Helping Women with Breast Cancer Choose between Surgical Treatment Options

**Principal investigator**
Marie-Anne Durand PhD, MSc, MPhil, CPsychol
Glyn Elwyn MD, PhD, MSc, BA

**Organization**
Dartmouth College

**What was the research about?**
Patients with early-stage breast cancer can often choose between two treatment options. With a mastectomy, a surgeon removes the entire breast. With breast-conserving surgery, a surgeon removes only cancerous and nearby tissue. Patients usually need radiation after this surgery.

In this study, the research team tested two conversation aids used during clinic visits to help patients choose the treatment that works best for them:

- **Option Grid.** A one-page, easy-to-read table of surgery options, with answers to common questions.

- **Picture Option Grid.** A four-page, easy-to-read summary of surgery options with pictures. This approach was designed for people of low socioeconomic status and with limited health literacy. Health literacy is knowing how to get and use information to make choices about health.

The research team compared patients who received one of these aids with patients who received usual care. Usual care included educational materials and medical guidance about breast cancer and treatments.

**What were the results?**
Compared with usual care, patients receiving the Picture Option Grid

- Had higher knowledge about breast cancer one week after surgery.
- Felt more involved in the decision process right after their visit, but not one week after surgery.
- Had more observed and reported shared decision making. In shared decision making, patients and doctors work together to make health choices.
- Had lower decision regret one week after surgery.

The study found no difference in reported care coordination.

Compared with usual care, patients receiving the Option Grid

- Didn't differ in knowledge about breast cancer or decision regret
- Felt more involved in the decision process one week after surgery
- Had more observed, but not reported, shared decision making
- Reported better care coordination 12 weeks after surgery
The two aids didn’t differ from usual care on whether patients chose a treatment that aligned with their values or other quality of life outcomes.

When compared with one another, the two aids didn’t differ on any outcomes.

**Who was in the study?**
The study included 615 women with early-stage breast cancer. Of these, 64 percent were White, 16 percent were Black, 13 percent were Hispanic, 3 percent were Asian, and 2 percent were another race. The average age was 60, and 33 percent were of low socioeconomic status. All received care at one of seven clinics across the United States.

**What did the research team do?**
The research team assigned 16 surgeons to one of the three groups by chance. Surgeons used their assigned aid to talk with patients about treatment choices during their visit.

The research team surveyed patients at the start of the study, right after the visit, and again 1 week, 12 weeks, and one year after surgery. The team also observed shared decision making during the visit.

Patients, caregivers, and clinicians were part of the research team.

**What were the limits of the study?**
Because surgeons saw different numbers of patients, fewer patients used the Option Grid than the Picture Option Grid.

Future studies could include more patients who use the Option Grid.

**How can people use the results?**
Surgeons can use these results when looking for ways to support patients with early-stage breast cancer in choosing treatments.

To learn more about this project, visit www.pcori.org/DurandElwyn361.