Introduction

Costs and benefits of modern-day spine care

FRANK L. ACOSTA JR., M.D.,1 CHRISTOPHER AMES, M.D.,2 PATRICK C. HSIEH, M.D.,1 AND IAN M. MCCARTHY, PH.D.3

1University of Southern California, Department of Neurological Surgery, Los Angeles; 2University of California San Francisco, Neurological Surgery, San Francisco, California; and 3Baylor Health Care System, Institute for Health Care Research and Improvement, Dallas, Texas

As the Patient Protection and Affordable Care Act, commonly known as the Affordable Care Act (ACA), becomes formalized in the United States, we are reminded now more than ever of the economic realities of our modern-day health care system. The ACA accompanies a larger paradigm shift in the way all future medical and surgical therapies will be judged—one in which the economic impact of a particular intervention will be as important as its impact on patients' outcomes in justifying its existence. Perhaps in no other surgical field is the impact of this shift as evident as in the field of spinal surgery, in which near-daily technological advances meant to improve quality of life are constantly balanced against their accompanying price tags. In this issue, we highlight important efforts aimed at improving our understanding of the true economic impact of modern-day spine care.

Our first two manuscripts focus on the importance of large, multicenter databases in allowing us to conduct high-quality, population-based studies on the cost-effectiveness of current spinal treatment strategies. As the days of using single-surgeon or single-center–based studies in spine care research come to an end, we are faced with a new challenge of creating and maintaining multi-institutional databases that can be readily accessed by fellow researchers.

The next two studies center on utilizing databases to conduct cost-benefit analysis. Dr. Alvin and colleagues focus on several factors that can explain variations in cost calculations in spine surgery cost-effectiveness research.

Finally, the articles in our last section deal with the interplay between patient-based characteristics, which can influence not only quality-based patient outcomes, but also economic outcomes related to the ultimate cost of treatment for these patients.

We hope the reader gains a better understanding of the significant challenges we face in the coming decades. Whereas physicians and surgeons were formerly tasked only with improving patient outcomes, we now are directly faced with improving economic outcomes as well.

Disclosure

Dr. Ames reports a consultant relationship with DePuy, Stryker, and Medtronic; direct stock ownership in Doctors Research Group, Visualase, and Baxano Surgical; a patent holder relationship with Fish & Richardson; and receiving royalties from Biomet Spine and Aesculap.