

COMPdata Monthly Monitor - Montana
October 2005
Breast Cancer

INTRODUCTION

Cancers are a group of diseases that cause cells in the body to change and grow out of control. Most types of cancer cells form a lump or mass called a tumor and are named after the part of the body where the tumor originates. Breast cancer begins in breast tissue, which is made up of glands for milk production, called lobules, and ducts that connect lobules to the nipple. The remainder of the breast is made up of fatty, connective, and lymphatic tissue.¹

While the death rate from breast cancer has declined since 1990, the percentage of decline was larger among younger age groups.² This has been attributed to both improvements in breast cancer treatment and early detection.³ Just this month, clinical trials sponsored by the National Cancer Institute found that in combination with chemotherapy, early-stage breast cancer patients who received Herceptin (trastuzumab) had a 52% decrease in disease recurrence compared with patients who were treated with chemotherapy alone.^{4,5}

COMPdata STATISTICS ON BREAST CANCER INPATIENTS IN MONTANA HOSPITALS

(Note: All of the following inpatient statistics exclude newborns and obstetric cases– Major Diagnostic Categories 14 and 15.)

Table 1 - Total Montana Inpatients
Excludes MDCs 14 & 15

	2001	2004	
	Discharges	Discharges	% Change 2001 to 2004
Total Montana Patients	81,510	82,004	0.6

Table 2 - All Breast Cancer Inpatients
ICD-9 diagnosis codes 1740-1749,19881 (Excludes MDCs 14 &15)

	2001		2004		% Change 2001 to 2004
	Discharges	% of All Discharges	Discharges	% of All Discharges	
All Diagnoses	599	0.7	513	0.6	-14.3
Principal Diagnosis	396	0.5	281	0.3	-29.0
Other Diagnoses	207	0.3	235	0.3	13.5

Tables 1-2 provide 2001 and 2004 utilization statistics for all Montana and all breast cancer inpatients. Some key findings in these tables are:

- There has been an overall reduction in the number of breast cancer diagnoses between 2001 and 2004, and this reduction is primarily driven by a 29.0% drop in breast cancer as a principal diagnosis.
- Although over 500 patients have been diagnosed with breast cancer, this represents less than 1% of overall Montana inpatients.

Table 3 – Outpatient Breast Procedures
Principal Procedure (Excludes MDCs 14 &15)

	2001		2004		% Change in Cases 2001 to 2004
	Cases	% With Breast Cancer Dx	Cases	% With Breast Cancer Dx	
8511 Perc Breast Biopsy	360	15.2	600	14.0	66.7
8512 Open Biopsy - Breast	172	14.0	53	15.1	-69.2
8521 Loc Exc Br. Lesion	823	20.0	695	21.2	-15.6
8523 Subtotal Mastectomy	39	79.5	17	58.8	-56.4
8541 Unilat Simple Mast	31	35.5	50	54.0	61.3
8542 Bilat Simple Mast	4	0.0	2	0.0	-50.0
8543 Uni Exten Simp Mast	48	77.1	35	88.6	-27.1

Table 4 – Outpatient Breast Procedures
Principal Procedure (Excludes MDCs 14 &15)

	2001		2004		% Change in Discharges 2001 to 2004
	Discharges	% With Breast Cancer Dx	Discharges	% With Breast Cancer Dx	
8511 Perc Breast Biopsy	5	80.0	0	0.0	N/A
8512 Open Biopsy - Breast	2	0.0	0	0.0	N/A
8521 Loc Exc Br. Lesion	44	75.0	26	69.2	-40.9
8523 Subtotal Mastectomy	42	92.9	24	100.0	-42.9
8541 Unilat Simple Mast	81	51.9	77	63.6	-4.9
8542 Bilat Simple Mast	10	50.0	14	35.7	40.0
8543 Uni Exten Simp Mast	254	89.8	151	88.1	-40.6

Table 3 above presents the number of patients undergoing selected breast procedures as the principal procedure on an *outpatient* basis in 2001 versus 2004 along with the percent in each year that had a breast cancer diagnosis. Table 4 presents information for the same set of principal procedures but for *inpatients* in 2001 versus 2004. The following points illustrate a general trend in the movement of many of these procedures from an inpatient to an outpatient basis.

- The most frequent procedure conducted on either an outpatient or inpatient basis was 8521-local excision of breast lesion (lumpectomy). While the number of outpatients with this procedure decreased 15.6%, from 2001 to 2004, there was a more significant decrease among inpatients, -40.9%. Although only 21.2% of the outpatients having this procedure in 2004 also had breast cancer, the number of cases, 147, was more than eight times greater than the number of inpatients having this procedure who also had breast cancer, 69.2% out of 26 or 18 inpatients.
- While the number of inpatients who had percutaneous breast biopsies dropped from five to zero between 2001 and 2004, the number of outpatients with this procedure increased 66.7% from 2001 to 2004.
- The most frequent inpatient procedure, 8543-unilateral extensive simple mastectomy, decreased 40.6% from 2001 to 2004.

Table 5- Patients with a Principal Diagnosis of Breast Cancer vs. All Cancers

2004 Inpatient Discharges - (Excludes MDCs 14 &15)
 ICD-9 diagnosis codes for Breast Cancer: 1740-1749,19881
 ICD-9 diagnosis codes for All Cancers: 140-2089, 230-2349

Table 5– Part I		Breast Cancer	All Cancers
Admission and Discharge Patterns		Total N = 281 (%)	Total N = 3,544 (%)
Admission Source	Emergency Room	2.1	18.2
	Clinic Referral	3.2	1.2
	Physician Referral	94.3	77.8
	Other	0.4	2.8
Admission Type	Emergency	2.1	15.2
	Urgent	16.0	26.8
	Elective	81.9	57.8
	Other	0.0	0.2
Discharge Status	Routine to Home	88.3	73.0
	To Skilled Nursing	1.8	7.1
	To Home Health	7.5	5.5
	Expired	1.1	7.2
	Other	1.3	7.2
Hospital Location	Other Urban	45.2	51.9
	Rural	54.8	48.1

Table 5 provides statistics that explore in more detail the characteristics of those patients who were discharged in 2004 and had breast cancer as a principal diagnosis and those who had any cancer as a principal diagnosis. Some highlights found in Table 5 are:

- Breast cancer patients are rarely admitted through the emergency room, while 15.2% of all cancer patients are admitted that way.
- Breast cancer patients are most likely to have a routine discharge to their home, 88.3%, or to home health care, 7.5%.

Table 5– Part II Patient Characteristics		Breast Cancer	All Cancers
		Total N = 281 (%)	Total N = 3,544 (%)
Gender	Female	100.0	49.0
	Male	0.0	51.0
Primary Payer	Medicare	43.8	49.5
	Commercial Ins	27.4	24.0
	Medicaid	5.7	3.6
	Miscellaneous	14.6	12.1
	Other	8.5	10.8
Age	Less than 45 years	9.3	6.9
	45 to 64 Years	37.0	34.4
	Over 65 Years	53.7	58.7
	Average Age	64.8	66.5
Avg Length of Stay		2.0	5.5
Avg Total Charge		\$9,116	\$17,905

- Nearly one-half, 46.3%, of patients with breast cancer were under 65 years old.
- On average, breast cancer patients have a length of stay of only 2.0 days, less than half of the length for all cancer patients, 5.5 days.

MONTANA STATISTICS FROM COMPdata

All of the Montana patient statistics were derived from MHA's COMPdata. We encourage you to use COMPdata to examine your hospital community area(s) regarding breast cancer patients so that you might better understand the impact of these patients on your care and treatment of your patient population and the resources needed to diagnose, treat, and manage the breast cancer population.

The COMPdata graphing feature can be utilized to examine in a pictorial fashion trends in your state and hospital community area(s) regarding breast cancer. Click here to obtain a bar chart that illustrates the distribution of outpatients with percutaneous breast biopsies by year for 2001-2004: <http://www.compdatainfo.com/news/monitor/montana/breastcagraph.pdf>.

ADDITIONAL INFORMATION

If you would like to develop the COMPdata reports that will provide similar statistics for your hospital or community, a training tool is available to guide you through the process. The training tool may be requested by e-mailing compdata@ihastaff.org. For additional assistance on using the COMPdata system, contact the COMPdata Hotline at compdata@ihastaff.org.

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APPENDIX

Breast Cancer Patients

- Breast cancer is the most common cancer among women, except for nonmelanoma skin cancers. Thirteen percent of U.S. women will develop invasive breast cancer in their lifetime.²
- In 2005, an estimated 211,240 new cases of invasive breast cancer will be diagnosed among U.S. women.²
- During 1998-2002, those aged 20-24 had the lowest incidence rate (1.3 per 100,000) and women aged 75-79 had the highest rate (496.6 per 100,000).²
- Five to ten percent of the breast cancer cases are diagnosed in women who have a hereditary form of the disease.⁶

SOURCES FOR ADDITIONAL INFORMATION

For Hospitals

The American Cancer Society publishes "Breast Cancer Facts and Figures", a publication that includes statistics from the Surveillance, Epidemiology, and End Results (SEER) Program as well as information about risk factors and treatment options. Their web site can be found at: <http://www.cancer.org>.

The Cancer Epidemiology Homepage provides links to cancer sites worldwide. The site is organized by cancer type and is an excellent source of information on the treatment and prevention of cancer as well as the latest on clinical trials in progress. Their site is located at <http://www.cancerindex.org/clinks4e.htm>.

The National Cancer Institute (NCI) is a division of the National Institutes of Health (NIH) and the web site can be found at www.cancer.gov. The site is organized by cancer type and includes information about screening, treatment, and the latest in cancer research.

For Patients and the Community

The Johns Hopkins Avon Foundation Breast Center web site includes an excellent library for educating patients in the diagnosis and treatment stage of breast cancer. It can be located at <http://www.hopkinsbreastcenter.org/library>.

The National Breast Cancer Foundation web site has information on cancer myths, early detection, and signs and symptoms of breast cancer at <http://www.nationalbreastcancer.org>.

The Centers for Disease Control and Prevention (CDC) sponsors the National Breast and Cervical Cancer Early Detection Program helps low-income, uninsured, and under-served women gain access to lifesaving screening programs for early detection of breast and cervical cancers. Their web site address is: <http://www.cdc.gov/cancer/nbccedp/index.htm>.

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6. Blackwood MA, Weber BL, BRCA1 and BRCA2: from molecular genetics to clinical medicine. *Journal of Clinical Oncology*, 16(5): 1998.