Decades of research from the Dartmouth Atlas have shown that unwarranted variations in elective surgery are pervasive in the United States. Decision aids (DAs) are evidence-based sources of health information that can help patients make informed treatment decisions about elective surgery. Growing evidence suggests that using DAs improves the quality of patient decision making and potentially reduces unwarranted variations in care, mitigating unnecessary health expenditures. Unfortunately, little is known about how DAs affect patient satisfaction and health care use, and few health systems have attempted large-scale implementation of DAs to support shared decision making (SDM).

To help address the persistent problem of unwarranted variations in health care, in 2007 Washington became the first state to enact legislation encouraging use of SDM and DAs to address deficiencies in the informed-consent process. Group Health, a Seattle-based, consumer-governed, integrated health system that provides insurance coverage and care for more than 600,000 residents of Washington state and northern Idaho, volunteered to fulfill a legislated mandate to study the costs and benefits of integrating DAs across a wide range of health conditions. The Group Health SDM Demonstration Project, begun in 2009, implemented video-based DAs for 12 preference-sensitive conditions related to elective surgical procedures in 6 specialties. The video DAs used by Group Health were developed by the Informed Medical Decisions Foundation and Health Dialog.

In the past 4 years, Group Health has distributed more than 31,000 DAs—more than any other health system in the United States. Today, more than 65 percent of patients undergoing elective surgery at Group Health receive a DA. Member satisfaction with DAs has been high, with more than 95 percent of members surveyed reporting that the DAs helped them better understand their conditions and treatment options. Members were also less conflicted about their treatment decisions and expressed more satisfaction with their decisions.

Group Health Research Institute conducted an observational study of almost 10,000 patients, supported by The Commonwealth Fund, to examine the relationships between introducing DAs for hip and knee osteoarthritis and rates of joint replacement surgery and costs. Consistent with prior randomized trials, the introduction of DAs at Group Health was associated with 26 percent fewer hip replacement surgeries, 38 percent fewer knee replacements, and 12 to 21 percent lower costs over 6 months.
We have identified several key components for successful DA implementation, including

- introductory meetings with clinical leaders to build support and identify champions;
- mandatory viewing of the DAs by clinic providers and staff;
- visits to each clinic to discuss the DAs and how to incorporate them into existing processes;
- iterative communications to develop a formal, customized implementation plan for each clinic;
- post-implementation monitoring and support to identify best practices for quality improvement; and
- fostering changes in physician culture through continuing medical education on SDM conversations.

We believe that the use of patient DAs and the promotion of SDM among providers and patients can positively influence several aspects of the U.S. health care system. Possible contributions include promoting patient-centered care, improving the quality of medical decisions, controlling health care costs, and reducing unwarranted variations in care. The lessons learned by Group Health should guide other states and health care organizations toward adopting SDM with DAs as the highest standard of care for informed consent.

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Note: Authored commentaries in this IOM Series draw on the experience and expertise of field leaders to highlight health and health care innovations they feel have the potential, if engaged at scale, to foster transformative progress toward the continuously improving and learning health system envisioned by the IOM. Statements are personal, and are not those of the IOM or the National Academies.

In this commentary, Scott Armstrong and David Arterburn of Group Health describe the promise offered by decision aids (DAs) and shared decision making (SDM) for ameliorating the persistent problems of unwarranted variations, high costs, and subpar collaboration with patients in health care. Their discussion touches on several concepts central to continuously improving care, including the importance of:

- Providing patients with targeted informational resources that allow for informed, high-quality, team-based decision making;
- Fully involving all members of the clinical care team in the effort to incorporate DAs into existing care processes;
- Structured planning of personalized DA implementation plans for individual clinics; and
- Post-implementation monitoring of new DAs and continued emphasis on their promise for encouraging shared decision making.

Information on the IOM’s Learning Health System work may be found at www.iom.edu/learninghealthsystem.