilogy Linear Accelerator Treatment Delivery System for radiation therapy, which can target all types of cancer to deliver a wide range of therapy procedures
- Pharmacy, laboratory, chaplaincy, social services, nutrition and research
- Physical, emotional and spiritual dimensions of care
- Financial services to assist with co-pays, pre-authorization, insurance questions and other financial issues
- Annual cancer screenings, such as diagnostic mammograms and lung screenings
- Post treatment follow-up programs such as the oncology rehab program, Training for Hope and the Survivorship Program

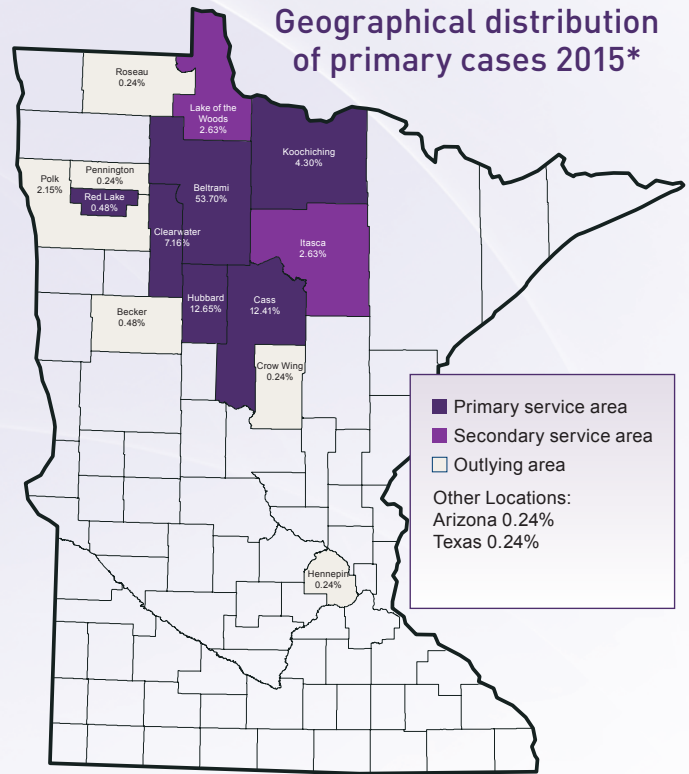


2015 in review

Primary site distribution for Sanford Bemidji Cancer Center

Site	2015			2014		
	Totals	Male	Female	Totals	Male	Female
Breast	83	1	82	73	0	73
Lung & Bronchus	53	30	23	55	33	22
Prostate	46	46	0	45	45	0
Melanoma, skin	24	13	11	22	13	9
Colon	25	12	13	21	10	11
Lymphoma	17	8	9	14	6	8
Non-Hodgkin	15	6	9	11	4	7
Nodal	8	4	4	8	4	4
Extranodal	7	2	5	3	0	3
Hodgkin	2	2	0	3	2	1
Bladder	26	20	6	18	10	8
Leukemia	9	6	3	5	4	1
Lymphocytic	4	2	2	4	3	1
ALL	0	0	0	0	0	0
CLL	0	0	0	0	0	0
Other	0	0	0	0	0	0
Myeloid	5	4	1	1	1	0
AML	2	2	0	0	0	0
CML	3	2	1	0	0	0
Other	0	0	0	0	0	0
Other leukemias	0	0	0	0	0	0
Brain	8	7	1	3	1	2
Other CNS	7	1	6	6	1	5
Kidney	13	9	4	12	8	4
Pancreas	14	8	6	8	6	2
Rectum/rectosigmoid	9	5	4	10	9	1
Uterus	12	0	12	10	0	10
Cervix	0	0	0	3	0	3
Ovary	2	0	2	6	0	6
Stomach	2	2	0	4	4	0
Esophagus	5	3	2	7	5	2
Oral Cavity/Pharynx	9	7	2	3	1	2
Multiple Myeloma	6	1	5	7	3	4
Thyroid	5	2	3	3	0	3
Testis	0	0	0	3	3	0
Soft Tissue	3	2	1	3	1	2
Larynx	3	2	1	4	3	1
Liver/IBD	4	4	0	6	4	2
Mesothelioma	2	1	1	2	2	0
Small Intestine	2	0	2	2	1	1
Anus	3	0	3	4	1	3
Vulva	5	0	5	2	0	2
Other Sites	22	9	13	23	15	8
Total	419	199	220	384	189	195

Geographical distribution of primary cases 2015*



Beltrami	225	53.70%
Hubbard	53	12.65%
Cass	52	12.41%
Clearwater	30	7.16%
Koochiching	18	4.30%
Itasca	11	2.63%
Lake of the Woods	11	2.63%
Polk	9	2.15%
Becker	2	0.48%
Red Lake	2	0.48%
AZ – Outside state/ county code unknown	1	0.24%
Crow Wing	1	0.24%
Hennepin	1	0.24%
Pennington	1	0.24%
Roseau	1	0.24%
TX – Cameron	1	0.24%
Total	419	100%

2015 in review cont.

419 NEW PATIENTS

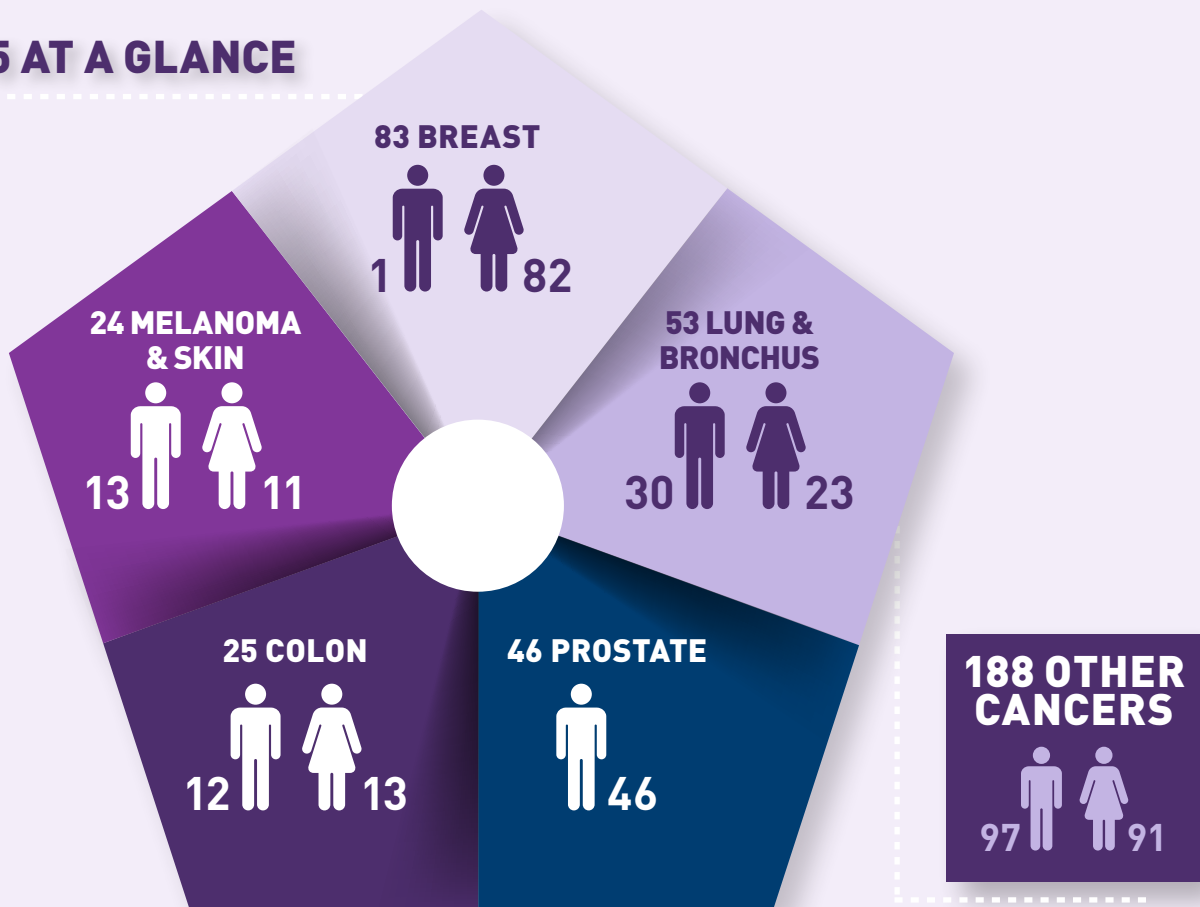
Came to Sanford Bemidji Cancer Center for diagnosis and or treatment.

↑ MORE 53%

Came from Beltrami County

TOP 5 CANCER DIAGNOSES

2015 AT A GLANCE



TOTAL 2015 DIAGNOSES **419** 199 220

Total in 2014 **384** 189 195



Dedicated to assisting patients reduce medication costs

The team at Sanford Bemidji 1705 Anne Street Clinic assists Carolyn with her medications from reducing cost to monitoring side effects and adjusting dosage. This dynamic duo, Dubias and Diaz, worked side-by-side to provide the highest level of care, all while developing a companion in the process.

Gary Lockner had a lot on his mind that day as he approached the pharmacy. His wife, Carolyn, had spent years fighting breast cancer, and now, having been put on an oral chemotherapy – Afinitor – to help her continue combatting the disease, he knew it came with a steep price tag. At a full cost of \$10,000 a month, Gary faced a \$500-a-month copay, which didn't include the additional hundreds of dollars for Aromasin, the complementary hormone therapy drug.

“I figured it out once that ... we'd be looking at probably 50 percent of our income on medicines and medical (expenses),” Gary said.

Gary braced himself for months of battling with insurance companies and health care providers, but he knew he had to try. He approached the pharmacist at Sanford Health and told him of his predicament.

“I asked him, ‘Is there any way to get any help?’” Gary recalled, “and (the pharmacist) said, ‘Go see Brittany, right over there in the next office.’”

Gary went to meet Brittany Dubias, a financial advisor with Sanford Bemidji

Cancer Center. She looked up the drug and its cost before asking Gary for his insurance and annual income. She told him, yes, she could help him, but there still would be some cost involved. Gary asked how much, and she replied that it would maybe be \$10 a month.

“By that time, it was about the end of the conversation because my throat slammed shut. She did all that for me,” Gary said.

Then, glancing over at his wife of 49 years, he shook his head.

“No, she did that for *her*. Brittany saved her life. I think she would have worried about money and continued struggling.”

It takes a team of professionals to help patients find the most effective and appropriate courses of action in their cancer battles – and two crucial team members work in tandem inside the 1705 Anne Street Clinic in Bemidji.

Dubias helps patients tap into programs that ease the financial burden of their necessary medications. Susan Diaz, RN, the oral chemo program nurse, helps coordinate

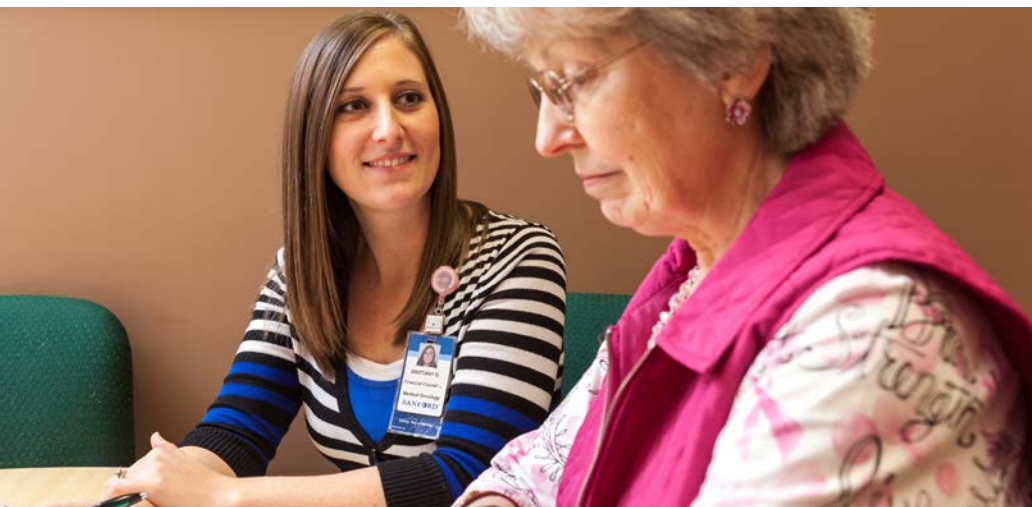
patients' care, outlining the goals and potential side effects of the drugs, and consistently and frequently checking in with patients throughout their treatment.

“It's easier in that they don't have to come in every day and sit for hours on end for an infusion; they can take it right at home,” explained Diaz, describing the differences between oral chemo and traditional IV infusion. “The big thing is making sure they're following up with the lab work and reporting their side effects.”

While Sanford Health oncologists direct each patient's care, Diaz is there to assist the physicians in monitoring how each patient is progressing through his or her drug regimen. Many oral chemo drugs are cyclic, meaning a patient might be on one for 21 days and off for seven, or perhaps on for 14 days and off for five. Each comes with its own set of potential side effects.

“I've got a lot of different patterns,” said Diaz, who between oncology and hematology coordinates care for about 95 patients. “Having somebody keeping track of all that helps the doctors so much.”

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Carolyn and her husband, Gary, didn't know how they were going to pay for her medication before meeting Brittany Dubias. Dubias was able to reduce their prescription costs to a manageable sum in a single visit.

Initially, after a patient is prescribed an oral chemo, Diaz will ask him or her to bring in the filled prescription so she can double-check the dose to ensure the patient is taking exactly what is prescribed. Then, after identifying the appropriate start date, she will call and check in with the patient in a few days to find out how he or she is feeling on the new drug. This provides an initial opportunity to mention any potential problem or concern the patient might be having with the drug. A few days after that, she calls again.

"A lot of your oral chemotherapies come to a head or a peak in patient's bodies right around the 14-day mark," she said. "I'm making checks throughout the cycle to see if we need to add something, or if I can give them some tips or tricks to curb some of those side effects."

Meanwhile, she's monitoring the number of pills each patient has remaining because mistakes happen, and it's not unheard of for patients to miss doses.

"Because of that, their labs would show differently, and because they've missed those medications, you wouldn't want their doctor to make an immediate decision, thinking (the medications) are not working," she said. "If they didn't know the patient had missed those doses, that can make a huge change in their therapy."

In the 28 years Carolyn Lockner has been fighting breast cancer, she has come to trust Diaz, who sees her every week for lab work and calls her with the results. After Carolyn was placed on her current medication, Ibrance, she let Diaz know she was getting some mouth sores. A remedy was found, but the new medication was also causing her tumor counts to increase, so her dosage amount and frequency of the medication were also changed.

Instances such as these are why it is beneficial to have Diaz and Dubias working side by side. The vast majority of cancer patients are on a financial assistance program, either to get their

co-payments reduced or to get free medications delivered directly to patients by the drug manufacturer. If a dose is changed, Dubias needs to work with the patients and their assistance programs to make sure they receive the accurate, newly adjusted doses.

The full cost of select oral chemo medications can run as high as \$25,000 a month, Dubias and Diaz said, and the average costs can approach \$10,000 a month. Dubias said the average copayment amount, without assistance, is between \$2,000 and \$3,000 a month.

"If the copay is higher than what they are able to pay ... then we move forward with copay assistance," she said. "There are tons of programs out there."

Once Dubias is able to place a patient in a program, she said it generally is in place for a year and renewable after that. Even if that program were to close, she said there are other options.

"It's something they don't have to worry about," she said. "If they don't have that financial stress month to month, they are able to put more energy into ... the healing itself."

To learn more about Sanford Bemidji's support services for cancer patient's call (218) 333-5407.



When Tia and her mother, Mary, were diagnosed with breast cancer within one month of each other, the team at Bemidji's Edith Sanford Breast Center were there to provide Barthorpe care, guidance and compassion.

Not just a treatment center, a family

When patients enter the Edith Sanford Breast Center (ESBC) in Bemidji, they immediately realize they have become part of a large and welcoming family. Although the building is located in the Sanford Bemidji Main Clinic, the ESBC is more about the people and the mission than it is exam rooms and hallways.

“When patients come into the Edith Sanford Breast Center with a problem or a concern, our goal is that when they leave that day, they will have either an answer or a plan,” said Tracy Skaja, BSN, RN, CBCN, a breast health specialist at Sanford Bemidji. “To the best of our ability, we try to accommodate the patient’s needs, and we do that during the first visit. If there is nothing for the patient to worry about, we will let the patient know. If we do find something, we will do a biopsy the same day to find out what we are dealing with, or we will schedule a return visit for further treatment.”

Tia Barthorpe of Bemidji became part of the ESBC family earlier this year after she found a lump on her breast that felt odd.

“Right away I knew it wasn’t good,” Barthorpe explained of finding the lump.

Barthorpe took her concerns to the staff at ESBC, and Beth Ann Korczak, PA-C, set the wheels in motion with an immediate examination and mammogram. In addition, Korczak ordered an ultrasound.

“And that’s when they saw it,” Barthorpe recalled.

A second ultrasound was ordered. When radiologist Dr. Matthew Sanford looked at those results, he told Barthorpe the cyst most likely wasn’t benign, and a biopsy would reveal what the team was up against.

“At my request, we waited a week for the needle biopsy,” Barthorpe said. “But after the ultrasound that first day, Dr. Sanford gave me his card and his cell phone and told

me to call with any questions or concerns. How many doctors will give you their cell phone numbers?”

“The day of the biopsy he sat down with us and explained everything,” Barthorpe continued. “Beth Ann called me the next day with the results, and two days later, I had my lumpectomy surgery with general surgeon Dr. Benjamin Roy.”

The needle biopsy revealed that Barthorpe had invasive ductal carcinoma, but the good news was it hadn’t spread into the lymph nodes. Her treatment included 15 radiation treatments over a three-week period under the guidance of radiation oncologist Dr. John Bollinger as well as a hormone drug designed to prevent a recurrence.

“Dr. Bollinger and the radiology techs were all great,” Barthorpe said. “They were so reassuring. On the last day of my treatment, Dr. Bollinger told me if I have any questions, I should come back because I was part of the family.”

The family also includes breast cancer navigator, Terri Bentler, BSN, RN, OCN, CN-BN, who handles all of the behind-the-scenes aspects of the diagnosis, treatment and follow-up care.

“Terri is involved with all of the background work,” Skaja explained. “She handles everything needed to set the patient’s appointments, including the surgeries, medical oncology and radiation oncology treatments. Dealing with a diagnosis of cancer is hard enough by itself, and we don’t want to make things worse by having a patient worry about scheduling treatments or appointments. Our job is to make things as easy as possible. Our job is to make the Edith Sanford Breast Center of Bemidji a one-stop shop.”

“Terri met us right away and set everything up for us,” Barthorpe stated. “Terri took care of all of the

(continued on next page)

EDITH SANFORD BREAST CENTER

Sanford Bemidji is proud to serve women's breast health needs at the Edith Sanford Breast Center. Located in the lower level of the Sanford Bemidji Main Clinic, our center provides everything a woman needs for breast care in one convenient location, including:

- Mammogram scheduling without a physician referral
- On-site 3D screening and diagnostic mammograms
- Breast biopsies and ultrasounds
- Breast MRIs
- Certified clinical breast examiner
- Consultations with clinical provider
- Athena Breast Health Network
- Certified breast nurse navigator
- Fellowship-trained radiologist
- Fellowship-trained surgical oncologist
- Nationally accredited technologists, nurses and staff
- Genetic counseling and testing

Call (218) 333-5475 to schedule your mammogram or clinical breast exam.

NAP^{BC}

NATIONAL ACCREDITATION PROGRAM FOR BREAST CENTERS
ACCREDITED BREAST CENTER

SANFORD
Edith Sanford
BREAST CENTER



Dr. Sanford and the care team discuss the best approach to Tia's care, developing a plan specifically for her. The team sets up every appointment and schedules every treatment for Tia so she can focus on recovering.

details and all of the worry about what we were supposed to do next.”

Barthorpe's follow-up treatment also included a visit with Sanford Bemidji geneticist, Jennifer Leonhard. A month before Tia discovered her lump, her mother, Mary, was diagnosed with breast cancer during her annual mammogram screening. Mary's cancer was contained, however, so a lumpectomy was enough to eliminate the problem.

“The first mammogram found a spot, and the spot showed up again during a second mammogram and the ultrasound,” Mary said. “Dr. Thurgood (radiologist Michael Thurgood, MD) then ordered a biopsy and that also showed cancer. We did all that in the same day, and I liked the fact that everything happened so fast.”

“Our services include screening mammograms, diagnostic mammograms and ultrasounds, breast MRI, breast biopsies, clinical breast exams, consultations with clinical physicians, genetic testing for patients with a family history of cancer, navigators to help

patients through the diagnostic and treatment process, the Athena Breast Health Network – a program to help determine a woman's risk of developing breast cancer and connections with cancer survivor mentors,” Skaja said.

“A patient may not need all of these services, but they are available for those who do.”

Tia Barthorpe doesn't require all of the services offered by the ESBC, but she is glad to have them available if the need arises.

“From start to finish, the people at the breast center are on top of things,” she explained. “Their goal is to make having cancer go as smoothly as possible by giving the best care possible.”

“Walking into our breast center thinking there is a possibility that you have breast cancer and then being told you have breast cancer is a life-changing moment,” Skaja said. “There is no good way to tell someone they have breast cancer, but we have to deal with the cards we are given and play them the best way we can.”

Changing mammograms with 3D imaging



Matthew Sanford, MD
Radiology

If a picture is worth a thousand words, the new 3D breast mammography technology at the Edith Sanford Breast Center is priceless.

The three-dimensional mammogram, or tomosynthesis,

vastly improves on the imaging previously available through traditional two-dimensional mammograms, according to Dr. Matthew Sanford, a radiologist with Sanford Bemidji.

“There are a couple of fundamental problems with just regular mammography,” Sanford said. “One is that probably 20 to 30 percent of cancers we don’t detect ... on regular mammography.”

Since the breast is compressed in mammography, for both 2D and 3D imaging, Sanford likens it to a family photograph, where there are people standing behind people behind other people. It can be difficult to see the back row of individuals due to overlapping.

“What tomosynthesis does is it takes that picture and basically gives you a three-dimensional view, so you can see behind problems that normally would have been obscured,” explained Sanford.

The imaging takes numerous high-resolution pictures that are each one-millimeter wide. Sanford, in explaining how the new technology works, noted one recent patient had 79 such images available after her 3D mammogram.

“We went from having four pictures of the breast to lots,” Sanford explained. Instead of looking at one, you put three together. If there is a tumor, usually, as you can imagine,

it grows in three dimensions, so the mass should come up. It’s kind of like a CT scan of the breast.”

The technology was approved by the Food and Drug Administration in 2011. Since then, several comprehensive studies have been done to examine its effectiveness.

“The results are astounding,” Sanford stated.

“One thing that gave women a lot of anxiety – and still does – is if they have an abnormal (result during a) yearly mammogram,” he said.

When that happens, the woman is called back to get additional imaging done. This is called the recall rate.

“About 10 to 20 percent of the time, when a woman comes in to get extra mammographic pictures, it was just normal breast tissue that was stacked on top of each other,” Sanford said. “The tomosynthesis (3D) basically peels off those layers so we can see if it’s a shadow or if it is normal breast tissue that’s overlapping.”

Studies have shown the technology has decreased the recall rate by up to 30 percent, Sanford said.

“(That) is huge for patient anxiety and also for the cost of health care,” he added.

On top of that, 3D mammography has also increased physicians’ ability to detect invasive cancer by 40 to 50 percent and noninvasive cancer by 27 to 29 percent.

“It’s exceedingly rare for there to be a test that increases your sensitivity – we catch more cancers – and our specificity’s better, meaning that when we see a problem, there’s a problem,” Sanford explained. “That is a huge deal. I’ve been a radiologist for 12 years now, and this is the only test I know where we’ve improved both.”

The Edith Sanford Breast Center received the new technology in

September and began using it in October, after physicians and support staff were trained. Patients will not notice any difference in how mammograms are given since breast compression is still required and the imaging generally takes the same amount of time. Bemidji personnel also will continue to read mammograms in real time with no additional wait time required to offer results.

All Bemidji mammogram patients will be screened utilizing the new technology.

“We’re really lucky here,” Sanford stated, “A lot of places where the population is so large, you might have to roll out a couple of machines at a time. We have two machines here so everybody will receive the new technology when they come here.”

He noted the technology has existed for more than 50 years, since World War II, but it was not until 2011 when someone thought to apply it to breast exams. Sanford was one of the first physicians to be trained in this technology in 2011 while he was completing specialized breast imaging fellowship training at Brown University, where the technology was first introduced.

“As a physician, one thing I think about is that, in our culture, it’s easy to become infatuated with technology, liking the newest and the best, so it has to prove a benefit,” Sanford said. “That’s something that’s really enlightening about this. The data’s out there. It detects cancer more readily, and it does a better job of it.”

“Is it groundbreaking? Yes. ... When this first came out five years ago, my first thought was, ‘This will be everywhere at some point.’ It’s that much better.”

To schedule your 3D mammogram, call (218) 333-5475.



The Edith Sanford Breast Center is at the forefront of breast cancer risk assessment. Through Athena, breast cancer specialists, like Skaja, are about to get a comprehensive, individualized understanding of a women's cancer risk.

Transforming our understanding of breast cancer risk

Athena: A revolutionary breast cancer risk assessment



Knowledge is power.

This is the driving force behind a breast cancer risk assessment tool recently introduced at Sanford Health.

The Athena screening is a comprehensive questionnaire that evaluates a woman's lifetime risk for developing breast cancer. While numerous risk assessment tools already exist, the Athena screening is unique in that it runs a woman's personal and family histories through multiple models as it develops an individual profile to help her understand her breast cancer risk.

"The Athena screening is a comprehensive tool," said Tracy

Skaja, BSN, RN, CBCN, a certified breast care specialist who works in the Edith Sanford Breast Center in Bemidji. "There are different models available. Each one takes into account different factors, and they all come out a little bit different. This model also uses guidelines ... it's just a more comprehensive approach."

Every woman who is scheduled for a screening mammogram has the opportunity to take the Athena screening. Since the screening, which was developed by the University of California medical system, is electronically based, each woman must have an email address on file with Sanford Health. Two weeks before her mammogram appointment, the

woman receives an email inviting her to fill out a questionnaire detailing her personal and family histories. Depending on her history, the questionnaire generally takes 5 to 15 minutes to complete.

Her answers are then run through the Athena calculator, and results are sent to Skaja, who contacts those women determined to have an elevated risk.

Once Skaja reviews the results, she follows up with the women for a consultation. First, she will verify the woman's answers to ensure accuracy, because even

just one misunderstood question may affect a woman's risk factor.

"After I do that, then we look at the overall answers to make sure nothing has changed, looking at what exactly causes them to be at an elevated risk," Skaja explained. "Is it personal history? Is it family history? And what can we do from here?"

For example, women who smoke or consume larger quantities of alcohol can be at a higher risk, so Skaja will offer information about a tobacco-cessation program and other local resources. She will also discuss how maintaining a healthy weight and active lifestyle can positively impact a woman's risk factor and may suggest a consultation with a dietitian.

"Not everyone is interested, but we will talk about it," Skaja added. "We just talk about the resources that are available in case someone is interested."

Then, depending on the woman's risk level, Skaja will walk her through her next-step clinical options. For example, she may qualify to have an appointment with the genetic counselor, or she may be referred to the Edith Sanford Breast Center. There, she could be eligible to alternate a mammogram and breast MRI every six months.

"We explore the options," Skaja said. "If you are at an elevated risk or if you are found to be positive for a genetic mutation ... it's not a guarantee you will get cancer, but your chances are much higher. Our goal is that if you do develop it, we want to catch it sooner and smaller. It's a lot more treatable and easier to take care of."

In many cases, women may not realize they are at an elevated risk of cancer. A woman might recognize she had a couple of family members who had breast cancer, but she might dismiss it because her mother did not. She might not connect



After receiving a woman's Athena results, Skaja reviews the information, sends a letter and contacts the patient directly. A single health screening, which takes less than 15 minutes to complete and can be completed at home on a phone, tablet or computer, gives a woman a clear insight into her breast cancer risk.

that one family member had breast cancer and another ovarian cancer.

"It isn't uncommon for people to be unaware," Skaja stated. "Ovarian cancer can be related to breast cancer. Not always, not in all situations, but there is a close link with some genetic mutations between the two."

Statistics say one in eight women will develop breast cancer, so the average risk is 12 percent. Those women determined to have a risk factor higher than 20 percent are generally recommended to have further evaluation. But even those who fall into a "moderate risk" category, from 15 to 19 percent, should

know they have an elevated risk.

"We want to make sure they are aware of that risk level," she noted. "Because, if something changes in their family history or if something changes in their personal history, that can definitely bump them to the 20 percent. ... Again, it's not that women of average risk can't develop breast cancer – they do – but we're just trying to find those that are more likely. ... We are trying to find those higher-risk women to make sure, number one, they are aware of their risk because that is very empowering."

Raising community awareness of radon poisoning

Radon cannot be detected through sight or smell – the only way to know if your home is at risk is through testing.

There could be a silent and invisible invader sneaking into your house at this moment, and this trespasser possesses the power to make you sick or, possibly, kill you.

“It could be in a new home or in a home built in 1900. It doesn’t discriminate,” said Janel Olson, radiation oncology manager at Sanford Bemidji.

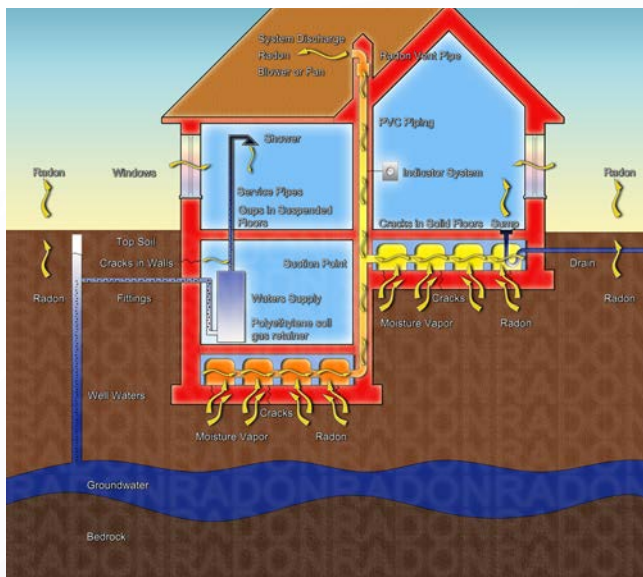
The silent invader that wants to do you harm is radon – a colorless, tasteless, odorless, naturally occurring gas that is a byproduct of uranium. As the uranium, commonly found in soil under people’s homes, breaks down, the process releases radon gas. The gas then permeates through the dirt and, eventually, can work its way into your home through crawl spaces, open floor and wall joints, sump holes, cracks or plumbing. As the radon decays, it releases alpha particles, which are easily inhaled and deposited into the lungs. When the alpha particles are inhaled, the result often is lung cancer.

In fact, in 2015 about 21,000 people died from radon-induced lung cancer in the United States.

“Radon is the leading cause of lung cancer in non-smokers, and the second-leading cause of lung cancer in smokers,” Olson stated.

The radon risk is measured in the number of radon disintegrations per minute in a liter of air (pCi/L).

According to the Environmental Protection Agency (EPA), the



Minnesota homes have a high risk of radon exposure, leading to severe consequences like lung cancer. Preventing radon poisoning is a simple as testing and if needed, installing a mitigation system. Find out more at the local county health departments.

national indoor average in the United States is 1.3 pCi/L, but the average in Minnesota homes is 4.6. The EPA also suggests all homes be tested, and if the result is 2.0 to 8.0, a second test should be conducted. If the second test result is 2.0 to 4.0, the homeowner should consider installing a mitigation system. Any second-test number 4.0 or above should prompt the homeowner to install the system.

2016 Prevention and Screening Project

Earlier this year, Marc Katz, MPH, Minnesota Department of Health Planner and Sanford Bemidji held a community seminar on radon exposure. It resulted in 50 people opting to have their homes tested. So far, 12 have had their results calibrated. Each figure was above the national average, and 4 were higher than the Minnesota average, including one test result which showed a 7.9 pCi/L.

The other homeowners will conduct their tests in the early winter when the pCi/L levels usually are at their peak because windows are normally closed and there is less air circulation throughout the home.

“I would recommend that everybody tests their home for radon,” Olson said. “The longer the exposure to radon the more likely you will be to develop lung cancer because of that exposure. If you have a risk factor for lung cancer, and you

have a method to evaluate that risk, it is good to get it checked.”

“If you discover that you have radon in your home and that you have been exposed for a long time, it is best to have your doctor perform a scan to look for nodules, even if you don’t show any symptoms. Lung cancer is curable if you find it early,” Olson added.

Radon can be removed from a home through a piping system that diverts the radon out of the ground under the foundation before it reaches the structure. The radon is transported through the pipe and eventually back into the air above the house. Sealing any cracks in the foundation can also reduce the amount of radon that enters the home.

Radon test kits and information can be accessed through the local county health departments. Test kits can also be ordered through the Minnesota Department of Health website: mn.radon.com.

“Minnesota, and in particular our area, has an increased rate of lung cancer,” Olson explained. “The majority of the lung cancer is the result of smoking, but other cancers can’t be traced to smoking. Radon is suspected in some of the lung cancer cases.

“The effects of radon have been known for a long time, and we want to create an awareness in our area,” Olson added.

Scrapbook



Beauty of Hope luncheon

Sanford Health Foundation of Northern Minnesota hosts an annual Beauty of Hope luncheon as a fundraiser for Bloom the Boutique. Bloom supplies wigs for people who have lost hair due to a medical condition. This year, a fashion show was held with cancer survivors and oncology staff as the models.



Marathon

Sanford staff attended the Blue Ox Marathon Expo and provided cheer gear, including blue ox horns, to spectators and runners. The team educated people about breast cancer screening and 3D mammography.



Retreat

On Oct. 13, 2016, Sanford Bemidji Cancer Center loaded up a bus of breast cancer survivors and staff from the Bemidji and Detroit Lakes areas and headed to Fargo for the annual Sanford Cancer Survivorship Breast Cancer Survivors Retreat.



Survivor Picnic

Staff from the Sanford Bemidji Cancer Center have fun with the photo booth during the 2016 Cancer Survivors Picnic.

We Celebrate
Survivors

SAVE THE DATE

Sanford Bemidji Cancer Center
2017 Survivorship Picnic
Sunday, June 4, 2017
2017 National Cancer
Survivors Day®

