

Decision aid helps surgeons better communicate treatment options to women contemplating breast cancer surgery.

Overview

This randomized trial evaluated the effectiveness of a decision aid in communicating surgical options to women with early stage breast cancer. The study found that women in the decision aid group attained greater knowledge than those in the control group, especially in understanding that survival rates are similar after either breast conservation therapy (BCT) or mastectomy. The women whose surgeons used the decision aid during consultation also felt less conflict about their decision and were more likely to choose BCT over mastectomy than women in the control group.

Background

Prior to 1980, the primary treatment option for women with early stage breast cancer was modified radical mastectomy. Beginning in the 1980s, a number of clinical trials showed that mortality after breast conservation therapy (BCT), which consists of surgical removal of the lump combined with radiation therapy, was equal to that after modified radical mastectomy. In addition, quality of life and satisfaction were higher among women who received BCT than the more invasive intervention.

Because the information regarding breast cancer staging and treatment options is complex and often provided at an emotionally difficult time, communication about treatment options can be challenging. Decision aids have been developed to help physicians better communicate with their patients about treatment options. Decision aids consist of visual and written information based on the best available evidence. Such aids have been shown to improve patient knowledge and facilitate decision-making in the context of oncologists discussing treatment options with women with breast cancer. This study aimed at evaluating similar decision aids when used by general surgeons discussing treatment options with patients diagnosed with breast cancer.

Previously known about the topic:

- Regional variations in Medicare spending are related to variations in provider practice patterns.

Contribution of this study:

- The authors propose a new approach to Medicare reform that would address spending and quality issues by promoting shared decision-making and establishing centers of medical excellence.

Objective

To assess the effectiveness of a decision aid in communicating surgical options for early stage breast cancer

Methods

- Patient population: women recently diagnosed with stage I or II breast cancer who had not yet received surgical treatment
- Study design and setting: paired cluster randomized trial in which general surgeons in Canada were randomly assigned either to use the decision aid during consultation or to conduct the consultation without the aid.

- **Intervention:** a decision board was created using information collected from a systematic review of randomized trials that compared BCT and mastectomy and from interviews and focus groups of patients and surgeons. The board displayed information about four topics (Treatment Choice, Side Effects, Results of Treatment Choice for the Breast, and Results of Treatment Choice for Survival) for each of the two treatment options, creating 8 topic areas. The board was presented with all 8 topic areas covered by sliding panels. The surgeon then sequentially uncovered one panel at a time and read it with the patient. Patients were provided with portable versions of the decision aid to take home. The tool took an average of 21 minutes to use, which did not increase the length of the consultation.
- **Primary outcome measures:** patient knowledge about breast cancer and treatment options; decisional conflict score (which assessed how well-informed the patient feels about choices, clarity of the patient's values, perceived support in decision-making, and level of uncertainty); satisfaction with decision-making, (based on a subscale of the decisional conflict scale); and the treatment decision following consultation.
- Women in the decision aid group were more likely to choose BCT than women in the control group (94% vs 76%; $P = .03$) and were more likely to strongly prefer the treatment they chose (83% vs 72%; $P = .05$).

Key Implications

- Use of a decision aid was associated with greater patient knowledge, less decisional conflict, and greater patient satisfaction with the treatment decision than usual care. Women whose surgeons used the decision aid also were more likely to choose BCT and to more strongly prefer their choice of treatment.
- More women in the decision aid group than the control group reported that they strongly preferred their treatment choice. This finding suggests that decision aids facilitated the decision-making process and empowered women to choose the treatment option that better fit their values.
- The proportion of BCT use and the degree to which patients perceive they have a choice in treatment are considered two important indicators of the quality of cancer care. This study's findings suggest that use of decision aids improves both quality measures.

Main results

- 201 patients were included in the primary analysis (94 in the decision aid group and 107 in the control group).
- Women in the decision board group achieved significantly higher knowledge scores than women in the control group (66.9 vs 58.7; $P < .001$).
- The greatest difference between the two groups within the knowledge domains was in understanding that survival was the same with BCT or mastectomy (77.7% of women in the decision aid group vs 57.9% of women in the control group; $P = .006$).
- Women in the decision aid group had less conflict about their decision (decisional conflict scores of 1.40 vs 1.62; $P = .02$) and scored higher for satisfaction with decision-making (satisfaction scores of 4.50 vs 4.32; $P = .05$).

Full citation:

Wennberg JE, Fisher ES, Skinner JS. Geography and the debate over Medicare reform. *Health Aff (Millwood)*. 2002; Suppl Web Exclusives:W96-114.

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