

Patient decision aids improve decision quality but widespread use is limited.

Overview

This literature review summarizes the current data on the effectiveness of patient decision aids in improving decision quality and reducing use of interventions of less value to informed patients. It also identifies the barriers that hinder widespread use of such aids and suggests solutions to address these barriers.

Background

Preference-sensitive health care decisions are those for which there is no clear answer and the best choice is based on the patient's values or preferences. Such decisions include the treatment options for chronic back pain and early-stage prostate cancer. Studies have found wide regional variation in the use of treatment options for preference-sensitive conditions. Shared decision-making has been advocated as a means for ensuring that preference-sensitive options are chosen based on an informed patient decision rather than provider-related factors. Patient decision aids have been developed to assist health care providers in the shared decision-making process.

Objective

To summarize the current data on the effectiveness of patient decision aids and highlight barriers to widespread use.

Definitions

- **Shared decision-making:** "The process of interacting with patients who wish to be involved in arriving at an informed, values-based choice among two or more medically reasonable alternatives."
- **Patient decision aid:** An evidenced-based, standardized tool used to facilitate shared decision-making, which includes:
 - High-quality, up-to-date information about a specific condition or disease, the treatment options, and likely outcomes.
 - Methods to help patients clarify their personal values (e.g., a five-star rating system).
 - Guidance for patients on communicating values and personal issues to health care providers and family members.

Previously known about the topic:

- Decision aids can facilitate shared decision-making.

Contribution of this study:

- Review of the evidence base that supports the effectiveness of patient decision aids.
- Identification of barriers to widespread use of decision aids and recommendations for addressing these barriers.

Review of Evidence Base

(Based on the authors' summary of a systematic review of randomized controlled trials of decision aids conducted by the International Cochrane Collaboration Review Group on Decision Aids.)

- **Decision quality:** When used in conjunction with counseling, patient decision aids have demonstrated superior effects to usual care, including:
 - Increased knowledge scores
 - Greater proportion of patients with realistic perceptions of benefits and harms
 - Reduced decisional conflict scores
 - Reduced proportion of patients who are passive during the decision-making process
 - Reduced proportion of patients who remain undecided about their options after counseling
 - Improved agreement between the medical option chosen and the patient's values

- Uptake rate: for major elective surgery, 6 of 7 trials showed a reduction in patients choosing the more invasive option. The seventh trial involved a low rate of surgery in the control group due to a shortage of surgical specialists, suggesting that decision aids may not reduce uptake if baseline usage rates are low. Another trial found that decision aids increased uptake in surgery when rates were “too low,” suggesting that decision aids can address underuse as well as overuse of medical options.
- Cost-effectiveness: In three UK trials, the costs were comparable or lower when decision aids were used rather than usual care. The cost savings was primarily attributable to lower rates of surgery.

Recommendations for Lowering Barriers to Use of Patient Decision Aids

- According to the authors, four primary issues have been identified that hinder the widespread use of decision aids:
 - Lack of awareness of a decision aid appropriate to a particular clinical situation
 - Lack of accessibility of decision aids
 - Acceptability issues (e.g., incompatibility with health care provider’s practice or values, difficulty of use, or need for additional equipment)
 - Lack of motivation to use decision aids
- The authors propose several strategies to address these issues:
 - *Setting quality standards.* The Cochrane Collaboration on Decision Aids has developed six criteria for rating the quality of decision aids: competent developers and development; recent; evidence-based; disclosure of conflicts of interest; balanced presentation of options, benefits, and harms; and efficacious. However, at present there is no accreditation body to evaluate decision aids.
 - *Improving access.* Several organizations, including the National Cancer Institute and the Cochrane Collaboration Review Team, are in the process of developing or expanding databases of decision aids for health care provider use.

- *Practitioner training.* Education for nurses and physicians on the ideal use of decision aids is under development.
- *Models for providing patient decision support.* The authors identified three possible models for providing decision support to patients: clinic or hospital-based, freestanding, and insurance-centered. The authors note that with the recent shift toward “consumer-driven health plans,” there may be an expanded need for patient decision aids to better inform patients about preference-based choices.
- The authors propose several types of demonstration projects as an important next step for understanding policy issues that relate to improved patient decision-making.

Key Implications

- Randomized trials have demonstrated the efficacy of patient decision aids in decision quality and a variety of other realms.
- A number of barriers exist to widespread use of decision aids.
- Barriers to greater use can be addressed through several specific interventions, including the development of accessible databases of decision aids. ■

Full citation:

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Author contact information:

Annette O’Connor, PhD, professor, University of Ottawa, Ottawa, Ontario, Canada K1N 6N5. (aoconnor@ohri.ca).