Commentary: Conduits and congenital heart surgery—ka-ching and more ka-ching

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Dalziel and colleagues very eloquently and efficiently show substantial financial cost associated with right ventricle to pulmonary artery conduits placed early in life.¹ In their program, total costs in the first decade of life (approximately USD\$200,000) were similar to those of patients with staged palliation of single-ventricle heart disease. Despite a seemingly prolonged index length of stay and the obvious influence on cost, the underlying message remains valid and important. In fact, a lot of what we do in the neonatal and infant population is associated with substantial cost. Smith and colleagues reported an approximate cost of USD\$150,000 for an admission for major neonatal heart surgery (2011 cost).² Burstein and colleagues reported cost approaching USD\$800,000 for a heart failure admission associated with implantation of a ventricular assist device.³ It is challenging to comprehend what an analysis would show if costs were tracked from the antenatal period out through the fifth or sixth decade of life.

The provision of higher quality care at lower costs—easy to state as a goal, not so easy to fully operationalize. Are quality and cost evaluated only for the index admission, first year, first decade, more? Consider a very complex newborn case with a poor prognosis even were care to be excellent. An intraoperative catastrophe and death in the operating room would seem to be associated with very low quality, but also low cost. What if the surgery goes very well, the child stays 3 months in the hospital, and is discharged with a tracheostomy and neurologic injury? The latter course avoided death, but incurred substantial cost. Even if we had very clean definitions of quality and appropriate weighting measures that might shed light on the former question, valid costing continues to be a process in evolution. The data provided by sophisticated costing software is an important step forward, yet institutions continue to

strive to refine their knowledge of exactly what it costs to provide a specific service.

This all occurs in a very complex background of payer contracting; variable reimbursement, confidentiality clauses with payers (institution A cannot inform institution B of charges and reimbursements for insurance company C), the uncertainty in future reimbursement schemes, and a national mandate for price transparency. I sat down with our executive director for a brief lesson on these topics and looks at possible future scenarios—I left bewildered and amazed and very happy that I am not a vice president of finance. Perhaps, one thing we as surgeons can do is insist that we be educated on our specific procedural costs. For example, if my intraoperative costs for an arterial switch exceed those of my two partners, I need to look at my outlier elements and be willing to consider change. And, in an ideal world, this process would extend across disciplines and institutions. Doing nothing will simply result in more ka-ching.

References

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Central Message

In young children, pulmonary conduits are associated with substantial costs.

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