

# Editorial

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## How much does it cost? How much can be saved?

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COST CONTAINMENT IS THE driving force for current health care reform. Despite continuing concerns that this will adversely affect the quality of care or access to care, there are areas where costs appear to have been reduced without affecting quality or access. Such a result is a net increase in cost effectiveness. Elsewhere in this issue Syrek et al report their latest protocol for increasing the cost effectiveness of managing patients being considered for carotid endarterectomy. Features of the protocol include substituting ultrasonography for arteriography or using arteriography as an outpatient procedure, performing surgery the day of admission, using regional anesthesia, using an intensive care unit stay only in nonroutine situations, and reducing the postoperative stay. Their results are corroborated by similar studies from at least several other institutions. To date, none of the published protocols note an increase in morbidity or mortality.

Although these studies are to be applauded, many of them share 2 limitations: they report charges rather than costs and they do not report variation about the mean. Because charges represent price, not cost, the reduction in charges associated with these protocols may not represent savings. Savings relate to the extent that the protocols reduce costs, not charges. Because cost is a noun that does not stand alone,<sup>1</sup> it requires 2 additional pieces of information to define its meaning and relevance. The first relates to the object being costed, such as personnel, supplies, or equipment. The second further modifies these costs as direct or indirect, variable or fixed, etc. When a cost is not dis-

continued but only associated with a change in the frequency of use (eg, arteriography), savings may be limited to reductions in the costs of supplies.

Providers, patients, and payors are also likely to have differing perspectives of cost. These may involve both qualitative and quantitative differences. Thus any discussion of savings should also specify who benefits and by how much. If hospitals need to maintain certain services to care for a patient population, savings associated with reducing the frequency of services may be relatively small. Under fee for service, decreased revenue caused by decreased frequency may more than offset the savings in supplies. The result will be a net loss. On the other hand, under capitation decreased frequency is likely to result in a net gain.

Patients may or may not directly participate in any savings. They may "save" if decreases in charges also decrease their deductibles or, eventually, if they pay less in insurance premiums. These protocols do not affect total time lost from work. Moreover, there may be an increase in patients' indirect costs if family members take off from their own work to provide patient services previously performed on an inpatient basis.

Payors will save to the extent that previously covered services are not used. Outpatient arteriography may save only the amount reimbursed for a hospital day; eliminating arteriography saves this amount plus the difference between the amount reimbursed for arteriography versus carotid ultrasonography. Yet savings may not occur if providers increase charges in other areas to compensate for the lost revenue.

As each of the above components of the health care "system" respond to health care reform, there will be continued pressure to further improve efficiency. However, many costs of carotid endarterectomy cannot be eliminated and thereby will remain fixed. Although cost reduction may then tend to reach a limit, attaining this limit may also become increasingly

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important in the medical marketplace. Because variation in the costs of care for seemingly similar patients is a known and remarkable characteristic of health care costs, minimizing variation may become an important method for achieving the lowest possible costs.

Yet the variation about mean charges (or costs) for a given procedure is only occasionally reported. To be sure, analyses of variation can be fraught with pitfalls. For one, this variation is usually not normally distributed and the skew must be considered. These analyses must also carefully distinguish between variation resulting from inefficiency and variation resulting from differences in medical severity. To those not familiar with the nuances of medical practice, these distinctions are not always

clear. Thus surgeon input is essential to ensure continued quality of patient care and avoid discrimination against patients and providers.

Again, surgeons should be applauded for their efforts to increase the cost effectiveness of surgical care. Although reducing charges is not necessarily the right answer to calculating savings, these studies begin to identify the important questions. Surgeons should familiarize themselves with the complexities of health care costs and continue to seek the answers.

#### REFERENCE

1. Cleverly WO. Essentials of health care finance. 2nd ed. Rockville (MD): Aspen Publishers; 1986.

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