When It Comes to Elective Surgery, Location Matters

Wide Regional Variation Suggests Physicians Are Driving Decisions, Underscores Need for Shared Decision-Making with Patients

Lebanon, N.H. (February 24, 2011) – For Medicare patients with conditions for which surgery is an option, whether they undergo elective surgery depends largely on where they live and the clinicians they see, according to a new report from the Dartmouth Atlas Project and the Foundation for Informed Medical Decision Making. Researchers found remarkably wide regional variations in elective surgery for Medicare patients even though they had similar conditions.

Researchers found that men over 65 with early-stage prostate cancer who live in San Luis Obispo, Calif., are 12 times more likely to have surgery to remove their prostate than those in Albany, Ga. Medicare patients with heart disease in Elyria, Ohio, were 10 times more likely to have a procedure such as angioplasty or stents than those in Honolulu. And women over 65 living in Victoria, Texas were seven times more likely to undergo mastectomy for early-stage breast cancer than women in Muncie, Ind.

“These striking variations are the by-product of a doctor-centric medical delivery system. In highlighting the variation from community to community for elective procedures, we hope to shine a light on the fact that patients’ preferences are not always taken into account when medical decisions are made,” said Shannon Brownlee, M.S., lead report author and instructor at the Dartmouth Institute for Health Policy and Clinical Practice.

The report is the first in a series looking at individual states and regions, and highlights Minnesota in addition to presenting national trends. Researchers analyzed the rates of elective, or “preference-sensitive” procedures, including: mastectomy for breast cancer; coronary artery bypass surgery; percutaneous coronary intervention; back surgery; knee and hip joint replacement; carotid artery surgery; gall bladder removal; radical prostatectomy for prostate cancer; and prostate cancer screening.

In addition to analyzing data on practice patterns, the report also advocates for shared decision-making, a process that helps patients understand their choices fully and allows them to share treatment decisions with their clinicians. The report also describes the treatment choices available for the preference-sensitive procedures, all of which can—but do not have to be—treated with surgery, as well as steps patients can take to make sure they get the care they want and need.
“All too often, patients facing elective surgery are not given an opportunity to learn about the full range of options, and that each choice has unique risks and benefits. Many are not even aware that the decision about an elective procedure is actually a choice. Instead, they routinely delegate such important decisions to their clinicians, with the result being that patients often do not get the treatment they would prefer,” said David C. Goodman, M.D., M.S., report co-author and co-principal investigator for the Dartmouth Atlas Project, and director of the Center for Health Policy Research at the Dartmouth Institute for Health Policy and Clinical Practice.

The researchers explain that differences in clinicians’ personal beliefs and opinions contribute to the variation in surgical rates in observed geographic locations. For example, there is considerable disagreement among surgeons about the need for back surgery, its effectiveness, and even the best way to diagnose the cause of back pain. With no consensus about how to diagnose and treat back pain, the rate of back surgery varies widely from place to place. As a result, Medicare patients living in Casper, Wyo. are nearly six times more likely to undergo back surgery than patients living in the Bronx, N.Y.

“The most important choices in medicine are not the clinician’s alone to make. Patient preference is especially important when facing a test, surgery or treatment that is elective. In order to ensure that patients get the treatment that is right for them, the choice should be a shared decision. When done right, shared decision-making results in a better decision: a personalized choice based on both the best scientific evidence and the patient’s values,” said Michael J. Barry, M.D., report co-author and president of the Foundation for Informed Medical Decision Making.


**Methodology**
Surgical rates are for procedures performed during 2003 to 2007 for patients enrolled in traditional (fee-for-service) Medicare. The data for PSA testing are for men age 68-74 enrolled in traditional Medicare in 2008. These are the most recent dates for which Atlas data are available. All data are based on Medicare claims, and rates are age, race and, when appropriate, sex adjusted.

**About the Dartmouth Atlas Project**
For more than 20 years, the Dartmouth Atlas Project has documented glaring variations in how medical resources are distributed and used in the United States. The project uses Medicare data to provide comprehensive information and analysis about national, regional, and local markets, as well as individual hospitals and their affiliated physicians. These reports, used by policymakers, the media, health care analysts and others, have radically changed our understanding of the efficiency and effectiveness of our health care system.

**About the Foundation for Informed Medical Decision Making**
The Foundation for Informed Medical Decision Making is a non-profit organization leading changes to ensure that health care decisions are made with the active participation of fully informed patients. The Foundation is dedicated to advancing research, policy, and clinical models that ensure that patients understand their choices and have the information they need to make sound decisions about their health and well-being. Its mission is to inform and amplify the patient’s voice in health care decisions.

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