Hennepin County Medical Center
Comprehensive Cancer Program
Annual Cancer Report 2014

Table of Contents

COMPREHENSIVE CANCER PROGRAM PROVIDERS

Hennepin County Medical Director
Dr. Michael Belzer

Oncology Medical Director
Dr. Douglas Rausch

Oncology/Hematology Physicians
Dr. Satya Bommakanti
Dr. Rachel Koreth
Dr. Andres Wiernik

Radiation Oncology
Dr. Natarajan Raman

Surgical Oncology
Dr. Richard Zera
Dr. Joan VanCamp

Thoracic Surgical Oncology
Dr. Mark Solfelt

Oncology Hospice & Palliative Care
Dr. Jeff Rubins

Oncology Nurse Practitioners
Louann Bosmans, RN, MS, CNP, AOCN
Syndal Ortman, APRN, DNP, AOCNP
Cindy Steele, RN, MS, CNP, AOCN

Breast Cancer Clinical Nurse Specialist
Jane VanDeusen-Morrison, RN, MS, AOCN, ACNS-BC

MISSION

We are committed:

- To provide the best possible care to every patient we serve today
- To search for new ways to improve the care we will provide tomorrow
- To educate health care providers for the future
- To ensure access to healthcare for all

VISION

We are committed to being:

- The best place to receive care
- The best place to give care
- The best place to work and learn

VALUES AND BELIEFS

Our service to our patients will be:

- Respectful
- Ethical
- Innovative
- Cost Effective

The Cancer Center is committed to reflecting the diversity of our community through our service to a multicultural population, community outreach, and employment practices.

CANCER CENTER PHONE NUMBERS

Cancer Program Administrative Director
Mary Kurvers (612) 873-2316

Cancer Center Practice Manager
Kelly Porter (612) 873-9763

Cancer Center Clinical Supervisor
Carole McCarthy (612) 873-5471

Cancer & Tumor Data
Chunny Daiker (612) 873-3178
Kathy Lougiu (612) 873-3188

Clinical Trials & Research
Carol Sojos-Schmidt (612) 873-5911

Community Outreach
Julie Pierce (612) 873-9576

Dietitian
Lauren Levandoski (612) 873-9909

Genetics
Annie Burrows (612) 873-9308

Infusion Clinic
(612) 873-6369

Inpatient Nursing
Betsy Grover (612) 873-2565
Dana Pitzen (612) 873-2452

Nancy Geltman Shiller Cancer Library
(612) 873-6369

Oncology Inpatient Units
(612) 873-2639 or (612) 873-2626

Oncology Social Worker
Karen Holdgrafer (612) 873-2256

Oncology Pharmacy
Katie Won (612) 873-6369
Lynn Weber (612) 873-6369

Radiation Oncology Manager
Jane Rogers (612) 873-6878

Survivorship Director
Syndal Ortman (612) 873-3393

CANCER COMMITTEE MEMBERS 2014

As required by the American College of Surgeons (ACoS) Commission on Cancer, The Cancer Committee membership is a multidisciplinary committee; representing physicians from the diagnostic and treatment specialties and non-physicians from other areas of care of the Cancer Program.

PHYSICIAN MEMBERS

Douglas Rausch, MD, Oncology Medical Director, Cancer Committee Chair
Richard Zera, MS, MD, PhD, Surgical Oncology,
Cancer Committee Cancer Liaison Physician, HCMC
American College of Surgeons (ACoS) State Chair, Commission on Cancer
Satya Bommakanti, MD, Medical Oncology
Steven Debol, MD, PhD, Pathology
Kendall Feia, MD, Urology
Rachel Koreth, MD, Medical Oncology
Fred Kravitz, MD, Obstetrics & Gynecology
Gopal Punjabi, MD, Radiology
Natarajan Raman, MD, Radiation Oncology
Jeffrey Rubins, MD, Hospice and Palliative Medicine
Ian Schwartz, MD, Urology
Mark Solfelt, MD, Thoracic Surgical Oncology
Philip Sweetser, MD, Urology
Andres Wiernik, MD, Medical Oncology, Breast Cancer Committee Chair

NON PHYSICIAN MEMBERS

Annie Burrows, MS, CGC, Genetics
Chunny Daiker, BS, RHIT, CTR, Cancer & Tumor Data
Karen Holdgrafer, LICSW, Oncology Social Services
Mary Kurvers, BSN, Administrative Director of Ambulatory Medicine/Specialty Care
Lauren Levandoski, MS, RD, LD, Oncology Dietitian
Tatyana Leyderman, CPHQ, Health Care Data Analyst
Kathy Lougiu, RHIT, CTR, Cancer & Tumor Data
Carole McCarthy, **RN, BSN, OCN,** Oncology Clinical Nurse Supervisor
Anne O'Keefe, American Cancer Society, Health Systems Manager
Syndal Ortman, APRN, DNP, AOCNP, Oncology Nurse Practitioner, Survivorship Director
Julie Pierce, BA, Community Outreach Coordinator
Dana Pitzen, RN, BSN, OCN, Inpatient Medicine, Clinical Care Supervisor
Kelly Porter, RN, BS, OCN, CHPN, Oncology Practice Manager
Jane Rogers, Radiation Oncology Manager
Carol Sojos-Schmidt, BA, RN, OCN, CCRP, Clinical Trials & Research
DeCourcy Squire, PT, CLT-LANA, CI-CS, Rehabilitation
Cindy Steele, MS, RN, CNP, AOCN, Oncology Nurse Practitioner
Jane VanDeusen-Morrison, RN, MS, AOCN, ACNS-BC, Breast Cancer Clinical Nurse Specialist, Patient Navigation
Lynn Weber, PharmD, BCOP, Oncology Pharmacy
Katie Won, PharmD, BCOP, Oncology Pharmacy

Oncology Medical Director
Cancer Committee Chair
Dr. Douglas Rausch

As Chair of the Hennepin County Cancer Committee, I am pleased to present the Annual Cancer Program Report. The 2014 Hennepin County Annual Cancer Program Report will reflect our continued efforts to meet the individual needs of our patients and their families. This report highlights some of our achievements for 2014 and provides statistical analysis of our cancer patients.

Cancer Program Achievements for 2014

- Cancer Center remodeled its existing location and expanded by 4,238 square feet. We hosted a Open House to welcome HCMC staff, the community, and our patients on 2/4/2014.
- Dr. Andres Wiernik's article "Getting It Wrong On Cancer Care" published in July's issue of Forbes Magazine regarding cancer patients and 340B drug discount program.
- Mobile Mammography officially rolled out to the community on 3/4/2014. Providing screening mammography services in convenient locations for patients to increase screening mammography opportunities and provide breast cancer awareness and prevention.
- Smoking Cessation Program piloted in Cancer Center by Oncology Pharmacy. To date, it has a 33% Quit Smoking Success Rate.
- Developed and instituted a Lung Cancer Screening Program following NCCN guidelines by Dr. Gopal Punjabi and his Radiology Department.
- The Pathology Department implemented an auditing system to review lung cancer cases to help ensure that cancer mutation testing is ordered in a timely manner for Stage IV cases.
- 482 patients accessioned into the Cancer Data Registry.
- Awarded the "2014 Livestrong Community Impact Grant". This grant helped to fund & start our Music Therapist in the cancer center. We are happy to welcome our new Music Therapist, Julia Albers.
- 39 patients enrolled in Clinical Trials.
- Screened 120 men and women through the Minnesota Dept of Health Sage Scopes colorectal screening grant.
- Awarded $10,000 grant from Breath of Hope for HCMC to collaborate with the American Indian Cancer Foundation to screen Native American patients.
- 81 cancer patients accessed through Genetic Counseling.
- Cancer Data Registry working closely with the Minnesota Cancer Surveillance team on a 5 year (2014-2019) "Early Case Capture Pediatric Study". This study will capture clinical and pathological diagnosed malignancies & benign brain/CNS tumors in patients 19 years and younger within 4 weeks of diagnosis.
- Hosted 9 Sage Breast & Cervical Screening events, seeing a total of 126 women.
- Our very own Survivorship Director, Syndal Ortman presented "Survivorship & Cancer Rehabilitation" at Medical Grand Rounds.
- Awarded $10,000 from Hope Chest and $25,000 from Komen to help patients with urgent needs.
- Teamed with the Internal Medicine Clinic providers to provide Internal Medicine Services to our Oncology patients. Internal medicine clinics started 6/2/2014 and helped to connect oncology patients to primary care providers.

This year, I am proud to focus our Annual Cancer Report on Lung Cancer. I greatly appreciate Dr. Mark Solfelt in writing the Lung Cancer Report.

Kind Regards,
Doug Rausch, MD

HCMC Cancer Center Open House

HCMC's fully accredited Comprehensive Cancer Center team includes medical, surgical, radiation oncology, advanced practice providers, and specially trained RNs in complementary therapy. It has also been awarded a certificate of approval with commendation from the Commission on Cancer of the American College of Surgeons.

A beautiful dedication given by our Oncology Director, Dr. Doug Rausch.

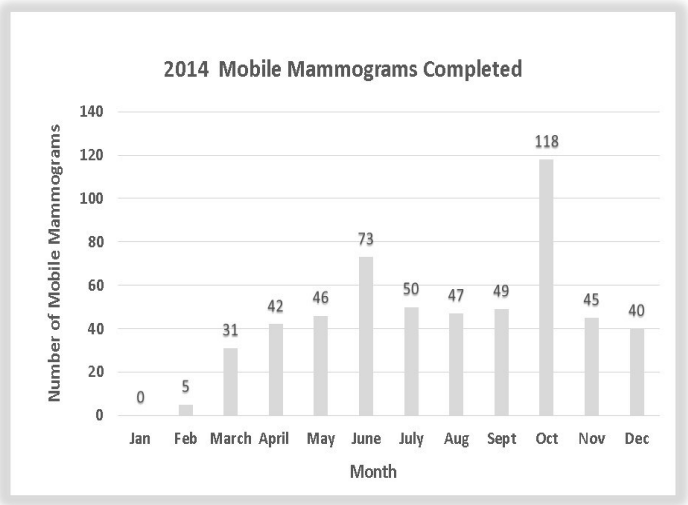
We are proud to have recently completed an expansion and remodel of our existing Comprehensive Cancer Center to better serve our patients and families.

The cancer center team hosted a Open House on February 11, 2014 to welcome HCMC staff, community, and patients.

The newly expanded and remodeled location now provides an additional 4,238 square feet of space to create a more comfortable area for our patients and families.

We were able to provide 5 more exam rooms as well as an additional counseling and special procedure room in a cheerful, comfortable atmosphere bathed in warm lighting.

Mobile Mammography



In our 1st year, 546 mobile mammograms were completed.

Mammography is still the best tool to detect breast cancer in its earliest, most curable stages. It is a very safe procedure that uses low doses of radiation to produce high quality x-rays. Screening mammography is already available at Whittier Clinic and Brooklyn Center Clinic, as well as at our downtown campus. In addition to screening services, our downtown location offers a full range of breast care services, including diagnostic mammography (used when an abnormality is found during a screening mammogram), breast ultrasound, breast MRI, breast biopsies, and surgery. To arrange a mammography appointment, patients may call Radiology at (612) 873-4213.

Mobile Mammography rolled out to the community on March 4th, 2014.

Multi-Disciplinary Lung Cancer Program

Dr. Mark Solfelt
Thoracic Surgical Oncology

Lung cancer continues to be the leading cause of cancer death in the United States, responsible for approximately 160,000 deaths per year. In 2016, it is estimated that lung cancer will account for 13.3% of all new cancer cases but 26.5% of all cancer deaths. More people will die from lung cancer this year than from breast, prostate, colorectal, bladder, melanoma, thyroid, and kidney cancers combined. 75% of new cases nationwide are already in Stage III or IV at the time of diagnosis, reflecting the silent nature of this often aggressive tumor. By the time that lung cancer becomes symptomatic, it is often too advanced to achieve a cure, and more than one half of patients will die within one year of their diagnosis. Despite remarkable progress in survival in many hematologic and solid tumor malignancies, the 5-year survival rate for lung cancer continues to hover around 17%. This dismal statistic reflects many challenges confronting the treatment of lung cancer, including societal shame and avoidance due to the causative role of cigarette smoking, the historical lack of widespread screening in high-risk individuals, under-representation of lung cancer in the world of cancer research and funding, and failure of centers to coordinate lung cancer care in a focused, multi-disciplinary center. HCMC has begun to address these challenges in an intentional way, and our progress in these areas is detailed in this report.

LUNG CANCER STATISTICS

- Lung cancer is the most common cancer worldwide, accounting for 1.8 million new cases and 1.6 million deaths in 2012.
- Smoking is by far the leading risk factor for lung cancer. 9 of 10 Lung Cancers are caused by smoking cigarettes.
- Lung Cancer is the leading cancer killer in both men & women in the United States. 1 in 4 cancer deaths are from lung cancer.
- Nonsmokers have a 20-30% greater chance of developing lung cancer if they are exposed to secondhand smoke at home or work.

HCMC LUNG CANCER DEMOGRAPHIC POPULATION

As depicted in Tables 1, 2, 3 the majority of lung cancer patients treated over the last decade at HCMC were in the 50-69 year-old age group, which reflects a younger patient population than national data, in which the majority of patients are diagnosed in the 65-74 year-old age group. The majority of patients were male, and almost 2/3 of patients were white, consistent with national trends.

Table 1: Lung Cancer by Age at Diagnosis

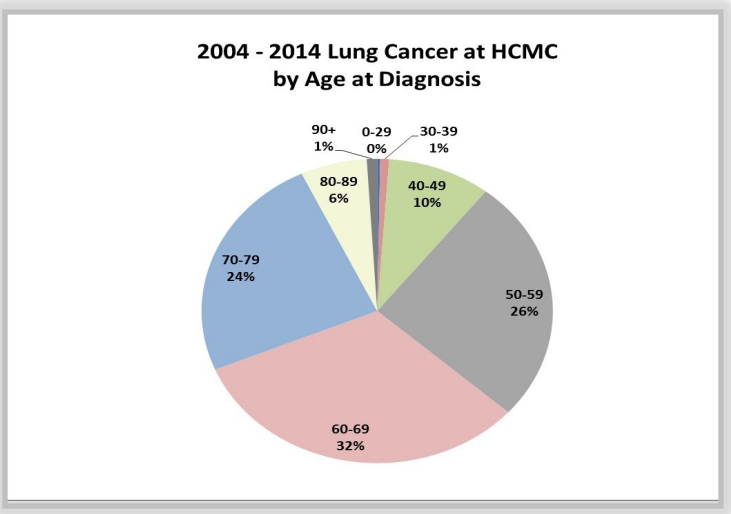


Table 2: Lung Cancer by Gender

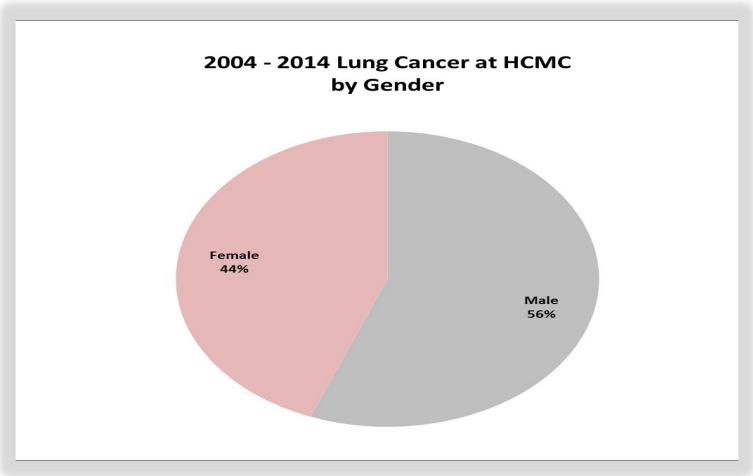
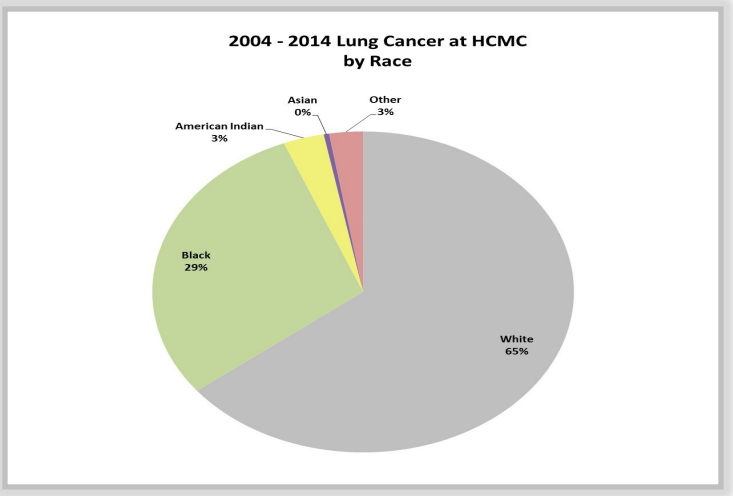


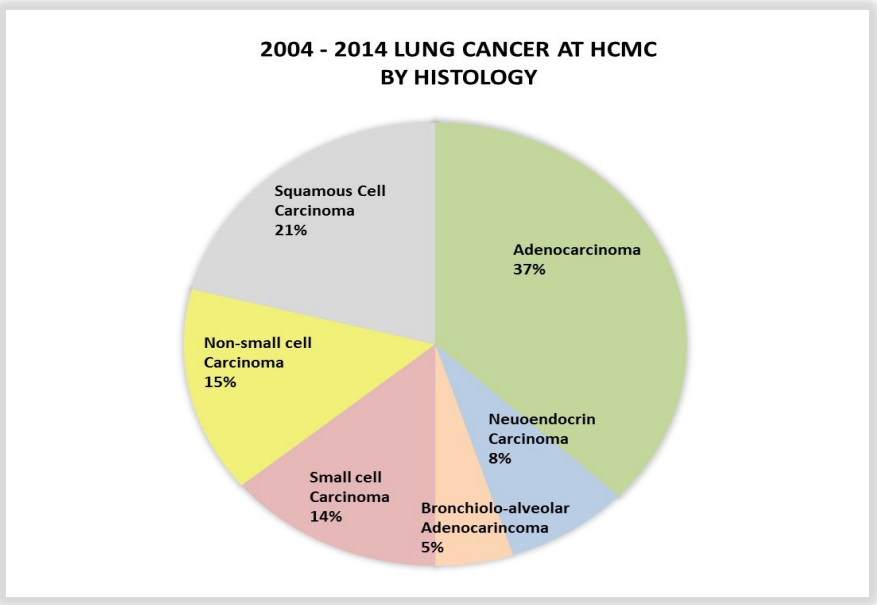
Table 3: Lung Cancer by Race



HCMC LUNG CANCER HISTOLOGY AT DIAGNOSIS

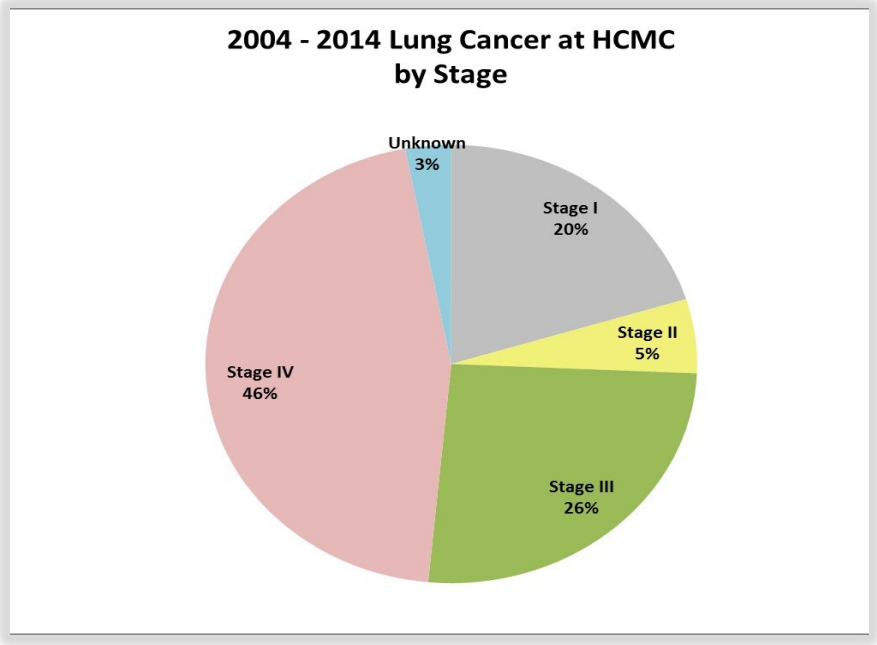
Table 4 national trends of lower incidence of small cell carcinoma. In our population, adenocarcinoma accounted for 37%, and squamous cell carcinoma accounted for 21% of new cases. In all, from 2004 through 2014, 736 patients were diagnosed with primary lung cancer at HCMC. 14% were small cell carcinoma. 8% were neuroendocrine carcinomas, which included typical and atypical carcinoid tumors as well as large cell neuroendocrine tumors.

Table 4: Lung Cancer by Histology



HCMC LUNG CANCER STAGE AT DIAGNOSIS

Table 5: Lung Cancer by Stage



LUNG CANCER SCREENING AT HCMC

As seen above, HCMC has an advanced-stage lung cancer population, with 71% of patients presenting in either stage III or IV. A fundamental goal of care is to diagnose patients at an earlier stage, which would lead to an increase in surgical candidates and higher overall cure rates. In 2011, the results of the National Lung Screening Trial were published (N Engl J Med 2011;365:395-409). There were 20% fewer lung cancer deaths among 53,000 participants screened with low-dose helical CT scan compared to those screened with CXR. The trial ended early due to the promising results, and it led to eventual government funding for lung cancer screening for a high risk population. The criteria for Medicare coverage for lung cancer screening include current and former smokers with at least a 30 pack year smoking history, age 55-74, and those who have quit smoking within the last 15 years. Medicare funding requires consultation with the patient prior to screening to encourage a programmatic approach and avoid random screening without proper interpretation or follow-up.

HCMC does have a compliant lung cancer screening program administered through our Radiology Department. We recently utilized a grant from A Breath of Hope Lung Foundation providing funding for lung cancer screening in the Native American population, just one of several underserved populations in our area. This grant served as an example of a successful partnership with philanthropy in our area to improve patient care and outcomes. In the future HCMC will compete for additional grants to provide community resources and support for our lung cancer patients, who often face uniquely difficult personal and financial challenges in addition to their lung disease.

PULMONARY NODULE CLINIC AT HCMC

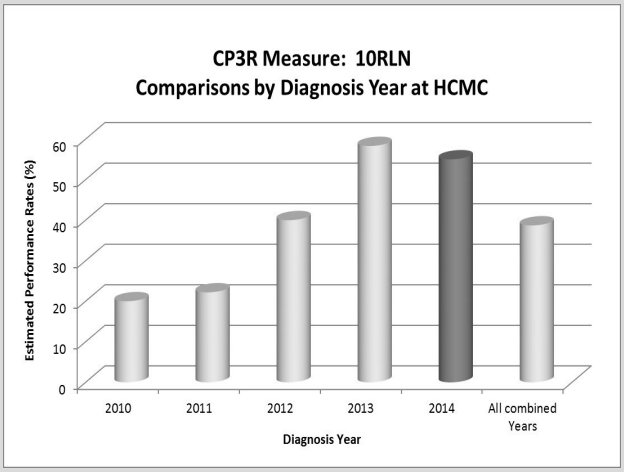
Lung cancer screening, to be fully effective, must occur in the context of a multi-disciplinary approach that brings together Pulmonary Medicine, Medical and Radiation Oncology, Thoracic Surgery, Radiology, Pathology, and Nurse clinicians and navigators, as well as clinical research staff. In the last year, HCMC launched a Pulmonary Nodule Clinic embedded within the Cancer Center and staffed with Pulmonologists. This clinic serves as a destination and initial point of evaluation for patients with lung nodules discovered through screening as well as through other inpatient and outpatient encounters. The Pulmonary Nodule Clinic evaluates each lesion in terms of clinical context, size, initial appearance, and pattern of growth. Algorithms are used when appropriate to recommend intervals of repeat imaging. Immediate on-site consultation is available with Thoracic Surgery and Oncology to streamline decision making and shorten the time to diagnosis and initiation of treatment.

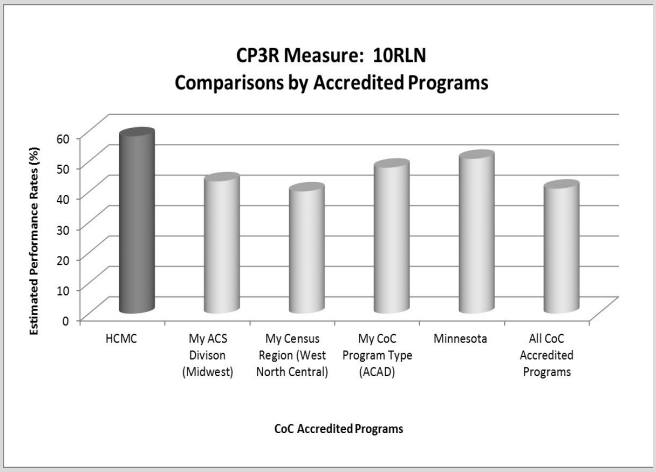
MULTI-DISCIPLINARY LUNG CANCER CENTER

The Pulmonary Nodule Clinic is just one facet of a team approach to lung cancer care at HCMC. The physical proximity of Thoracic Surgery, Medical Oncology, Radiation Oncology, Pulmonary Medicine, Pharmacy and Nursing in the Cancer Center greatly enhances an evidence-based, patient-focused dialogue which is designed to improve early detection and outcomes. Similar programs across the country have resulted in an encouraging shift toward earlier stage disease, with more opportunities for surgical intervention and multi-modality treatment. An on-site clinical research coordinator at HCMC helps identify candidates for clinical trials. A weekly working Tumor Conference, which also includes Pathology and Radiology, allows further coordination of care and input from specialists who are not directly involved in the patient's care. These efforts have already begun to show benefit for our patients in the form of more thorough intra-operative lymph node sampling to ensure accurate staging, as well as timely initiation of neo-adjuvant or adjuvant chemotherapy. These areas of improvement are reflected in Commission on Cancer's Core Measures for Lung , as shown in the Tables Below.

CoC Lung Measure: 10RLN

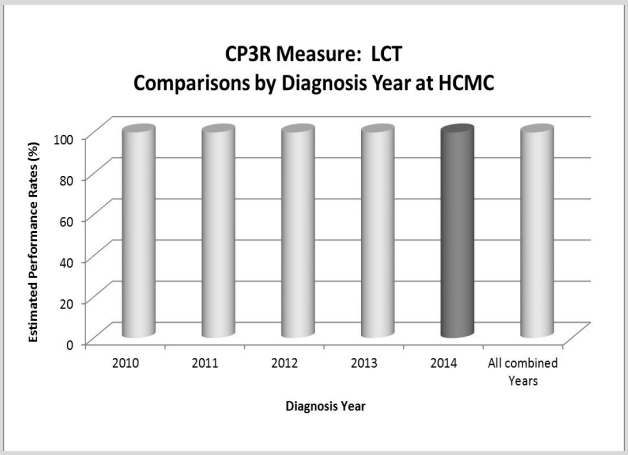
At least 10 regional lymph nodes are removed and pathologically examined for AJCC Stage IA, IB, IIA, and IIB resected NSCLC

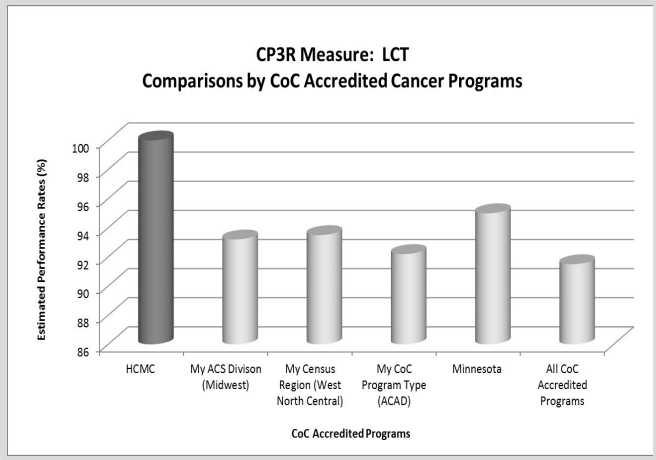




CoC Lung Measure: LCT

Systemic Chemotherapy is administered within 4 months to day preoperatively or day of surgery to 6 months postoperatively, or it is recommended for surgically resected cases with pathologic lymph node positive (pN1) and (pN2) NSCLC





Exciting developments are changing the landscape of lung cancer diagnosis and treatment, and these advances involve every medical specialty. Low-dose CT imaging technology has enabled safer lung cancer screening. Navigational bronchoscopy and endobronchial ultrasound (EBUS), both provided by HCMC practitioners, are assisting in diagnosis and pathologic staging. Robotic lung surgery is greatly reducing the disability and morbidity of lung surgery, expanding the pool of candidates and allowing safer biopsy of small lesions detected by screening. Molecular testing has opened the door for rapid advances of targeted chemotherapy, and indications are expanding for its use. Important advances in immunotherapy are also opening new avenues for chemotherapy. Stereotactic radiosurgery will likely be available at HCMC in the future as facility improvements take place. The Lung Cancer Program at HCMC remains committed to providing outstanding, state-of-the art care in a truly Multi-Disciplinary environment.

Respectfully submitted,

Mark Solfelt, MD

Lung Cancer Screening Program

Dr. Gopal Punjabi

Radiology

Background:

Lung cancer causes about 160,000 deaths every year, more than the next 3 most common cancers (breast, prostate, and colon cancer) combined. 5 year survival for lung cancer 15.6% overall (when confined to lung, 53%; with distant mets, 3.9%)

85% lung ca related to smoking (Lifetime RR of smoking 25).

CXR does not work for screening. NLST results show that LDCT scans work, reduce mortality by 20%.

USPTF class B recommendation (12/31/2013): moderate certainty that the net benefit is moderate to substantial

ACCP, ASCO, ATS, AATS, ACS, NCCN all recommend LDCT, based on NLST criteria.

Inclusion criteria:

Careful patient selection, only high risk

NLST criteria: 55-74 years, 30 pack years smoking (if former smoker, quit <15 years)

USPTF recommendations (adopted by HCMC): 55-79 years, 30 pack years history of smoking (if former smoker, quit <15 years)

Exclusion criteria:

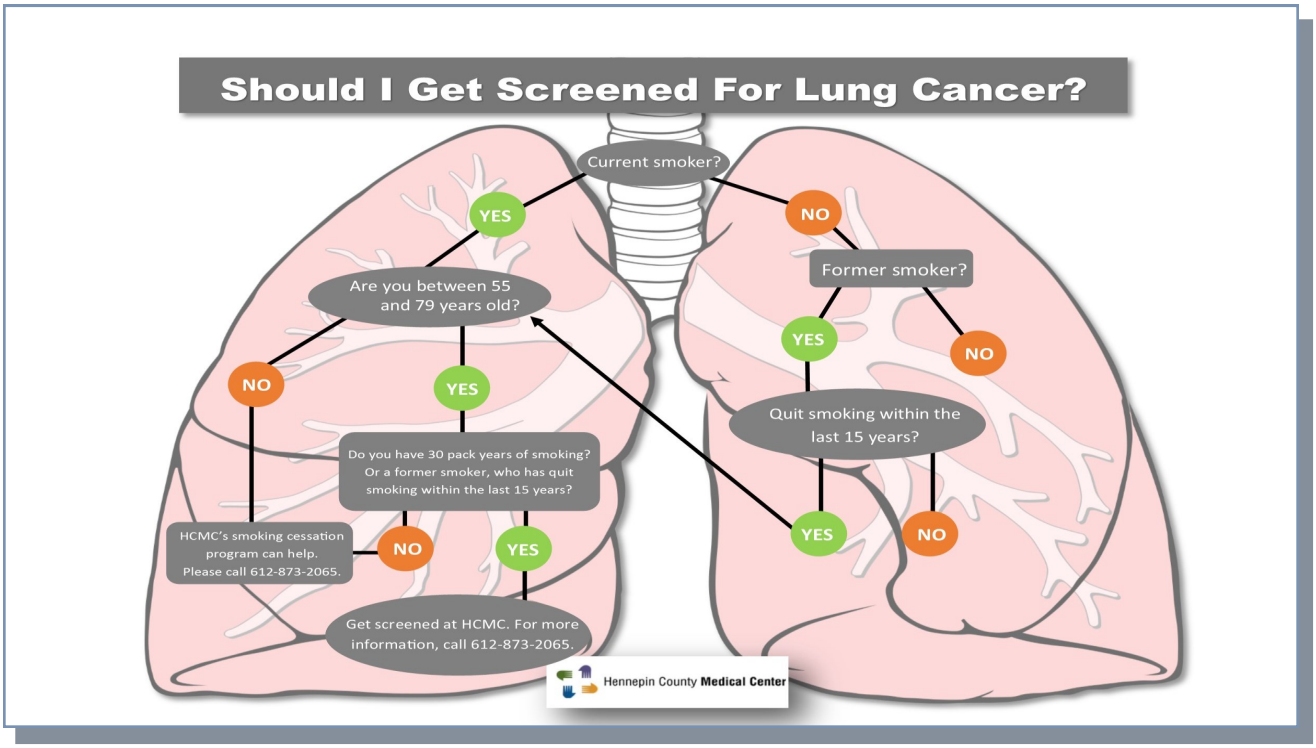
Anyone dependent on oxygen at baseline. Avoid LDCT within 12 weeks of respiratory infection requiring antibiotics.

Screening duration:

LDCT scans every year, until patient is 80, or has quit smoking for 15 years. Or, develops significant health issues that limit life expectancy or ability to have curative surgery.

HCMC Lung Cancer Screening Program

- Carefully designed multidisciplinary program following NCCN guidelines.
- Outstanding equipment and software.
- Standardized reads and follow up protocols.
- Option for real-time interpretation (Radiology provider will discuss results 30 minutes after test).



Drawbacks of lung cancer screening

Radiation exposure: Goal average dose <1.5 mSv (annual background 3.5 mSv)

Radiation from mammography 0.7 mSv

Low risk, but believed to be cumulative

False positive results (up to 40% scans have a nodule; > 95% are benign).

False negative results (will not pick all cancers)

Complications of work up and treatment: If an abnormality is found, additional diagnostic testing may be recommended. Some of this testing is invasive and may carry risk of complications. With a careful multidisciplinary and collaborative approach, we are committed to minimizing the risk of such complications.

Cost of Lung Cancer Screening at HCMC

The cost of a low-dose CT lung screening exam is significantly less than the cost of a traditional chest CT scan.

Moving target: USPTF recommendation, so expect coverage at some time.

Currently NOT COVERED by Medicare, some insurers cover LDCT screening.

$99 for LDCT scan, out of pocket cost.

Smoking cessation:

Screening NOT a substitute for smoking cessation.

Robust smoking cessation efforts central to screening process.

We offer help in collaboration with HCMC smoking cessation clinic.

Smoking Cessation Services Provided by Oncology Pharmacists

Katie Won, PharmD, BCOP
Lynn Weber, PharmD, BCOP

There is clear evidence linking tobacco smoking to cancer and other illnesses such as cardiovascular disease and pulmonary disease. (1) The 2014 Surgeon General's Report on the risks of tobacco smoking concluded that cigarette smoking causes an increased overall and cancer-specific mortality as well as an increased risk of developing a second tobacco-related primary cancer in cancer survivors (2). This evidence highlights the importance of smoking cessation in patients diagnosed with cancer to improve outcomes.

While most smokers are encouraged to quit, only 30-40% are provided counseling and medications to help them in doing so which results in patients either not attempting to quit or attempting without assistance (3). Methods to assist patients in quitting include pharmacotherapy and counseling and both depend on patient follow-up.

Oncology pharmacists are well suited to assist patients in quitting smoking. HCMC Comprehensive Cancer Center offers smoking cessation services on site by pharmacist to all patients with cancer or hematologic disorders. Our pharmacists practice under a collaborative practice agreement which allows them to provide counseling in addition to prescribe nicotine and other medications to patients who are willing to quit. This, in combination with psychosocial support and financial advocacy, gives our patients the best opportunity to improve their health by being tobacco-free.

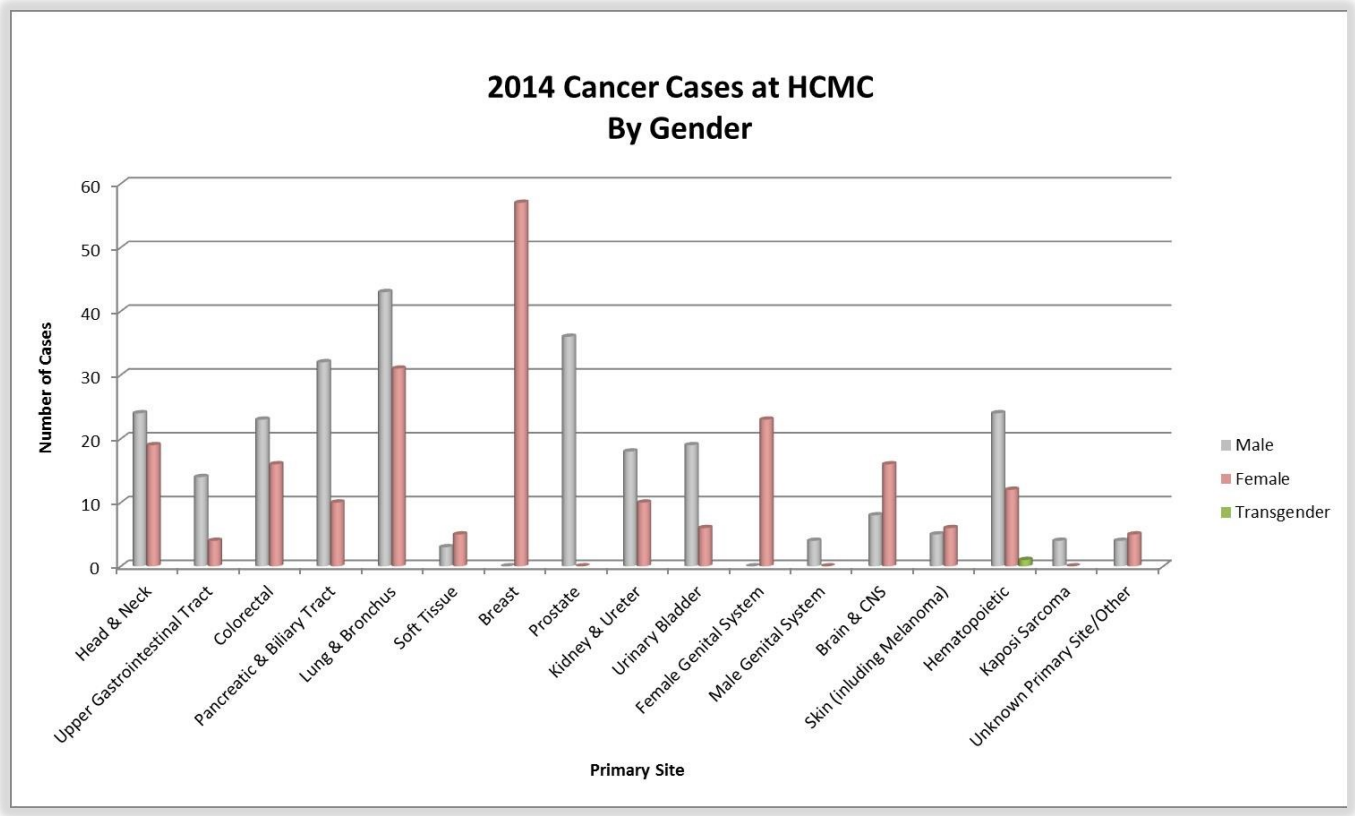
Highlights of Smoking Cessation Program to date

- 46 patients counseled
- 15 patients successfully quit smoking
- 33% quit rate

Smoking Cessation References, page 23.

Cancer & Tumor Data Summary

Kathy Lougiu, RHIT, CTR
Chunny Daiker, BS, RHIT, CTR



In 2014, The top 5 cancer sites in Males was Lung & Bronchus which accounted for 16% of all cancers, followed by Prostate 14%, Pancreatic & Biliary Tract 12%, Colorectal 9%, and Hematopoietic 9%. In females, Breast cancer accounted for 26% of all cancers diagnosed at HCMC, followed by Lung & Bronchus 14%, Female Genital System 10%, Head & Neck 9%, and tying for top 5 is Colorectal and Brain both at 7%. In Transgender Population, Hematopoietic Cancer accounted for 100% of all cases.

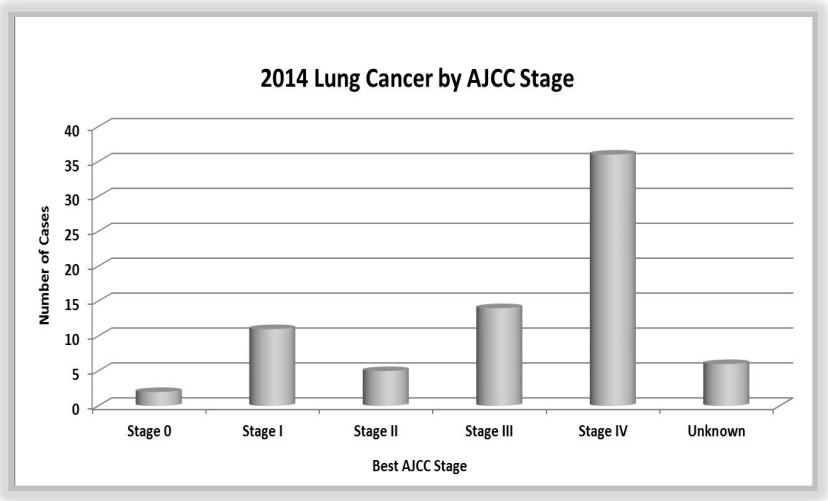
2014 Primary Site Table by Best AJCC Stage

ALL PRIMARY SITES	TOTAL CASES	STAGE 0	STAGE I	STAGE II	STAGE III	STAGE IV	NOT STAGED/ UNKNOWN
LIP	1	0	1	0	0	0	0
TONGUE	8	0	1	1	2	4	0
SALIVARY GLANDS	4	0	2	0	0	1	1
GUM & OTHER MOUTH	2	0	1	0	0	0	1
TONSIL	1	0	0	0	0	1	0
OROPHARYNX	1	0	0	0	0	0	1
HYPOPHARYNX	3	0	0	0	1	1	1
OTHER ORAL CAVITY & PHARYNX	3	0	0	0	0	0	3
ESOPHAGUS	6	0	1	1	0	2	2
STOMACH	9	0	2	1	0	5	1
COLON (EXCLUDING RECTUM)	25	0	2	8	8	6	1
RECTUM & RECTOSIGMOID	7	0	0	1	3	2	1
ANUS, ANAL CANAL & ANORECTUM	7	4	0	0	1	0	2
LIVER & INTRAHEPATIC BILE DUCT	25	0	5	2	1	7	10
GALLBLADDER	2	0	0	1	0	0	1
PANCREAS	15	0	2	3	0	10	0
OTHER DIGESTIVE ORGANS	3	0	0	0	1	0	2
LARYNX	7	0	4	0	0	2	1
LUNG & BRONCHUS	74	2	11	5	14	36	6
SOFT TISSUE	8	0	1	0	2	0	5
MELANOMA OF SKIN	8	2	3	0	0	1	2
OTHER NON-EPITHELIAL SKIN	3	0	0	1	0	0	2
BREAST	57	5	26	13	5	5	3
CERVIX UTERI	8	2	0	1	1	2	2
CORPUS & UTERUS, NOS	9	0	5	0	2	1	1
OVARY	1	0	0	0	0	1	0
VAGINA	2	1	1	0	0	0	0
VULVA	3	3	0	0	0	0	0
PROSTATE	36	0	4	10	2	11	9
TESTIS	4	0	1	3	0	0	0
BLADDER	23	9	4	5	0	5	0
KIDNEY & RENAL PELVIS	27	0	12	0	4	7	4
URETER & OTHER URINARY ORGANS	1	0	0	0	1	0	2
BRAIN	14	0	0	0	0	0	14
NERVOUS SYSTEM, OTHER	10	0	0	0	0	0	10
THYROID	12	0	4	1	3	2	2
ENDOCRINE, OTHER	1	0	0	0	0	0	1
HODGKIN LYMPHOMA	3	0	0	1	1	1	0
NON-HODGKIN LYMPHOMA	16	0	6	3	0	3	4
MYELOMA	8	0	0	0	0	0	8
LEUKEMIA	10	0	0	0	0	0	10
KAPOSI SARCOMA	4	0	0	0	0	0	4
UNKNOWN PRIMARY/OTHER	9	0	0	0	0	0	9
TOTAL	**482**	**28**	**99**	**61**	**52**	**116**	**126**

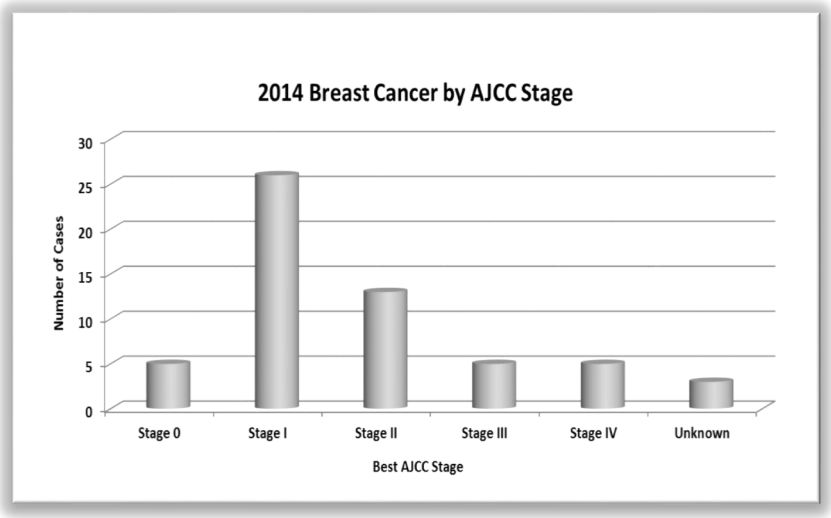
*excluding basal cell and squamous cell carcinoma carcinoma of skin.

*excluding intraepithelial neoplasia of cervix and prostate.

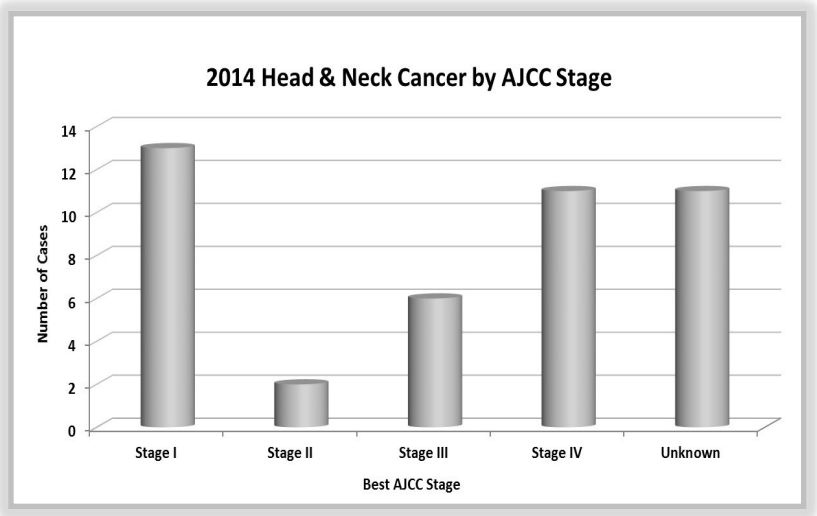
Cancer Data Summary * Top 7 Cancers at HCMC



3% of all Lung cancers at HCMC are Stage 0,
15% Stage I,
7% Stage II,
19% Stage III,
48% Stage IV, and
8% unknown.

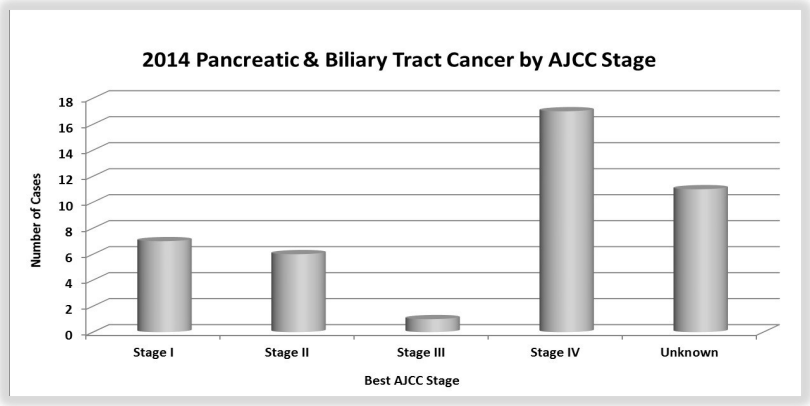


9% of all Breast cancers at HCMC are Stage 0,
45% Stage I,
23% Stage II,
9% Stage III,
9% Stage IV,
and 5% Unknown

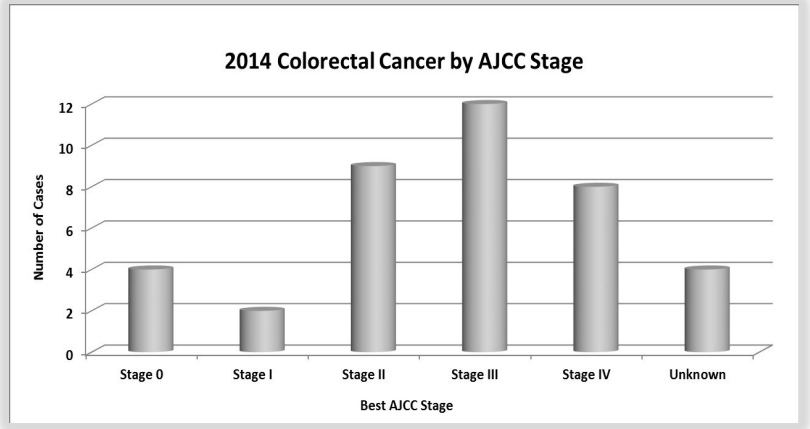


30% of all Head & Neck cancers at HCMC are Stage I,
5% Stage II,
14% Stage III,
25% Stage IV,
and 26% Unknown

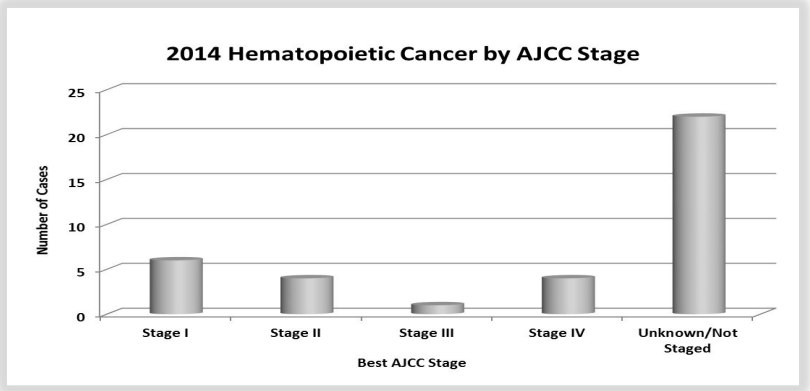
Cancer Data Summary * Top 7 Cancers at HCMC



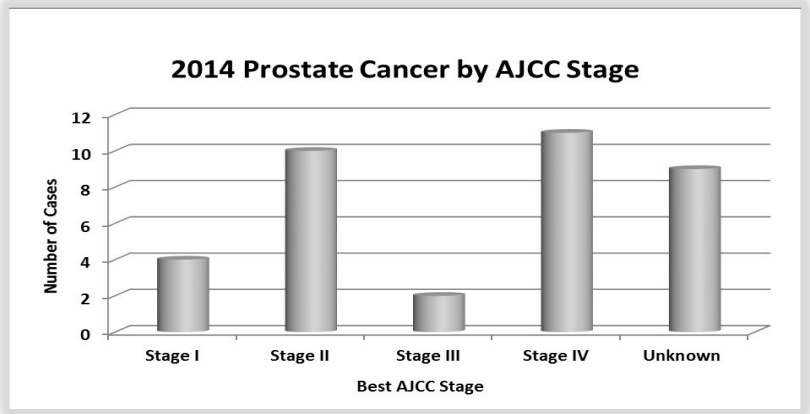
17% of all Pancreatic & Biliary Tract cancers at HCMC are Stage I,
14% Stage II,
2% Stage III,
41% Stage IV, and
26% Unknown



10% of all Colorectal cancers at HCMC are Stage 0,
5% Stage I,
23% Stage II,
31% Stage III,
21% Stage IV, and
10% Unknown.



16% of all Hematopoietic cancers at HCMC are Stage I,
11% Stage II,
3% Stage III,
11% Stage IV,
59% Unknown or Not Staged.



11% of all Prostate cancers at HCMC are Stage I,
28% Stage II,
5% Stage III,
31% Stage IV,
25% Unknown.

Cancer Rehabilitation

Syndal Ortman, APRN, DNP, AOCNP

During the development of the cancer Survivorship program in 2013 it was apparent that a gap for cancer survivors continued to exist in the area of cancer rehabilitation. While there was access for cancer patients to see physical therapy, occupational therapy, and speech-language pathology clinicians, many of those therapists expressed a desire for oncology specific education in order to better serve HCMC's cancer patients. Further, many of the referrals for these services from the cancer center were somewhat inconsistent and not in alignment with the recommendations in current literature.

In July 2013 the cancer center was given grant funding through the Hennepin Health Foundation for $17,325 as initial start-up costs to begin a Cancer Rehabilitation program. To receive its certification, the HCMC Cancer Center implemented the STAR (Survivorship Training and Rehab) Program which involves training clinicians and focusing on improving patient care outcomes. The healthcare services offered by the STAR Program are covered by most insurance providers, including Medicare, and are offered to patients by a knowledgeable and sensitive medical staff that is specially trained to work with survivors of all forms of cancer.

The team consisted of a multidisciplinary group of 25, representative of a partnership between the department of Physical Medicine & Rehabilitation, the Comprehensive Cancer Center, and the Rehabilitation department. This group included physicians, advanced practice providers, nurses, physical therapists, occupational therapists, speech-language pathologists, physical training professionals, as well as dietitian and clinical social work to undergo the online certification offered by Oncology Rehab Partners. The collaborative group will be one of the first multidisciplinary STAR Programs in the state of Minnesota.

The program was officially launched in the beginning of 2014 and will address the significant issues such as pain, fatigue, and disability that are often caused by cancer and its treatments. The goal of the STAR program is to minimize side effects and to encourage the best quality of life possible for cancer patients and survivors. Rehabilitation services are based on individual goals to improve daily functioning and quality of life. These may include managing fatigue and energy, pain, limb swelling or lymphedema, memory problems, balance, joint stiffness, issues with swallowing, etc.

About the STAR Program

The STAR Program is a best practices multidisciplinary cancer rehabilitation service-line model that improves patient care. STAR Program Certification provides healthcare facilities and clinicians with the tools (education, training, evaluation and treatment protocols, and outcomes support) to develop and deliver state-of-the-art cancer rehabilitation services to survivors who suffer the side effects and after effects of treatments – whether they are in remission, living with cancer or cured. All of the services integrated in the STAR Program, including physical therapy, occupational therapy, speech therapy, mental health counseling, and consultations with rehabilitation medicine physicians (physiatrists), are typically covered by health insurance. Learn more at www.OncologyRehabPartners.com.

When to Refer for Cancer Rehabilitation

The HCMC Comprehensive Cancer Center is part of the STAR program network of certified cancer rehabilitation programs. It is a nationally recognized accreditation that focuses on improving the lives of cancer patients & survivors who suffer from the side effects caused by cancer and its treatments.

Certified STAR Programs offer coordinated cancer rehabilitation care by a team of specially trained health professionals. Rehabilitation services are based on individual goals to improve daily functioning and quality of life.

Physical Therapy can assist with:

- **Mobility, Walking, Transfers, Balance, & Falls Prevention.**
- **Family & Caregiver Training** to assist with mobility and exercise program as needed.
- **Mobility Equipment** Wheelchairs, canes, or walkers.
- **Pain Management** pain reduction modalities such as heat/cold applications and electrical stimulation, manual therapy and flexibility.
- **Strengthening** Improve strength, flexibility, balance, endurance, and coordination.
- **Physical Functioning of the Extremities & Spine** Peripheral neuropathy or weakness of the upper and/or lower extremities, sensory deficits, coordination, posture, strength, range of motion and balance.

Occupational Therapy can assist with:

- **Fatigue Management** and energy conservation.
- **Cognitive Impairments**: Issues with memory, safety & judgment, problem solving, attention & focus.
- **Visual Impairments:** Issues with low vision, visual processing, perceptual changes.
- **Self-Care & Home-Care Activities** (Evaluations done in clinic) Assisting with bathing, bowel/bladder management, dressing, feeding, grooming, home management, and home safety evaluations.
- **Daily Equipment needs** Assistive devices such as reachers, sock-aids, bathroom equipment.
- **Physical Functioning of the Upper Body** Peripheral neuropathy or weakness of the hands, dexterity, coordination, strength, range of motion, and core balance.
- **Family & Caregiver Training** Preventing falls, transfer safety, environmental modifications.
- **Social & Emotional Performance** Lifestyle and coping.
- **Return to Community** (Evaluations done in clinic) Workplace accommodations, driving issues, public transportation, shopping.

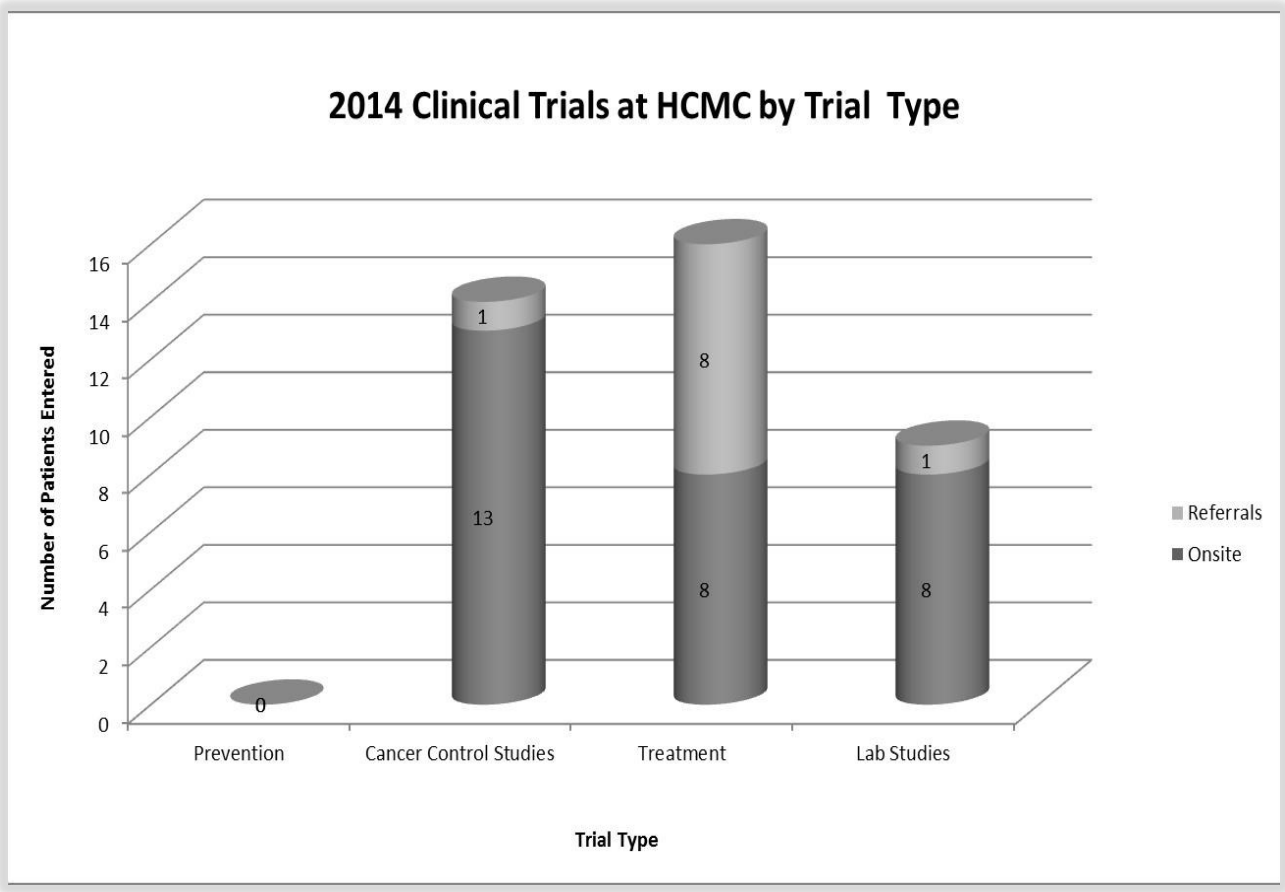
Speech-Language Pathology can assist with:

- **Speaking** Improving speech intelligibility, stoma care, communication options, voice remediation.
- **Swallowing** Difficulty while eating/drinking, secretion management, strengthening and coordination.
- **Head & Neck Cancer** Assessment & evaluation before, during, and after cancer treatments for speech & voice function, swallowing strategies & strengthening, hydration & side effects management.
- **Cognition** Assess and remediate cognitive-linguistic impairments or auditory processing.

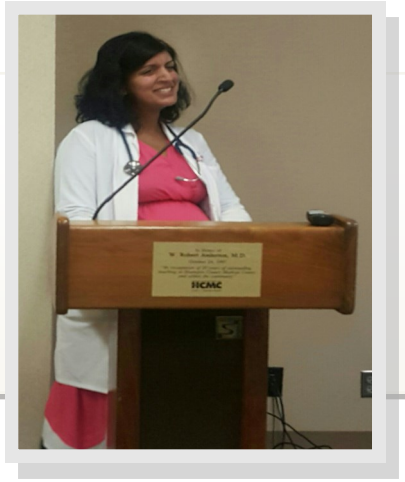
Research

Carol Sojos-Schmidt, BA, RN, OCN, CCRP
Clinical Trials & Research Program Coordinator

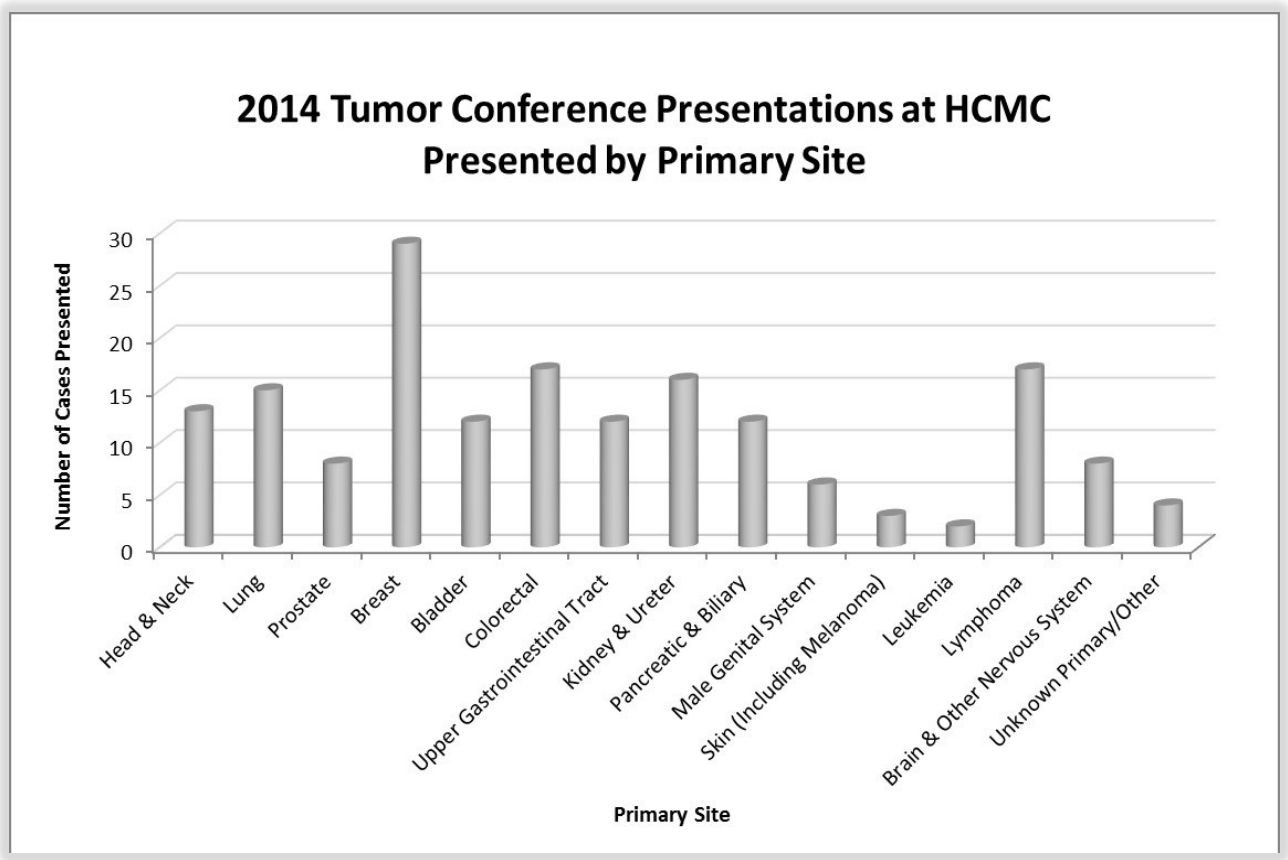
HCMC participates in the Metro-Minnesota Community Oncology Research Consortium (MMCORC), a nonprofit research program sponsored by the National Cancer Institute (NCI) and participating community hospitals and clinics. This program gives people in our community access to the newest therapies available for cancer treatment, symptom management, and cancer prevention. The MMCORC links community cancer specialists, primary care physicians, and other health professionals to NCI-approved research studies, called clinical trials. Clinical trials are where progress is made against cancer. Advances in the prevention and treatment of cancer, and controlling the side effects of cancer treatment, depend on information gained from well conducted national clinical trials.



Tumor Conference Summary



In 2014, The Comprehensive Cancer Program held 45 Multidisciplinary Facility-wide Tumor Conferences presenting a total of 175 educational cancer cases.



Helpful Internet Resources for Our Cancer Patients

American Cancer Society
www.cancer.org

American College of Surgeons-Commission on Cancer
www.facs.org/dept/cancer

Association of Community Cancer Centers (ACCC)
www.assoc-cancer-cts.org/main2011.shtml

American Joint Committee on Cancer
www.cancerstaging.org/index.html

Cancer Answers
www.canceranswers.com

Cancer Care, Inc.
www.cancercare.org

CancerEducation.com
www.cancereducation.com

Cancer Hope Network
www.cancerhopenetwork.org

Cancer Information Services
www.cancer.gov

Center for Disease Control and Prevention-National Program of Cancer Registries

Clinical Trials.gov
www.clinicaltrials.gov

Consumer Health Information Resources
www.healthfinder.gov

Hispanic Leadership Initiative on Cancer
www.enaccion.bcm.tmc.edu

Inter-Cultural Cancer Council
www.iccnetwork.org

Minnesota Cancer Surveillance System
www.heatlh.state.mn.us/divs/dpc/cdee/mscc.htm

National Cancer Institute
www.cancernet.nci.nih.gov

National Comprehensive Cancer Network
www.nccn.org

Wisconsin Cancer Reporting System
www.dhfs.state.wi.us/wcrs/operate.htm

National Coalition for Cancer Survivorship
www.cansearch.org

National Cancer Institute (NCI)
www.cis.nci.nih.gov

Native American Cancer Research
www.natamcancer.org

OncoLink
www.oncolink.com

R.A. Bloch Cancer Foundation, Inc.
www.blochcancer.org

U.S. Food and Drug Administration's Office of Women's Health
www.fda.gov/womens/

Wellness Community
www.wellness-community.org

References: Smoking Cessation Services Report

1) Anthonisen NR, et al. The effects of a smoking cessation intervention on 14.5-year mortality: a randomized clinical trial. Ann Intern Med. 2005;142(4):233.
2) US Department of Health and Human Services: The Health Consequences of Smoking - 50 Years of Progress: A Report of the Surgeon General. Atlanta, GA, US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.
3) Warren GW, Marshall JR, Cummings KM, et al: Addressing tobacco use in patients with cancer: A survey of American Society of Clinical Oncology members. J Oncol Pract 2013; 9:258-262.

Hennepin County Medical Center

Hennepin County Medical Center is a 462 bed Level 1 Trauma Center and public teaching hospital located in downtown Minneapolis, Minnesota. It is the centerpiece of Hennepin County's clinical health service system, which includes the HMO Metropolitan Health Plan, the physician group practice Hennepin Faculty Associates, and a network of community clinics.

Hennepin County Medical Center offers a full spectrum of inpatient and outpatient services, including a number of regional centers such as:

- Level I Adult & Pediatric Trauma Center
- Addiction Medicine Program
- Comprehensive Cancer Center
- Huntington's Disease Center
- Infectious Disease Clinic
- Acute Burn & Wound Clinic
- Transplant Clinic & Program
- Center for Hyperbaric Medicine
- Minnesota Poison Control Center
- Miland E. Knapp Rehabilitation Center
- Center for Senior Care
- The Birth Center
- Traumatic Brain Injury Center
- Pediatric Brain Injury Program
- Minnesota Regional Sleep Disorders Center
- Positive Care Center
- Hennepin Bariatric Center
- Hennepin Heart Center
- Hennepin Stroke Center
- Crisis Residence
- Institute for Bone & Joint Care

Hennepin County Medical Center is proud to be the safety net hospital providing care for low-income, uninsured, and vulnerable populations.

SPECIAL THANKS

The Comprehensive Cancer Center would like to Acknowledge and Give Special Thanks to:

- The Cancer & Tumor Data Services Department in putting together this year's 2014 Annual Cancer Report.
- The Cancer Committee members, along with the many other people who have provided guidance for the growth and development of the Cancer Program at Hennepin County Medical Center.
- The staff members who provide excellent care and support for our cancer patients daily.
- Special recognition to the physicians who participate in weekly Tumor Conference.
- Our patients who inspire us to learn and grow.

Hennepin County Medical Center

Hennepin County Medical Center
Comprehensive Cancer Program
701 Park Ave
Minneapolis, MN 55415
Cancer Center (612) 873-6369
Www.hcmc.org