# 2010







Cancer Program Annual Report and Outcome Study on Colon Cancer

The Jewish Hospital

MERCY HEALTH PARTNERS



# Annual Report on 2009 Activities

#### Cancer Program Summary

The Jewish Hospital offers the highest quality of cancer care as evidenced by the approval of our cancer program by the American College of Surgeons, Commission on Cancer and Foundation for the Accreditation of Cellular Therapy for our Blood and Marrow Transplant Center. Achieving compliance with the required standards of care set by the above mentioned accrediting bodies, assures our patients that they will receive the best of care from diagnosis, throughout the treatment period and continuing to end of life care.

In addition to a wide range of diagnostic and treatment services, our hospital offers many programs that provide assistance to both our patients and their families as they cope with a diagnosis of cancer. Our support services include nutritional support, spiritual support, rehabilitation, palliative care, educational programs for our patients and the community, information on access to clinical trials and cancer support groups and programs, many of which are provided through our collaboration with the American Cancer Society.

To meet the growing and changing needs of the patients and the community we serve, our Surgical Oncology Specialty Quality Committee and the Blood and Marrow Transplant Center Special Quality Committee continually strives for Cancer Program excellence by quarterly review of our services and by performing patient care studies, and setting annual goals to improve and enhance our services.

The Blood and Marrow Transplant Program's affiliation with the National Marrow Donor Program (NMDP) and the Center for International Blood and Marrow Transplant Research (CIBMTR) allows patients access to national and international research protocols and increases their opportunity for participation in cutting edge oncology clinical trials.

The Jewish Hospital implemented many patient care improvements, sponsored a large number of patient, community and staff educational offerings and improved many of our services last year.

# 2009 Cancer Program Achievements include:

- Acquisition of the daVinci Robotic Surgical System.
- Upgraded IMPAC Radiation Oncology Information System to MOSAIQ.
- Replaced Pinnacle Treatment System with the current state-of-the-art Philips Treatment Planning System which provides a new method for IMRT.
- Implemented new dosimetry system for whole body or selected area monitoring for diagnostic and radiation oncology.
- Implemented a Medication Action Plan across the Blood and Marrow Transplant continuum of care to improve patient safety.
- Expanded options for transplant recipients by implementing a haploidentical transplant regimen.
- Re-accreditation by the Foundation for the Accreditation of Cellular Therapy for the Blood and Marrow Transplant Program.

The Surgical Oncology Specialty Quality Committee is a multi-disciplinary team comprised of hospital employees, staff physicians and members from the American Cancer Society. The committee meets quarterly to monitor the hospital's cancer program's performance and to review the available services and programs.

Our mission is to provide a patient-focused, integrated and comprehensive cancer program. We will serve in a compassionate and efficient manner, providing state-of-the-art technology and research, through caring for people one individual at a time.

#### 2009 Surgical Oncology Specialty Quality Committee Membership

#### **Physician Members:**

Elliott Fegelman, MD, Chair Ellizabeth Weaver, MD, Co-Chair, Liaison James Essell, MD Kevin Monroe, MD William Gluntz, MD Christopher Juergens, MD Peter Fried, MD

#### **Allied Health Members**

Teresa Schleimer, MSN, CNP Elena Stein, MAHL, BCC Kathy Smith, RN, MSN Sandra Huber, RN, BSN Carolyn Green, RT, (R) (M), ARDS Chris Warders, RD, LD Patricia Holland, RHIT CTR Robin Hite, R.T. (R) (T) Dianne Mahaffey, MSN, CNS, CNP Michael DeVoe, Pharm.D. Laura Metzler Lyn Sontag, Psy.d., ABPP Annette Shephard, R.T. (R) (T) Mary Andre, RN, MBA Jenny Martin, RN, MSN Beverly Weinstein, RTRM Vickie Estridge, BSN, RN, OCN Pam Van Sant, BS, MBA Linda Miller, RN, MSN Karen Hess, MSN, MBA, CNP Mary Ann Heekin Debra Steinbuch, MA, CCC-SLP Susan Colding, RN, OCN Mary Hill, MSW, LISW Yvonne Duhart, RHIT Angela Price, RHIA

#### **Cancer Program Coordinators**

Kevin Monroe, MD Patricia Holland, CTR, RHIT Elizabeth Weaver, MD Mary Andre, RN, MBA

#### Discipline: General Surgery Radiology Medical Oncology Pathology Internal Medicine General Surgery Radiation Oncology

#### Department:

Cancer Program Administrator Pastoral Care Patient Services Quality Management Radiology Nutrition Cancer Registry Radiation Oncology Pain Management Pharmacy American Caner Society Clinical Psychologist Community Member Performance Improvement Performance Improvement Mammography Clinical Manager, BMTU VP, Administration VP, Patient Services Blood and Marrow Transplant Center Cancer Family Care Rehabilitation Services Research Nurse Social Services Cancer Registry Medical Records

Quality of Registry Data Canœr Conferenœ Community Outreach Quality Improvement

#### **Cancer Conferences**

Cancer Conferences provide a multidisciplinary format for the development of a plan of care for the cancer patient. The conferences are integral to improving care and providing education to physicians and hospital staff. Consultative services and education are optimal when physicians representing all oncology related disciplines participate in the discussion. Patient identities are kept confidential.

The Cancer Conferences are prospective, patient-oriented and multidisciplinary by design. Medical Oncology, Radiation Oncology, Diagnostic Radiology, Pathology, and General Surgery specialties are present to discuss diagnostic evaluations and possible treatment options for the types of cancers presented at the conferences. Physicians from all specialties, including Medical and Surgical residents are invited to attend.

Treatment options that are based on national guidelines and AJCC staging are the foundations of the discussions. National Comprehensive Cancer Network (NCCN) Practice Guidelines in Oncology, information on open clinical trials, NCDB and cancer registry data are provided for the cancer sites presented.

Surgical Cancer Conferences are held at The Jewish Hospital on the fourth Wednesday of each month at 7:30 a.m. in Conference Room D. Breast Cancer Conferences are conducted quarterly on first Wednesday in the same conference room. Both programs are approved by the Ohio State Medical Association for one Category 1 CME credit hour. The Medical Cancer Conference is held on the second Tuesday of each month at 12 Noon in Conference Room A & B. The Blood and Marrow Transplant Multidisciplinary Team Meeting is held each Wednesday in Conference Room A & B at 8:30 am.

# **Cancer Registry**

The Cancer Registry is a vital component of the Cancer Program, providing data for programmatic and administrative planning, research, and for monitoring patient outcomes. Data are collected according to the current standards of the Commission on Cancer to create a detailed cancer–focused record for all reportable tumors diagnosed and/or treated at our hospital. Each record entered into the database contains information on the diagnosis, extent of disease, treatment received, recurrence of disease and lifetime follow-up for each patient. Aggregate data is analyzed and published without patient identifiers to protect the confidentiality of each patient entered into the cancer database according to Ohio state laws and HIPAA regulations.

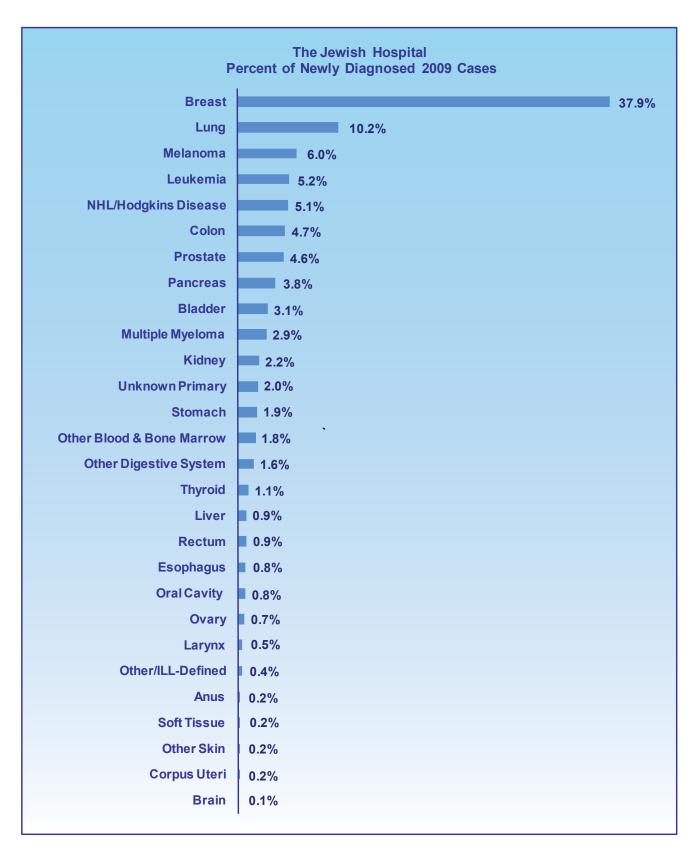
A Cancer Registrar performs the collection, interpretation, analysis and reporting of cancer data. The National Cancer Registrars Association defines Cancer Registrars as "data management experts who collect and report cancer statistics for various healthcare agencies." Registrars work closely with physicians, administrators, researchers, and health care planners to provide support for cancer program development, ensure compliance with reporting standards, and serve as a valuable resource for cancer information with the ultimate goal of preventing and controlling cancer. The Cancer Registrar is involved in managing and analyzing clinical cancer information for the purpose of education, research, and outcome measurement.

All approved Cancer Programs are required by the Commission on Cancer to submit registry data that is error free to the National Cancer Data Base (NCDB) annually. As a result of the data submission to the NCDB programs are able to benchmark their performances and outcomes to that of regional, state and national patterns. Major differences between the facility data and the national data are reviewed in an effort to identify the areas of improvement.

In addition, cancer data is submitted to the Ohio Cancer Incidence Surveillance System (OCISS). All reported data is used to support research, track trends, initiate epidemiologic studies, generate journal articles and provide data for allocation of services. The data is analyzed to identify opportunities for community cancer awareness and screening where higher stages (III-IV) of cancers are seen. This data also provides a means of identifying possible cancer clusters within the state.

#### 2009 Cancer Data Summary and Comparisons

The total number of cases in The Jewish Hospital Cancer Registry database since the 1998 reference date is 14,691 cases, 13,116 of which are available for analytic studies. During 2009, a total of 1,172 cases were accessioned into the registry database; 1,035 analytic (newly diagnosed) cases and 137 non-analytic (recurrent cancer) cases. The statistics contained in this report represent only analytic cancer cases.



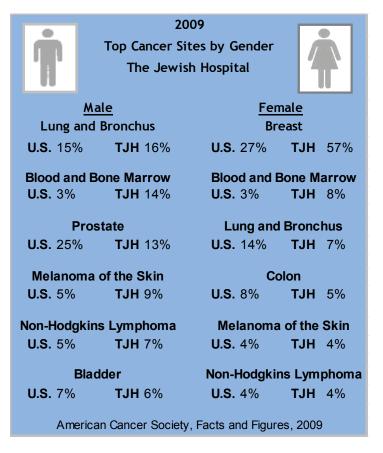
# **Top Cancer Sites in 2009**

The top sites in 2009 were Breast (39 percent), Lung (11 percent), Non-Hodgkin's Lymphoma (8 percent), and Colorectal (7 percent). Leukemia, Melanoma, and Prostate were all at 6 percent.

Compared with the estimated 2009 state and national data, our incidence of breast and prostate cancers are higher than the state and national averages. Potential explanations for the higher incidence include the availability at Jewish Hospital of ultrasound guided needle biopsies for prostate cancer and stereotactic and ultrasound guided needle biopsies for breast cancer. Additional diagnostic studies provided by the hospital are digital and mobile mammography and breast MRI. Jewish Hospital provides sentinel lymph node biopsy for melanoma. Of special note is the FACT accreditation held by the Blood and Marrow Transplant Center.

Top Cancer Sites - 2009										
Primary Site US OH TJH										
Breast	13%	12%	38%							
Lung	15%	17%	10%							
Melanoma	5%	3%	6%							
Leukemia	3%	3%	5%							
NHL	3%	2%	5%							
Colon	10%	5%	5%							
Prostate	13%	5%								
Estimated Figures for US/Ohio										
American Cancer Soci	ety, Facts & I	Figures 200	9							

Distribution of cases by gender reveals that breast cancer is the top site for females (57%) while lung cancer was the top site in males (16%). The table demonstrates the percentage of cases seen at Jewish Hospital compared to the national average incidence for each cancer site.



# **Colon Cancer Outcome Study**

# Incidence and Mortality in the United States

**Incidence** – Colon cancer is the third most common cancer in the United States. The American Cancer Society (ACS) estimates 146,970 new cases of colon cancer will be reported in 2009. Studies show that 1 in 18 men and 1 in 20 women will be diagnosed with colon cancer during their lifetime.

**Mortality** – Colon cancer ranks third as the leading cause of cancer deaths in Americans, after lung and prostate/breast cancers. The ACS estimates 49,920 colon cancer deaths in 2009, representing a slightly upward trend in mortality.

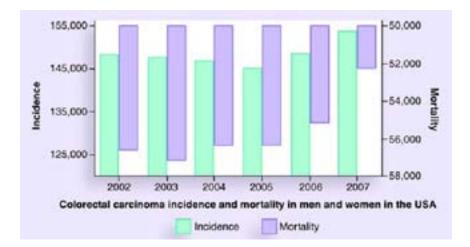


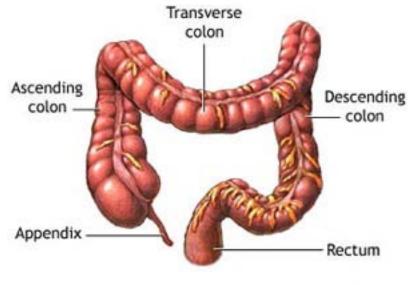
Figure 1. Incidence and mortality of colorectal carcinoma in men and women in the USA over the past 6 years. Over the last 3 years there has been an increase in the incidence of colorectal carcinoma. Fortunately, a decrease in mortality has been observed over the same period of time.

# National, Ohio and Hospital Incidence Comparisons

Nationally, it is estimated that colon cancer will account for about 10% of the cancers diagnosed in 2009. In the state of Ohio, it is estimated that nearly 5% of the cancers will be colon cancer. At The Jewish Hospital, 5% of our diagnosed cases were colon cancer. Our colon cancer cases were half the national average and the same as the state average.

# Anatomy and Physiology of the Colon

The colon is about six feet long and has four parts: ascending colon, transverse colon, the descending colon, and sigmoid colon. Beyond the sigmoid colon are the rectum and the anus. The colon from cecum to the mid-transverse colon is known as the right colon. The remainder is known as the left colon. The functions of the colon include absorption of water and minerals and the formation and elimination of feces.





#### **Risk Factors for Americans**

The risk of colon cancer increases with age, with 91% of cases diagnosed in individuals aged 50 and older. Several modifiable factors are associated with increased risk of colon cancer. Among these are obesity, physical inactivity, a diet high in red or processed meat, heavy alcohol consumption, and possibly smoking and inadequate intake of fruits and vegetables. Studies indicate that compared to healthy-weight individuals, men and women who are overweight are more likely to develop and die from colon cancer. Consumption of milk and calcium appears to decrease risk. Studies suggest that regular use of nonsteroidal anti-inflammatory drugs, such as aspirin, and menopausal hormone therapy may also reduce colon cancer risk.

Colon cancer risk is also increased by other factors. These include certain inherited genetic mutations such as familial adenomatous polyposis (FAP) and hereditary non-polyposis colon cancer (HNPCC), also known as Lynch syndrome], a personal or family history of colon cancer and/or polyps, or a personal history of chronic inflammatory bowel disease. Studies have also found as association between diabetes and colon cancer.

#### Prevention

Beginning at age 50, men and women who are at average risk to develop colon cancer should begin screening. Screening can result in the detection and removal of colon polyps before they become cancerous, as well as the detection of cancer that is at an early stage. Thus, screening reduces mortality both by decreasing the incidence of cancer and by detecting a higher proportion of cancers at early, more treatable stages.

#### Signs and Symptoms

Early stage colon cancer does not usually have symptoms; therefore, screening is necessary to detect colon cancer in its early stages. Advanced disease may cause rectal bleeding, blood in the stool, changes in bowel habits, and cramping pain in the lower abdomen. In some cases, blood loss from the cancer leads to anemia (low red blood cell count), causing symptoms such as weakness and excessive fatigue.

#### Screening and Diagnostic Methods

Two tests are utilized in the screening and diagnosis of colon cancer: colon-tumor markers and colonoscopy. Colontumor markers or CEA remains the prototypical solid tumor marker of colon cancer and is a simple blood test while a Colonoscopy is an outpatient procedure in which the inside of the large intestines is examined. Beginning at age 50, both men and women should follow one of these testing schedules:

Tests that find polyps and cancer Flexible sigmoidoscopy every 5 years\*, or Colonoscopy every 10 years, or Double-contrast barium enema every 5 years\*, or CT colonography (virtual colonoscopy) every 5 years\*

\* If the test is positive, a colonoscopy should be done.

Tests that primarily find cancer Yearly fecal occult blood test (gFOBT)\*\*, or Yearly fecal immunochemical test (FIT) every year\*\*, or Stool DNA test (sDNA), interval uncertain\*\*

\*\* The multiple stool take-home test should be used. One test done by the doctor in the office is not adequate for testing. A colonoscopy should be done if the test is positive.

The tests that are designed to find both early cancer and polyps are preferred if these tests are available to you and you are willing to have one of these more invasive tests. Talk to your doctor about which test is best for you. The American Cancer Society recommends that some people be screened using a different schedule because of their personal history or family history. Talk with your doctor about your history and what colorectal cancer screening schedule is best for you.

Treatment and prognosis are influenced by the patient's age, stage of the cancer, pre-operative CEA level and other medical conditions that may contraindicate certain types of treatment.

**Gender Comparison** – Female incidence of colon cancer is greater than that of males both at Jewish Hospital, mimicking the national distribution. The table below demonstrates the distribution of colon cancer diagnosed at Jewish Hospital to be 58% female and 42% male which is closely consistent with the National Cancer Base statistics as noted in the chart below.

_	2006-2007 Colon - Gender									
	U.:	S.	The Jewish	Hospital						
GENDER	#	%	#	%						
MALE	14,034	48%	48	42%						
FEMALE	15,159	52%	66	58%						
TOTAL	29,193	100%	114	100%						

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**Colon Histologies** - Most colon cancers are adenocarcinomas (cancers that begin in cells that make and release mucus and other fluids). At Jewish Hospital the incidence of adenocarcinomas is greater than other specified types.

	2006-2007 Colon - Histologies								
	U.	S.	The Jewish Hospita						
Histology	#	%	#	%					
Adenocarcinoma, NOS	19,659	67%	86	75%					
Adenocarcinoma in									
Adenomatous Polyp	1,992	7%	3	3%					
Adenocarcinoma in									
Tubulovillous Polyp	2,244	8%	0	0%					
Mucinous									
Adenocarcinoma	2,238	8%	6	5%					
Other Specified Types	3,060	10%	19	17%					
Total	29,193	100%	114	100%					

National Cancer Data Base Statistics

**Age** – Findings: age distribution compares favorably to what was seen nationally in the 6th, 7th, and 8th decades.

#### Age at Diagnosis Comparison

2006 - 2007 Colon Cancer									
National vs The Jewish Hospital									
AGE AT DIAGNOSIS U.S. TJH									
Pediatric	0.0%	0%							
16-29	0.3%	1%							
30-39	1%	1%							
40-49	5%	6%							
50-59	15%	10%							
60-69	22%	22%							
70-79	29%	25%							
80-89	23%	27%							
90+ 4% 8%									
Source: National Cano	er Datab	ase							

**Stage** - Findings: The distribution of the incidence of each stage of colon cancer closely mirrors that of the national average except for stage 4 where we see higher percentage of cases as seen in the table below.

2006-2007 Colon - Stage at Diagnosis										
	U.:	S.	The Jewish Hospital							
Stage Group	#	%	#	%						
0	2,059	7%	10	9%						
1	5,824	20%	24	21%						
2	6,944	24%	31	27%						
3	6,718	23%	23	20%						
4	4,458	15%	24	21%						
N/A	27	0%	2	2%						
UNK	3,163	11%	0	0%						
Total	29,193	100%	114	100%						

Source: National Cancer Database

# Treatment of Colon Cancer

**Surgery** – Surgery is the most common treatment for colorectal cancer. For cancers that have not spread, surgical removal may be curative. Improved surgical techniques such as laparoscopic-assisted colectomy can be used in colon surgeries. The surgical treatment guidelines of The American College of Surgeons, American Joint Committee on Cancer, and a National Cancer Institute-sponsored panel recommends that at least 12 lymph nodes be examined in patients with colon cancer to confirm the absence of nodal involvement by tumor. This recommendation takes into consideration that the number of lymph nodes examined is a reflection of the aggressiveness of lymphovascular mesenteric dissection at the time of surgical resection and the pathologic identification of nodes in the specimen. Retrospective studies demonstrated that the number of lymph nodes examined in colon and rectal surgery may be associated with patient outcome.

**Chemotherapy** – Adjuvant chemotherapy for colon cancer is equally effective and can be no more toxic in otherwise healthy patients aged 70 and older than in younger patients. Oxaliplatin, in combination with 5-fluorouracil (5FU) and followed by leucovorin (LV), may be used to treat persons with carcinoma of the colon or rectum. Three targeted monoclonial antibody therapies have been approved by the FDA to treat metastatic colorectal cancer: bevacizumab (Avastin) blocks the growth of blood vessels to the tumor and cetuximab (Erbitux) and panitumumab (Vectibix) both block the effects of hormone-like factors that promote cancer cell growth.

**Radiation Therapy** – While combined modality therapy with chemotherapy and radiation therapy has a significant role in the management of patients with rectal cancer, the role of adjuvant radiation therapy for patients with colon cancer in not well defined. Patterns-of-care analyses and single-institution retrospective reviews suggest a role for radiation therapy in certain high-risk subsets of colon cancer patients with T4 tumor location in immobile sites, local perforation, obstruction, and residual disease post-resection. Such observations led to the development of a phase III randomized inter-group study designed to test the benefit of adding radiation to surgery and chemotherapy with 5-FU, levamisole for selected high-risk colon cancer patients.

# **Other Treatment Types**

**Palliative Treatment** – Providing optimal palliative care for the patient with advanced colorectal cancer is a complex and challenging process. The best palliative care will likely come from a multidisciplinary team that individualizes the treatment plan in accordance with the patient's wishes, allowing symptoms to be maximally treated, lifespan to be optimized and hospital stay to be minimized.

**Clinical Trials** - Clinical trials for cancer treatment offer additional treatment options, including new drugs, new surgery or radiation therapy techniques, or even complementary or alternative medicines. Some trials study drugs that are approved for one type of cancer to determine the efficacy on a different type of cancer or to determine if effectiveness can enhanced by administering in a different way or in combination with other treatments. Clinical trials provide access to treatment that is not otherwise available, and might be safer or more effective than current treatment options. When clinical trials show that a new treatment is better than the current treatment, the new treatment may become a standard treatment. All clinical trials are reviewed and approved by scientific panels to make sure they are ethical, safe, and at least as good as, and possibly better than, the standard and currently available treatments.

According to the American Cancer Society, the number one reason people give for not taking part in a clinical trial is that they didn't know the studies were an option for them. Before starting treatment, patients may want to think about taking part in a clinical trial. Ideally, the patient, family, and health care team should be involved in the decision on choosing the most appropriate cancer treatment.

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	NCDB	TJH	NCDB	TJH	NCDB	TJH	NCDB	TJH	NCDB	TJH	NCDB	TJH	NCDB	TJH
Treatment Type	Sta	ge O	Sta	ge 1	Sta	ge 2	Staç	ge 3	Sta	ge 4	Stage	e N/A	Stage Ur	nknown
Surgery Only	87%	100%	88%	87%	65%	80%	24%	25%	17%	17%	30%	1%	44%	0%
Surgery and Chemotherapy	1%	0%	2%	0%	17%	9%	56%	100%	39%	100%	14%	0%	10%	0%
Other Specified Therapy	7%	0%	8%	0%	15%	13%	18%	8%	17%	11%	19%	0%	15%	0%
No 1st Course Rx	5%	0%	3%	3%	3%	3%	3%	2%	27%	6%	36%	0%	30%	0%
% of Cases for Stage Group	7%	9%	19%	22%	24%	26%	23%	20%	17%	21%	0%	2%	11%	0%
Source: ©2010 National Cancer Data Base (NCDB) / Commission on Cancer (CoC)														

Colon Cancer- Diagnosed 2006 - 2007 Treatment by Stage Comparison - National Cancer Data Base vs The Jewish Hospital

#### Findings:

Stage 0 - All of our stage 0 patients were treated with surgery only at 100%. Nationally, 87% received surgery only.

Stage 1 - Our treatment compares favorably to national.

Stage 2- More of our patients received surgery only and fewer had surgery with adjuvant chemo. We also had a higher percentage of stage 2, 80% vs. 65% than seen nationally.

Stage 3 – Slightly more of our stage 3 patients received adjuvant chemo (62% compared to 56% nationally). We also had significantly less patients treated with "Other Specified Therapy" (8% compared to 18% in the U.S.). This may be due to our having had fewer patients receiving radiation as well as other forms of treatment.

Stage 4 - We have more patients who received adjuvant chemotherapy (100% compared to 39% nationally).

For both stage 3 and stage 4, we have more patients who received adjuvant chemotherapy. For stage 3, this may be related to our efforts to obtain information on treatment done elsewhere. Our performance in the Commission on Cancer, American College of Surgeons CP3R colon study indicates we have an average 2006-2007 concordance of 100% for adjuvant chemotherapy. Other Community Hospital Cancer Programs have an average of 86% and the state of Ohio has an average of 92% concordance for these years.

#### National Cancer Database-Diagnosed 1998-2002

	Year									
	0	1	1 2 3 4							
Stage 0	100%	95%	92%	88%	85%	81%				
Stage 1	100%	95%	91%	86%	82%	77%				
Stage 2	100%	92%	86%	79%	73%	67%				
Stage 3	100%	87%	75%	65%	58%	53%				
Stage 4	100%	51%	27%	16%	11%	8%				
Overall	100%	84%	74%	67%	61%	56%				

#### The Jewish Hospital-Diagnosed 1998-2002

	Year									
	0	1	2	3	4	5				
Stage 0	100%	90%	90%	90%	90%	90%				
Stage 1	100%	83%	73%	74%	75%	75%				
Stage 2	100%	87%	80%	80%	73%	73%				
Stage 3	100%	74%	74%	74%	74%	74%				
Stage 4	100%	42%	27%	17%	12%	12%				
Overall	100%	82%	77%	68%	62%	56%				

# Comparison of The Jewish Hospital to National Survival

The most recent data on relative survival for colon cancer indicates that five year survival for colon cancer is 85%. Comparison of survival data for our patients diagnosed in 1998 through 2002 shows that our survival is 56%.

#### Summary of Findings:

Colon cancer is the fourth highest cancer diagnosed at The Jewish Hospital. Colon cancer incidence has decreased over the last two decades because of the increase in screening that allow the detection and removal of colorectal polyps before a progression to cancer.

- Colon cancer is the fourth highest cancer diagnosed at The Jewish Hospital. Colon cancer incidence has decreased over the last two decades because of the increase in screening that allow the detection and removal of colorectal polyps before a progression to cancer.
- Most of the colon cancers presented with stage 2 disease.
- Our treatment of colon cancer follows the national standards.
- Our overall survival is slightly higher than the national survival statistics.

#### **Recommendations:**

- Develop process to collect CEA and document in the medical record to aid in diagnosis process.
- Promote colon cancer awareness through patient education and community outreach activities.
- Provide and monitor stage-based treatment in accordance with national guidelines.

#### **Community Outreach**

The Jewish Hospital and Cancer Program, led by our Surgical Oncology Specialty Quality Committee, are committed to making a difference in our community. We do this through several means, including increasing colon cancer awareness through participation in local Health Fairs, conducting Colon Cancer Awareness Month activities, increasing awareness of clinical trials and participation in or referral to American Cancer Society programs.

#### American Cancer Society Programs and Screening Guidelines

For information on American Cancer Society Programs and Screening Guidelines: Visit http://www.cancer.org or call 1-800-ACS-2345 (1-800-227-2345)

#### **Informational Websites**

For information on colon cancer and other cancers, call or visit:

National Cancer Institute at 1-800-4-CANCER or www.cancer.gov

People Living With Cancer: The official patient information website of the American Society of Clinical Oncology at www.cancer.net/portal/site/patient

National Comprehensive Cancer Network at www.nccn.org/patients

American Cancer Society - 1-800-ACS-2345 or www.cancer.org

National Library of Medicine at www.nlm.nih.gov/medlineplus/healthtopics.html

US TOO! International, Inc at www.ustoo.org

#### **Clinical Trial Information**

For information on access to clinical trials in your area:

Call the American Cancer Society, Clinical Trials Matching Service (a free, confidential program) at 1-800-303-5691 or visit www.cancer.org

Visit the National Cancer Institute (NCI) website at: www.cancer.gov/clinicaltrials/search

Visit the Coalition of Cancer Cooperative Groups at: www.cancertrialshelp.org

#### **References/Sources:**

American Cancer Society - www.cancer.org

National Cancer Institute - www.cancer.gov

American Medical Network - www.health.am

American College of Surgeons - National Cancer Database

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