<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directors Report</td>
<td>1</td>
</tr>
<tr>
<td>Cancer Committee &amp; Leadership</td>
<td>2</td>
</tr>
<tr>
<td>Cancer Center Mission, Vision &amp; Values</td>
<td>3</td>
</tr>
<tr>
<td>Operational Excellence</td>
<td>4</td>
</tr>
<tr>
<td>Gynecologic Oncology</td>
<td>5</td>
</tr>
<tr>
<td>Radiation Oncology</td>
<td>6</td>
</tr>
<tr>
<td>Medical Oncology &amp; Hematology</td>
<td>7</td>
</tr>
<tr>
<td>Telemedicine</td>
<td>8</td>
</tr>
<tr>
<td>Stem Cell Transplant Program</td>
<td>9</td>
</tr>
<tr>
<td>Infusion Services</td>
<td>10-11</td>
</tr>
<tr>
<td>Pharmacy Services</td>
<td>12</td>
</tr>
<tr>
<td>Cancer Research</td>
<td>13</td>
</tr>
<tr>
<td>Support Services</td>
<td>14-18</td>
</tr>
<tr>
<td>Care Navigation</td>
<td>14</td>
</tr>
<tr>
<td>Social Work</td>
<td>15</td>
</tr>
<tr>
<td>Genetic Counseling</td>
<td>16</td>
</tr>
<tr>
<td>Nutrition Services</td>
<td>17</td>
</tr>
<tr>
<td>Cancer Recovery Services</td>
<td>17</td>
</tr>
<tr>
<td>Supportive and Palliative Care</td>
<td>18</td>
</tr>
<tr>
<td>Integrative Medicine</td>
<td>18</td>
</tr>
<tr>
<td>Our Community</td>
<td>19</td>
</tr>
<tr>
<td>Cancer Registry</td>
<td>20</td>
</tr>
<tr>
<td>2017 Primary Site Table</td>
<td>21-23</td>
</tr>
<tr>
<td>Top 5 Cancers for Men &amp; Women</td>
<td>24</td>
</tr>
<tr>
<td>Awards, Publications &amp; Presentations</td>
<td>25-28</td>
</tr>
</tbody>
</table>
Dear Friends and Colleagues,

We are pleased to share this year’s annual report which highlights some of the 2018 key accomplishments for our cancer program. Our compassionate, skilled and dedicated team has grown this past year. With that growth we have expanded our outreach sites, clinical trials, and the services we offer to our patients in Montana, Idaho, North Dakota, Wyoming and Canada.

In 2018, we were the first site in the United States to enroll in the phase I/Ib trial: A Phase 1/1b, Multicenter, Open-label Trial of Oncolytic MG1 Expressing Mutant Human Papilloma Virus (HPV) E6 and E7 (MG1-E6E7), with Adenovirus Vaccine Expressing Mutant HPV E6 and E7 (Ad-E6E7) and Atezolizumab in Patients with HPV Associated Cancers. This study is a Phase I/Ib trial of Ad/MG1-E6E7 virus and then sequential treatment with Atezolizumab in patients with HPV associated cancers. The trial has required multidisciplinary team collaboration with Medical Oncology, Interventional Radiology, Infusion Pharmacy, the Infusion Center, Infection Control and the Inpatient Cancer Care unit.

In Medical Oncology, we added two new oncologists and two new physician assistants which allowed us to increase patient access and expand outreach services by adding additional days in Livingston and Miles City as well as partnering with North Big Horn Hospital in Lovell, WY.

Radiation Oncology continues to offer state-of-the-art radiation oncology services to our multi-state region and Canada. In 2018, the team introduced a new procedure, in collaboration with Dr. Bland from our Urology Department, called SpaceOAR. SpaceOAR helps protect the rectum from radiation effects using a hydrogel injection ‘spacer’ between the prostate and rectum.

Gynecologic Oncology has expanded outreach services and access to clinical trials to patients across the state of Montana. Currently, our team provides care in Bozeman, Great Falls, Helena and Missoula. Additional plans include expanding services and outreach in 2019 as we add two new gynecologic oncologists to the team late summer and early autumn.

Other news we are excited to share is that we were reaccredited with Quality Oncology Practice Initiative (QOPI) and American College of Radiology (ACR), and we are Foundation for the Accreditation of Cellular Therapy (FACT) accredited. In 2018 our Cancer Registry analytical cases grew 11% over the previous year, and our stem cell transplant program was very busy with eleven transplants performed. Finally, we are excited to announce a new opportunity to participate in a CAR T-cell clinical trial starting in January, 2019.

We hope that you enjoy reading about our focus, efforts, achievements and accomplishments towards outstanding oncology patient care. If you have any questions about our program or would like more information about any of our cancer services, please feel free to contact us.

Sincerely,

Rhonda Gradwohl, RN, MSN
Administrative Director of Cancer Services, Research, Integrative Medicine, and Supportive/Palliative Care

John Schallenkamp, MD
Medical Director of Cancer Services
Cancer Committee

The Cancer Committee is a multidisciplinary group of physicians, administrators, and ancillary team members that provides programmatic leadership for the Billings Clinic Cancer Center. The committee meets bimonthly to set, monitor, and evaluate the strategic goals of the cancer program while working to ensure that all Commission on Cancer standards for accreditation are met.

Cancer Committee Members

John Schallenkamp, MD (chair)
Brock Whittenberger, MD (past chair)
Brendan Bellew, MD
Justin Bottsford-Miller, MD
Simone Davion, MD
Karin Dolan, MD
Scott Dull, MD
Christopher Goulet, MD (cancer liaison physician)
Steven Hammond, MD
Michael Hill, MD
Mark Jones, MD
George Knight, MD
Jeff Lindenbaum, MD
Ron Linfesty, MD
Irene Lohkamp, MD
Samuel Reck, MD
Michelle Spenny, MD
Jack Staddon, MD
Breanne Terakedis, MD

Roxanne Allen, RN, CHPN
Karen Brannon, EdD
Pace Brittain, MBA, RT(R)(T)
Ramona Bruckner, CCC
Malissa Carr, RN, MSN
Jennifer Finn, MSW, LCSW, OSW-C
Rhonda Gradwohl, RN, MSN
Katie Gustin, PharmD
Jennifer Haarr, PT
Kristin Klebe, RN, BSN, OCN
Luke Kobold, MBA
Susan Landgren, MS, CGC
Jessica Martin, RD, LN
Chad Miller, MPT
Tricia Montgomery, RN, BSN, OCN
Pamela Nichols, RN, MSN-A, CMSRN
Meadow Nilles, BSW
Marcia Tostengard, CTR
Kathy Wilkinson, RN, BSN, OCN
Michael Wright, RT(T), ARRT

Leadership and Clinical Managers

Directors

Administrative Director for Cancer Services, Research, Integrative Medicine, and Supportive/Palliative Care
Rhonda Gradwohl, RN, MSN
(406) 435-7321

Medical Director of Cancer Services
John Schallenkamp, MD
jschallenkamp@billingsclinic.org
(406) 435-7150

Gynecologic Oncology and Infusion Services
Kristin Klebe, RN, BSN, OCN
kklebe@billingsclinic.org
(406) 435-7425

Medical Oncology and Genetic Counseling
Malissa Carr, RN, MSN, CNOR
(406) 435-7315

Research, Registry, Rehabilitation, Care Navigation and Social Work
Kathy Wilkinson, RN, BSN, OCN
kwilkinson@billingsclinic.org
(406) 435-7415

Inpatient Cancer Care Unit
Pam Nichols, RN, MSN-A
pnichols@billingsclinic.org

Clinical Managers

Medical Oncology
Jesus Fabregas, MD
jfabregas@billingsclinic.org
(406) 435-7330

Radiation Oncology
Christopher Goulet, MD
cgoulet@billingsclinic.org
(406) 435-7150

(L-R): Kathy Wilkinson, Rhonda Gradwohl, Pace Brittain, Kristin Klebe, Malissa Carr
Cancer Center Mission

To provide leading-edge care for patients and their families.

Cancer Center Vision

To be nationally recognized for premier cancer care and the first choice for patients, their families, and referring providers.

Cancer Center Core Values

Optimism:
We believe in creating an environment of optimism and offering a welcoming atmosphere for our patients and their families.

Compassion and Respect:
We show care for our patients and for each other and have a passion for the work that we do.

Multidisciplinary Collaboration:
We believe the best care for patients is delivered by drawing on the expertise of professionals across many disciplines.

Integrity:
We have an expectation of active professionalism in interactions among team members and in the care we provide.

Responsiveness:
Because patient needs are our priority, we remain flexible in order to accommodate timely access to care.
The Operational Excellence team at Billings Clinic provides continuous improvement support throughout the organization to help departments reduce waste and variation in their processes by using Lean Six Sigma methodology.

Scott Kastelitz is a certified Six Sigma Black Belt, responsible for providing ongoing Lean Six Sigma process improvement support for the Cancer Services team. He holds a bachelor’s degree in Industrial & Management Engineering from Montana State University. Scott started his career as a Manufacturing Engineer working on production lines for products varying from data storage libraries to electric toothbrushes. He then moved on to a Black Belt team in the medical equipment division at Philips Healthcare, where he received his Black Belt certification. After that, Scott joined the Service Marketing team at Philips, serving stints as both an Operations Manager and a Marketing Manager. Later, he entered the healthcare world as a Continuous Performance Improvement Associate at the Seattle Cancer Care Alliance. Scott joined the Operational Excellence team at Billings Clinic in 2015 and has supported improvement efforts for Cancer Services ever since.

Cancer Services Projects Completed in 2018:

- **Apheresis Process Standardization** – Nurses from the Infusion Center completed a project to decrease the amount of time between patients’ scheduled Apheresis appointment times and the TPE start times. The team successfully reduced this time from an average of 56 minutes to an average of 15 minutes by standardizing the process, a 73% improvement.

- **Inpatient/Outpatient Nursing Standardization** – The Infusion team, in conjunction with the Inpatient Cancer Care team, completed a project to standardize processes between Inpatient & Outpatient Cancer Teams where possible, with an understanding of where the process differs, and how to educate patients accordingly.

- **Gynecologic Oncology Depart Process** – The GynOnc team completed a project to have staff departing patients in the exam room, to align with the rest of the Cancer Services department.

- **Pelvic Treatment Delays** – The Radiation Oncology team completed a project to reduce delay times caused during pelvic treatment procedures by 14 minutes, a 25% reduction.
Gynecologic Oncology has established outreach clinics in Bozeman, Missoula, Helena and Great Falls, MT to provide patient care to our regional patients closer to home. Our physicians travel to these regions to see patients in clinic. Additionally, we provide surgical services in Missoula, Helena and Great Falls. This past year we have extended both outreach services and access to clinical trials to our patients across Montana.

As we continue to grow and expand our provider and regional services, we remain committed to meeting the needs of our patients and referring providers, locally and regionally. Our provider team rotates among our various outreach sites with a team approach to ensure patients have access to expert care throughout the continuum without worry of gaps in service if a specific provider is not available.

Dr. Justin Bottsford-Miller was raised in Nebraska where he earned his undergraduate degrees. For medical training, he attended the University of Iowa, the University of North Carolina, and MD Anderson Cancer Center at the University of Texas. He recently earned board certification in both OB/Gyn and Gynecologic Oncology, and he is working to expand clinical trials access in Montana. In his spare time, he enjoys hiking and camping, learning to snowboard, and he aspires to be a fly-fisherman.

Dr. Megan Petersen earned her undergraduate and medical degrees from the University of Colorado. She completed her medical training at Banner University in Arizona and the University of California before moving to Montana. She earned her mom degree in all four states. When she is not playing house with her kids or writing notes, she is finding ways to get outdoors.

Deb Hofer, RN, Nurse Navigator, is from Miles City, MT. She graduated with her nursing degree from Miles City College of Nursing. Deb also has her BA in Healthcare Administration and is a certified legal nurse consultant. She has 34 years of nursing experience, 12 of those in gynecologic nursing. This year, Deb plans on attending the SGNO (Society of Gynecologic Nurse Oncologists) seminar event to continue her education and advance nursing care for our patients at Billings Clinic. Her goal for the upcoming year is to expand nurse navigation in Gynecologic Oncology to include surgical navigation as well. In Deb’s spare time she loves her horses and horseback riding.

New additions to our team:

Sara Trader, CMA, is from Tampa, FL. Sara just obtained her certified medical assistant certificate this year and is excited for all the winter sports in Montana.

Mariah Zeeb, CMA, is a Billings, MT native currently working on her biology degree. In her spare time she loves to garden.
Radiation Oncology

Billings Clinic is pleased to continue offering state-of-the-art radiation oncology services to our multi-state region and Canada. Our linear accelerators allow us to treat a large variety of cancer conditions utilizing techniques such as IGRT (Image-Guided Radiation Therapy) and SBRT (Stereotactic Body Radiation Therapy). Billings Clinic is now in its fifth year of offering Gamma Knife Radiosurgery to our patients. Our HDR (High Dose Rate) Brachytherapy program allows us to treat both Gyn and Prostate cancers with great precision in an outpatient setting. Billings Clinic Radiation Oncology is proud to be accredited by the American College of Radiology (ACR).

The Radiation Oncology department had two new additions to our staff in 2018. Kevin Barth, RTT accepted the position of Radiation Therapist. Kevin is originally from Billings, MT and has been a welcome addition to our team. Joseph Roring, DMP accepted the position of Medical Physicist after graduating as Doctor of Medical Physics from UT Health Science Center at San Antonio. We offer our congratulations to Kelsey Chisholm, M.S., DABR who was promoted to Chief Medical Physicist for Radiation Oncology.

We are fortunate to have introduced a new procedure for prostate patients called SpaceOAR. SpaceOAR protects the rectum or Organ at Risk (OAR) using a hydrogel injection ‘spacer’ between the prostate and rectum. SpaceOAR hydrogel injections are offered by Dr. Lisa Bland as a collaborative effort between Billings Clinic Urology and Radiation Oncology.

Gamma Knife Stereotactic Radiosurgery (SRS) Program Hits 5 Year Mark

Billings Clinic established the Leksell Gamma Knife Perfexion SRS Program in early 2014. Since then 294 treatments have been delivered. Gamma Knife Radiosurgery is considered the Gold Standard in radiosurgery. Gamma Knife Radiosurgery is recognized worldwide as a noninvasive state-of-the-art technique for both benign and malignant intracranial tumors and vascular malformations in the brain. Conditions treated include:

- Single and multiple brain metastases  
- Glioblastoma (GBM)
- Essential Tremor  
- Meningioma
- Trigeminal Neuralgia  
- Acoustic Neuroma
- Arteriovenous Malformation  
- Craniopharyngioma

Gamma Knife Radiosurgery is a collaborative effort with a team consisting of a Neurosurgeon, Radiation Oncologist, and Medical Physicist. This noninvasive treatment is offered as a comfortable outpatient procedure with rapid return to normal activity.

Gamma Knife SRS Cases

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<tr>
<th>Condition</th>
<th>Percentage</th>
</tr>
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<tr>
<td>Single Metastasis</td>
<td>21%</td>
</tr>
<tr>
<td>Multiple Metastases</td>
<td>46%</td>
</tr>
<tr>
<td>Acoustic Neuroma</td>
<td>3%</td>
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<tr>
<td>Meningioma</td>
<td>10%</td>
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<tr>
<td>Essential Tremor</td>
<td>5%</td>
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<tr>
<td>Trigeminal Neuralgia</td>
<td>9%</td>
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<tr>
<td>Pituitary AVM</td>
<td>1%</td>
</tr>
<tr>
<td>GBM</td>
<td>3%</td>
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Billings Clinic Radiation Oncology participates in a number of Clinical Trials including:

NRG GI002: A Phase II Clinical Trial Platform of Sensitization Utilizing Total Neoadjuvant Therapy in Rectal Cancer

NRG GU006: A Phase II, Double-Blinded, Placebo-Controlled Randomized Trial of Salvage radiotherapy with or Without Enhanced Anti-Androgren Therapy with Apalutamide in Recurrent Prostate Cancer


Alliance CCTG CE.7: A phase III of Stereotactic Radiosurgery Compared with Whole Brain Radiotherapy (WBRT) for 5-15 Brain Metastases

NRG B-51: Randomized Phase III Clinical Trial Evaluating Post-Mastectomy Chest Wall and Regional Nodal XRT and Post-Lumpectomy Regional Nodal XRT in Patients with Positive Axillary Nodes Before Neoadjuvant Chemotherapy Who Convert to Pathologically Negative Axillary Nodes After Neoadjuvant Chemotherapy.
The Billings Clinic Medical Oncology/Hematology department is excited to introduce four new providers: Dr. Cesar Ochoa, Dr. Le Min Lee, Kyle Raymond, PA, and Maria Krasowski, DNP.

Dr. Cesar Ochoa grew up in Mexico where he received his medical degree from Tecnológico de Monterrey School of Medicine. He completed his Internal Medicine residency at Wayne State University and Henry Ford Hospital in Detroit, MI and a postdoctoral research fellowship at The University of Texas MD Anderson Cancer Center in Houston, TX where he studied immune signaling and lung carcinogenesis. He recently completed his clinical fellowship in Hematology and Medical Oncology at Mayo Clinic Cancer Center in Jacksonville, FL. He is a member of the American Medical Association, the American College of Physicians, the American Society of Clinical Oncology and the American Society of Hematology. In his free time, he enjoys reading, listening to music and exploring the outdoors.

Dr. Le Min Lee is originally from Malaysia. She received her medical degree in Canada from International Medical University/Dalhousie University School of Medicine. She then began a residency in Internal Medicine at the University of Miami Miller School of Medicine Regional Campus until 2015. Afterwards, Dr. Lee pursued a fellowship in Hematology Oncology at Mount Sinai Health System in New York where she graduated in 2018. During her training, she investigated the impact of Breast Cancer Index (BCI) in shared decision making for extended endocrine therapy in early stage breast cancer. She is a member of the American College of Physicians, American Society of Clinical Oncology and American Society of Hematology. Le Min enjoys cooking, hiking, travel and outdoors.

Kyle Raymond, PA, received his undergraduate degree from the University of Nevada-Reno in 2014. After working as a physical therapy tech for three years, he decided that the Physician Assistant career was one that he wanted to pursue and was accepted into the Rocky Mountain College Physician Assistant program, graduating in 2018. He is very excited to work in the field of oncology as a PA, as he can't imagine a more rewarding and fulfilling position. He enjoys the outdoors including hunting and loves spending time with his wife and two dogs. He is eager to learn and connect with all the patients and staff in the Medical Oncology clinic.

Maria Krasowski, DNP, obtained her Doctorate of Nursing practice with a specialty in adult-gerontology from Arizona State University. She received her undergraduate degree in nursing from the University of Mary in 2009 and started working at local hospital for about four years on the medical/surgical oncology unit. She also worked on a medical/surgical oncology unit while in Arizona for three years. Maria considers oncology to be a special area in health care, and she is enthusiastic about joining the oncology team. She is happy to be moving back to Montana where she will be closer to her family. Maria enjoys traveling, playing the guitar, and spending time with her family and friends.
The Eastern Montana Telemedicine Network (EMTN) is a partnership of local, regional, and national health care organizations. These partnerships provide access to critically needed clinical services, through state-of-the-art telemedicine technology. This technology allows health care professionals to evaluate, diagnose and treat patients at a distance using telecommunications systems. Our telemedicine network works in conjunction with the Billings Clinic Oncology department and its providers to improve access to clinical care not available locally, and enhance continuity of care. Telemedicine can be utilized for the initial clinical encounter between a patient and provider, or for follow up visits. Telemedicine is often used by our Oncology providers for follow up visits when the initial appointment was held during an Outreach clinic. Often, during times of hazardous travel when the provider cannot get to the patient, telemedicine is used in place of the outreach clinic. This again promotes continuity of care. By using telemedicine, access to specialty providers is increased, while travel time and patient expense is decreased.
2018 was a very busy year for the stem cell transplant program. At year’s end, we performed 115 transplants at Billings Clinic since 2002, with 11 of them in 2018. The transplant program has substantially grown during the last two years.

Dr. Carlos Silva became the new director of the stem cell transplant program in 2018. As the region’s only fellowship-trained bone marrow transplant physician, Dr. Silva is ready and eager to further develop our transplant program. Dr. Silva and Christina Schye, Transplant Coordinator, spent numerous days traveling our great state visiting medical providers in Sidney, Great Falls, Havre, Helena, Anaconda, Butte, Missoula and Kalispell as well as Williston, ND, Cody and Sheridan, WY. These visits were to increase and facilitate access to transplantation, pheresis and malignant hematology care for patients in the region in order to avoid unnecessary travel out of state.

Transplant services currently include: autologous stem cell transplants for adults with hematologic malignancies (multiple myeloma, Hodgkin and non-Hodgkin lymphomas, amyloidosis, and acute myeloid leukemia); and aftercare for allogeneic transplants.

For more information or to make a referral for stem cell transplant, please contact: Donna Parker, BSN, OCN – Patient Care Navigator (406) 435-7355

Billings Clinic Laboratory provides services to the Cancer Center relating to Stem Cell Processing. The hematopoietic progenitor cell (HPC) product is extremely critical to the successful treatment of patients on high-dose chemotherapy protocols. The HPC component of the apheresis products will be used to reconstitute the patient’s immune system following dose-intensification. The steps and the order in which they are performed are aimed at protecting the cells both from the processing and the freezing procedures. The Laboratory stores the cryopreserved product until the patient is ready to receive their cells back, at which point they are thawed and given back to the patient.

The Laboratory also provides all blood products necessary to support the patient following high-dose chemotherapy, including packed red blood cells, fresh frozen plasma, platelets and cryoprecipitate.
Our infusion center grew by leaps and bounds in 2018. With a daily average of 63 patients, our 18-chair infusion center served over 15,000 patient encounters in 2018. With our patients as the mainstay, our nursing team drives forward with compassion and care not only for our patients, but for each other as well.

**Jessica Kapsner, RN, OCN,** is a Billings native. She attended nursing school at MSUB and has been in nursing for six years. In 2018, Jessica worked hard to become a Level III infusion RN by obtaining the requirements by the Board of the Oncology Certified Nurse Association entitling her to be known as an Oncology Certified Nurse. Jessica is an excellent resource on the unit and in her words, “I can’t imagine being in any other specialty.” Her infusion family can’t imagine it either. Jessica became a charge nurse in 2018 and is currently pursuing training in plasma pheresis and continues to be a resource for our patients and families.

**Pam Berens, RN, BSN, OCN,** is from Sidney, MT and graduated Nursing School from Boise State. She is a charge nurse, chemo/biotherapy certified, and an Oncology Certified Nurse. In 2018, Pam won the Billings Clinic Friends of Nursing Outstanding Nurse Award. She was nominated by her peers throughout the Cancer Center for her expertise in compassionate nursing care. In addition, Pam has worked diligently with our Operational Excellence team on a project to standardize apheresis at Billings Clinic. This project has decreased wait times for patients, standardized physician orders and consents, and has improved the overall process for efficient and effective patient care. Pam is a level IV infusion RN and continues to be an asset to not only the infusion center but to the Cancer Center as a whole.

**Shanel Wirkman, RN, BSN, OCN,** is a Billings, MT native and attended nursing school at the University of Colorado. She has been a nurse for eight years. Shanel is chemo/biotherapy certified and has achieved OCN status. She serves on the unit as an excellent resource and charge nurse. She excels at managing patient care and workflow daily. Shanel worked diligently in 2018 to become a Level IV infusion RN. Additionally, Shanel has collaborated this past year with our Operational Excellence team here at Billings Clinic. In her project, she worked to streamline the care between inpatient and outpatient nursing services. In this project, nursing education, process and policy were standardized to increase quality patient care and continuity among the disciplines.
New Employees on the Infusion Center Team

We were very pleased in 2018 to welcome **Nicole West** to the role of Clinical Coordinator. Nicole is from Tacoma, WA. She graduated nursing school from South Puget Sound, and is currently pursuing her Master of Science in Nursing degree from the University of Texas. Nicole has 16 years of nursing experience. This past year Nicole traveled to Houston, TX to operationalize our Lean Taas scheduling software, and participated in Joint Commission Accreditation, QOPI reaccreditation and our CIBMTR audit. She streamlined the orientation process, and is an incredibly valued member of the leadership team. Outside of the Cancer Center, Nicole is a busy mom of two wonderful children and serves as secretary for their baseball teams.

**Raney Glasgow** is our newest team member. Raney is an LPN with 22 years of nursing experience. She is a Billings, MT native, and she graduated from the MSU-COT program. Her most recent goal is to learn infusion nursing, as her prior experience was with primary care and infectious disease. Raney is a busy mom of two and has been married to her husband Greg for 22 years. Her intellect, caring heart and sense of humor make her a great addition to our team.

**Croix Larsen** is from Cody, WY. She graduated nursing school from Northwest College in Powell, WY. Croix came to the infusion center with OR experience. She is quickly becoming an incredible asset in the infusion center. Croix is currently working on completing her BSN degree and becoming Oncology Nurse Certified. Something that may surprise others about Croix: although soft spoken, she has a black belt in Taekwondo!

**Tiarelle McDowell** is from Redyard, MT. She graduated nursing school from Northwest College in Powell, WY. Tiarelle came to us from Cardiology, and is quickly adapting to oncology nursing. Shortly after being hired, she became chemo/biotherapy certified. Aside from being a wonderful infusion nurse, Tiarelle is the mother of a beautiful baby girl – two-year-old Dawson. Tiarelle is very active and has also participated in skydiving!

**Caitlin Soderberg** is a Billings, MT native. She graduated with her nursing degree from Montana State University. Croix came to us with five years of Critical Care nursing experience. Her goal is to become an Oncology certified nurse within the next year. Caitlin played soccer in high school and college. Caitlin met her Sweden-born husband through soccer, and they are soon expecting Charlie – an English Golden Retriever.

**Leah Krumm** grew up in Boyd, MT. She graduated from Montana State University with her nursing degree. Leah came to us from outpatient surgery with incredible nursing experience, care and knowledge. She is a true advocate for our patients. Leah obtained her oncology nurse certification this past year. In her free time, Leah hopes to become fluent in Spanish and is good at yoga. We are very happy she has joined our team.
Pharmacy Services

Billings Clinic Specialty Pharmacy

Billings Clinic is proud to offer a local specialty pharmacy service for our patients. We work with numerous Billings Clinic departments, including Oncology. We are committed to providing patients with personalized care, clinical expertise, and outstanding customer service. Our staff works directly with patients, prescribers and insurance companies to ensure patient’s needs are met and to enhance the Billings Clinic experience as a one-stop solution for all health care services.

- Pharmacy staff can be reached 24 hours a day, 7 days a week
- Option to pick up prescription or mailed at no charge
- Complimentary, secure delivery option with package tracking for prompt, reliable service
- Medically Integrated Dispensing (MID), bringing medications directly to patients during their appointment for added convenience
- Personalized experience including proactive refill reminders, automatic refills and text alerts when medications are ready
- Comprehensive counseling on all medication fills, including refills
- Prior authorization assistance to navigate this complicated process and ensure a timely response
- Benefits investigation to secure financial resources to make medications more affordable
- Direct coordination with Medication Assistance Program (MAP) to ensure most affordable price for medications
- Clinical pharmacists who offer personalized education and support to ensure patients receive the most benefit from therapy
- Follow-up phone calls, drug interaction screenings, refill reminder phone calls and a dedicated staff always available to answer any questions

Our specialty team includes pharmacists and technicians who help navigate the insurance and prescription process. In addition, we have a clinical pharmacist located in the oncology department.

Oral Oncology Management Program

The role of pharmacy in the management of oral oncology at Billings Clinic has grown tremendously over the past year. At the center of this is a clinical pharmacy specialist integrated into Medical, Hematologic, and Gynecologic Oncology clinics. Marie Sirek, PharmD, BCACP, joined our team in July of 2017 and has worked closely with the Cancer Center and Billings Clinic Specialty Pharmacy to develop an oral oncology management program.

This program provides a variety of services for our patients receiving cancer treatment with an oral agent. These services include medication education, dosing and therapeutic review, drug interaction evaluation, symptom management, laboratory monitoring, and medication follow up for tolerance and adherence to therapy. Working under a collaborative practice agreement, Marie Sirek has proven to be a valuable resource for our patients on oral oncology treatment regimens.

This past year, Marie passed the Board of Pharmacy Specialties in Ambulatory Care (BCACP). In addition, she was named co-chair of the National Community Oncology Dispensing Association (NCODA) Oral Chemotherapy Education Committee.

Billings Clinic’s Lead Oncology Clinical Pharmacy Specialist Anna Howard received her board certification in oncology pharmacy (BCOP) in July 2018. This is an important distinction that demonstrates Billings Clinic’s pursuit of excellence for the patients in our region. To become board certified, a pharmacist must complete up to 2 years of residency after receiving a doctorate in pharmacy including specific oncology pharmacy training in addition to passing a rigorous examination. Board certification in oncology is the gold standard that demonstrates a pharmacist is well qualified to contribute to the management of complex chemotherapy treatment regimens and side effects related to these drug therapies. At Billings Clinic, we are dedicated to providing the best care to our cancer patients and utilizing specially trained pharmacists to improve patient outcomes and satisfaction is just one piece of the puzzle.

We are dedicated to ensuring our patients have access to the best care from a trusted local pharmacy and are proud to offer over 80 oncology medications. Please give us a call today at (406) 657-4545. We would love to talk with you!
In 2018, we had two new staff join our Cancer Research Team. Melissa Heick and Jackie Thielen joined our staff as Clinical Data Specialist. Melissa came in June from Aqrava, LLC where she was a Coding Analyst. Jackie was at Montana Health Research working as a Research Assistance and Phlebotomist. We are very excited to have them join our research team.

In Calendar year 2017, we enrolled 121 patients on Clinical Trials. The American College of Surgeons Commission on Cancer requires we enroll at least 4% of our analytical cases on a clinical trial or 6% for commendation. We had 1717 analytical cases in our 2017 Primary Site Table; we enrolled 7% our new analytical patients on a clinical trial.

In 2018, we were the first site in the US to enroll in this phase I/Ib trial: A Phase 1/1b, Multicenter, Open-label Trial of Oncolytic MG1 Expressing Mutant Human Papilloma Virus (HPV) E6 and E7 (MG1-E6E7), with Adenovirus Vaccine Expressing Mutant HPV E6 and E7 (Ad-E6E7) and Atezolizumab in Patients with HPV Associated Cancers. This is a Phase I/ib trial of Ad/MG1-E6E7 virus and then sequential treatment with Atezolizumab in patients with HPV associated cancers. The trial has required much team collaboration with Medical Oncology, Interventional Radiology, Infusion Pharmacy, Infusion Center, Infection Control, and the Inpatient Cancer Center.

In October 2018 at the American Society for Radiation Oncology (ASTRO) Annual Meeting, the results from a randomized phase III NRG Oncology study in which the Billings Clinic participated reported that the use of hippocampal avoidance reduced the cognitive toxicity from whole brain radiotherapy. The study found that the use of hippocampal avoidance with whole brain radiotherapy reduced cognitive toxicity by 26%. This trial provides evidence for practice change in the management of brain metastases.
Support Services

Care Navigation

Care navigation continues to be an integral part of the care and support offered to cancer patients at Billings Clinic. Our experienced oncology nurse navigators help to arrange multidisciplinary consultations for diagnosis and treatment planning, attend provider appointments during the initial diagnostic and treatment planning phase, provide treatment plans and a schedule that is understandable to the patient, make referrals to supportive services, and provide tailored education specific to patient needs. Navigators also compile survivorship care plans that outline treatment received, potential long-term side effects, surveillance monitoring, and information regarding follow-up care.

Navigators work closely with patients during the initial diagnosis and treatment planning period, which means they collaborate not only with oncologists, but also with specialists who treat cancer outside the Cancer Center. These specialists include pulmonologists, gastroenterologists, otolaryngologists, surgeons (general, neuro, cardiothoracic, and reconstructive), neurologists, urologists, dermatologists, radiologists, and pathologists. When there is a high-suspicion of cancer or a diagnosis is being given in a department outside the Cancer Center, the navigator is often called upon by specialists to help provide support and education to the patient, as well as coordinate additional diagnostics and multidisciplinary evaluation.

*Front row (L-R): Kerry Nichols, RN, OCN, Mary Lou Iverson, RN, OCN, Lora Wingerter, RN, OCN
Back row (L-R): Kathy Aders, RN, Donna Parker, RN, OCN, Gina Bradley, RN, OCN, (not pictured: Nikkeal Beverley, RN, OCN)
Social Work

Our Social Work team includes two Licensed Clinical Social Workers (LCSWs) who are certified in Oncology Social Work. Certification in Oncology Social Work is through AOSW (Association of Oncology Social Work) which is the largest international organization dedicated to enhancing psychosocial services to cancer patients and their families. This past year, Jennifer Finn was asked, and is now serving on, and the AOSW Board. This prestigious role gives her the ability to network and connect with other Social Workers across the globe on a regular basis to enhance and improve psychosocial support right here in our community.

The Social Work team has a Facebook page, Billings Clinic Pathways, that provides information on upcoming events, links to highly supportive websites, free tickets to local events and entertainment, and updates from our Cancer Center. Every Monday, a group called “Hope Knits” gets together to lovingly create hats for our cancer patients. The second and fourth Tuesday of every month, a “Living with Cancer” support group meets. The second Thursday of every month a women’s support group called “Here and Now” convenes. Twice a year, we offer an 8-week “Partnership in Survivorship” course that is also available via telemedicine. Finally, twice a month, we offer a mental health clinic, staffed with a psychiatric nurse practitioner, to our patients in addition to the other offerings.
Genetic Counseling

Billings Clinic has two genetic counselors, Andrea Crawford, MS, and Susan Landgren, MS, who are available to see patients. Andrea received her genetic counseling degree at the University of Utah, and Susan received her degree from Brandeis University in Massachusetts. Their primary departments include medical oncology and maternal-fetal medicine where they see a variety of patients with cancers and with genetic risk for pregnancies. They also see some patients, as time allows, in the pediatric and adult muscular dystrophy clinics, in the reproductive endocrinology and infertility department, as well as patients with personal and/or family histories of hereditary cardiac and neurologic diseases.

The role of genetic testing in health care grows more prevalent and complex every day. Andrea and Susan can help incorporate the latest genetic science into the care of Billings Clinic’s patients by providing genetic counseling services. Additionally, their training in counseling theory and practice enables them to provide the emotional support patients need as complex genetic information is translated into sometimes-difficult health care decisions.

In medical oncology, the Clinic’s genetic counselors meet with patients who have cancers diagnosed at young ages and/or have strong family histories of cancers. Genetic counseling includes a detailed review of the family and medical history, education regarding cancer genetics, an overview of screening and risk-reducing options for patients with hereditary cancers, assessment of hereditary cancer risk, and discussion of benefits and limitations of genetic testing. The most common hereditary cancers include breast, ovarian, colon and uterine. However, advances in genetic testing have revealed that several other cancers, including pancreatic, prostate and nervous system cancers, can be hereditary as well.

Andrea and Susan are also available to meet with patients who do not have a personal history of cancer but have families that are either known to have a cancer predisposition syndrome or are strongly suggestive of a hereditary cancer syndrome. Genetic testing is sometimes offered to these patients. Even when genetic testing is not indicated, Andrea and Susan utilize risk models to provide guidance to these patients for individualized cancer screening.

Referrals for genetic counseling can be ordered through Cerner or by calling and speaking with Andrea at (406) 435-7113 or Susan at (406) 435-7336. It is important to note that Andrea and Susan are not medical geneticists (MDs) and cannot diagnose and treat patients. However, they are happy to provide genetic counseling to patients who wish to learn more about their risks for certain types of hereditary disease.
**Nutrition Services**

Jeremy Thararoop, RD, LN, joined our Cancer Center’s Nutritional Services team in 2018. Jeremy joined us from Woodlands, TX with an extensive background as a Registered Dietitian and Health Fitness Specialist. Jeremy not only works as an Outpatient Oncology Dietitian for the Cancer Center, but also as a Clinical Research Coordinator for Billings Clinic. Jeremy is a welcome addition to our team of dietitians which includes Tamara Shaffer, RD, LN, and Jessica Martin, RD, LN, CNSC.

Proper nutrition is crucial for those diagnosed with cancer, and should be optimized before, during, and after treatment. Weight loss has been used as an indicator for poor prognosis in cancer patients. Anorexia is reported to be present in 15% to 25% of all patients with cancer at the time of diagnosis. Anorexia can directly escalate the course of cancer cachexia. Cancer anorexia/cachexia is associated with weakness, fatigue, and a poor quality of life. Unlike other diseases, malnutrition may even occur with patients of obesity and/or high BMI due to loss of skeletal muscle and increase of adipose tissue (Sarcopenia).

The dietitian’s role is to work with the cancer care team to identify patients most at risk for malnutrition or weight loss. Our dietitians assist patients that are often challenged by loss of appetite and altered tastes as a result of their treatments. In addition, the dietitians have specialized expertise in providing care for patients who require a feeding tube or intravenous nutrition. By working closely with patients diagnosed with cancer throughout their treatment, our dietitians can offer individualized nutritional advice, and promote a better quality of life for our patients.

**Cancer Recovery Services**

Patients who have been diagnosed with cancer continue to have access to a variety of rehabilitation services at Billings Clinic including physical therapy, occupational therapy, and speech therapy. Just as rehabilitation is often recommended following heart surgery or a stroke, rehabilitation is just as crucial following a cancer diagnosis.

Our patients complete a screen every 60 days to assess any new or ongoing needs that may arise. **Physical Therapy** addresses mobility issues, weakness, gait or balance concerns, fatigue, peripheral neuropathy and lymphedema or swelling. **Occupational Therapy** addresses energy saving modifications, arm weakness, memory and cognitive tasks. **Speech Therapy** addresses swallowing problems, speech difficulties, as well as cognitive and memory issues. By initiating rehabilitation services sooner versus later, functional limitations can usually be reduced, and recovery may be faster.
Supportive and Palliative Care

The Cancer Center has had a dedicated Supportive and Palliative Care program since 2010 with the overall program goal of enhancing quality of life and addressing whole person needs – physical, social, psychological, and spiritual. Each year, the team continues to develop and enhance program infrastructure and services offered. During 2018, the team collaborated with our care navigators and all stage III and IV lung cancers are referred to our SCPC team.

Core members of the Cancer Center who facilitate the Supportive and Palliative Care program include Diane Jones, APRN, MN, FNP, AOCNP, Jennifer Finn, MSW, LCSW, OSW-C, and Stacey McManamen, RN, BSN, and Tia Robinette, MSW. Aside from these three individuals, other healthcare professionals, such as a pain specialist, pharmacist, chaplain, care manager, dietitian, and/or physical therapist, are often included in the care team based on specific patient and family needs. Some of the services provided by this dynamic and interdisciplinary team include expert symptom management, supportive counseling, and advance care planning.

Integrative Medicine: Dr. Roberta Bourgon

Integrative oncology at Billings Clinic involves a multi-disciplinary team approach. My role as a naturopathic physician is to meet with people who have received a diagnosis of cancer and help them to understand the treatment options available to them conventionally and to formulate a treatment plan using lifestyle modifications along with evidence based or evidence informed strategies. Our goals are to help to keep a person as healthy as possible while they undergo treatment, support them through the cancer treatment they choose, help them improve their quality of life after the diagnosis and help them to develop long term survivorship plans that implement lifestyle changes that help to prevent cancer recurrence. The use of evidence based or evidence informed supplements can enhance the anti-cancer effects of chemotherapeutic agents and can prevent or significantly reduce the side effects of the treatment. People diagnosed with cancer are often overwhelmed with information. They feel the desire to do anything and everything they can to help fight the cancer. My role also involves helping people understand which options are appropriate (not all cancers are the same) at what times. Certain herbal medications and other over the counter supplements can interfere with the treatment being given and/or can make the side effects of the treatment worse. In my experience over the last 20 years, the best outcomes occur when a combination of conventional treatment, lifestyle medications and evidence-informed supplements are used.
Our Community

You are only as great as the people you are surrounded by. The support from our community for our patients is heartwarming and overwhelming. Because we serve such a large regional area, housing/lodging assistance is needed for many of our patients while they are undergoing treatment. Our community was touched by this need and rose up to meet it.

Martial Arts Academy (Dave Allen) of Billings raised close to $800 recently, in support of Billings Clinic cancer patient housing assistance, and we are so grateful for them!

Thank you to everybody from Yellowstone CrossFit who held a workout event to benefit the Billings Clinic Cancer Center Patient housing assistance fund. They raised an amazing $7,700 and presented it to members of our cancer care team in 2018! This is a huge help to our patients in need of lodging assistance while undergoing chemotherapy, stem cell transplant and/or radiation. Special thanks to Trevor Craig from Fireplace Center and Jason Tounsley from Tounsley Electric Inc., as well as Kelley Armstrong from T&E Realty for organizing this great event. Everybody who pitched in is making a real difference in the lives of patients here.
Cancer Registry was very busy finishing 2017 data abstraction. We finished over 1717 analytical cases, which is 163 more cases than 2016, so our Registrars have been very busy! We continue to submit RQRS each month within three months for breast and colorectal cancer. We are currently doing 2018 cases, but because of the software not being updated for the AJCC 8th Edition Staging Manual, we are having to leave those cases incomplete and will have to update them when the upgrade is available.

This past year, we also participated in the Commission on Cancer Special Study for DCIS. The Special Study investigated outcomes from DCIS treatment retrospectively. Current NCCN guidelines dictate that DCIS be treated upon diagnosis with a combination of surgery, radiation and hormonal therapy. There is now emerging discussion around whether active surveillance for DCIS may also be a safe and less morbid option for some women subtypes with DCIS. The Cancer Center is also participating in an Alliance Clinical Trial called Clinical Trials in Oncology Comparison of Operative to Monitoring and Endocrine Therapy (COMET) which is looking at the risk and benefits of active surveillance compared with usual care in randomized trial for low risk DCIS.

We also had to say good bye to Lori Frank, our Cancer Registrar who moved with her husband to the Spokane area. In December 2018, we got to celebrate Jennifer Williams passing her Certified Tumor Registrar (CTR) exam. To become a CTR you must have a associate degree, then complete two semesters of Human Anatomy and Physiology and complete 1950 hours of work in the cancer registry field to take the exam.
<table>
<thead>
<tr>
<th>Primary Site</th>
<th>Total (%)</th>
<th>Sex</th>
<th>Class of Case</th>
<th>Status</th>
<th>Stage Distribution - Analytic Cases Only</th>
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<tbody>
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<td></td>
<td></td>
<td>M</td>
<td>F</td>
<td>Analy</td>
<td>NA</td>
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<tr>
<td><strong>ORAL CAVITY &amp; PHARYNX</strong></td>
<td>42 (2.3%)</td>
<td>34</td>
<td>8</td>
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<td>1</td>
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<tr>
<td>Lip</td>
<td>7 (0.4%)</td>
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<td>Salivary Glands</td>
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<tr>
<td>Gum &amp; Other Mouth</td>
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<td>5</td>
<td>1</td>
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<tr>
<td>Tonsil</td>
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<td>Oropharynx</td>
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<td><strong>DIGESTIVE SYSTEM</strong></td>
<td>236 (12.8%)</td>
<td>119</td>
<td>117</td>
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<td>Esophagus</td>
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<tr>
<td>Stomach</td>
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<td>16</td>
<td>8</td>
<td>21</td>
<td>3</td>
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<td>Small Intestine</td>
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<td>Colon Excluding Rectum</td>
<td>68 (3.7%)</td>
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<td>34</td>
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<td>Cecum</td>
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<td>8</td>
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<td>4</td>
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<td>Ascending Colon</td>
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<td>14</td>
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<td>Hepatic Flexure</td>
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<td>0</td>
<td>1</td>
<td>0</td>
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<td>Descending Colon</td>
<td>4</td>
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<td>1</td>
<td>4</td>
<td>0</td>
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<tr>
<td>Sigmoid Colon</td>
<td>18</td>
<td>12</td>
<td>6</td>
<td>18</td>
<td>0</td>
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<tr>
<td>Large intestine, NOS</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>0</td>
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<tr>
<td>Rectum &amp; Rectosigmoid</td>
<td>45 (2.4%)</td>
<td>23</td>
<td>22</td>
<td>42</td>
<td>3</td>
</tr>
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<td>Rectosigmoid Junction</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Rectum</td>
<td>36</td>
<td>17</td>
<td>19</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td>Anus, Anal Canal &amp; Anorectum</td>
<td>8 (0.4%)</td>
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<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Liver &amp; Intrahepatic Bile Duct</td>
<td>15 (0.8%)</td>
<td>13</td>
<td>2</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Liver</td>
<td>13</td>
<td>12</td>
<td>1</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Intrahepatic Bile Duct</td>
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<td>1</td>
<td>1</td>
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<tr>
<td>Gallbladder</td>
<td>4 (0.2%)</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Other Biliary</td>
<td>5 (0.3%)</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Pancreas</td>
<td>33 (1.8%)</td>
<td>12</td>
<td>21</td>
<td>32</td>
<td>1</td>
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<tr>
<td>Retropertoneum</td>
<td>1 (0.1%)</td>
<td>1</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>Peritoneum, Omentum &amp; Mesentery</td>
<td>10 (0.5%)</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Primary Site</td>
<td>Total (%)</td>
<td>M</td>
<td>F</td>
<td>Class of Case</td>
<td>Status</td>
</tr>
<tr>
<td>--------------------------------------</td>
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<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>RESPIRATORY SYSTEM</td>
<td>172 (9.3%)</td>
<td>87</td>
<td>85</td>
<td>167 5</td>
<td>89</td>
</tr>
<tr>
<td>Nose, Nasal Cavity &amp; Middle Ear</td>
<td>1 (0.1%)</td>
<td>1</td>
<td>0</td>
<td>1 0</td>
<td>1</td>
</tr>
<tr>
<td>Larynx</td>
<td>12 (0.6%)</td>
<td>10</td>
<td>2</td>
<td>11 1</td>
<td>9</td>
</tr>
<tr>
<td>Lung &amp; Bronchus</td>
<td>158 (8.5%)</td>
<td>76</td>
<td>82</td>
<td>154 4</td>
<td>79</td>
</tr>
<tr>
<td>Trachea, Mediastinum &amp; Other Respiratory Organs</td>
<td>1 (0.1%)</td>
<td>0</td>
<td>1</td>
<td>1 0</td>
<td>0</td>
</tr>
<tr>
<td>BONES &amp; JOINTS</td>
<td>2 (0.1%)</td>
<td>1</td>
<td>1</td>
<td>2 0</td>
<td>2</td>
</tr>
<tr>
<td>SOFT TISSUE</td>
<td>11 (0.6%)</td>
<td>6</td>
<td>5</td>
<td>10 1</td>
<td>7</td>
</tr>
<tr>
<td>Soft Tissue (including Heart)</td>
<td>11 (0.6%)</td>
<td>6</td>
<td>5</td>
<td>10 1</td>
<td>7</td>
</tr>
<tr>
<td>SKIN EXCLUDING BASAL &amp; SQUAMOUS</td>
<td>195 (10.5%)</td>
<td>109</td>
<td>86</td>
<td>188 7</td>
<td>188</td>
</tr>
<tr>
<td>Melanoma -- Skin</td>
<td>162 (8.8%)</td>
<td>88</td>
<td>74</td>
<td>155 7</td>
<td>155</td>
</tr>
<tr>
<td>Other Non-Epithelial Skin</td>
<td>33 (1.8%)</td>
<td>21</td>
<td>12</td>
<td>33 0</td>
<td>33</td>
</tr>
<tr>
<td>BREAST</td>
<td>233 (12.6%)</td>
<td>2</td>
<td>231</td>
<td>219 14</td>
<td>222</td>
</tr>
<tr>
<td>Breast</td>
<td>233 (12.6%)</td>
<td>2</td>
<td>231</td>
<td>219 14</td>
<td>222</td>
</tr>
<tr>
<td>FEMALE GENITAL SYSTEM</td>
<td>274 (14.8%)</td>
<td>0</td>
<td>274</td>
<td>223 51</td>
<td>260</td>
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<tr>
<td>Cervix Uteri</td>
<td>51 (2.8%)</td>
<td>0</td>
<td>51</td>
<td>24 27</td>
<td>48</td>
</tr>
<tr>
<td>Corpus &amp; Uterus, NOS</td>
<td>128 (6.9%)</td>
<td>0</td>
<td>128</td>
<td>124 4</td>
<td>124</td>
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<tr>
<td>Corpus Uteri</td>
<td>121</td>
<td>0</td>
<td>121</td>
<td>118 3</td>
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<tr>
<td>Uterus, NOS</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>6 1</td>
<td>6</td>
</tr>
<tr>
<td>Ovary</td>
<td>47 (2.5%)</td>
<td>0</td>
<td>47</td>
<td>46 1</td>
<td>43</td>
</tr>
<tr>
<td>Vagina</td>
<td>4 (0.2%)</td>
<td>0</td>
<td>4</td>
<td>2 2</td>
<td>4</td>
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<tr>
<td>Vulva</td>
<td>29 (1.6%)</td>
<td>0</td>
<td>29</td>
<td>13 16</td>
<td>27</td>
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<tr>
<td>Other Female Genital Organs</td>
<td>15 (0.8%)</td>
<td>0</td>
<td>15</td>
<td>14 1</td>
<td>14</td>
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<tr>
<td>MALE GENITAL SYSTEM</td>
<td>265 (14.3%)</td>
<td>265</td>
<td>0</td>
<td>249 16</td>
<td>257</td>
</tr>
<tr>
<td>Prostate</td>
<td>255 (13.8%)</td>
<td>255</td>
<td>0</td>
<td>239 16</td>
<td>247</td>
</tr>
<tr>
<td>Testis</td>
<td>6 (0.3%)</td>
<td>6</td>
<td>0</td>
<td>6 0</td>
<td>6</td>
</tr>
<tr>
<td>Penis</td>
<td>2 (0.1%)</td>
<td>2</td>
<td>0</td>
<td>2 0</td>
<td>2</td>
</tr>
<tr>
<td>Other Male Genital Organs</td>
<td>2 (0.1%)</td>
<td>2</td>
<td>0</td>
<td>2 0</td>
<td>2</td>
</tr>
<tr>
<td>URINARY SYSTEM</td>
<td>143 (7.7%)</td>
<td>96</td>
<td>47</td>
<td>136 7</td>
<td>120</td>
</tr>
<tr>
<td>Urinary Bladder</td>
<td>59 (3.2%)</td>
<td>40</td>
<td>19</td>
<td>55 4</td>
<td>50</td>
</tr>
<tr>
<td>Kidney &amp; Renal Pelvis</td>
<td>76 (4.1%)</td>
<td>50</td>
<td>26</td>
<td>73 3</td>
<td>65</td>
</tr>
<tr>
<td>Ureter</td>
<td>7 (0.4%)</td>
<td>5</td>
<td>2</td>
<td>7 0</td>
<td>4</td>
</tr>
<tr>
<td>Other Urinary Organs</td>
<td>1 (0.1%)</td>
<td>1</td>
<td>0</td>
<td>1 0</td>
<td>1</td>
</tr>
<tr>
<td>BRAIN &amp; OTHER NERVOUS SYSTEM</td>
<td>42 (2.3%)</td>
<td>12</td>
<td>30</td>
<td>40 2</td>
<td>33</td>
</tr>
<tr>
<td>Brain</td>
<td>14 (0.8%)</td>
<td>8</td>
<td>6</td>
<td>13 1</td>
<td>6</td>
</tr>
<tr>
<td>Cranial Nerves Other Nervous System</td>
<td>28 (1.5%)</td>
<td>4</td>
<td>24</td>
<td>27 1</td>
<td>27</td>
</tr>
</tbody>
</table>
## 2017 Primary Site Table – Cancer Cases (continued)

<table>
<thead>
<tr>
<th>Primary Site</th>
<th>Total (%)</th>
<th>M</th>
<th>F</th>
<th>Class of Case</th>
<th>Sex</th>
<th>Status</th>
<th>Stage Distribution - Analytic Cases Only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stage</td>
</tr>
<tr>
<td>ENDOCRINE SYSTEM</td>
<td>49 (2.6%)</td>
<td>14</td>
<td>35</td>
<td>48</td>
<td>1</td>
<td>49</td>
<td>0</td>
</tr>
<tr>
<td>Thyroid</td>
<td>42 (2.3%)</td>
<td>9</td>
<td>33</td>
<td>41</td>
<td>1</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>Other Endocrine including Thymus</td>
<td>7 (0.4%)</td>
<td>5</td>
<td>2</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>LYMPHOMA</td>
<td>65 (3.5%)</td>
<td>36</td>
<td>29</td>
<td>63</td>
<td>2</td>
<td>54</td>
<td>11</td>
</tr>
<tr>
<td>Hodgkin Lymphoma</td>
<td>7 (0.4%)</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Non-Hodgkin Lymphoma</td>
<td>58 (3.1%)</td>
<td>32</td>
<td>26</td>
<td>56</td>
<td>2</td>
<td>47</td>
<td>11</td>
</tr>
<tr>
<td>NHL - Nodal</td>
<td>27</td>
<td>18</td>
<td>9</td>
<td>26</td>
<td>1</td>
<td>21</td>
<td>6</td>
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<tr>
<td>NHL - Extranodal</td>
<td>31</td>
<td>14</td>
<td>17</td>
<td>30</td>
<td>1</td>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td>MYELOMA</td>
<td>25 (1.4%)</td>
<td>10</td>
<td>15</td>
<td>21</td>
<td>4</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>Myeloma</td>
<td>25 (1.4%)</td>
<td>10</td>
<td>15</td>
<td>21</td>
<td>4</td>
<td>19</td>
<td>6</td>
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<tr>
<td>LEUKEMIA</td>
<td>41 (2.2%)</td>
<td>26</td>
<td>15</td>
<td>39</td>
<td>2</td>
<td>28</td>
<td>13</td>
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<tr>
<td>Lymphocytic Leukemia</td>
<td>18 (1.0%)</td>
<td>12</td>
<td>6</td>
<td>16</td>
<td>2</td>
<td>15</td>
<td>3</td>
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<tr>
<td>Acute Lymphocytic Leukemia</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
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<td>3</td>
<td>1</td>
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<tr>
<td>Chronic Lymphocytic Leukemia</td>
<td>12</td>
<td>8</td>
<td>4</td>
<td>11</td>
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<td>10</td>
<td>2</td>
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<tr>
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<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
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<tr>
<td>Myeloid &amp; Monocytic Leukemia</td>
<td>22</td>
<td>13</td>
<td>9</td>
<td>22</td>
<td>0</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Acute Myeloid Leukemia</td>
<td>16</td>
<td>9</td>
<td>7</td>
<td>16</td>
<td>0</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Acute Monocytic Leukemia</td>
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<td>1</td>
<td>1</td>
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<td>1</td>
<td>0</td>
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<tr>
<td>Chronic Myeloid Leukemia</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Other Myeloid/Monocytic Leukemia</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other Leukemia</td>
<td>1 (0.1%)</td>
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<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>MESOTHELIOMA</td>
<td>5 (0.3%)</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Mesothelioma</td>
<td>5 (0.3%)</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>MISCELLANEOUS</td>
<td>50 (2.7%)</td>
<td>22</td>
<td>28</td>
<td>46</td>
<td>4</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>50 (2.7%)</td>
<td>22</td>
<td>28</td>
<td>46</td>
<td>4</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,850</td>
<td>843</td>
<td>1,007</td>
<td>1,717</td>
<td>133</td>
<td>1,543</td>
<td>307</td>
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</tbody>
</table>
Billings Clinic Top 5 Cancers for 2017

**Men**
- Kidney & Renal: 50 cases
- Colon & Rectal: 57 cases
- Lung: 76 cases
- Melanoma: 88 cases
- Prostate: 255 cases

**Women**
- Colon & Rectal: 74 cases
- Breast: 231 cases
- Melanoma: 56 cases
- Lung: 82 cases
- Uterine Corpus: 128 cases
Accomplishments

- Berens, P. – Lean Six Sigma Yellow Belt Certification
- Beverly, N. – Lean Six Sigma Yellow Belt Certification
- Blaseg, K. – Lean Six Sigma Green Belt Certification
- Bosket, K. – OCN Certification
- Bottsford-Miller, J. – Board Certification in OB/Gyn and Gynecologic Oncology
- Bottsford-Miller, J. – Lean Six Sigma Yellow Belt Certification
- Bowman, C. – Lean Six Sigma Yellow Belt Certification
- Brant, J. – The Mary Pazdur Award: Excellence in Advance Practice Oncology
- Britton, H. – Lean Six Sigma Yellow Belt Certification
- Carr, M. – Lean Six Sigma Yellow Belt Certification
- Hansen, C. – Lean Six Sigma Yellow Belt Certification
- Hilliard, A. – Lean Six Sigma Yellow Belt Certification
- Howard, A. – BCOP Certification
- Jones, D. – Advanced Certified Hospice and Palliative Care Nurse Practitioner
- Jones, D. – National Certification Hospice and Palliative Care
- Kapsner, J. – OCN Certification
- Klebe, K. – Lean Six Sigma Yellow Belt Certification
- Krumm, L. – OCN Certification
- Martin, C. – Lean Six Sigma Yellow Belt Certification
- Nichols, P. – CNML Certification
- Nichols, P. – Lean Six Sigma Yellow Belt Certification
- Olson, A. – Lean Six Sigma Yellow Belt Certification
- Schye, C. – BMT Tandem Meetings, including FACT Quality Bootcamp
- Shelton, L. – Advanced Lymphedema Management Certification
- Sides, L. – Lean Six Sigma Yellow Belt Certification
- Sirek, M. – Board of Pharmacy Specialties in Ambulatory Care (BCACP)
- Skogen, K. – OCN Certification
- Thararoop, J. – Doctorate of Clinical Nutrition, Maryland University of Integrative Health
- Thompson, B. – Lean Six Sigma White Belt Certification
- Thompson, J. – Lean Six Sigma Yellow Belt Certification
- West, N. – Lean Six Sigma Yellow Belt Certification
- Williams, J. – CTR Certification
- Wirkman-Lear, S. – Lean Six Sigma Yellow Belt Certification

Awards

- Aders, K. – Service Star, Billings Clinic
- Berens, P. – Outstanding Nurse, Billings Clinic
- Bowker, D. – Great Catch Award
- Lee, SY – Service Star, Billings Clinic
- Sirek, M. – National Community Oncology Dispensing Association (NCODA) Oral Chemotherapy Education Committee co-chair

(continued on page 26)
Publications


(continued on page 27)
Accomplishments, Awards, Publications & Presentations (continued)

Poster Presentations

- Thararoop, J. (2018). Exploration of Factors Related to Inflammatory Depression. Poster Session, Maryland University of Integrative Health, Laurel, MD.

Podium Presentations (National)

- Brant, J. M. (2018). ONS Nursing Day and Palliative Care Keynote*, United Arab Emirates Cancer Congress, Dubai, UAE.

(continued on page 28)
Podium Presentations (Local/Regional)

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For the Physician/Provider Communication Line, please call (406) 255-8411 or 1-800-325-1774.

For questions about cancer or if you need a physician, please call HealthLine nurses at (406) 255-8400 or 1-800-252-1246.

billingsclinic.com/cancer