Health Care Industry

0 Comments

Financial facts about treating breast cancer - includes a listing of educational resources - Costing Out Care

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Breast cancer is the most common form of cancer (other than skin) in American women and the second leading cause of death after lung cancer. Breast cancer is a group of related diseases in which cells within the breast most commonly in the lining of the milk ducts or in the milk-producing glands become abnormal and divide without control or order. When cancer cells break away from the original tumor and enter the bloodstream or lymphatic system, secondary tumors (metastases) may form, invading and damaging other parts of the body, including vital organs.

The incidence rate for breast cancer increased dramatically through much of the. 1980s, rising from 85 cases per 100,000 in 1980 to 112 in 1987. The surge was due primarily to a nationwide increase in mammography screening, particularly in women ages 50 and older, as was stabilization of incidence rates around 110 per 100,000 in the past several years.

Of the 182,000 breast cancer cases diagnosed, each year in U.S. women, more than 40 percent occur in three well-established and broad risk groups: those who have no children or have their first child after age 19; those with a moderate to high income level, and those who have a mother or sister with the disease.

The probability of developing breast cancer increases throughout life. The National Cancer Institute (NCI) estimates that about one in eight women in the United States will have the disease during her lifetime. In evaluating risk for a cancer-free woman, age-specific probabilities are more accurate than lifetime probabilities. (See the chart below.)

The overall five-year relative survival for breast cancer is 75 percent, which means that three out of four women who are treated for breast cancer this year will be alive five years from now. More specifically, 93 of 100 women diagnosed with localized breast cancer will be alive five years hence, as will 71 out of 100 with regional spreading of the cancer but only 18 out of 100 with distant metastases.

THE COST OF DETECTION

The total cost of illness for breast cancer has been estimated at $3.8 billion, of which $1.8 billion represents medical care. Since treatment costs are considerably lower when a tumor is discovered at an early stage, screening programs have economic value. Breast examination can be performed

by the woman herself or by a health care professional. Screening can be accomplished by self-examination or by a health care provider, and by mammography, a process of taking x-rays of the breasts, usually one from the side and one from above. Mass screening using mammography can improve early detection by 15 to 35 percent.

Cost-effectiveness studies have estimated the cost of screening at between $13,200 and $28,000 per year of life saved.

The National Cancer Institute reports that screening mammography every one to two years reduces breast cancer deaths by a third or more for women 50 and older. However, published cost-effectiveness studies have challenged the return on health care dollars invested for frequent mammograms. The ratios from several studies indicate the cost effectiveness of an annual mammography to be from $62,000 to $190,000 per life-year for women age 40-49 and $17,000 to $110,000 for women age 50-65. The cost effectiveness of a mammography every three years for women age 50-65 was determined to be $2,700 per life year in another study.

The issue is not whether mammography is cost effective, but how frequently it should be done and at what ages.

Another issue is the cost of false positives--test results that indicate a woman has a disease when she really doesn't. In one study, 352 women with false positive mammograms made over 1,000 visits to physicians and had nearly 400 fine needle aspiration biopsies, 200 mammograms and 90 surgical biopsies before 219 of them were declared free of cancer. The remaining women underwent another 400-plus visits to physicians and had 145 fine needle aspiration biopsies, 70 mammograms and 28 surgical biopsies before 107 were found to be cancer-free. The additional screening costs were $450,000 ($1,300 per patient) in the first round and $150,000 ($1,000 per patient) in the second round.

There is evidence that an upfront investment in a more careful mammography process can pay off. One study found that double readings were more effective and less costly (a savings of $9,000 to $10,000 per woman screened) than single readings. In another study comparing one-position and two-position views, the latter cost $48 and detected 6.8 cancers per 1000 women vs. a cost of $40 and 5.5 cancers detected for the single view. The two-view method also had 15 percent fewer retests.

TREATMENT OPTIONS

Primary therapy for breast cancer is usually surgery. The most common type of surgery is modified radical mastectomy, the removal of the entire breast, some of the underarm lymph nodes and the lining over the chest muscles. More limited surgery often can be used with removal of underarm lymph nodes and radiation therapy to destroy cancer cells that may remain in the breast tissue.