

The Value of Comparative Effectiveness Research in Health Care

There is widespread agreement among health experts that much of the health care delivered in America today lacks a basis in evidence, which is contributing to wide variations in practice patterns across the country. The end result is that patients may well be paying more for sub-optimal care. One study estimates up to 30% of health care spending pays for ineffective, inappropriate, or redundant care.¹ Another study estimated that only 54% of acute care and 56% of chronic care provided by physicians conforms to medical literature. In this latter study, researchers found that patients needed an average of 16 health care services—such as mammograms to screen for breast cancer, flu shots, and medications to control blood pressure and blood sugar—over a two year period and they received about eight of those services.²

Obtaining and making widely accessible objective information on best medical practices and protocols through comparative effectiveness research is imperative to improving the quality of health care and the affordability of insurance coverage. It can help better inform and educate providers and patients and produce better health outcomes.

Comparative effectiveness aims to assess how various procedures or interventions for a given ailment compare with each other. Comparative effectiveness is part of a broader movement to make sound science-based evidence the basis for medical practice. Most clinical trials tell us how an individual therapy compares to a placebo. But such studies usually do not provide head-to-head comparisons of two or more therapies.

The absence of good evidence can even result in harmful care. For example, in the mid to late 1980s, some studies provided limited evidence that autologous bone marrow transplant/high-dose chemotherapy (ABMT/HDC) was more effective than conventional chemotherapy for treating metastatic breast cancer. However, after rigorous clinical trials were performed in the 1990s, it became apparent that conventional chemotherapy was superior to ABMT/HDC. Thus, approximately 30,000 women were unnecessarily subjected to ABMT/HDC. ABMT/HDC is estimated to have caused nearly 600 premature deaths.³

¹ Fisher, E., Wennberg, D., et al., “The Implications of Regional Variations in Medicare Spending: Part 2, Health Outcomes and Satisfaction with Care,” *Annals of Internal Medicine*, Vol. 38, Issue 4, February 2003.

² McGlynn E.A., et al., “The Quality of Care Delivered to Adults in the United States,” *New England Journal of Medicine*; Vol. 348, No. 26, June 2003.

³ Blue Cross Blue Shield Association, “Improving Health Care Value: Quality and Cost,” Issue Paper, September 25, 2007.

The ABMT/HDC story—with the approximately 10-year delay in producing credible comparative information—shows the negative impacts that can occur due to insufficient research being done in critical areas.

Although several federal agencies conduct some health services research, none have a strong focus on supporting comparative clinical trials. For example, the National Institutes of Health (NIH) do not have a significant focus on comparative trials, and the Agency for Healthcare Research and Quality's (AHRQ) modest budget is generally spent on literature reviews and other studies. Furthermore, many of the clinical trials supported by the private sector focus on establishing product efficacy for purposes of FDA approval and typically do not involve comparisons to other treatment options.

How we use comparative effectiveness research data to make payment decisions in the private sector and in government programs is an important issue. However, to achieve desired improvements in health care quality, at some rudimentary level we need to be able to distinguish the Advil from the aspirin, or the MRI from the less-expensive X-ray if they are producing similar quality outcomes.

The nonpartisan Congressional Budget Office (CBO), in a December 2007 report, said that over the long term, comparative effectiveness research would probably reduce health care spending. CBO has suggested that comparative effectiveness research might help ensure that costly services will be used only when they offer a clinical benefit greater than that offered by less costly services.⁴

We already have a form of this in the prescription drug and insurance worlds in "step therapy" (or step protocol). This is the practice of beginning drug therapy for a medical condition with the most cost-effective and safest drug therapy first and progressing to other more costly or risky therapy, only if necessary. The aims are to control costs and minimize risks.

⁴ Congressional Budget Office, "Research on the Comparative Effectiveness of Medical Treatments: Issues and Options for an Expanded Federal Role," December 2007.