Urology Surgical Providers

Dr. Ian Schwartz ◦ Dr. Philip Sweetser ◦ Jeff Estrin, PA-C ◦ Dr. Kendall Feia
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COMPREHENSIVE CANCER PROGRAM PROVIDERS

Chief Medical Officer
Dr. William Heegard

Cancer Program Administrative Director
Mary Kurvers

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 Medicine
Dr. Jeff Rubins
Belle Matheson, FNP, ACHPN

Oncology Nurse Practitioners
Louann Bosmans, RN, MS, CNP, AOCN
Syndal Ortman, APRN, DNP, AOCNP
Cindy Steele, MS, APRN, 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 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
Jayne Gagne, Charge Nurse (612) 873-6369

Nursing Manager
Dana Pitzen, Inpatient (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) 873-4734
Lynn Weber (612) 873-4734

Radiation Oncology Therapy Manager
Jane Rogers (612) 873-6878

Survivorship Director
Syndal Ortman (612) 873-3393
As Chair of the Hennepin County Cancer Committee, I am pleased to present the Annual Cancer Program Report. The 2015 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 2015 and provides statistical analysis of our cancer patients.

Cancer Program Achievements for 2015

- Dr. Andres Wiernik, Dr. Jeff Rubins, and Mike Ries published study “Implications of English-speaking status for end-of-life care in advanced cancer” in Journal of Clinical Oncology.
- Developed a Pulmonary Nodule Clinic using NCCN and ARC Lung Rads guidelines. This multidisciplinary team will involve radiologist, pulmonologist, thoracic surgeon, oncologist, and ancillary support services.
- Our Palliative Care Director, Dr. Jeff Rubins was featured on WCCO’s Healthy Matters to discuss palliative care at HCMC.
- HCMC’s CEO, Dr. Jon Pryor signed the partnership agreement with ACS for 80% by 2018 campaign. Through this partnership, we have committed to increasing awareness of screening on a local and legislative level as well as increase access to screening for those who lack the financial resources to complete screening.
- Cancer Registry participated and successfully completed the Commission on Cancer Special Study focusing on Post-Active treatment surveillance in breast, colorectal, and lung cancer.
- We are fortunate to add 1 new position to the Cancer Center
  * Karna Anderson, Chaplain.
- Dr. Joseph Leach from Minnesota Oncology presented “Lung Cancer: Beyond Chemotherapy” at Medical Grand Rounds.
- Underwent 3-year QOPI Recertification Survey. Completed on 7/7/2015 and recertification granted.
- 68 patients successfully entered into clinical trials.
- 120 colon cancer screenings completed through the SAGE scopes program.
- 565 breast screenings through cancer center clinic and outreach programs.
- Lauren Levandoski, our Oncology Dietician completed 335 visits with Cancer Center patients.

This year, I am proud to focus our Annual Cancer Report on Breast Cancer. I greatly appreciate Dr. Kendall Feia and Dr. Ian Schwartz in writing the Renal Cell Carcinoma Report.

Kind Regards,

Doug Rausch, MD
CANCER COMMITTEE MEMBERS 2015

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

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, MBBS, MD  
Radiation Oncology

Douglas Rausch, MD  
Oncology Medical Director, Cancer Committee Chair

Ian Schwartz, MD  
Urology

Mark Solfelt, MD  
Thoracic Surgical Oncology

Philip Sweetser, MD  
Urology

Andres Wiernik, MD  
Medical Oncology, Breast Cancer Committee Chair

Richard Zera, MS, MD, PhD  
Surgical Oncology

Cancer Committee Cancer Liaison Physician

American College of Surgeons (ACoS) State Chair for MN

NON PHYSICIAN MEMBERS

Karna Anderson, M.Div  
Chaplin

Annie Burrows, MS, CGC  
Genetics

Chunny Daiker, BS, RHIT, CTR  
Cancer & Tumor Data

Lainey Erion  
Health Care Specialist, Community Outreach

Karen Holdgrafer, LICSW  
Oncology Social Services

Mary Kurvers, BSN  
Administrative Director of Ambulatory Medicine

Lauren Levandoski, MS, RD, LD  
Oncology Dietitian

Tatyana Leyderman, CPHQ  
Health Care Data Analyst

Kathy Lougu, CTR  
Cancer & Tumor Data

Belle Matheson, FNP, ACHPN  
Hospice & Palliative Medicine

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 Schmidt, BA, RN, OCN, CCRP  
Clinical Trials & Research

DeCourney Squire, PT, CLT-LANA, CI-CS  
Rehabilitation

Cindy Steele, MS, APRN, CNP, AOCN  
Oncology Nurse Practitioner

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

Lynn Weber, PharmD, BCOP  
Oncology Pharmacy

Katie Won, PharmD, BCOP  
Oncology Pharmacy
Hennepin County Medical Center and the American Cancer Society collaborate to provide assistance, free of charge, to cancer patients, survivors and caregivers.

Linda Herrera provides onsite Patient Navigation services at Hennepin County Medical Center, Comprehensive Cancer Center. American Cancer Society, Patient Navigator Services bridges the gap between initial cancer diagnosis, treatment, and successful survivorship, with a focus on medically underserved cancer patients. Linda also connects patients with resources provided by both the American Cancer Society and other resources within the patient’s community.

Patient Navigator had an information booth at HCMC National Cancer Survivors Day celebration.

- Look Good, Feel Better sessions were held monthly at Cancer Center library. A trained beauty professional volunteer to teach women how to cope with changes of their appearance going through chemotherapy. The volunteer address skin changes and hair loss by using cosmetic and skin care products donated by cosmetic companies.

- Road to Recovery is an American Cancer Society program that provides rides to treatment for people with cancer. There are patients who may not have access to transportation with their insurance or unable to drive themselves, and family and friends cannot always help. Volunteer drivers are trained to provide transportation for patients.

- Reach to Recovery is a program for Breast Cancer patients. Volunteers are trained by American Cancer Society. Patients are match up with a volunteer with someone similar in age and ethnicity and has had a similar cancer experience. These encounters can be either in person or on the phone.
Renal cell carcinoma (RCC) remains a common cancer amongst men and women in the U.S. and is the 9th most common cancer diagnosed nationally. RCC accounts for 2-3% of new cancer diagnoses in the U.S. each year amounting to around 63,000 new cases and an estimated 1,000 new cases in the state of Minnesota in 2016 (1). The incidence of RCC has also been on the rise since the 1970’s likely in part due to more prevalent and widespread use of abdominal imaging modalities and an increase in “incidentally” detected lesions (4). RCC has typically been a disease of older adults with the usual age of diagnosis between 50-70 years of age and there remains a male to female predominance of 3:2 (2). With this rise in incidentally discovered masses in older patients there is an expanding role for active surveillance in patients with shorter life expectancies and/or high surgical risk. Since we now know the expected growth rates for most small renal masses (<2.5 cm in size), it is sometimes now safer to follow such masses with routine imaging, possibly avoiding an unnecessary surgical treatment in higher risk patients.

There also appears to be a racial predilection, with incidence rates 10-20% higher and 5-year survival rates 5% lower in African-Americans as a group (2). There are roughly 14,000 deaths per year in the U.S. due to RCC and will be an estimated 280 deaths in Minnesota from the disease in 2016 (1,3). National five-year relative survival rates for patients diagnosed between 2002 and 2008 were 71% for kidney cancer, which remains lower than other genitourinary malignancies such as prostate, testis and bladder cancer (3).

Renal Cell Cancer Facts

- Renal cell carcinoma is the most common type of kidney cancer, with about 9 out of 10 kidney cancers diagnosed as RCC.
- Average Age of Diagnosis is 64yrs old
- RCC is about twice as common in men as in women.
- Being overweight and having a high-fat diet increase your risk.
- For reasons unclear, African-Americans have a slightly higher rate of RCC.
Early treatment of RCC remains critical to curing the disease as pathologic stage has been shown to be the single most important prognostic factor for RCC survival (5). Additionally, RCC tumor size has also been shown to be another significant independent prognostic factor with studies showing a 15-20% reduction in survival with invasion outside of the kidney capsule (6). Historically the treatment for RCC has largely been surgical extirpation as the ability to cure patients with advanced disease remains limited, however with the increase in incidentally detected renal lesions the treatment paradigm has shifted to some degree. Surgical therapy has historically been aimed at removal of the entire kidney with radical nephrectomy (RN), however our treatment views have shifted as studies have shown that up to 20% of stage T1 renal lesions are benign, thus not all detected lesions are malignant or require treatment (7). We are now more frequently utilizing treatment strategies such as partial nephrectomy (PN), percutaneous ablation, as well as minimally invasive surgical options such as laparoscopic and robotic surgery.

In many cases of RCC, particularly stage T1a renal masses (<4cm in size), partial nephrectomy has now become the standard of care. The main concern with RN is that it predisposes patients to chronic kidney disease (CKD) which is potentially associated with an increased risk of cardiovascular events and increased rates of overall mortality, and this has been demonstrated in several studies (9,10,11). Interest in PN for treatment of RCC has also been stimulated by advances in renal imaging, improved methods of preventing surgical ischemic renal damage, increase in incidentally detected RCCs, greater understanding of the long term effects of CKD, and evidence of long-term cancer specific survival in patients undergoing PN (12). Oncologic outcomes in patients treated with PN have shown to be equivalent to RN in properly selected patients with T1a renal masses and morbidity has decreased over recent years (13). Recent trends have now been shifting towards performing PN by minimally invasive laparoscopic and robotic approaches, with margin status and oncologic outcomes equivalent to open PN in experienced hands (14).
Thermal ablative therapies, including radiofrequency ablation (RFA) and cryoablation (CA) are also becoming more available and utilized options for treatment of low stage renal masses. When compared to surgical excision, data suggests that local recurrence rates are slightly higher than those reported for traditional surgical approaches. However, minimally invasive ablative techniques many times offer the potential for reduced morbidity and more rapid recovery in those patients that are of higher surgical risk with the trade-off of more intense follow-up after treatment (15). Newer technologies on the horizon including high-intensity focused ultrasound (HIFU) and image-guided radio-surgical treatments, such as CyberKnife, are being investigated and may allow us to treat many small renal tumors in the future in an extracorporeal fashion (16, 17, 18). Unfortunately, current use of these entities is not sufficiently reliable for routine use at this time (19).

There have also been numerous advances in the treatment of systemic RCC over the past several years with multiple therapies now available. Most of these newer medications are based on a more complete understanding of the genetic basis behind the most common types of renal cell cancers. While these treatments are usually reserved for use in either metastatic or recurrent disease, there is little doubt that they may impact our approach to treating renal cell cancer in the future.

As a part of our annual review process, we set out to compare the population of patients seen at Hennepin County Medical Center (HCMC) to those seen at other Commission on Cancer (CoC) certified programs in Minnesota between the years of 2003 and 2013.

Methods: The National Cancer Data Base is a joint project of the CoC of the American College of Surgeons and the American Cancer Society, collecting data from the approximately 1500 certified programs in the United States, including Hennepin County Medical Center. Certified programs represent only about 25% of the facilities in the country but 75% of the cancer in the US is treated in certified programs. This data base allows for the program to compare itself with other treatment facilities within the state, region, or country. We have chosen to compare our population with all of the other certified hospitals in Minnesota, a total of 29 programs (MNP’s).

We looked at age, gender, race, household income, insurance status, comorbidity score, stage, and primary treatment modality. Comorbidity uses the Charlson Comorbidity Score which is calculated based on the presence or absence of additional illnesses, scored according to the likelihood of the condition causing death within 1 year (20). Statistical analysis was performed using the Chi2 test for categorical variables. A p-value of less than or equal to 0.05 was considered to be statistically significant. All analyses were conducted using STATA 14.1 (StataCorp College Station, TX).
Results:
HCMC treated a total of 151 patients with newly diagnosed renal cell cancer during this 8 year period, while a total of 8916 were treated at MNP’s.

The age groups for these populations are detailed in table 1. HCMC treats a slightly younger population when compared to the rest of the state, with 50.33% of HCMC’s patients are under 60 years of age compared to only 37.57% for the other MNP’s. Additionally, the most common age range is 50-59 (31.79%) at HCMC while the other MNP’s most common age range is 60-69 (29.17%). The age groupings of the patients differ significantly between HCMC and MNP (p=0.006).

TABLE 1: By Age (Compared to other CoC Hospitals, MN only)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>HCMC (N)</th>
<th>Oth. (N)</th>
<th>HCMC (%)</th>
<th>Oth. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20</td>
<td>.</td>
<td>39</td>
<td>.</td>
<td>0.44%</td>
</tr>
<tr>
<td>20 - 29</td>
<td>1</td>
<td>71</td>
<td>0.66%</td>
<td>0.8%</td>
</tr>
<tr>
<td>30 - 39</td>
<td>6</td>
<td>279</td>
<td>3.97%</td>
<td>3.13%</td>
</tr>
<tr>
<td>40 - 49</td>
<td>21</td>
<td>898</td>
<td>13.91%</td>
<td>10.07%</td>
</tr>
<tr>
<td>50 - 59</td>
<td>48</td>
<td>2062</td>
<td>31.79%</td>
<td>23.13%</td>
</tr>
<tr>
<td>60 - 69</td>
<td>41</td>
<td>2601</td>
<td>27.15%</td>
<td>29.17%</td>
</tr>
<tr>
<td>70 - 79</td>
<td>20</td>
<td>2058</td>
<td>13.25%</td>
<td>23.08%</td>
</tr>
<tr>
<td>80 - 89</td>
<td>12</td>
<td>825</td>
<td>7.95%</td>
<td>9.25%</td>
</tr>
<tr>
<td>90 and over</td>
<td>2</td>
<td>83</td>
<td>1.32%</td>
<td>0.93%</td>
</tr>
<tr>
<td>Col. TOTAL</td>
<td>151</td>
<td>8916</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The gender distribution for kidney and renal pelvis tumors at HCMC does compare nicely with other MNP’s and is similar to the expected ratio of these malignancies being more common in men than women (p=0.331 – no significant differences) (Table 2).

TABLE 2: By Gender (Compared to other CoC Hospitals, MN only)

<table>
<thead>
<tr>
<th>Gender</th>
<th>HCMC (N)</th>
<th>Oth. (N)</th>
<th>HCMC (%)</th>
<th>Oth. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>94</td>
<td>5740</td>
<td>62.25%</td>
<td>64.38%</td>
</tr>
<tr>
<td>Female</td>
<td>57</td>
<td>3176</td>
<td>37.75%</td>
<td>35.62%</td>
</tr>
<tr>
<td>Col. TOTAL</td>
<td>151</td>
<td>8916</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Racial data is detailed in Table 3. The vast majority of patients treated outside of HCMC in MN are white (91%) while 50% of HCMC’s patients are white. Black patients are 33% of the HCMC patients and only 3% of those patients treated at MNP’s. A similar trend is also seen within the Hispanics as well with this subset of patients comprising 8% of the HCMC patient population compared to <1% of patients treated at other MNP’s.

Table 3: By Race (Compared to other CoC Hospitals, MN only)

<table>
<thead>
<tr>
<th>#</th>
<th>Race/Ethnicity</th>
<th>HCMC (N)</th>
<th>Other (N)</th>
<th>HCMC (%)</th>
<th>Other (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>White</td>
<td>76</td>
<td>8146</td>
<td>50.33%</td>
<td>91.36%</td>
</tr>
<tr>
<td>2.</td>
<td>Black</td>
<td>50</td>
<td>245</td>
<td>33.11%</td>
<td>2.75%</td>
</tr>
<tr>
<td>3.</td>
<td>Hispanic</td>
<td>19</td>
<td>86</td>
<td>12.58%</td>
<td>0.96%</td>
</tr>
<tr>
<td>4.</td>
<td>Asian and Pacific</td>
<td>1</td>
<td>63</td>
<td>0.66%</td>
<td>0.71%</td>
</tr>
<tr>
<td></td>
<td>Islander</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Native American</td>
<td>5</td>
<td>120</td>
<td>3.31%</td>
<td>1.35%</td>
</tr>
<tr>
<td>6.</td>
<td>Other/Unknown</td>
<td>.</td>
<td>256</td>
<td>.</td>
<td>2.87%</td>
</tr>
<tr>
<td>Col. TOTAL</td>
<td></td>
<td>151</td>
<td>8916</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Household income is based on the 2012 census data and is detailed in Table 4. Less than $52,999 annual income is defined as 200% of the poverty level for a household of 5. While actual household make up is not available for these patients, 59.6% of HCMC patients meet these criteria, compared to 41.62% of MNP’s patients. This difference is even more pronounced for the lowest income levels. A significantly larger proportion of HCMC patients’ income falls below 36k$ per year (21.19%), compared to other MNP’s (3.54%) (p<0.001).

Table 4: By Household Income (Compared to other CoC Hospitals, MN only)

<table>
<thead>
<tr>
<th>#</th>
<th>Household Income (2012 Census)</th>
<th>HCMC (N)</th>
<th>Other (N)</th>
<th>HCMC (%)</th>
<th>Other (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>&lt; $36000</td>
<td>32</td>
<td>316</td>
<td>21.19%</td>
<td>3.54%</td>
</tr>
<tr>
<td>2.</td>
<td>$36000 - $43999</td>
<td>18</td>
<td>1341</td>
<td>11.92%</td>
<td>15.04%</td>
</tr>
<tr>
<td>3.</td>
<td>$44000 - $52999</td>
<td>40</td>
<td>2054</td>
<td>26.49%</td>
<td>23.04%</td>
</tr>
<tr>
<td>4.</td>
<td>$53000 - $68999</td>
<td>34</td>
<td>2918</td>
<td>22.52%</td>
<td>32.73%</td>
</tr>
<tr>
<td>5.</td>
<td>$69000 +</td>
<td>27</td>
<td>2218</td>
<td>17.88%</td>
<td>24.88%</td>
</tr>
<tr>
<td>6.</td>
<td>Unknown</td>
<td>.</td>
<td>69</td>
<td>.</td>
<td>0.77%</td>
</tr>
<tr>
<td>Col. TOTAL</td>
<td></td>
<td>151</td>
<td>8916</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Insurance coverage is listed in Table 5. Uninsured patients account for 13.91% of the renal cancer patients at HCMC while less than 1% of patients treated at MNP’s have no insurance. 35.1% of HCMC patients have private insurance while 50.86% of those treated at MNP’s have such coverage. Medicaid patients are over-represented significantly at HCMC relative to MNP’s (17% vs 4%) and Medicare patients are somewhat underrepresented at HCMC (32.45%) compared to MNP’s (42.53%). This insurance coverage difference is significant for our patient cohort (p<0.001).

**TABLE 5: By Insurance Status (Compared to other CoC Hospitals, MN only)**

<table>
<thead>
<tr>
<th>#</th>
<th>Insurance Status</th>
<th>HCMC (N)</th>
<th>Other (N)</th>
<th>HCMC (%)</th>
<th>Other (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Not Insured</td>
<td>21</td>
<td>43</td>
<td>13.91%</td>
<td>0.48%</td>
</tr>
<tr>
<td>2.</td>
<td>Private/Managed</td>
<td>53</td>
<td>4535</td>
<td>35.1%</td>
<td>50.86%</td>
</tr>
<tr>
<td>3.</td>
<td>Medicaid</td>
<td>25</td>
<td>376</td>
<td>16.56%</td>
<td>4.22%</td>
</tr>
<tr>
<td>4.</td>
<td>Medicare</td>
<td>49</td>
<td>3792</td>
<td>32.45%</td>
<td>42.53%</td>
</tr>
<tr>
<td>5.</td>
<td>Other Government</td>
<td>0</td>
<td>68</td>
<td>.</td>
<td>.76%</td>
</tr>
<tr>
<td>6.</td>
<td>Insurance Status Unknown</td>
<td>3</td>
<td>102</td>
<td>1.99%</td>
<td>1.14%</td>
</tr>
</tbody>
</table>

Col. TOTAL 151 8916 100% 100%

The Charlson Comorbidity Score was tabulated as Score 0, 1, 2, >3. These results are detailed in Table 6. HCMC treats patients with significantly more comorbidities when compared to other MNP’s (comparing 0 comorbidities to 1+, p<0.001). This could be a natural byproduct of our hospital system being a tertiary care center and also a teaching institution. We also have a large support system built in for these complex patients, with a large and experienced surgical department as well as high volume intensive care facilities.

**TABLE 6: By Charlson Comorbidity Score (Compared to other CoC Hospitals, MN only)**

<table>
<thead>
<tr>
<th>#</th>
<th>Charlson Comorbidity Score</th>
<th>HCMC (N)</th>
<th>Other (N)</th>
<th>HCMC (%)</th>
<th>Other (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Score = 0</td>
<td>86</td>
<td>6128</td>
<td>56.95%</td>
<td>68.73%</td>
</tr>
<tr>
<td>2.</td>
<td>Score = 1</td>
<td>46</td>
<td>2071</td>
<td>30.46%</td>
<td>23.23%</td>
</tr>
<tr>
<td>3.</td>
<td>Score = 2</td>
<td>15</td>
<td>543</td>
<td>9.93%</td>
<td>6.09%</td>
</tr>
<tr>
<td>4.</td>
<td>Score &gt;= 3</td>
<td>4</td>
<td>174</td>
<td>2.65%</td>
<td>1.95%</td>
</tr>
</tbody>
</table>

Col. TOTAL 151 8916 100% 100%
Stage at diagnosis is detailed in Table 7. We find that we treat a similar number of stage I cancers compared to other MNP’s. The slightly lower number of stage III cancers is likely due to local referral patterns as many of these patients may have tumor thrombus within the major blood vessels of the abdomen. For this reason, many patients with this type of tumor burden are often referred to large cardiac surgical centers as they may require cardiac bypass to successfully resect the tumor. During the time of this data collection these patients were likely referred for specialized services. Despite this referral pattern preference at the time, there was still a higher percentage of patients with advanced disease (stage IV) treated at HCMC (22%) compared to other MNP’s (14%).

The primary treatment modality is detailed in Table 8 and reflects other findings that we would expect to see within our practice. With the mainstay for treatment being surgery, it is not surprising to see that this is the most common therapy utilized. The interesting finding here is that we have a higher percentage of patients that undergo no primary treatment for their cancer (13% vs. 6%) when compared to other MNP’s. This is likely a byproduct of the number of patients we see with multiple medical comorbidities who are not good candidates for surgical therapy, the higher stage we tend to see at diagnosis, and also the expanding knowledge and role for active surveillance for many smaller renal masses.
Discussion:

HCMC is a 472 bed safety net, academic, teaching hospital of Hennepin Health System (10 Primary Care Clinics, Multispecialty Physician Group, HCMC). There are 559,100 outpatient visits, with a primary care base of 70,000 patients. Our population is 11 % uninsured, 69% Medicaid, Medicare, or other Gov’t, 20% commercial insurance.

The kidney cancer population shares a similar insurance pattern when compared to our general population. There is a higher percentage of patients with insurance when compared to our general population with almost twice as many having commercial insurance. We feel this is likely related to HCMC employees seeking their care here, as well as a robust effort through the financial department to get patients connected with insurance as a part of their cancer care. Compared to MNP’s a much higher proportion of uninsured patients are treated at HCMC reflecting our mission “to ensure access to outstanding care for everyone”. The demographics also speak to the younger patient age that we see as well as the diverse population of patients that we care for.

The NCDB is a powerful tool for evaluating an institution and their cancer patient population. The groups’ presentation as well as how they compare to other institutions in the state, region and or country can be assessed in rather general terms but these can be meaningful in helping define the particular needs an institution such as HCMC may require in caring for these patients. The CoC is increasingly adding quality measures to its required reporting elements and these are helpful in real time assessment of how a variety of treatment parameters are being met. The NCDB is a major advantage of participation in the Commission on Cancer Certification program and HCMC has been such a program since 1989. The evaluation presented here was instituted to both highlight the NCDB and also to validate our assumptions regarding the HCMC cancer population. Indeed, we see a more racially diverse, more economically challenged, and higher stage kidney cancer population than other institutions in Minnesota. We also treat a population with more significant medical comorbidities, which again correlates with economic status (21). Despite these differences, we find that our treatment approach for this type of cancer is comparable to other CoC institutions. Our goals moving forward will be to continue to bring high quality, state of the art treatment to our patients, with a focus on robotic and minimally invasive treatment options moving forward.

Sincerely,
Division of Urology
Dr. Kendall Feia
Dr. Ian Schwartz

Kidney Cancer Report References, page 24
Cancer & Tumor Data Summary

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

In 2015, the Top 3 cancer sites in Males was Prostate which accounted for 22% of all cancers, followed by Lung 14%, and Head and Neck 13%, Hematopoietic 13%. In Females, the Top 3 cancer sites was Breast 26%, followed by Lung 15%, and Female Genital System 9%.
### 2015 Primary Site Table by Stage

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<tr>
<th>ALL PRIMARY SITES</th>
<th>TOTAL CASES</th>
<th>STAGE 0</th>
<th>STAGE I</th>
<th>STAGE II</th>
<th>STAGE III</th>
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<td><strong>TOTAL</strong></td>
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<td><strong>48</strong></td>
<td><strong>89</strong></td>
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* excluding basal cell and squamous cell carcinoma of skin.
* excluding intraepithelial neoplasia of cervix and prostate.
Cancer Data Summary
Top 3 Primary Cancers at HCMC

2015 Lung Cancer by AJCC Stage

22% of all Lung cancers at HCMC are Stage I,
11% Stage II,
17% Stage III,
41% Stage IV,
9% Unknown Stage

2015 Prostate Cancer by AJCC Stage

20% of all Prostate cancers at HCMC are Stage I,
47% Stage II,
14% Stage III
17% Stage IV
2% Unknown Stage

2015 Breast Cancer by AJCC Stage

15% of all Breast cancers at HCMC are Stage 0,
47% Stage I,
27% Stage II,
7% Stage III,
4% Stage IV,
Quality Improvement

The National Quality Forum (NQF) is a not-for-profit membership organization that develops and implements national strategies for health quality measurement and reporting. In 2004, working with NQF, The Commission on Cancer developed evidence-based measures that help promote improvements in care delivery and are the highest standard for measurement. These measures demonstrate provider accountability, influence payment for services, and promote transparency.

Since the 1st measures were released for Colon Cancer and Breast cancer, 2005 and 2006 respectively, more measures and sites are being continually added. These measures are monitored by Cancer Data Registries to collect the necessary data to assess and monitor concordance with the measures.

Breast Measure for HCMC 2010-2013

Breast Measure: HT

Tamoxifen or third generation aromatase inhibitor is recommended or administered within 1 year of diagnosis for women with AJCC T1c or Stage IB-III hormone receptor positive breast cancer.

Clinical Rationale: There is extensive evidence that hormone (endocrine) therapy with hormone receptor positive breast cancer reduces the risk of local recurrence, contralateral breast cancer, distance recurrence, and death. Measure specifies use of Tamoxifen or third-generation aromatase inhibitor rather than specifying Tamoxifen for premenopausal and aromatase inhibitor for postmenopausal because of (a) difficulty in clearly identifying from records or administrative data the menopause status, and (b) variation in appropriate use of Tamoxifen in postmenopausal women and some reasonable use of aromatase inhibitor in premenopausal women with the use of ovarian suppression.

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<td>96.00%</td>
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<td>88.89%</td>
<td>90.48%</td>
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Conclusions

- Meeting Standard HT with no issues.
- The ACoS Benchmark for Measure HT is 90%. For years 2011, 2012, and 2013, HCMC exceeded the ACoS benchmark.
- In both 2011 and 2013, HCMC’s Estimated Performance Rates (EPR) is higher than the national average (lower 95% confidence interval above the mean).
- No action plan is required.
Lung Cancer Screening at Hennepin County Medical Center

The Hennepin County Medical Center (HCMC) serves the widely diverse population of Hennepin County. According to the most recent Community Needs Assessment, 12.5% of residents were born in a different country. The largest number of Somali refugees in Minnesota lives in Hennepin County. All racial/ethnic groups, except for Asians, saw an increase in the proportion of families living in poverty. The percent of Hennepin County families living in poverty continues to increase. Income inequality and poverty continue to be highest among the racial and ethnic minority families.

Lung cancer is the leading cause of death in Minnesota for both men and women. Screening with spiral CT has been shown to reduce lung cancer deaths by 16-20% compared to standard x-ray with 30 pack-year smoking history who are current smokers or had quit within 15 years. Lung cancer is diagnosed at a later stage at the HCMC Comprehensive Cancer Center compared to other Minnesota hospitals. 43% of patients at HCMC are diagnosed with stage IV lung cancer compared to 37% at other Minnesota hospitals.

The Comprehensive Cancer Center, radiology, and pulmonary staff teamed together in 2015 to develop and implement a lung cancer screening program. This program consists of CT imaging, smoking cessation, patient education and implementation of a dedicated pulmonary nodule clinic started in September 2015.

### Lung Cancer Screening Program Outcomes

- A lung cancer screening event focused on the American Indian population. All participants received lung cancer screening and education. 12 participants completed screening.
- 45 patients were scheduled in the pulmonary nodule clinic.
- As of October 2015, 300 patients had completed lung cancer screening with CT imaging.
- 14 patients of the patients screened were a LungRADS4.
HCMC participates in the Metro-Minnesota Community Oncology Research Consortium (MMCORC), a non-profit 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.
In 2015, The Comprehensive Cancer Program held 46 multidisciplinary facility-wide Cancer Conferences presenting a total of 186 educational cancer cases.
Cancer Related Services Provided at HCMC

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<td>• Chemotherapy</td>
<td>• Grand Rounds</td>
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<td>• Hormonal/Antihormonal Therapy</td>
<td>• Continuing Education</td>
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<td>• Immunotherapy</td>
<td>• Continuing Medical Education</td>
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<td>• External Beam Radiotherapy</td>
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<td>• High Dose Rate Brachytherapy</td>
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<td>• Image Guided Radiation Therapy</td>
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<td>• Intensity Modulated Radiation Therapy</td>
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<td><strong>Treatment Planning</strong></td>
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<td>• Computerized Axial Tomography</td>
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<td>• Image Fusion (CT, MRI, PET)</td>
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<td>• Medical Physics/Dosimetry</td>
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<td><strong>Support Services</strong></td>
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<td>• American Cancer Society Patient Navigator</td>
<td>• Cancer &amp; Tumor Data Services</td>
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<td>• Cancer Support Group</td>
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<td>• Tumor Conferences</td>
<td>• Occupational, Physical, Speech Therapy</td>
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<td>• Pastoral Care</td>
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<td>• Social Services</td>
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<td>• Genetic Counseling</td>
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<td>• Dietitian</td>
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<td><strong>Additional Services</strong></td>
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<td>• Exercise/Wellness/Yoga Classes</td>
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<td></td>
<td>• Palliative Care &amp; Hospice Services</td>
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Cancer Related Services Provided at HCMC
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)

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.health.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
Bibliography


3 - https://cancerstatisticscenter.cancer.org/?_ga=1.126039117.1157223852.1461679515#/cancer-site/Kidney%20and%20renal%20pelvis


8 – Campbell Walsh urology


14 - Lane BR, Gill IS. 5-Year outcomes of laparoscopic partial nephrectomy. J Urol 2007;177:70–4


21 - Americans in Poverty at Greater Risk for Chronic Health Problems http://t.usnews.com/a33B5D?src=usn_tw via @usnews
SPECIAL THANKS

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- The Cancer & Tumor Data Services Department for putting this year’s 2015 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.