Editorial

The Cost and Quality Paradox

D. A. Axelrod$^a$*, K. L. Lentine$^b$, P. R. Salvalaggio$^c$ and M. A. Schnitzler$^b$

$^a$Department of Surgery, Dartmouth Hitchcock Medical Center, Lebanon, NH
$^b$St. Louis University Center for Outcomes Research, St. Louis University School of Medicine, St. Louis, MO
$^c$Department of Surgery, University of Washington School of Medicine, Seattle, WA

*Corresponding author: David A. Axelrod, david.a.axelrod@hitchcock.org

Received 13 February 2009, revised 16 February 2009 and accepted for publication 17 February 2009

In the debate over health care costs, the tired statement that ‘everyone does not need a Cadillac when a Chevy will do’ is all too frequently cited. One implication of this statement is that high quality equals high cost. In fact, health care should turn to another automotive slogan, ‘Quality is Job 1’. In health care, high quality care often results in lower costs and improved outcomes. Consider the example of central line infections that have been reduced to previously unimaginable levels through simple process changes (1). It is within this context, that the article by Englesbe and colleagues should be considered (2).

Dr. Englesbe and his colleagues have extended their previous work assessing the cost of complications following transplant procedures. The authors argue that Medicare outlier payments and payments for early readmission are markers of potentially avoidable complications. Their analysis demonstrated substantial variation across transplant programs in the proportion of their transplants that receive these payments. In 12% of kidney transplant programs, additional Medicare payments were received in greater than 20% of transplants performed (compared with an average of about 12%). Furthermore, they demonstrated a relationship between higher costs and high mortality at 30 days posttransplant.

One conclusion is that ‘low quality’ programs, which the authors define by their higher than expected 30-day mortality rates, actually cost the health care system more. These programs are more likely to receive outlier payments and readmission payments and yet produce ‘inferior results’. Thus, if patients were transplanted at ‘high quality’ programs, complications would be reduced, costs lowered and outcomes improved. Perhaps we can have the Cadillac for the price of the Chevy, if we buy it from the right dealer. This is known as ‘value-based purchasing’ and is widely practiced by larger insurers and others. If transplant centers adopt best practices, develop streamlined, efficient and well thought-out care plans, their outcomes should be better and the costs will be lower.

However, alternative conclusions must also be considered. Perhaps there are significant, systematic and uncontrollable differences between programs due to donor and recipient factors, which drive costs up independent of transplant center performance. In the authors’ analysis they found that African American race patients and those with more comorbidities were more likely to quality for outlier payments. Among the factors that were not considered in this analysis are the length of time on dialysis prior to transplantation and the incidence of cardiac complications. For instance, early postoperative congestive heart failure (CHF) is an expensive complication that could reflect less than optimal care. However, CHF may also reflect extended pretransplant dialysis duration, which accelerates the risk of myocardial dysfunction and the use of marginal organs with attendant risks of delayed graft function (3). In many urban areas, waiting times now exceed 5–7 years, leading to higher use of donors after cardiac death (DCD) and expanded criteria donors (ECD) organs in patients with a significant burden of cardiac disease. It is predictable and expected that there will be a higher incidence of outlier payments and readmissions related to CHF in these populations. The only way for centers to avoid these costs is not to transplant these patients with the available marginal organs.

Another risk in a system that discourages transplanting higher cost patients is the impact on access for highly sensitized patients. Without a doubt, patients with high levels of allosensitization are more expensive and have more complications. Yet, in experienced hands, they have excellent graft and patient survival (4). Already, increased scrutiny by regulatory authorities has resulted in reduced access due to concerns about impact on overall program outcome statistics. Further implementation of selective purchasing to punish ‘high cost’ centers will undoubtedly decrease access further. Again, because measures of sensitization were not included in this analysis, it is possible that some of the additional payments reflect care for these patients.

985
Transplantation is not and should not be immune from economic evaluation and scrutiny. Unfortunately, many of the factors increasing the cost of care are not within the control of the transplant centers. Organ quality and patient severity of illness clearly impact the overall cost of care (5). There is lack of uniformity in these factors across the county and currently no method of indicating increased complexity in the DRG for kidney transplant. Furthermore, kidney transplant is actually cost saving for almost every patient group and type of organ considered (6). Thus, we need to design systems that improve quality without limiting access, particularly in difficult-to-transplant populations. For instance, Dr. Englesbe’s group and his colleagues have previously demonstrated that there are process improvements that can be used to avoid excess costs associated with preventable complications (e.g. routine use of ureteral stents) (7).

The variation in high cost payments identified by Dr. Englesbe and his colleague’s demands further study. It is incumbent upon the transplant community to identify best practices which can decrease costs by reducing avoidable complications. Adoption of validated, data driven practices should be encouraged by pay for performance and selective contracting. However, it is equally important to develop systems, including payments adjusted for donor and recipient risk, to reward transplant centers for transplanting difficult patients with less than optimal organs. Given restrictions in the organ supply, the rising number of patients with high degrees of sensitization, and the overall aging of the population, the cost of kidney transplant is unlikely to decrease and any remaining margin may disappear (8). To protect access for patients we need to be sure that programs are rewarded based on the quality of care they provide not simply the environment in which they are located. Furthermore, these measures of transplant center quality must be focused on wait list mortality and survival from the point of evaluation and listing, not simply the post-transplant period. If we are not careful, a few patients will get the Ferrari of transplants while the rest will be left to walk on dialysis.

References