2018 CANCER CONTROL ANNUAL REPORT

Academic Comprehensive Cancer Program
Accredited by the American College of Surgeons Commission on Cancer
The American College of Surgeons has designated University Medical Center of Southern Nevada as an Academic Comprehensive Cancer Program and is currently the only program of its kind in the state of Nevada. This designation indicates that the hospital program has met very stringent requirements for the care of cancer patients. UMC Medical Staff Cancer Control Committee supervises the program. The UMC Academic Comprehensive Cancer Program offers a full range of diagnostic and treatment capabilities for the patients who have been found to have one of the many forms of cancer. The staff of the Academic Comprehensive Cancer Program includes physicians with special interest, training, and abilities in the care of the cancer patient. Members of the UMC medical staff with special interests in oncology include internal medicine, obstetrics/gynecology, thoracic and cardiovascular surgery, general surgery, colorectal surgery, genitourinary surgery, neurosurgery, pediatrics, plastic surgery, radiology, and pathology.

The specially trained and experienced nursing staff is of vital importance in the management of the patient. The separate oncology nursing unit assures continuity of care for our patients to include rehabilitation, home health care, palliative and hospice care. An Oncology Nurse Navigator provides specialized assistance for the community, patients, families, and caregivers to assist in overcoming barriers to receiving care and facilitating timely access to clinical services and resources. Treatment may require surgical care, radiation and/or chemotherapy/biotherapy administration for adults and pediatric patients. Radiation treatment is provided by an affiliation with the 21st Century Oncology Radiation Center. Radioactive iodine therapy is provided for thyroid cancer patients needing inpatient services related to this type of cancer-directed therapy. The Nevada Cancer Research Foundation – one of 34 designated sites for the NCI Community Oncology Research Program (NCORP) which provides cancer patients with participation in clinical trials and supports the physicians in their care of the patient. The Pharmacy Department plays an active role in the preparation of chemotherapy/biotherapy, pain control and assistance with research protocols. With their expertise, the pharmaceutical services ensure safe and accurate distribution of medications. Pharmacists are responsible for compliance with ASCO/ONS Chemotherapy Administration Safety Standards and the American Society of Hospital Pharmacists, OSHA guidelines for chemotherapy/biotherapy preparation, handling, and dispensing of chemotherapeutic and biological agents.

Rehabilitation of patients is done with the assistance of the UMC Rehabilitation Center, the HOPE Chaplains and counseling programs at UMC and the American Cancer Society. The American Cancer Society (ACS) provides the Look Good Feel Better (LGFB) Program in the community. The LGFB program is free and teaches beauty techniques to women in active treatment to help them with appearance-related side effects of cancer treatment. A general Cancer Survivor Support Group is facilitated on-site at the UMC Healthy Living Institute. A full-time Social Worker is available to oncology patients related to psychosocial needs. An enterostomal therapist is available to provide specialized care and treatment for patients with ostomies, skin problems, decubitus ulcers and draining wounds. Patients receive pre-and-post operative counseling, treatment and education.

Registered Dietitians are available to provide adequate nutritional support to patients receiving supplements, such as TPN or tube feedings, and to assist with planning special menus. The Cancer Control Committee supervises the Academic Comprehensive Cancer Program. Professional educational programs include CME activity and the UMC Tumor Board, which reviews cases and furnishes an annual review of cancer diagnosis and therapy. The committee is responsible for supervision of the cancer registry, participation in studies of the American College of Surgeons and the publishing of the Cancer Control Annual Report.
2018 Cancer Control Committee Members

JOHN ELLERTON, M.D., C.M.
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DIAGNOSTIC RADIOLOGIST

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PHARMD, PHARMACIST – ALT

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JUNE 2017-JULY 2018
ONCOLOGY CERTIFIED NURSE

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CLINICAL RESEARCH REPRESENTATIVE

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CANCER REGISTRAR
CANCER REGISTRY QUALITY COORDINATOR

SALLY SABAN, RD
DIRECTOR OF CLINICAL NUTRITION

CHRISTOPHER FREHNER
DIRECTOR OF REHABILITATION SERVICES
REHABILITATION SERVICES REPRESENTATIVE

MARIA ZENQUIS, LSW
ONCOLOGY SOCIAL WORKER
PSYCHOSOCIAL SERVICES COORDINATOR

PAM NORCIA, LCSW
DIRECTOR OF SOCIAL SERVICES
PALLIATIVE CARE REPRESENTATIVE

KENDALL LYONS
AMERICAN CANCER SOCIETY REPRESENTATIVE

JOSIAH LAROW
AMERICAN CANCER SOCIETY REPRESENTATIVE - ALT
MEDICAL

CME program entitled Integrating New Therapies into Treatment Regimens for Gastric and Gastroesophageal Cancer was held on Friday, May 11, 2018. Presented by, Katherine Van Loon, M.D., MPH, Director, Global Cancer Program, Helen Diller Family Comprehensive Cancer Center, University of California-San Francisco, CA.

EDUCATIONAL OBJECTIVES:
This program is designed to address the IOM competencies: provide patient-centered care and employ evidence-based practice. At the conclusion of this activity, participants should be able to demonstrate the ability to:

• Evaluate the current evidence across multiple lines of therapy and appropriately sequence therapies for gastric and GEJ cancers.
• Mitigate toxicities associated gastric cancer treatment regimens to improve patient outcomes.
• Evaluate the safety and efficacy data for emerging therapies for gastric and GEJ cancers.

TARGET AUDIENCE: This activity is intended for community-based medical oncologists, surgical oncologists, radiation oncologists, oncology nurses, and the rest of the multidisciplinary care team for gastric and GEJ cancers.

ACCREDITATION: This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint provider-ship of the Potomac Center for Medical Education and Rockpointe Oncology. The Potomac Center for Medical Education is accredited by the ACCME to provide continuing medical education for physicians.

CREDIT DESIGNATION: The Potomac Center for Medical Education designates this live activity for a maximum of 1.0 AMA PRA Category 1 Credit™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

ATTENDANCE:
Number of physicians = 10
Number of nurses = 2
Number of ancillary staff (CTR) = 1

CME program entitled Optimizing the Use of Novel Agents for the Treatment of Leukemia was held on Friday, September 28, 2018. Presented by, Hetty Carraway, MD, MBA, FACP Associate Professor of Medicine Learner College of Medicine of Case Western Reserve Vice Chair of Strategy and Cancer Programming Taussig Cancer Institute, Cleveland Clinic Cleveland, OH

EDUCATIONAL OBJECTIVES:
At the conclusion of this activity, participants should be able to demonstrate the ability to:

• Increase awareness of the importance of long-term safety with BCR-ABL TKIs in CML management for individualized treatment based on patient history and any comorbidities.
• Improve awareness of FDA-approved agents and/or therapies under development for the treatment of AML and ALL.
• Incorporate FDA-approved agents and therapies under development into treatment paradigms for AML and ALL.
TARGET AUDIENCE:
This activity is intended for community-based hematologists/oncologists and other clinicians involved in the care of patients with leukemia.

ACCREDITATION:
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint provider-ship of the Potomac Center for Medical Education and Rockpointe Oncology. The Potomac Center for Medical Education is accredited by the ACCME to provide continuing medical education for physicians.

CREDIT DESIGNATION:
The Potomac Center for Medical Education designates this live activity for a maximum of 1.0 AMA PRA Category 1 Credit™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

ATTENDANCE:
Number of physicians = 7
Number of nurses = 1
Number of pharmacists = 1
Number of ancillary staff = 3 (two Tumor Registry and one Clinical Research Associate)

CME program entitled Use of Novel Combination Therapies in the Treatment of Advanced HR+/HER2- Breast Cancer was held on Friday, October 12, 2018.
Presented by Pavani Chalasani, MD, MPH
Assistant Associate Professor of Medicine
Program Director, Hematology-Oncology Fellowship
Disease Oriented Team Leader
Breast Cancer Multidisciplinary Team
University of Arizona Cancer Center
Tuscon, AZ

EDUCATIONAL OBJECTIVES:
At the conclusion of this activity, participants should be able to demonstrate the ability to:

- Evaluate the updated clinical guidelines for combination therapies in the treatment of HR+/HER2- advanced breast cancer patients.
- Integrate clinical data regarding the use of CDK4/6 inhibitors and mTOR inhibitors to treat HR+/HER2- advanced breast cancer, including appropriate subpopulations.
- Mitigate toxicities associated with multi-drug treatment regimens to improve patient outcomes.
- Recognize potential drug-drug interactions to plan effective and safe treatment regimens for each patient.

TARGET AUDIENCE:
This activity is intended for community-based medical oncologists and other clinicians involved in the care of patients with advanced or metastatic breast cancer.

ACCREDITATION:
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint provider-ship of the Potomac Center for Medical Education and Rockpointe Oncology. The Potomac Center for Medical Education is accredited by the ACCME to provide continuing medical education for physicians.
MEDICAL
The Potomac Center for Medical Education designates this live activity for a maximum of 1.0 AMA PRA Category 1 Credit™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

ATTENDANCE:
- Number of physicians = 5
- Number of nurses = 1
- Number of pharmacists = 2
- Number of ancillary staff = 2 (one Tumor Registry staff and one CME Coordinator)

CME program entitled **Orienteering on the Complex Treatment Landscape of EGFR-Mutant NSCLC: Latest Evidence to Guide Clinical Decisions in Everyday Community Practice** was held on Friday, November 2, 2018.

Presented by, Sukhmani Padda, MD
Associate Professor of Medicine (Oncology)
Stanford Cancer Institute/Stanford University School of Medicine
Stanford, CA

EDUCATIONAL OBJECTIVES:
At the conclusion of this activity, participants should be able to demonstrate the ability to:
- Discuss the latest evidence and recommendations for use of tissue- and blood-based biomarker testing for evaluation of EGFR mutation status in different settings throughout the continuum of advanced/metastatic NSCLC.
- Assess data from clinical trials evaluating standard and novel EGFR TKIs and combinations in the first-line treatment of advanced EGFR-mutant NSCLC.
- Analyze data from clinical trials evaluating approved and investigational therapies and combinations for management of NSCLC with acquired resistance to initial EGFR TKIs.
- Describe the latest practice guidelines and/or expert recommendations for optimal management of EGFR-mutant NSCLC throughout the continuum of advanced/metastatic disease.
- Develop individualized, genotype-directed, evidence-based treatment plans for patients with NSCLC exhibiting EGFR mutations throughout the continuum of advanced disease, taking into account all the relevant tumor, treatment, and patient-related factors as well as patient needs and preferences.

TARGET AUDIENCE:
This activity has been designed to meet the educational needs of oncologists, pathologists, nurses, advanced practice clinicians, and other healthcare providers involved in the management of patients with NSCLC.

ACCREDITATION:
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Medical Learning Institute, Inc. and PVI, PeerView Institute for Medical Education. The Medical Learning Institute, Inc. is accredited by the ACCME to provide continuing medical education for physicians.
CREDIT DESIGNATION:
The Medical Learning Institute, Inc. designates this live activity for a maximum of 1.0 AMA PRA Category 1 CreditTM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

NURSES:
Medical Learning Institute, Inc. Provider approved by the California Board of Registered Nursing, Provider Number 15106, for 1.0 contact hour(s).

MEDICAL
ATTENDANCE:
• Number of physicians = 4
• Number of nurses = 3
• Number of pharmacists = 1
• Number of ancillary staff = 2 (two Tumor Registry staff)

CME program entitled **Teaming Up to Improve Outcomes in Advanced Hepatocellular Carcinoma A Tumor Board Evaluating the Potential of Immunotherapy and Novel Targeted Approaches** was held on Friday, November 16, 2018. Presented by, Richard Kim, MD
Associate Professor, Service Chief GI Medical Oncology
Moffit Cancer Center
Tampa, FL

EDUCATIONAL OBJECTIVES:
At the conclusion of this activity, participants should be able to demonstrate the ability to:
• Describe safety and efficacy data for currently approved and emerging systemic targeted therapies for advanced HCC.
• Explain the role of immune checkpoint proteins in tumor biology, the mechanism of action of checkpoint inhibitors, and the rationale for targeting immune checkpoints for the treatment of advanced HCC.
• Discuss safety and efficacy data from clinical trials for immune checkpoint inhibitors in advanced HCC including the management of immune-related adverse events.
• Select appropriate treatment options, including enrollment in a clinical trial, for patients with advanced HCC by comparing the safety and efficacy of approved versus emerging systemic targeted therapies and immunotherapies.

TARGET AUDIENCE:
This activity has been designed to meet the educational needs of medical oncologists, hepatologists, interventional radiologists, hepatobiliary surgeons, pathologists, radiologists, gastroenterologists, advanced practice oncology clinicians, nurses, and other clinicians involved in the care of patients with hepatocellular carcinoma.

ACCREDITATION:
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Medical Learning Institute, Inc. and PVI, PeerView Institute for Medical Education. The Medical Learning Institute, Inc. is accredited by the ACCME to provide continuing medical education for physicians.
CREDIT DESIGNATION:
The Medical Learning Institute, Inc. designates this live activity for a maximum of 1.0 AMA PRA Category 1 Credit™. Physicians should claim only the credit commensurate with the extent of their participation in the activity. Nurses: Medical Learning Institute, Inc. Provider approved by the California Board of Registered Nursing, Provider Number 15106, for 1.0 contact hour(s).

ATTENDANCE:
- Number of physicians = 4
- Number of nurses = 2
- Number of ancillary staff = 1

NURSING EDUCATION:
Oncology Nursing Symposium – April 7, 2018
Greater Las Vegas Chapter Oncology Nursing Society 16th Annual Oncology Nursing Symposium
Presentations:
- B-Cell Malignancies
  Amy L Goodrich, RN, MSN, CRNP-AC
  Safe Handling of Hazardous Drugs, Impact of USP 800
- Ginger Fidel, MSN, RN, OCN, CNL
  Palliative Care
  Emily Brown, APN
  Cranio-Sacral Energy Work
  Julie Jensen
  Pancreatic Cancer – A Disease State Review
- Susan Yee, BSN, RN, OCN
  Personalized Treatment Strategies in Multiple Myeloma and the Impact on Patient Care
- Karolina Faysman, NP
  6.0 CNE contact hours were awarded through this program.

Acronym Glossary
- ACS - American Cancer Society
- AJCC - American Joint Commission on Cancer
- NCORP - NCI Community Oncology Research Program
- CME - Continuing Medical Education
- CNE - Continuing Nursing Education
- ONS - Oncology Nursing Society
- OSHA - Occupational Safety and Health Association
- UMC - University Medical Center
The American Cancer Society estimated there will be over 250,000 new cases of invasive breast cancer diagnosed in 2018. In addition, there will be over 63,000 new cases of non-invasive (in situ) breast cancer. In Nevada it is estimated that there will be over 2000 new cases in females. In January of 2018 there was more than 3.1 million with a history of breast cancer. This includes women who are currently being treated or have been previously treated.

There are several risk factors for breast cancer: age, race, an individual or family history of breast cancer, history of ovarian cancer, genetic predisposition, estrogen exposure, high risk pathology from previous biopsies, lifestyle and radiation exposure. An individual's risk of developing breast cancer can be calculated with a risk assessment tool (www.cancer.gov/bcrisktool). The majority of breast cancers (85%) occur in women who have no family history of breast cancer. It's only 5-10% of breast cancers that can be linked to gene mutations inherited from one's parents. The BRCA1 and BRCA2 are the most common. Women who have a BRCA mutation have a 50 - 80% chance of developing breast cancer. If a woman has a strong family history of breast cancer and are consider high risk, genetic counseling should be made available. The non-genetic breast cancers occur due to genetic mutations that happen as a result of the aging process. The most significant risk factors for breast cancer are gender (being a woman) and age.

The University Medical Center of Southern Nevada (UMC) is the county hospital of Clark County, Las Vegas, NV. UMC serves all residents of the county, but mostly the underserved population of the community being that of the socioeconomic disadvantaged, minorities and financially disadvantaged. UMC serves all members of the community and does have a mix of patients and pay sources.

The cancer data of UMC for breast cancer cases from 2007-2016 was reviewed. There were 641 cases of breast cancer diagnosed during this time period. There were 13% (81) stage 0, 22% (138) stage I, 26% (166) stage II, 16% (102) stage III, 16% (105) stage IV and 7% (45) unknown. When compared to the National Cancer Database (NCDB Benchmark Reports) there were more cases diagnosed at later stages (III and IV) and less as in situ (0) and early stage (I and II).

Most patients presenting with breast cancer were over 50 years of age, by definition postmenopausal. There were no patients below the age of 20, with 6 patients between 20-29 years old, 56 patients between age 30-39, 123 patients between age 40-49, 187 between age 50-59, 163 between age 60-69, and 82 between 70-79 years of age and 24 over the age of 80. The most common histologic type was infiltrating ductal carcinoma, which is consistent with the NCDB data.
Although the majority of patients did have a pay source there was a higher percentage of patients who were uninsured, 20.28% vs 2.85% for other Academic Cancer Program Hospitals. This is probably reflective of the fact that UMC is the county hospital of Clark County serving mostly underserved, socioeconomically disadvantaged of the community. In addition, UMC serves a diverse ethnic population which is also reflected in its breast cancer patients. The ethnic breakdown was as follows: Caucasian 55%, Black 18%, Hispanic 13%, Asian and Pacific Islander 13%, and Unknown at 1%.

In addition, we looked at our data from 2015-2016 to evaluate if National standards related to axillary staging were being performed. The National Comprehensive Cancer Network recommends axillary staging usually as a sentinel node biopsy when treating invasive breast cancer. During that period there was a total of 81 patients had cancer directed breast surgery at University Medical Center. Of these cases 14 patient did not have lymph node sampling. In that group 8 patient had a diagnosis of ductal carcinoma in situ, 2 diagnosis of sarcoma, 1 case incidental finding after prophylactic mastectomy. There were 3 patients that did not have axillary staging because either they had neoadjuvant therapy, or the sentinel node could not be identified. These three cases are non-concordant with NCCN guidelines and should have had an axillary dissection. Further analysis of these cases and evaluation of other years is needed to determine if there is a particular reason for the guidelines not being followed.

In reviewing our data, UMC has provided a valuable resource to the community of Clark County. We see that even though UMC is the community hospital of the county, it is not only a place for patients without a pay source to receive quality care but it also attracts and is supported by patients who do have a pay source. The screening, diagnosis and treatment of breast cancer is multi-disciplinary. It is through the interaction of multiple departments at UMC, radiology, pathology, surgery, medical oncology, radiation oncology, the outpatient clinics and many others that this care is provided. By continued evaluation of our data we are able to improve and bring quality care to our community. Looking for ways to extend our outreach and improve screening and early detection are goals we will continue to achieve.
The Cancer Registry at UMC is just one of the important parts of an American College of Surgeons approved Academic Cancer Program Hospital Cancer Program. The registry collects, manages, and analyzes data on patients who are diagnosed and/or treated with a malignancy or CNS Tumor at UMC. The Cancer Registry at UMC was established in 1979 and its’ reference year is 2005. There are approximately 9,200 cases in its database (from its’ reference year of 2005) with 902 new cases accessioned into the registry in 2017 and approximately 4,600 patients followed annually. The registry’s primary goal is to assist the hospital in providing optimal care to the cancer patients. To ensure a credible database, the registry performs ongoing quality control checks through IOP (Improving Organizational Performance) improvement procedures on case finding for both pathology and Disease Index List sources of cases. The registry also maintains the quality of registry data with a review of ten percent of analytical cases by Cancer Control Committee Member and also assists with review of a random 10% of the Pathology Reports eligible for CAP (College of American Pathologists) protocols. These findings are reported to the Cancer Control Committee on a quarterly basis. In 2017, the Registry started reporting cases to RQRS and has submitted data to NCDB every month. Also, in 2017, UMC added a Cancer Registry Data Technician to the Registry, to assist the Registrar in all elements of registry function. The Registry also participates in Special Studies required by the Commission on Cancer. They work closely with the Cancer Committee Chair, Cancer Liaison Physician and the Cancer Program Coordinator to assure the hospital maintains its’ approval with the American College of Surgeons. The Registrar annually attends the yearly Education Conference sponsored by the National Cancer Registrars Association (NCRA) and keeps all members of the Cancer Control Committee advised of changes to the CoC Standards that will impact the facility.
UMC 2017 Analytical Malignancies by Primary Pay Source

Not Insured 7%
Insured, NOS 17%
Medicare 30%
Medicaid 6%
Private Insurance 40%

UMC 2013 Analytical Colon Malignancies Survival by AJCC Stage

Percentage of Patients

1 Year 2 Years 3 Years 4 Years 5 Years

Stage I
Stage II
Stage III
Stage IV
Unknown

UMC vs NCDB

2016 Analytic Colon Malignancies by AJCC Stage

Percentage of Patients

Stage O Stage I Stage II Stage III Stage IV Unknown

UMC NCDB

AJCC Stage

UMC vs NCDB
INTRODUCTION
In an effort to provide a cancer prevention and screening program at UMC, a community needs assessment had been completed for 2018. The American Cancer Society, Nevada Cancer Coalition and University Medical Center Tumor Registry data were the main resources for gathering information related to the needs of the community. The Nevada Cancer Coalition is a non-profit collaboration of state and local government, health, medical, and business leaders, researchers, cancer survivors, caregivers, and advocates in Nevada. The Coalition works in partnership with the State of Nevada Comprehensive Cancer Control Program to develop, implement and manage the plan. Thus, the Nevada State Cancer Plan had been developed for the years 2016-2020.

NEVADA DEMOGRAPHICS
With Nevada being the 7th largest state geographically, it is among the fastest growing state in the United States. The population has increased by 12.96 percent between 2006 and 2015 for a total of 2.8 million residents in 2015. There are 17 counties with only 3 of them (Clark, Washoe, and the state capital, Carson City) as urban. The other 14 counties are rural or frontier that equates to pronounced geographic disparities. The average distance between acute care facilities in rural Nevada is 115 miles.

The United States Census Bureau (2013) identifies the greatest percentage of Nevadans as white (52.2%), followed by Hispanic (27.5%), Black (9.0%), Asian (8.1%), and Pacific Islander (0.7%).

CANCER BURDEN IN NEVADA
According to the American Cancer Society, Cancer Facts & Figures 2018, the number of estimated new cancer cases in the United States for all sites and in both sexes is 1,735,350 and an estimated 609,640 cases of cancer death will occur. When looking at the estimated incidence and deaths associated with cancer in the United States, lung and colon cancers show a higher mortality rate than breast cancer for both sexes. New cases of lung cancer are estimated at 234,030 for both sexes and 154,050 cancer deaths are estimated for 2018. Men show a slightly higher incidence of cancer death (n = 83,550) than women (n = 70,500) for lung cancer. With colon cancer, the estimated number of new cases is 97,220 for both sexes and slightly higher incidence for men (n= 49,690) than women (n = 47,530). The estimated number of cancer deaths from colon cancer is 50,630. However, there is a higher estimated number of colon cancer deaths for men (n = 27,390) than women (n = 23,240).

In the state of Nevada, the estimated number of new cancer cases is 14,060 for all sites. Breast cancer is highest estimated number of new cancer cases (n=2,180). Lung cancer is the second highest estimated rate of cancer (n = 2,090) and estimated to be the highest incidence of cancer death (n = 1,380). Next to breast cancer, colorectal cancer is estimated at 1,130 cases and estimated at 520 cases for colorectal cancer deaths. The incidence of melanoma of the skin is estimated at 790 of all cases of cancer in Nevada.

CANCER PROFILES
According to the American Cancer Society Facts and Figures 2018, invasive melanoma accounts for 1% of all skin cancer cases, but is the cause of the majority of skin cancer deaths (n=9,320). Melanoma is commonly diagnosed in non-Hispanic whites (incidence of 26 in 100,000) compared to Hispanics (4 in 100,000) or Blacks (1 in 100,000). The incidence of melanoma has increased over the past 30 years and University Medical Center Tumor Registry data reflects melanoma as one of the top five sites since 2012. With an average elevation of 5,500 feet and around 300 sunny days per year, Nevada’s geography and outdoor culture make it a high-risk state for the incidence of skin cancer. Historically, Nevada’s melanoma rates have been higher than national rates and currently Nevada’s rate per 100,000 for melanoma mortality sits at 2.9, again above the national rate of 2.7 per 100,000.
Other top five sites at University Medical Center since 2012 include breast, colon, and lung cancers. Lung cancer being the top site at UMC since 2012.

COMMUNITY OUTREACH PREVENTION AND SCREENING PROGRAMS

After review of the UMC Community Outreach Needs Assessment for 2018, Cancer Control Committee had determined that a Sun Safety Program would be appropriate as a goal for prevention (CoC Standard 4.1). And, cancer committee had determined two cancer screening programs to include skin and colon cancer screening for 2018. Since colon cancer has been estimated to cause more cancer deaths in both men and women and considered the second-leading cause of cancer deaths (Nevada State Cancer Plan 2016-2020), cancer committee at UMC had decided to continue colon cancer screening using FIT Kits in early detection of colon cancer as a goal for CoC Standard 4.2.

REFERENCES:


American Cancer Society, Cancer Facts & Figures 2018.
REVIEW OF CANCER PROFILES

According to the American Cancer Society Facts and Figures 2018, invasive melanoma accounts for 1% of all skin cancer cases, but is the cause of the majority of skin cancer deaths (n=9,320). Melanoma is commonly diagnosed in non-Hispanic whites (incidence of 26 in 100,000) compared to Hispanics (4 in 100,000) or Blacks (1 in 100,000). The incidence of melanoma has increased over the past 30 years and University Medical Center Tumor Registry data reflects melanoma as one of the top five sites since 2012. With an average elevation of 5,500 feet and around 300 sunny days per year, Nevada’s geography and outdoor culture make it a high-risk state for the incidence of skin cancer. Historically, Nevada’s melanoma rates have been higher than national rates and currently Nevada’s rate per 100,000 for melanoma mortality sits at 2.9, again above the national rate of 2.7 per 100,000.

With colon cancer, the American Cancer Society estimated 97,220 new cases for both sexes in 2018 with a slightly higher incidence for men (n= 49,690) than women (n = 47,530). The estimated number of cancer deaths from colon cancer is 50,630. However, there is a higher estimated number of colon cancer deaths for men (n = 27,390) than women (n = 23,240). In the state of Nevada, the estimated number of new cancer cases is 14,060 for all sites ACS Facts & Figures 2018). Next to breast cancer, colorectal cancer is estimated at 1,130 cases and estimated at 520 cases for colorectal cancer deaths. The incidence of melanoma of the skin is estimated at 790 of all cases of cancer in Nevada.

DATA RELATED TO CANCER PREVENTION (COC STANDARD 4.1) AND SCREENING PROGRAMS (COC STANDARD 4.2)

PREVENTION PROGRAMS

UMC Community Needs Assessment 2018 had revealed a need for providing opportunities for a sun safety program. In addition, the American Cancer Society recommends self-skin checks and learning more about signs/symptoms of skin cancer including melanoma. Therefore, cancer committee at UMC had set a prevention goal to include education related to the effects of the sun and skin cancer prevention through sun safety.

A Sun Safety program was provided on October 11, 2018 that included a lecture on UV radiation, statistics related to skin cancer, health issues related to sun damage, description of skin and skin layers, and skin cancer prevention and screening. Two oncology surgeons (Wydell Williams, M.D. and Daniel Kirgan, M.D.) participated in providing the lecture along with time for Q/A. A pre/posttest was provided to attendees related to skin cancer awareness and sun safety.

OUTCOME:

Results of the pre-test showed that 93.3% of participants needed more education on the effects of ultraviolet radiation. 100% of participants showed a clear understanding of sun safety related to tanning salons and sun protection during the winter months. Only 6.6% of participants needed more education related to skin cancer screenings. Results of the post-test showed 93.3% of participants answered all questions correctly, except one participant that needed more education related to ultraviolet radiation.

SCREENING PROGRAMS:

Although the American Cancer Society does not have guidelines for the early detection of skin cancer, regular self-skin checks and getting to know one’s body is recommended in finding skin cancer early. ACS goes on to say that many physicians also recommend regular skin exams. And, by having regular exams by a physician and self-skin checks frequently, this can help with early detection of skin cancer. Two oncology surgeons provided skin cancer screenings for the participants on October 11, 2018.
Since colon cancer had been estimated to cause more cancer deaths in both men and women and considered the second-leading cause of cancer deaths (Nevada State Cancer Plan 2016-2020), cancer committee at UMC had decided to include colon cancer screening with FIT Testing as a continued goal for CoC Standard 4.2. The Community Outreach Cancer Screening Committee had identified challenges in providing FIT Testing as a method for providing early detection of colon cancer.

**OUTCOMES:**
- Total number of participants for skin checks = 16 (2 males and 14 females)
- Median age of participants = 68 years of age
- Total number of participants for f/u post skin cancer screening = 7
- Total number of participants who followed up with primary care physician or dermatologist = 5
- Total number of participants pending follow up appointment = 2
- Number of diagnoses of skin cancer = 0

**CHALLENGES:**
One challenge was related to FIT testing with coordination of implementing FIT kits in the Primary Cares as a method of providing colon cancer screening in 2018 to include the following: multiple logistical challenges related to lab processing for payment and selection of provider; deployment misunderstandings with front line providers and communication delays led to FIT kit expiration preceding effective deployment.

**EFFECTIVENESS OF PREVENTION AND SCREENING PROGRAMS:**

**PREVENTION:**
As stated previously under the above section Data Related to Cancer Prevention, education related to sun safety and self-skin checks was successful in identifying ways to prevent skin cancer as seen through the pre and post-test results of the sun safety education program.

**SCREENING:**
When analyzing the effectiveness of the skin cancer screening, to date, there were no diagnoses of cancer. This could be related to the small number of participants (n= 16) and/or pending follow up appointments. In addition, the skin cancer screening did not capture the entire body as the program provided spot checks.

Of those screened, approximately 44% of participants needed followed up care with their primary care physician or dermatologist. 72% of participants had been seen for follow up care, 28% of participants had upcoming appointments.

In analyzing the effectiveness of the colon cancer screening program, the FIT Kits posed a challenge to the overall efforts to screening for colon cancer through this method of early detection. The program was not successful in identifying colon cancer through this method.

**RECOMMENDATIONS FROM CANCER COMMITTEE:**
- Continued involvement of the Community Outreach Cancer Screening Committee throughout the entire process of prevention and screening programs, ensuring key departmental personnel involvement in the committee.
- Community Outreach Coordinator to continue meeting with the UMC Community Outreach Cancer Prevention and Screening Committee in developing prevention and screening programs based on the needs of the community for 2018.
COMMUNITY OUTREACH SUMMARY 2018
CoC Standard 1.8 Community Outreach
Doris Cowell, BSN, RN, OCN Clinical Supervisor Oncology Program

ACTIONS:
Under the direction of cancer committee, the Community Outreach Coordinator will follow up with recommendations from cancer committee and coordinate subcommittee meetings related to cancer prevention and screening in an effort to provide community outreach programs that are multidisciplinary and outreaching in the community for 2019.

REFERENCES:
State of Nevada Comprehensive Cancer Control Plan 2016-2020 and is funded by the Division of Public Behavioral Health through grant number CDC DP12-1205 from the Centers for Disease Control and Prevention.


UMC Cancer Registry Data, 2018.
What is an Oncology Nurse Navigator?

Oncology Nurse Navigators, much like a compass or GPS, are experienced oncology nurses that provide education and guidance to patients and their families throughout their cancer journey. They provide support as the patient moves through the full continuum of care, from detection and diagnosis to treatment and survivorship. Nurse navigators function as a liaison between patients, physicians, the hospital and the community.

Questions You Might Ask Your Navigator:
(Source: Conquer-Magazine.com)

Care System Orientation
• Who do I need to see for care now?
• Where do I go for care?
• What type of doctors will I be seeing in the system?
• Can I stay in my community for care?
• Who is the expert in this field?
• What are the contact numbers for my health care team?
• Whom should I call in the evenings and on weekends?
• Can I ask my questions electronically?

Cancer Diagnosis Education
• What type of cancer do I have?
• Are there different types of my cancer?
• What are good Internet resources?
• What tests/scan will be performed?
• What is the treatment for my cancer (surgery, radiation therapy, chemotherapy, immunotherapy, other)?
• What can I expect after surgery?
• What can I expect after my first chemotherapy treatment?
• What is radiation like?
• What can I expect at the surgeon/medical oncologist/radiation visit?
• Why am I being sent to a high-risk clinic?
• What is a survivorship care plan?
• What did the doctor mean by palliative care?

Emotional Support for You
• Who can talk to my spouse/partner?
• What do I tell my children?
• How can I tell my parents?
• Is there someone to discuss financial concerns?
• Will I be able to work?
• Is there a support group?
• I do not feel comfortable in groups. Is there someone I can talk with?
• I cannot grasp all that is happening to me; who can I talk with?
• Assistance with logistics, such as transportation, and costs
• Is there transportation assistance?
• I live far away. Is there an affordable place to stay?
• What are the directions to the appointment/test?
• Is there a support group?
• Can you help me with the copays?

What is an Oncology Nurse Navigator?

In collaboration with the multidisciplinary health care team, the Oncology Nurse Navigator:
• Acts as a patient/family advocate in navigating the health care system.
• Addresses patient and caregiver concerns about the disease and its treatment and provides support throughout the course of treatment.
• Provides one-on-one support and assistance in the coordination of services for patients and their families.
• Evaluates the patient and directs them to the appropriate resources for clinical, emotional, and financial assistance to prevent problems and overcome barriers throughout the course of treatment.
• Provides education to the patient, family members and caregivers throughout the continuum of care.
• Links patients, families and caregivers with appropriate community resources.
• Develops and maintains working relationships with community agencies, health care organizations, and other providers to promote a broad base of support for patients and families.
• Facilitates team support of identified patient and family needs through ongoing communication with clinic team members.
• Serves as a point of contact for patient, family and other caregivers throughout the full continuum of care.
CANCER SURVIVOR SUPPORT GROUP

FIRST TUESDAY EVERY MONTH
6 PM TO 7 PM

FEBRUARY 6TH
MARCH 6TH
APRIL 3RD
MAY 1ST
CANCER SURVIVOR CELEBRATION
5:30 P.M. – 7:30 P.M.
JUNE 5TH
AUGUST 7TH
SEPTEMBER 4TH
OCTOBER 2ND
BREAST CANCER AWARENESS
NOVEMBER 6TH
LUNG CANCER AWARENESS
DECEMBER 4TH
CANCER SURVIVOR HOLIDAY PARTY
5:30 P.M. – 7:30 P.M.