



CANCER REPORT

2005

 **St. Cloud Hospital**

CENTRACARE Health System

2005

The process of caring for persons with cancer is complex as cancer occurs in virtually any area of the body. A person with cancer will literally have contact with dozens of physicians, nurses, therapists, pharmacists, and other health care professionals as they journey through screening, diagnosis, treatment and plans to get on with their lives. The delivery of cancer care reaches beyond the Coborn Cancer Center to involve many areas of the hospital and medical community.

Thank You

To the Central Minnesota health care community

The Cancer Care Center Board is indebted to the hundreds of professionals who go above and beyond to meet the multiple and complex needs of persons who have cancer. The work you do everyday is providing care, hope and cures.

To the CentraCare Health Foundation and its benefactors

On behalf of our patients, the Cancer Care Center Board is indebted to the hundreds of generous benefactors who have responded time and again to our requests for assistance. In fiscal year 2006 more than \$1.2 million of charitable support was given to the cancer program.

And most of all to our patients

Perhaps you live in the St. Cloud or Central Minnesota. Perhaps you came to us from hundreds of miles away. Perhaps you came only for a second opinion or spent several weeks or months with us for acute cancer treatment. We are grateful for your trust. We are here to provide you or those you love with world-class care.

World Class Care

The Cancer Program at St. Cloud Hospital (SCH), lead by the Coborn Cancer Center, this past year concentrated on formalizing our operational principles. These principles are specifically selected because each serves to either directly or indirectly assure patients they have selected a cancer program of outstanding quality and service.

Finally

Thank you to the many staff and physicians who contributed their time and talent to coordinate and publish the facts and figures contained in this cancer report. Your commitment to the cancer program is invaluable. We could not function without your knowledge and expertise.

Jo Zwilling RN, MBA
 Jo Zwilling, RN, MBA
 Cancer Services Director

Nicholas F. Reuter MD
 Nicholas F. Reuter, MD, FACP
 Cancer Program Medical Director

CANCER REPORT

PRINCIPLE	IMPORTANCE TO PATIENT	SAMPLE OF OPTIONS AVAILABLE AT SCH
Provide the most current treatments for diagnosis and treatment of cancer.	Screening, diagnosis and treatments for cancer continue to change and evolve. Less invasive treatments coupled with more focused drug treatments need to be available and constantly upgraded, enabling patients the ability to have their care and treatment locally without having to travel to other major centers.	<ul style="list-style-type: none"> ◆ More than 13,000 surgeries annually (many minimally-invasive procedures which spare normal surrounding tissue and reduce recovery time). <ul style="list-style-type: none"> • 18 operating rooms • 90 surgeons • da Vinci Robotic Surgical System ◆ 1,370 new cancers treated in 2005. ◆ Stereotactic radiosurgery in radiation oncology. ◆ More than 12,250 linear accelerator treatments annually. ◆ ACR and MQSA accredited Breast Center doing 31,000 annual mammograms. ◆ Availability of all approved chemotherapy and biologic medications within days of receiving FDA approval. ◆ Diagnostic services including ultrasound, MRI, CT, PET and nuclear medicine.
Monitor and report outcomes.	When facing a cancer diagnosis patients desire to know that current treatments are available but also how our program compares to other facilities doing cancer treatment.	In the past year we have organized four physician groups who have adopted consensus measurements and outcomes for breast, prostate, lung and head/neck cancers. These multi-specialty groups have addressed outcome measures for screening, diagnosis, treatment and follow-up care. Whenever possible we've used nationally published outcomes, with a goal to meet or exceed outcomes in each area. Watch for publication of our results from each group.

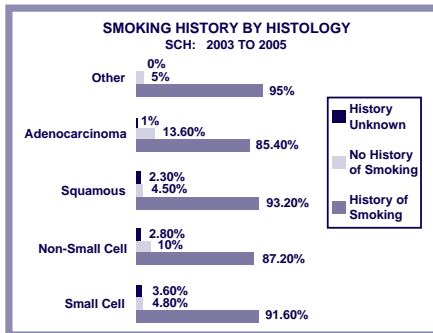
PRINCIPLE	IMPORTANCE TO PATIENT	SAMPLE OF OPTIONS AVAILABLE AT SCH
Recruit and hire only the best physicians and staff.	At one of the most stressful times in a patient's life we desire patients to have the comfort of knowing they've placed their trust in capable hands.	<ul style="list-style-type: none"> ◆ Medical staff of 375 physicians in all major specialties. ◆ Board-certified medical and radiation oncologists located at Coborn Cancer Center. ◆ Specially trained and nationally certified oncology nurses at the Coborn Cancer Center and the inpatient oncology unit at SCH. ◆ Certified radiation therapists, oncology dietitian, advanced practice oncology CNS, nurse practitioner, and oncology specific pharmacists at Coborn Cancer Center.
Attain outstanding patient satisfaction.	Patients expect to receive the most current surgical and medical programming. We also desire they receive timely appointments, responses to questions, accurate education, reference material, etc.	Effective July 1, 2006 a switch was made in our patient satisfaction-monitoring tool. The new survey enables us to compare and share our performance against both large and small cancer centers from across the nation.
Assure local availability of access to cancer clinical trials.	The clinical cancer research program in St. Cloud allows patients with various types of cancer access to clinical trials. Without this programming patients would have to travel long distances to a academic center or wait several more years for a treatment or medication to receive FDA approval.	<ul style="list-style-type: none"> ◆ SCH is a founding member of the North Central Cancer Treatment Group (NCCTG) headquartered at the Mayo Clinic. Participation in this research group allows us to have multiple clinical research studies available to patients without a need to leave the area. ◆ Currently we have more than 50 clinical trials open to patients with breast, brain, colorectal, prostate, pancreas, head/neck and lung cancers.
Increase available support services to patients from the time of diagnosis throughout their life.	The diagnosis of cancer affects not only a patient but also their family. Providing holistic care necessitates the need for numerous support services including nutrition, social services, finance, etc; most of these services are poorly or totally non-reimbursed. Additionally, cancer treatment itself can mean additional long-term side effects which require both medical and supportive services.	The Cancer Center is developing a specific program to enhance the long-term quality of life for patients and their families. We believe this program will serve as a national model for providing comprehensive services at the community cancer center level for persons surviving cancer.
Maintain national certifications for the cancer program.	Special voluntary certifications are sought to offer the public extra assurance that our cancer program meets standards and is reviewed against other national cancer programs.	<ul style="list-style-type: none"> ◆ The American College of Surgeons: Commission on Cancer has continuously accredited this program since 1989. The last survey in October 2004 resulted in a three-year approval with commendation at the highest-level available for a comprehensive community cancer center. ◆ The cancer research program is routinely audited, with the last audit and recertification occurring in summer of 2006. ◆ SCH is a Magnet hospital as designated by the American Nurse Credentialing Center for its outstanding nursing care. ◆ Laboratory, pathology and imaging services each are specialty certified. ◆ The Breast Center is accredited by both ACR and MQSA.
Provide community education and screening.	Prevention of cancer is our ultimate goal. Efforts to educate and communicate recommendations for cancer prevention and screening are key in lowering the incidence and mortality from cancer.	<ul style="list-style-type: none"> ◆ Community efforts have emphasized working with subspecialty clinics to focus on early screening for prostate cancer detection, melanoma screening, and smoking cessation. ◆ Assisting patients to find accurate and current information on various cancer types has been a focus. Additionally, we are in the midst of a major expansion of our patient resources center as part of the Cancer Center renovation which is currently underway.



James L. Jost
Surgery

Lung cancer remains the number one cause of cancer-related death among men and women in the United States, even though the incidence among men is declining slightly and the incidence among women is at a plateau. It is estimated that in 2006 a total of 162,460 people will die from lung cancer, accounting for 29% of all cancer deaths. Since 1987, more women have died each year from lung cancer than from breast cancer.

There are different types of lung cancer that are generally divided into “small cell” (a rare type primarily treated without surgery) and “non-small cell.” Non-small cell lung cancers are best treated with surgery if they are found early. Within the category of non-small cell lung cancer there are four sub-types that include: squamous cell, adenocarcinoma, large cell, and broncho-alveolar cell. Virtually all types are associated with tobacco smoking, although it is possible for non-smokers to get lung cancer. The cause in these cases is usually unknown. Risk factors, besides smoking, include asbestos or other occupational exposures, second-hand smoke, and possibly genetic factors.



Lung cancer exhibits no symptoms early in the disease. Early diagnosis is rare, but can occur when incidentally found on a chest X-ray or CT scan obtained for other reasons such as an unresolving upper respiratory infection. Late symptoms include cough, chest pain, coughing up blood, shortness of breath, weight loss, bone pain, or neurologic

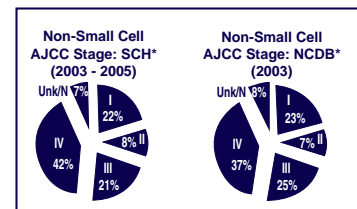
symptoms. Previous attempts to screen high-risk patients (e.g., smokers) with chest X-rays have not demonstrated a beneficial effect in improving the mortality rates from lung cancer. There is a new study underway by the National Cancer Institute to see if using CT scans of the chest would prove to be a better screening tool than traditional chest X-ray.

The right lung is divided into three sections (“lobes”) and the left lung is divided into two sections. At the root of each lobe are “lymph nodes” which act as filters in the lymph fluid drainage network coming from the lobe. These in turn connect to other lymph nodes at the root of the lung, around the windpipe, and into the neck. Tumor cells can travel through the lymph network to the aforementioned lymph nodes where they will continue to grow. Tumor cells may also travel through the bloodstream to settle and grow in other organs, especially the brain, skeleton, liver, and adrenal glands.

Typical surgery for non-small cell lung cancer involves removing the lobe containing the tumor (a “lobectomy”) as well as lymph nodes from the root of the lung and from around the windpipe. Not all lymph nodes in the region can be removed. The entire lung is only removed (a “pneumonectomy”) if the tumor is growing at the root. The “stage” of the cancer determines whether or not more treatment in the form of chemotherapy and/or radiation therapy will be recommended. The cancer stage is determined by the size of the tumor, whether or not tumor cells are found in lymph glands and whether or not tests such as CT or PET scans have demonstrated tumor in other organs such as the brain.

From 2003 to 2005 a total of 548 cases of lung cancer were treated at the St. Cloud Hospital. Of these cases 83 (15%) were small cell and 465 (85%) were non-small cell. There were 307 males and 241

females. The majority of patients had a smoking history, however, up to 14% of patients with adenocarcinoma had no such exposure history. Of the non-small cell patients, 22% had early Stage I disease with no tumor cells in lymph nodes, 29% had lymph node disease (Stages II and III), and fully 42% had metastatic disease outside of the chest (Stage IV).



*SCH = St. Cloud Hospital *NCDB = National Cancer Data Base

Nationally the five-year survival rate for all lung cancers is 16%, while the St. Cloud Hospital rate is 19.4%. The St. Cloud Hospital five-year survival rates for Stage I is 48% (42% national), for Stage II is 32% (24% national), for Stage III 13% (8% national), and for Stage IV 0% (2% national).

5-YR OBSERVED SURVIVAL RATE		
NON-SMALL CELL CARCINOMA		
AJCC STAGE	*SCH 1998 TO 1999	*NCDB 1998
I	48.22%	42.21%
II	31.82%	24.12%
III	13.21%	8.33%
IV	0%	2.01%
OVERALL	19.44%	16.21%

* SCH = St. Cloud Hospital
* NCDB = National Cancer Data Base

Efforts to develop new treatments and earlier detection will continue, but there is little doubt that the most successful effort against lung cancer will be to prevent it by eliminating smoking from societies throughout the world.

2005
ACTIVITY REPORT

Table 1

	2003	2004	2005
Analytic cancer cases ¹	1,239	1,376	1,370
Cases in the cancer registry	16,652	11,878*	13,776
Cases in follow-up	7,685	6,483*	7,306
Hospital discharges	22,775	24,306	24,932
Inpatient cancer discharges	1,493	1,432	1,347
Total cancer patient days	7,494	7,234	6,620
Average length of stay (cancer patient)	5.0	5.1	4.9
Radiation therapy patients treated	734	791	829
	(493 SCH ²) (241 Alex ³)	(505 SCH ²) (286 Alex ³)	(576 SCH ²) (253 Alex ³)
Hospice patients (cancer)	105	105	129
# of Cases Presented at Cancer/Breast Conference	259**	236**	231**
Average # of Physicians Attending Weekly Cancer Conference	10	9	9

¹Cases diagnosed and/or received their first course of therapy at St. Cloud Hospital/Coborn Cancer Center/CentraCare Radiation Oncology at Douglas County Hospital, Alexandria.

²SCH is St. Cloud Hospital.

³Alex is CentraCare Radiation Oncology at Douglas County Hospital, Alexandria.

*In 2004, the cancer registry changed its reference date from 1986 to 1994.

**Breast Conference cases and attendance are included in this figure starting in 2003.

AJCC STAGE: ANALYTIC CASES
ABSTRACTED IN 2005
(Total cases and top four cancer sites)

Table 2

Site	In Situ	I	II	III	IV	Unk	NA**	Total
All Cases	99	327	381	168	193	65	137	1,370
Prostate	0	0	184	13	10	5	1	213
Breast	38	103	78	27	9	11	0	266
Lung/Bronchus	0	30	19	37	90	12	4	192
Colon/Rectum	18	30	28	36	12	7	1	132

**NA (Not Applicable) refers to cancers that do not have an AJCC staging scheme.

(AJCC=American Joint Commission on Cancer)

SITE INCIDENCE OF TOP FOUR CANCER SITES

Table 3

(Compared to total number of cancers diagnosed)

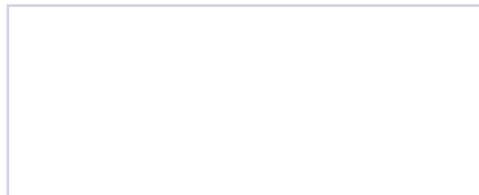
Site	St. Cloud Hospital	Minnesota*	Nationwide*
Prostate	16%	19%	17%
Breast	19%	14%	15%
Lung	14%	11%	13%
Colon/Rectum	10%	10%	11%

*Minnesota and nationwide statistics are taken from the ACS Facts/Figures 2005

2005 SITE INCIDENCE DATA
AT ST. CLOUD HOSPITAL

Table 4

	2003	2004	2005
Oral Cavity	21	25	27
Tongue	5	5	10
Oropharynx, Hypopharynx	3	3	0
Other Oral Cavity	13	17	17
Digestive System	186	177	202
Esophagus	13	12	22
Stomach	16	8	6
Colon	70	71	98
Rectum, Rectosigmoid	40	43	34
Anus/Anal Canal	5	3	3
Liver & Bile Ducts	6	6	6
Pancreas	21	22	18
Other Digestive	15	12	15
Respiratory System	170	218	202
Larynx	9	13	9
Lung/Bronchus	157	200	192
Other Respiratory	4	5	1
Hematopoietic/Lymphoid	117	118	125
Leukemia	34	20	35
Multiple Myeloma	9	22	10
Other Hematopoietic	13	13	11
Hodgkin Lymphoma	8	9	6
Non-Hodgkin Lymphoma	53	54	63
Bone	4	0	1
Connective/Soft Tissue	7	2	5
Skin	15	32	29
Melanoma	14	30	27
Other Skin	1	2	2
Breast	214	264	266
Female Genital	44	46	45
Cervix Uteri	2	3	3
Corpus Uteri	28	25	33
Ovary	12	14	7
Other Female Genital	2	4	2
Male Genital	268	289	230
Prostate	260	275	213
Testis	7	13	14
Other Male Genital	1	1	3
Urinary	102	110	129
Bladder	54	52	65
Kidney/Renal	42	53	61
Other	6	5	3
Brain and CNS	38	46	35
Brain (Benign)	2	2	0
Brain (Malignant)	20	23	16
Other Brain and CNS	16	21	19
Endocrine	33	43	55
Thyroid	33	32	46
Other Endocrine	0	11	9
Unknown Primary	25	20	16
Other/Ill-Defined	3	8	3
Total	1,247	1,398	1,370



ANALYSIS OF 2005 ACTIVITY REPORT

The Cancer Registry at the St. Cloud Hospital and Coborn Cancer Center is a key component that provides support for a multidisciplinary team of physicians serving Central Minnesota. The registry is responsible for data collection, follow-up and analysis of cancer activity.

Patients treated in their home communities but not at a CentraCare facility are not included in our registry data; however more cancer patients are being treated through our growing medical oncology outreach program. Coborn Cancer Center medical oncologists now serve the following Central Minnesota communities: Mora, Glenwood, Little Falls, Long Prairie, Paynesville, Melrose, and Sauk Centre.

In 2005, 1,370 patients were accessioned into the registry database. (See table 1) According to the American Cancer Society Cancer Facts and Figures 2005, the four most common cancer diagnoses were breast, prostate, lung and colorectal malignancies. (See table 2)

Breast cancer remains the most commonly diagnosed cancer in women. There were 266 cases accessioned in 2005. Eighty-two percent (219 of 266) were diagnosed with early stage (0 to II) breast cancer. Having a dedicated breast center leads to earlier diagnosis and treatment with a better chance for long-term survival.

Prostate cancer remains the most common cancer diagnosis among men. The Cancer Registry reports that 86% (184 of 213), of prostate patients in 2005 were diagnosed with early stage (I to II) cancer. The early detection and treatment of prostate cancer continues to be a high priority as evidenced by the availability of dedicated urology and radiation specialists.

Lung cancer accounts for a significant number of cases entered annually into the registry. There was a slight decrease in the number of lung cases accessioned during 2005. (See table 4) The majority of patients, 66% (127 of 192), were diagnosed as a stage III or IV, this finding is congruent with national statistics. Late stage at diagnosis plays a significant role in the poor survival outcomes for this disease. This, in part, reflects the fact that no screening methods have been developed that are able to diagnose lung cancer at an early stage. A national study sponsored by the National Cancer Institute is being conducted to evaluate chest X-ray versus spiral CT scan screening for lung cancer. Preliminary reports from this study are showing a possible advantage in doing spiral CT for early detection and this may lead to practice changes in the near future.



André L. Mitchell
Radiation Oncology

Colorectal cancer continues to be a top four-cancer diagnosed in Central Minnesota. Since early detection is a key factor to surviving colorectal cancer, it is relevant that 58% (76 of 132) of the cases entered into the registry were diagnosed as stage 0 to II. An aggressive screening program is vital for prevention as well as early detection.

There has been a steady increase in the number of urinary, thyroid, lymphoma/hematopoietic, and uterine cases accessioned into the registry. This may be due to the expanding services provided by CentraCare Health System to residents of Central Minnesota. The activity and information provided by the registry is essential for programmatic and administrative planning, research, and for monitoring patient outcomes at the St. Cloud Hospital and Coborn Cancer Center. For more information about Coborn Cancer Center, visit www.centracare.com