Using Technology to Promote Shared Decision Making for Neoadjuvant Breast Cancer Therapy

**BACKGROUND**

Shared Decision Making (SDM) between patients and providers, has been shown to lead to improved patient understanding and satisfaction with treatment choices. One recent study found 85-90% of breast cancer (BC) patients preferred an active or shared role in decision-making. Due to barriers to patient-provider communication about patient preferences, neoadjuvant chemotherapy is an underutilized treatment option, despite being shown to improve the chances of breast conservation. The Carevive Care Planning System™ (CPS), an evidence-based patient assessment and care planning software that has shown to improve patient-provider communication, was adapted to include a decision aid tool for use in surgeon's offices.

**METHOD**

This prospective multi-site intervention project will enroll 75 newly diagnosed BC patients across three cancer centers. Patients interact with the Carevive CPS prior to their initial surgical consultation to report concerns, mastectomy related distress, and medical decision-making preferences. These data are then displayed to surgeons at the point of care, along with algorithm-driven recommendations to facilitate SDM and supportive care plans for the patient. Care plans include treatment options education, including neoadjuvant therapy. Provider participants complete pre-test/post-test questionnaires assessing knowledge, beliefs and use of SDM.

**RESULTS:**

**RESULTS: PROVIDER’S BASELINE BELIEFS’ REGARDING SDM**

- **BENEFITS:**
  - 100% Believe that SDM leads to, “improved patient understanding of treatment options”
- **BARRIERS:**
  - 44% Believe patients are not fully able to understand the risks/benefits of the treatment options
  - 35% Believe Shared decision making will take too much time and effort

**RESULTS: PATIENT-PROVIDER BELIEF CONCORDENCE**

- WHAT ARE PATIENTS SAYING?
  - Patients wanting a shared role in treatment decision-making: 82%
  - Patients reporting a moderate to severe level of mastectomy related distress*: 80%
- IS THAT TRANSLATING TO CARE?
  - Providers reporting that half or fewer of their patient were eligible for neoadjuvant therapy: 91%

**CONCLUSIONS**

Barriers to SDM about BC therapy remain, and include provider misperceptions about patient's desired role in decision-making. The novel care planning and treatment decision making tool tested in this pilot project has the potential to improve SDM concerning treatment options to help overcome barriers to provision of neoadjuvant therapy and breast conservation where desired. Preliminary results will be presented.

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