



THE CANCER CENTER  
AT  
HEARTLAND REGIONAL MEDICAL CENTER



2009 ANNUAL REPORT  
Based on 2008 Data

## 2008 Annual Report Introduction

It is time again to report on the accomplishments of the Cancer Program of Heartland Health as relative to the Cancer Center, our community and region. Some of what has been accomplished is a result of building upon what had been initiated in 2007. In all that we do the purpose is to grow our Program in order to respond to the needs of our patients, their families and friends providing them with the best care close to home.

- Heartland became the 8<sup>th</sup> hospital host site in the nation with an affiliation to the MD Anderson Physicians Network. This partnership will allow Heartland Regional Medical Center to combine the best of what we provide locally with the expertise of MD Anderson. These benefits include the addition of patient referral services, when necessary, to MD Anderson for diagnostics, treatment, and second opinions. On site we have the technology for real-time patient video cancer conferences between our physicians and theirs', access to innovative clinical trials for qualifying patients, access to quality initiatives, and to an array of ancillary patient services
- Technologically there were equipment upgrades started late in 2007 that were completed in early January of 2008 in the form of replacing a single-energy linear accelerator (linac) with a new dual- energy accelerator equipped with Image Guided Radiation Therapy and Stereotactic Radiosurgery capabilities. Commissioning and acceptance testing now completed both of the department of Radiation Oncology's linacs are beam matched and are interchangeable adding scheduling flexibility and added treatment options for patients
- Stereotactic Radiosurgery was added to our array of treatment modalities. This type of cancer treatment is now available for patients meeting the exacting criteria for its' utilization
- The new Breast Center was opened in the fall of the year and will provide the latest mammography technology and diagnostic and surgical services available. A Nurse Navigator is employed to personally guide women through breast health issues and, if necessary, ensuing medical/surgical work up and treatment of breast disorders including cancer
- Weekly Breast Conferences were initiated providing a forum for physicians of all disciplines to discuss select breast cancer cases and plan patient care in a team approach
- Facilitating the team approach to treating breast cancer physicians and interdisciplinary stakeholders developed standardized treatments for breast cancers of all types and stages incorporating MD Anderson's latest evidence-based clinical guidelines. Plans are underway to standardize the treatment of lung, colorectal and prostate cancer care in the same way
- Responding to an assessed need in 2007 to provide expanded health screenings to the community, a third prostate screening site was successfully piloted and adopted at the Social Welfare Board
- Additional staff was secured for the Cancer Center's services as our program expanded. A dedicated Social Worker and Chaplain are now officially part of our interdisciplinary team and will continue to work, as they have for many years, exclusively with our patients and their families
- Not only focusing on cancer treatment but also to treat the patient in a holistic manner a Complimentary Therapies program was started. Classes for Nia, Tai Chi, Yoga, general fitness exercise, massage, reflexology, Healing Touch, music, journaling and more have been added or are in the process of being added as qualified instructors and therapists are engaged to partner with us
- A literary form of Complimentary Therapy was actualized in a book called "Hold Fast to Hope". Containing contributions of art, photography, prayers, prose and songs all of an original nature.

In it our patients, their families, and our staff express their reactions to the cancer experience and connect as a “Circle of Friends” to support each other

- A second book called “The Cancer Center Resource Guide” was created by our staff to be an additional tool for our patients and their families to use and familiarize themselves with our Cancer Program, its’ services and our interdisciplinary team

It has been an exceptionally busy year for the Cancer Center, its’ programs, physicians and staff. We look forward to additional opportunities to implement new technologies and patient services as we continue to address our commitment to providing our community and region with “the finest care close to home”.

Janet Schultz, BSN, RN, OCN  
Team Leader, Radiation Oncology  
The Cancer Center

## Cancer Registry Report

The Cancer Registry staff at Heartland Regional Medical Center (HRMC) collects, maintains, and analyzes data on all patients diagnosed with or treated for cancer, benign brain tumors, and hematopoietic diseases at our hospital and all Heartland owned clinics and offices. There were 769 new cases added to the Cancer Registry data base in 2008, of these, 722 were analytic\* and 47 were non-analytic#.

Follow-up is required, by the American College of Surgeons (ACoS), on all analytic patients on a yearly basis in order to have an accredited cancer program. The Cancer Registry currently has a follow-up data base of 11,043 patients. The follow-up rate since our Accession Year† is at 88.7% which is well above the ACoS required 80%.

The Cancer Registry staff coordinates the weekly Breast Cancer, Lung Cancer & General Tumor Conference meetings. These meetings are made up of a multidisciplinary panel of physicians who discuss diagnostic and treatment modalities for cancer patients.

The Cancer Registry staff coordinates the teleconferences with MD Anderson Cancer Center in Houston, Texas. These conferences follow the same premise as the Tumor Conference meetings held at HRMC and include input from the MD Anderson physicians.

The Cancer Committee is the governing body for the Cancer Registry staff. This committee is responsible for overseeing the Registry and aiding in compliance of all the Standards set forth by the American College of Surgeons in order to be an accredited cancer program.

Heartland Regional Medical Center has two certified tumor registrars and one full time registry clerk. Both certified registrars belong to Kansas City Area Tumor Registrars Association, Missouri State Tumor Registrars Association and the National Cancer Registrars Association. The registrars are required to submit educational credits every two years to maintain their certification.

Debra McDowell, CTR  
Oncology Data Coordinator

\* Analytic: diagnosed and/or received part of their first course of treatment in our facility.

# Non-analytic: diagnosed and received their first course of treatment at another facility and are treated in our facility for progression or recurrence of their disease.

†. Accession Year: year first diagnosed at the reporting facility.

## Heartland Regional Medical Center Primary Site Table by Sex for 2008

Primary Site	Total	Male	Female
<b>ORAL CAVITY &amp; PHARYNX</b>	<b>18</b>	<b>12</b>	<b>6</b>
Lip	1	1	0
Tongue	5	4	1
Salivary Glands	6	4	2
Gum & Other Mouth	2	1	1
Tonsil	2	2	0
Oropharynx	2	0	2
<b>DIGESTIVE SYSTEM</b>	<b>133</b>	<b>77</b>	<b>56</b>
Esophagus	13	10	3
Stomach	5	4	1
Small Intestine	4	3	1
Colon Excluding Rectum	68	35	33
Cecum	20	8	12
Appendix	1	0	1
Ascending Colon	14	4	10
Hepatic Flexure	4	4	0
Transverse Colon	4	2	2
Splenic Flexure	2	2	0
Descending Colon	5	5	0
Sigmoid Colon	17	9	8
Large Intestine, NOS	1	1	0
Rectum & Rectosigmoid	22	12	10
Rectosigmoid Junction	4	2	2
Rectum	18	10	8
Anus, Anal Canal & Anorectum	2	1	1
Liver & Intrahepatic Bile Duct	8	6	2
Gallbladder	1	0	1
Other Biliary	1	0	1
Pancreas	9	6	3
<b>RESPIRATORY SYSTEM</b>	<b>131</b>	<b>77</b>	<b>54</b>
Larynx	9	7	2
Lung & Bronchus	122	70	52
<b>BONES &amp; JOINTS</b>	<b>1</b>	<b>1</b>	<b>0</b>
Bones & Joints	1	1	0
<b>SOFT TISSUE</b>	<b>6</b>	<b>5</b>	<b>1</b>
Soft Tissue (including Heart)	6	5	1
<b>SKIN EXCLUDING BASAL &amp; SQUAMOUS</b>	<b>19</b>	<b>12</b>	<b>7</b>
Melanoma -- Skin	19	12	7
<b>BREAST</b>	<b>129</b>	<b>0</b>	<b>129</b>
Breast	129	0	129
<b>FEMALE GENITAL SYSTEM</b>	<b>31</b>	<b>0</b>	<b>31</b>
Cervix Uteri	5	0	5
Corpus & Uterus, NOS	16	0	16
Corpus Uteri	15	0	15
Uterus, NOS	1	0	1
Ovary	8	0	8
Vulva	2	0	2
<b>MALE GENITAL SYSTEM</b>	<b>95</b>	<b>95</b>	<b>0</b>
Prostate	89	89	0
Testis	5	5	0
Other Male Genital Organs	1	1	0
<b>URINARY SYSTEM</b>	<b>80</b>	<b>56</b>	<b>24</b>
Urinary Bladder	45	33	12
Kidney & Renal Pelvis	34	22	12
Ureter	1	1	0
<b>EYE &amp; ORBIT</b>	<b>1</b>	<b>0</b>	<b>1</b>
Eye & Orbit	1	0	1
<b>BRAIN &amp; OTHER NERVOUS SYSTEM</b>	<b>13</b>	<b>4</b>	<b>9</b>
Brain	8	3	5
Other Nervous System	5	1	4
<b>ENDOCRINE SYSTEM</b>	<b>37</b>	<b>5</b>	<b>32</b>
Thyroid	34	4	30
Other Endocrine (including Thymus)	3	1	2
<b>LYMPHOMAS</b>	<b>42</b>	<b>29</b>	<b>13</b>
Hodgkin Lymphoma	8	6	2
Non-Hodgkin Lymphoma	34	23	11
NHL - Nodal	26	17	9
NHL - Extranodal	8	6	2
<b>MULTIPLE MYELOMA</b>	<b>7</b>	<b>4</b>	<b>3</b>
Multiple Myeloma	7	4	3
<b>LEUKEMIAS</b>	<b>10</b>	<b>5</b>	<b>5</b>
Lymphocytic Leukemia	3	2	1
Myeloid & Monocytic Leukemia	5	3	2
Other Leukemia	2	0	2
<b>MESOTHELIOMA</b>	<b>1</b>	<b>1</b>	<b>0</b>
Mesothelioma	1	1	0
<b>MISCELLANEOUS</b>	<b>15</b>	<b>7</b>	<b>8</b>
Miscellaneous Sites	15	7	8
<b>Total</b>	<b>769</b>	<b>390</b>	<b>379</b>

## Colorectal Cancer Ten Year Study

Colorectal cancer is a major health concern in the United States as well as the world. Six percent of Americans are expected to develop the disease within their lifetime. There are more than one million new cases worldwide. It remains the 2<sup>nd</sup> leading cause of cancer deaths worldwide with over 500,000. In 2008, an estimated 158,000 new cases in the U.S. were diagnosed. Approximately 50,000 deaths occurred in the country from this disease in 2008.

The state of Missouri recorded an estimated 3,090 new cases 2008 and an estimated 1,100 deaths during that year from colorectal cancer. It remains one of the most expensive cancers to treat since multiple therapies are required for cure; surgery, chemotherapy and often radiation therapy.

The charts and graphs that accompany this article, represent pertinent statistics concerning patients diagnosed and treated at Heartland Regional Medical Center (HRMC) over a 10 – year period. Of note, the trend over the last 10 years at HRMC is trending downward. Examples: 86 cases in 1999, 78 in 2003 and 66 in 2008. The overall incidence in the State of Missouri over this same time period is also trending downward as shown in Table 1.

Patient ages at diagnosis at HRMC for both colon and rectum are presented in Table 2. The patients are separated at 5 year intervals to observe any changes over this 10 year period. The incidence in colon and rectal cancer diagnosed at HRMC remains nearly equally divided between male and female from 1999 through 2008 (Figure 1). This mirrors national trends with neither sex noting an increase incidence.

Table 3 shows the survival by stage for colon and rectal cancer at HRMC diagnosed during the period 1999 through 2008 compared to the same survival data nationally. Again, these numbers compare quite favorably for HRMC.

The number of total cases may be greater since very early stage cancers may be detected by the GI endoscopist or Surgeon with the pathology being sent to another facility for reporting. These early stage patients therefore may not enter into the tumor registry data for HRMC.

Approximately 50% of people in Western countries have adenomas by age 65. The data also reveal that endoscopic polypectomy reduces cancer risk by 80 – 90%. Colorectal cancer has a 95% survival rate when detected early and multiple methods are applicable for screening large populations.

HRMC cancer program has offered a free, annual fecal occult blood test (FOBT) screening for the region since 1987. The number of gastroenterologists in the community offering colonoscopy screening has risen from one in the early 1980's to approximately six. Although it is difficult to obtain the numbers of annual screening colonoscopies performed or colonoscopies performed to evaluate a positive FOBT, it is thought that this is partly responsible for the decline of total colorectal cancer cases over this most recent 10 years. When comparing data for the last ten years, the reduction rate in colon cancers for HRMC is 16% versus the state of Missouri figure of 4.1%.

In an effort to improve the effectiveness of the annual FOBT screening as well as further inform the community about the effectiveness of early detection, the Cancer Program is organizing an improved colorectal screening campaign. This effort is centered around bringing a wide variety of services together and coordinating their existing efforts. A renewed advertising campaign timed around the national colorectal cancer awareness month of March, a speakers series from community physicians educating the public about screening techniques, value of screening and treatment advances, as well as other local initiatives are being coordinated to expand the message of “early detection saves lives”.

Robert C. Johnson, MD  
Radiation Oncology

Table 1.

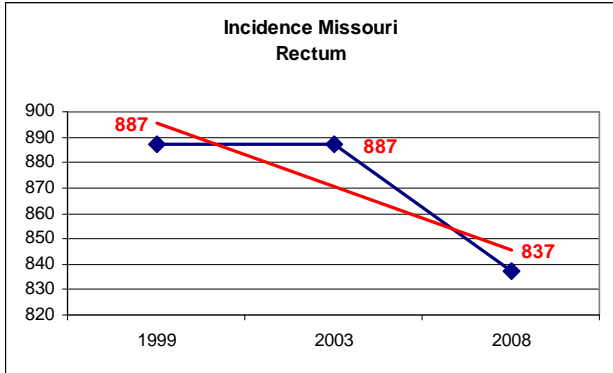
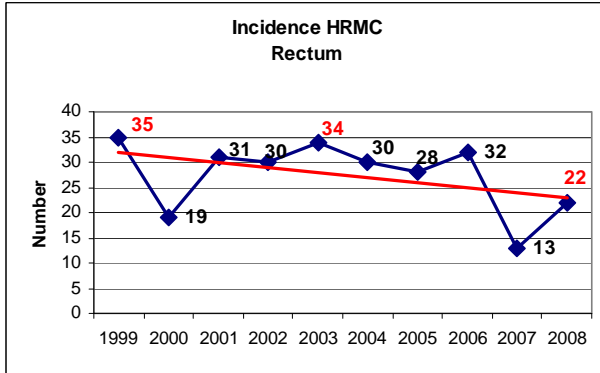
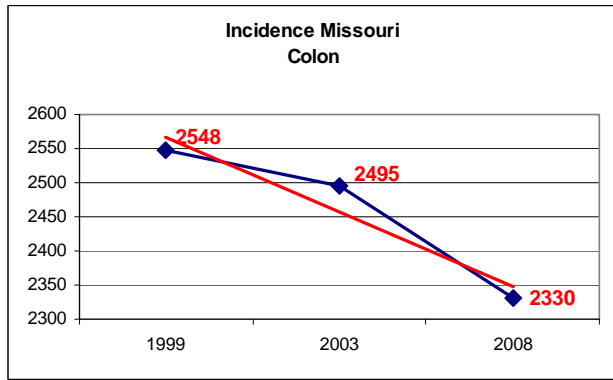
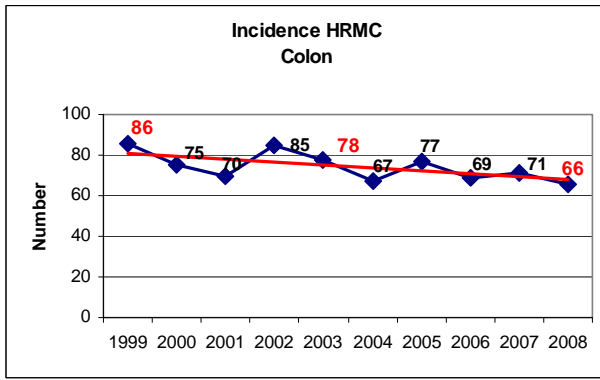


Table 2.

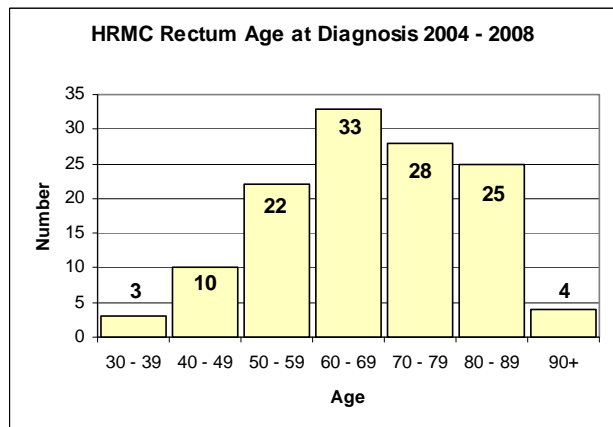
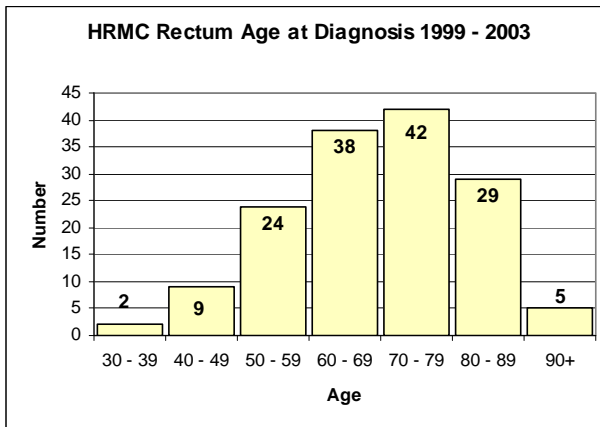
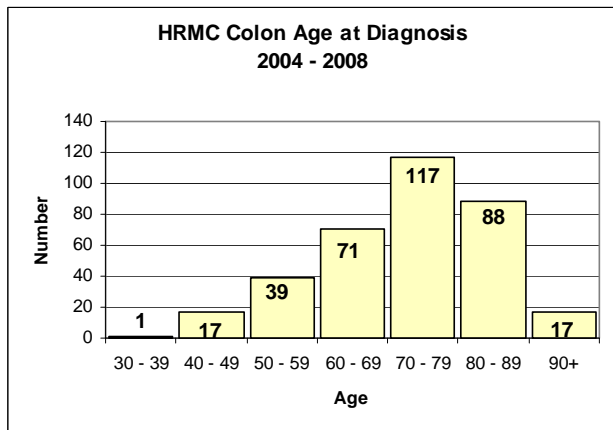
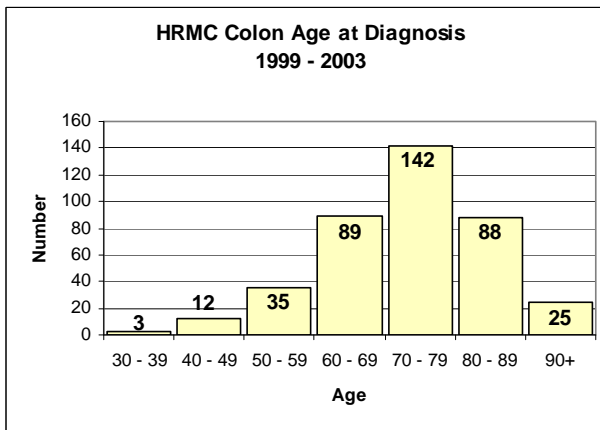


Figure 1

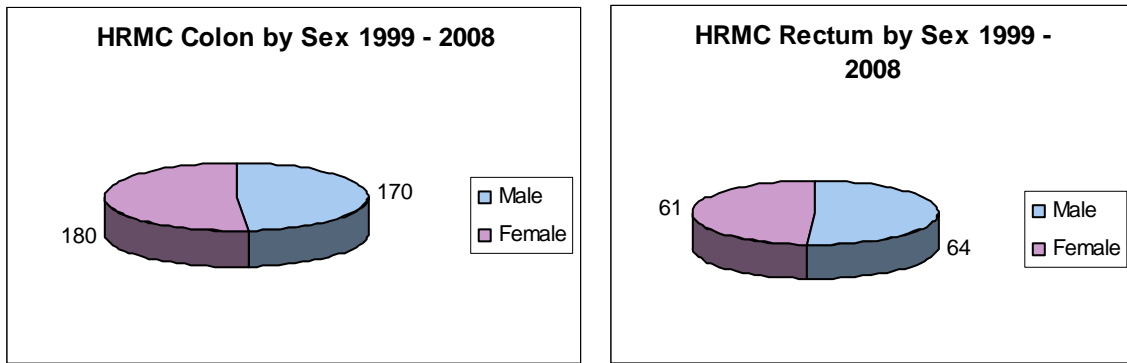
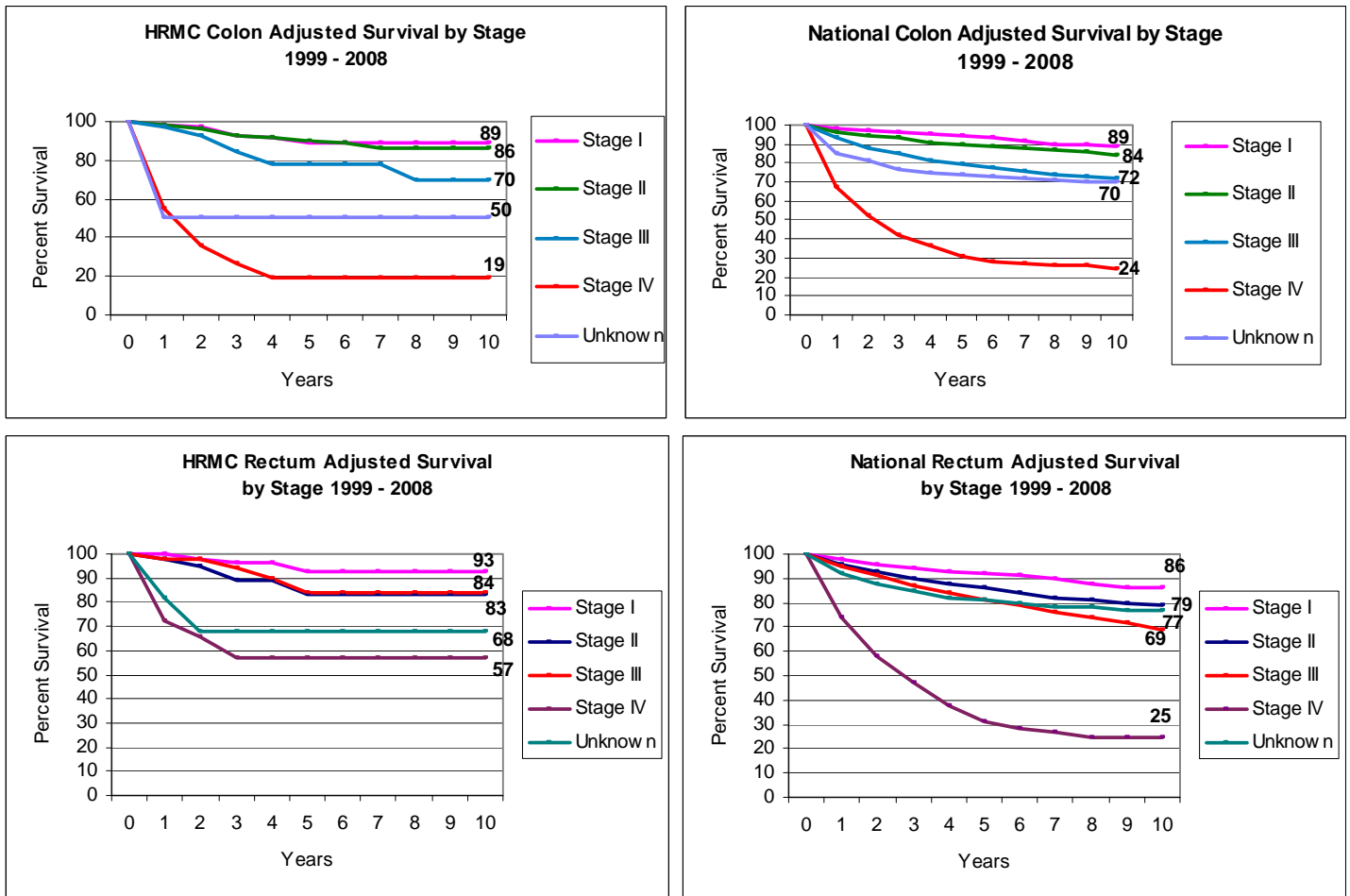


Table 3



## Five Year Lung Study 2004 - 2008

There were a total of 3,741 analytic cancer cases diagnosed at Heartland Regional Medical Center (HRMC) between 2004 and 2008. Fifteen percent were Non-Small Cell Lung Cancer (NSCCA) and two percent were Small Cell Lung Cancer (SCCA). For both NSCCA and SCCA there were significant “stage unknown” patients, shown in the graph in **Table 1**. It should be noted that staging has greatly improved in recent years.

Treatment by stage is depicted in **Tables 2a and 2b**. Surgery is still the treatment of choice for early stage lung cancer. Combined modality is used for late stage cancer.

Five year relative survival is compared to national figures and is shown in **Table 3**. The data confirms that the survival of NSCCA and SCCA seen at HRMC are comparable to the National Cancer Data Base (NCDB) figures, after making allowances for small numbers compared to NCDB numbers.

Table 1.

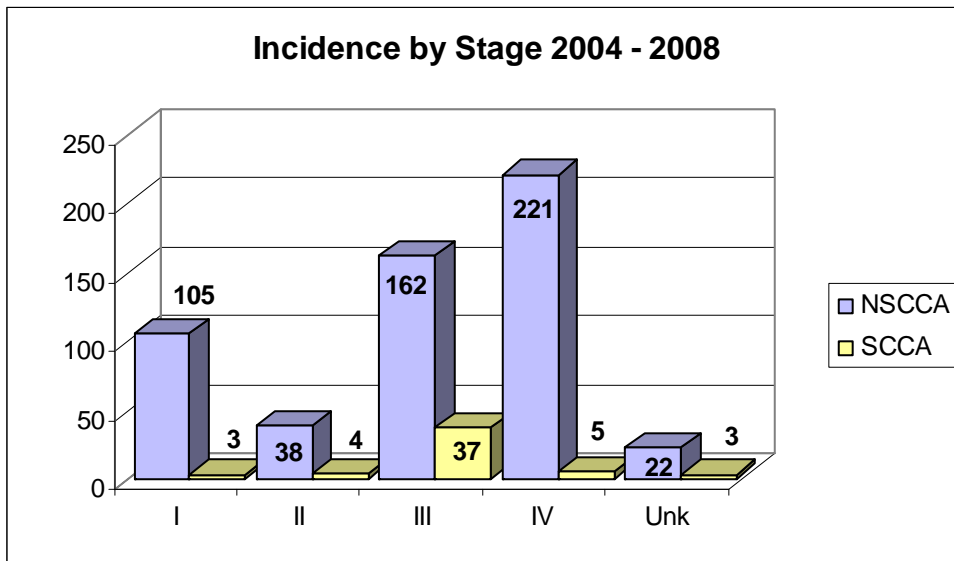
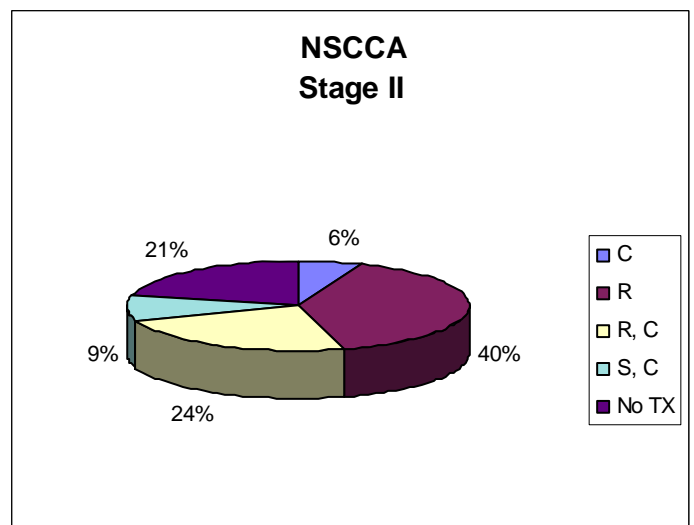
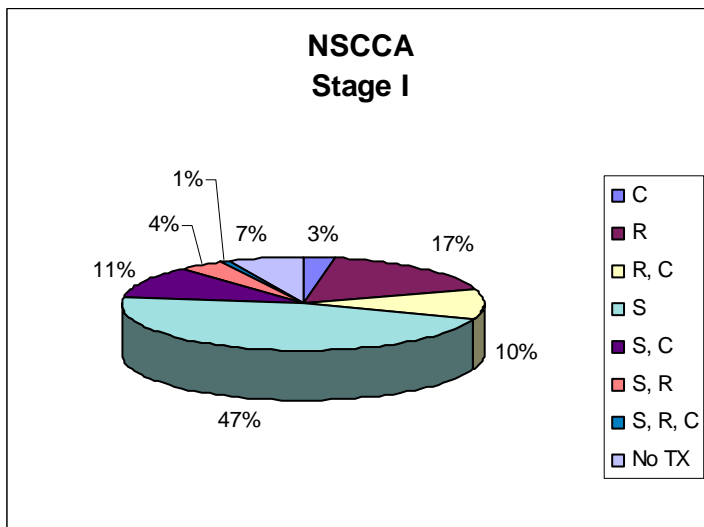
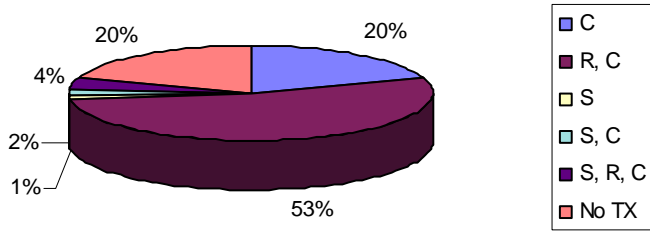


Table 2a.

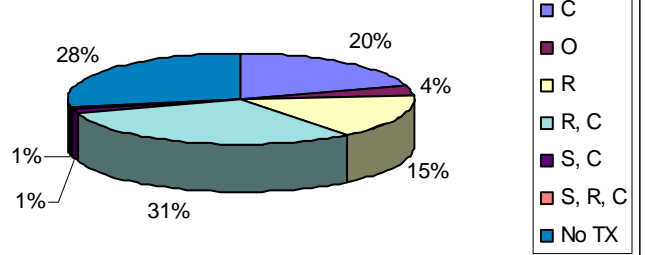
### HRMC First Course Treatment 2004 - 2008



**NSCCA  
Stage III**



**NSCCA  
Stage IV**



**NSCCA  
Stage Unknown**

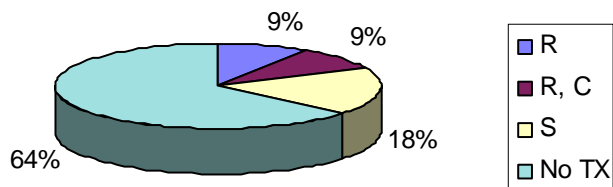
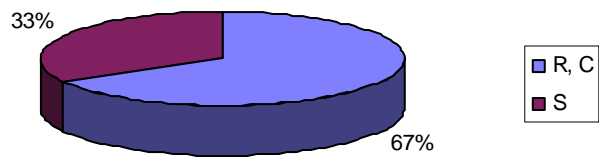


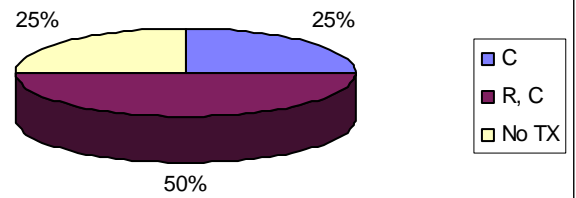
Table 2b.

**HRMC First Course Treatment  
2004 – 2008**

**SCCA  
Stage I**



**SCCA  
Stage II**



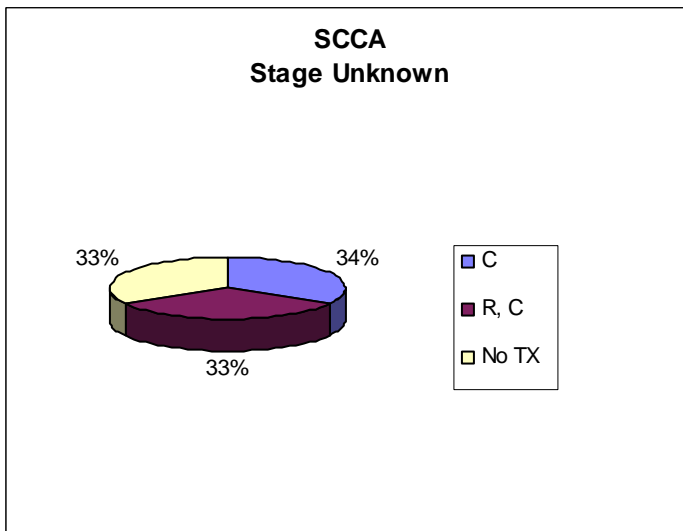
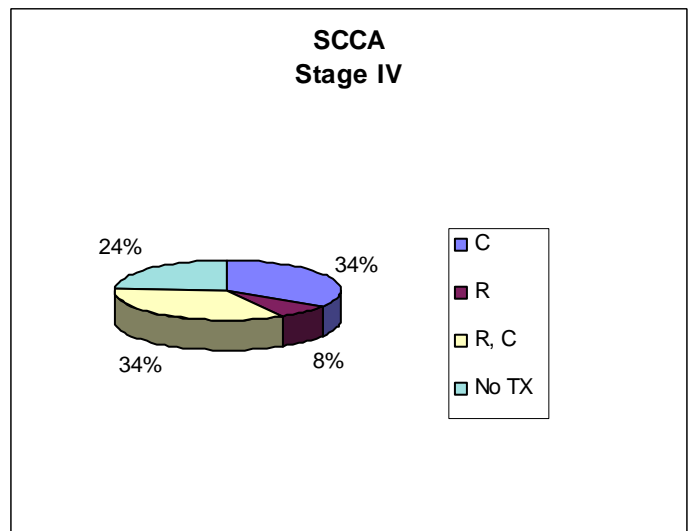
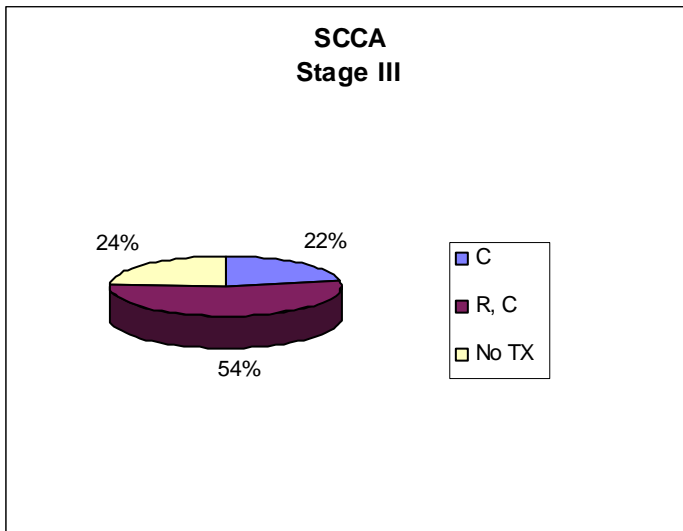


Table 3.

