Providers, outcomes and their determinants

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Three articles in this issue of the journal deserve to be read by all surgeons no matter what their specialty or inclination. The uniting theme is the attempt to better quantify our actions and therefore set our resources to support those actions.

The first paper is the one by Mitton and colleagues.[1] None of the authors of this paper is a surgeon, but this article is likely to influence more surgeons' lives than many other papers in this august journal. The authors describe a rational process of assessment called "program budgeting and marginal analysis" (PBMA) to allocate resources in a scarce resource environment. PBMA has not been used before in this country, and it is interesting to see its first application in a small community in Western Canada. The scenario is typical today: a surgeon asks for more resources in order to serve the population better. The need for such resource allocation is based on a wait list for services. The process by which the need for, and the potential effect of, redistribution of those resources is well described in this paper. This process will likely become increasingly common if more resources are made available to the administrations that control how and when surgeons work. The essential product of this process is an increased communication among those charged with the direct implementation of priority settings, which themselves are based on objective assessments of available data. This realization makes the reading of the next 2 papers by Davies and associates[2] and Kreder and colleagues[3] more interesting in terms of the implicit messages that they convey.

Davies and associates examine a small but important outcome of knee replacement surgery. How does this fit into a bigger picture? The importance of the paper is not so much in the experimental methodology, which is highly appropriate for the question asked, but more in the lack of a clinically and experimentally significant outcome. The authors found no differences between their experimental groups. The main finding was related to the state of the patient's knee before the surgical intervention; if it didn't bend well before total knee arthroplasty it most likely wouldn't bend well afterward! In other words the surgeon's implicit belief in what improved the outcome did not stand up to scientific examination. The variable was one that they may not have realized because they didn't have sufficient control over the patients' premorbid state.

Kreder and colleagues ask a question that concerns anyone proposing an economic solution to scarce resources: Are there places where the job gets done better than others? In this case, it is the question of knee arthroplasty: Do patients operated on by low-volume surgeons in low-volume hospitals fare worse that patients operated on by high-volume providers? Somewhat paradoxically low-volume hospitals do worse but, according to the methodology used, low-volume surgeons do not. Again, the worse are the patient comorbidities the worse is the outcome, a realization that may prompt administrators to urge that complicated cases to be sent to higher volume institutions — if they have control! The drawback to this paper, common to any that use administrative databases for assessing outcomes, is that the real outcomes of interest to patients and surgeons are not collected. Caution must be the byword when using such material in a PBMA process as described by Mitton and colleagues. It is surely the responsibility of the surgeon, to seek out clinically relevant material that supports the allocation of resources and to be very cognizant of flaws in other material that may be drawn upon by the administrators of those resources. Time spent reading these papers will, I hope, allow many more surgeons to develop the skills they will need when they seek support for their programs and patients. There is no better equipped patient advocate than a well-read surgeon.

References

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