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Outpatient Mastectomy

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Summary

Reports in the media on outpatient mastectomy have raised concerns about the quality of care provided to breast cancer patients. Only a small number of fairly limited research studies have examined this issue. Studies to date found the average length of stay for a mastectomy declined from about 6 days in 1986 to about 2-3 days in 1995; in one study, the majority of mastectomy patients had a one-day stay in 1996. A major force behind this trend to a shorter length of stay is the desire to cut costs. Although there is little solid evidence in the published medical literature that outpatient mastectomies cause medical harm, larger and more comprehensive research studies are needed to better determine if the health of the patient is compromised. S. 249, the Women's Health and Cancer Rights Act of 1998, requires that health plans provide inpatient coverage for mastectomies. Similar language is contained in the Patients' Bill of Rights Act, S. 2330 (Lott/Nickles); there is no such provision in the Patient Protection Act of 1998, H.R. 4250 (Gingrich). This report provides general background information and might be updated periodically.

What is the trend in the use of outpatient mastectomy procedures in recent years?

The trend toward outpatient mastectomies and shorter hospital stays following breast surgery is clearly part of a much broader shift occurring in all areas of surgical health care delivery. "In the mid-1980s, two-thirds of all surgery patients stayed in the hospital at least overnight. Now less than half do, and many procedures — repairing hernias and removing gallbladders, for example — routinely are done on an outpatient basis."[1] Data on the overall utilization of outpatient mastectomy procedures in all age groups in all 50 states are unavailable. The National Cancer Institute (NCI) has completed a large population-based study on outpatient mastectomy.[2] The NCI study included all women ages 65 and older in the fee-for-service Medicare program between 1986 and 1995. The

[1] Amy Goldstein, "Under the scalpel, then out the door," *The Washington Post*, November 19, 1997, sec. 1A, 16.

[2] Joan L. Warren et al., "Trends and Outcomes of Outpatient Mastectomy in Elderly Women," *Journal of the National Cancer Institute* 90 (1998).

number of outpatient mastectomies increased from 0% in 1986 (2 of 47,295 procedures) to 10.8% in 1995 (4,831 of 44,940 procedures). Between 1986 and 1988, 46.9% of the total 117,982 mastectomy patients stayed 6 or more days in the hospital. By 1993 to 1995, only 11% of the total 118,336 mastectomy patients stayed 6 or more days.

In a May 1997 report, the Health Policy Tracking Service provided a synopsis of data on outpatient mastectomies analyzed by HCIA, a Baltimore, MD, medical research firm.[3] HCIA found that the percentage of all hospital-based mastectomies performed as outpatient procedures increased from 1.6% in 1991 to 7.6% in 1995. For inpatient procedures, the average length of stay for a mastectomy declined from 4.4 days in 1991 to 3.0 days in 1995. The HCIA study analyzed 110,000 mastectomies covered by Medicare, and therefore the patients in the study were age 65 years and older.

A study by the Connecticut Office of Health Care Access found the average length of stay for all inpatient discharges in Connecticut acute care hospitals continued to decline since 1991, and average length of stay for mastectomy discharges has mirrored this trend.[4] In the Connecticut study, average length of stay for a mastectomy was 3.98 days in 1991 and 2.29 days in 1996. "From 1991 to 1993, most mastectomy patients were discharged after 3-day stays, whereas in 1994 and 1995, most were discharged after two-day stays. In 1996, the majority of mastectomy discharges were one-day stays." In the Connecticut study, the percentage of all hospital-based mastectomies performed as an outpatient procedure increased from 3.3% in 1991 (53 outpatient of a total of 1604 mastectomy procedures) to 7.7% in 1996 (97 outpatient of a total of 1256 mastectomy procedures).

A third study by the Wisconsin Office of Health Care Information found that although the number of outpatient mastectomies performed in Wisconsin remains relatively small, on a percentage basis they are increasing rapidly.[5] Overall, of the 7,481 mastectomies reported during the 3-year period beginning the last half of 1993 through the first half of 1996, 614 or 8.2% were outpatient mastectomy procedures. In the last half of 1993 less than 10% of mastectomies were outpatient procedures, however, by the first half of 1996, over 20% were outpatient. The study also looked at the type of mastectomy procedure performed and found "that the least complex, or least risky, cases were the most likely candidates for outpatient surgery."

What is spurring the increased use of outpatient procedures?

The outpatient mastectomy issue has been described in the media and in hearing testimony before Congress as an "uncaring" effort by insurance companies whose sole interest is cutting health care costs. Certainly a major force behind these trends and the much broader shift occurring in general for surgical procedures is the desire to contain

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[3] *Health Policy Tracking Service*. Mastectomies. May 28, 1997.

[4] Susan E. Furlong, et al., *Mastectomies in Connecticut*, OHCA Issue Brief No. 9, Connecticut Office of Health Care Access, June 1997, p. 4.

[5] Wisconsin Office of Health Care Information. *An In-Depth Analysis of Surgical Procedures:Mastectomy*. Director's Report, Spring 1997.
http://badger.state.wi.us/agencies/oci/ohci/spring97/drmast97.htm

costs. Shorter hospital stays cost less than longer ones, and ambulatory surgery is less expensive than inpatient surgery.

Shorter hospital stays were made possible by technological advances in surgery and anesthesia. However, the shorter stays may partially result from doctors own convenience and their attempts to improve patient care, as well as to decrease health care costs. For example, one study concluded that partial mastectomy and limited lymph node dissection "can be safely performed as a same day procedure with advantages to the patient of avoiding hospitalization, to the surgeon in avoiding excessive paperwork and in-hospital responsibilities, and to the third party insurers in reducing costs."[6] There is no evidence that the gradual shift toward increased numbers of outpatient mastectomies is *solely* insurer motivated.

Surgical literature in the mid-1980s began to report on the success of early discharge of the mastectomy patient. The first report of mastectomy as an outpatient procedure was conducted by Goodman and Mendez and published in 1993.[7] William C. Dooley, director of the Johns Hopkins Breast Center, established a program for outpatient mastectomy in 1993 because his patients wanted to go home. According to Dooley, prior to the start of the program two-thirds of his former patients would have preferred not to stay overnight.[8] In the Johns Hopkins program, release on the same day is strictly voluntary; when the program started, only 20% of patients chose outpatient mastectomy.[9] The percentage has increased each year to 83% of 600 patients in 1996.[10]

"Based on the experience of Hopkins and a few other hospitals that have specialized in outpatient surgery, Milliman and Robertson, Inc., a consulting and actuarial firm that develops guidelines on medical practice, ... revamped its advice [in 1995]. Both lumpectomies and mastectomies can be performed safely on an outpatient basis, according to revised guidelines meant to apply to relatively straightforward cases."[11] Because many health plans rely on the Milliman and Robertson guidelines in deciding what care should be paid for, they may have been influential in stimulating the current trend toward out- patient mastectomies and shorter hospital stays following breast surgery.

S. 249, the Women's Health and Cancer Rights Act of 1998, requires that health plans provide inpatient coverage for a hospital stay following mastectomy, lumpectomy or lymph node dissection for the treatment of breast cancer; the length of time is determined by the attending physician in consultation with the patient. Similar language

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[6] Murray H. Seltzer, "Partial Mastectomy and Limited Axillary Dissection Performed as a same day Procedure in the Treatment of Breast Cancer," *International Surgery* 80 (1995): 79-81.

[7] Anthony A. Goodman and Armando L. Mendez, "Definitive Surgery for Breast Cancer Performed on an Outpatient Basis," *Archives of Surgery*128 (1993): 1149-1152.

[8] Goldstein, Under the Scalpel, 16.

[9] Providence Business News, January 27, 1997, http://www.pbn.com/W012797/jhopkins.htm

[10] Goldstein, Under the Scalpel, 16.

[11] Ibid.

is contained in the Patients' Bill of Rights Act, S. 2330 (Lott/Nickles); there is no such provision in the Patient Protection Act of 1998, H.R. 4250 (Gingrich).

Where are outpatient mastectomy procedures being provided?

The Wisconsin study found that 14% of these procedures were performed at freestanding ambulatory surgery centers (FASCs) as opposed to hospitals. Of the 586 outpatient mastectomy procedures in the study, 84 occurred at an FASC. The study also found that a greater percentage of inpatient cases were paid for by Medicare compared to other pay sources, possibly reflecting the increased age of the patients (see Table 1).

Table 1. Expected Pay Source for all Mastectomies, Wisconsin

Expected Payer	Inpatient (%)	Outpatient (%)
Medicare	52.9	38.2
Medical Assistance	1.6	1.3
Other Government	0.7	0.5
Commercial Insurance	42.3	55.6
Self-Pay	2.0	2.9
Unknown	0.4	1.5

Source: Wisconsin Hospitals and FASCs — Third Quarter 1993 through Second Quarter 1996. Table is from the Wisconsin Office of Health Care Information *Director's Report*, Spring 1997 Edition.

A study performed by the American Association of Health Plans (AAHP) in New York State found that the majority of outpatient mastectomies conducted in 1995 were performed on Medicare fee-for-service beneficiaries (see Table 2). In 1995, less than 2% of mastectomies performed in New York were outpatient procedures.[12]

Table 2. Mastectomies, New York, 1995

Medicare	72
Medicare HMOs	2
Medicaid	3
Medicaid HMOs	2
HMOs	15
Blue Cross	15
Commercial Insurers	10
Self-pay	3
Other	2
Total Outpatient	**124**
Total Inpatient	**6892**
Total Mastectomies	**7016**

In an analysis of the primary payers for mastectomies, the Connecticut study found that from 1991 to 1996, average length of stay dropped most dramatically for those discharges covered by Medicare and Medicaid (see Table 3 below). Health Maintenance

[12] American Association of Health Plans, "New York State Mastectomies, 1995."

Organization and Preferred Provider Organization (HMO/PPO) discharges showed the smallest change in length of stay over the same time period.

Table 3. Average Length of Stay for Hospital Inpatient Mastectomies, Connecticut

Primary Payer	1991	1992	1993	1994	1995	1996	% change in mean length of stay 91-96
Medicare	4.32	4.07	3.45	3.12	2.50	2.21	-48%
Medicaid	5.07	4.12	3.95	4.07	2.92	2.98	-41%
Commercial Ins.	3.66	3.32	2.91	3.07	2.86	2.25	-39%
Blue Cross	3.52	3.24	2.93	2.88	2.52	2.13	-39%
HMO/PPO	3.65	3.46	2.94	2.99	2.48	2.44	-33%
Total	3.98	3.72	3.20	3.09	2.51	2.29	-42%

Source: Connecticut Office of Health Care Access, June, 1997.

Finally, a study by the MEDSTAT Group looked at differences in rates of outpatient procedures between three types of private insurance plans: 1) HMO and other capitated plans; 2) Managed Care (i.e., Preferred Provider Organization/Point of Service); and 3) Indemnity (i.e., fee-for-service).[13] The study found that all three types of health care plans "had fairly consistent rates of mastectomy procedures performed in the outpatient setting." The MEDSTAT study used 1993 and 1994 data representing "the healthcare experience of approximately 2.5 million individuals annually." The MEDSTAT Group study has not been analyzed and published by a peer-reviewed journal system, and therefore it may have problems in data collection or analysis that are not readily apparent.

What is the success rate of outpatient versus in-patient procedures?

"Numerous health researchers say there is little solid evidence showing that outpatient mastectomies cause medical harm."[14] The NCI study found only a modest increased risk for some surgery-related complications in a small percent of women. All other published studies to date on outpatient mastectomies have looked at "anecdotal evidence"[15] from small groups of patients in the practices of surgeons who are very enthusiastic about the procedure. For these small studies, it is unclear if such patients represent a true picture of the population of women who receive outpatient mastectomies.

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[13] The MEDSTAT Group letter dated December 20, 1996, on outpatient mastectomies.

[14] Goldstein, Under the Scalpel, 16.

[15] Anecdotal evidence is based on descriptions of unmatched individual cases rather than on controlled studies. Such evidence is of limited benefit in the support of a scientific argument because it is based on hearsay evidence rather than a systematic collection of data. From: Dorland's Illustrated Medical Dictionary, 28th Edition, 1994; and, Taber's Cyclopedic Medical Dictionary, 17th Edition, 1993.

According to one study on outpatient mastectomy, "the patients do as well as or better than those whose operations are performed on an inpatient basis. ... Patients and their families tend to downgrade the whole level of seriousness of the operation, and in doing so have a much better mental attitude toward their recovery. ... The Hospital setting tends to make patients dependent, and by and large, patients are overmedicated and underattended. Families can easily tend to the duties required for postoperative care of these patients."[16] The study was conducted on a total of 221 patients between September 1990 and June 1992 at an outpatient surgical center in Plantation, FL.

Another study of 63 patients treated over a 3-year period (1991-1993) at the Henry Ford Hospital in Detroit, MI, found that outpatient mastectomy "led to better physical and psychological recovery, emphasizing patient comfort, control and independence, and strong family interactions. ... The physical and psychological benefits of such an approach outweigh any minor inconveniences on patients and families."[17] The author went on to state that the "depressing and fearful attitude of years past, frequently reflecting ignorance and uncertainty as to the disease process and the effectiveness of treatment, has been replaced by a 'can do' attitude, emphasizing home independence, self care, and early physical and professional activity. The net effect of this program has been an enthusiastic endorsement and participation by patients, favorably affecting total recovery and rehabilitation."[18] According to the author, the patients in his study experienced the same low infection rate "documented by other authors and in fact there is evidence that [infection rates are] higher when patients stay in hospital longer."[19]

McManus et al. found that "the success of ambulatory breast surgery depends on careful preparation and education [of the patient]."[20] The authors of the study believe that "from a psychosocial standpoint there are unique advantages to ambulatory breast cancer surgery. Most patients want to go home, and this option allows a sense of personal control over their situation. ... This is especially true of women at the two ends of the age spectrum. Elderly women have often delayed their initial presentation because of a fear of doctors and hospitals, and feel relieved that hospitalization will not be required. Women with young children prefer that there be no unnecessary separation between them ... spouses remain an integral part of the team. Their inclusion makes them feel needed and useful, strengthening relationships."[21] The McManus study was conducted on 118 patients who underwent outpatient breast cancer surgery between January 1991 and December 1993 at St. Peter's Medical Center in New Brunswick, NJ.

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[16] Goodman and Mendez, Definitive Surgery for Breast Cancer, 1149.

[17] Angelos Kambouris, "Physical, Psychological and Economic Advantages of Accelerated Discharge After Surgical Treatment for Breast Cancer," *The American Surgeon* 62 (1996): 123-127.

[18] Ibid., p. 126.

[19] Ibid.

[20] Susan A. McManus, et al., "Advantages of outpatient breast surgery," *The American Surgeon* 60 (1994): 967-970.

[21] Ibid., p. 969.