

# Bundled Payments for Surgical Care—More Questions Than Answers

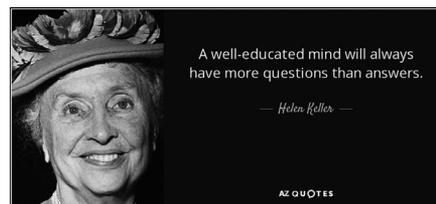


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Bundled payment models assign financial responsibility for extended episodes of care up to 90 days after operation. The report by Koeckert et al, in this issue, describes 376 patients having either transcatheter aortic valve replacements or surgical aortic valve replacements. They investigated the impact of readmissions on the Bundled Payments for Care Improvement initiative (BPCI) payment for Medicare valve patients. The authors' hospital was designated as a BPCI institution that linked reimbursement to the different phases of care (in-patient, outpatient follow-up, emergency visits, and other postacute care) up to 90 days after operation. They found that bundled costs were significantly increased above BPCI reimbursements in readmitted patients, especially transcatheter aortic valve replacements patients who were readmitted late up to 90 days after operation. This apparent disconnect between BPCI reimbursement and actual costs raises questions about BPCI reimbursement.

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The article by Koeckert et al in this issue of *Seminars in Thoracic and Cardiovascular Surgery* addresses the issue of bundled Medicare payments for valve operations.<sup>1</sup> The authors stated that goal was to understand the financial impact and sustainability of the bundled payment system (Bundled Payments for Care Improvement, BPCI) for valve patients who were readmitted at their institution. The authors compared transcatheter aortic valve replacements (TAVR) and surgical aortic valve replacements (SAVR) patients and found predictable results. Their assessments showed that TAVR patients were older, had higher Society for Thoracic Surgeons predicted risk, more frequent readmissions (both 30-day and 90-day), and significantly higher late readmission costs. The authors conclude that readmissions predict significant increased bundled costs and TAVR patients represent a high-risk group for readmission. This study deserves scrutiny by cardiothoracic surgical programs since it may portend the future. Perhaps more importantly, there are questions that surface about this study, and about the bigger picture of the BPCI bundled



Bundled payments for aortic valve replacements could easily generate more questions than answers.

### Central Message

Bundled payment models assign financial responsibility for extended episodes of care up to 90 days after operation. The financial viability of these models for aortic valve replacements (both TAVR and SAVR) is questionable.

payment system. In fact, this manuscript probably leaves the reader with more questions than answers.

The clear unstated message of the manuscript is that bundled payment models that assign financial responsibility for extended care up to 90 days may not be appropriate or even able to be estimated accurately. The authors provide some evidence to suggest a disconnect between bundled payments for TAVR patients and apparent true costs of care delivery. It is very difficult to estimate the true cost (not the charges) of providing surgical care for TAVR or SAVR. Most institutions do not know what their true costs for care delivery are.<sup>2,3</sup> They simply develop a cost to charge ratio <1 and assume that collection of the charges will provide a profitable outcome that will cover hospital costs. Without accurate assessments of true care-delivery costs, not billing charges, there are questions about whether TAVR procedures provide hospitals with a financially viable outcome, especially when 90-day postprocedure costs are included in the model of reimbursement.

Most readers would ask 2 questions about the reimbursement model for TAVR: (1) How does the BPCI payment scheme compare to conventional Medicare reimbursement? and (2) Are the reimbursement models for either BPCI, or conventional Medicare for that matter, true estimates of the actual costs for TAVR and SAVR, especially when 90-day costs are included? The authors get at these questions with 2 sentences in the second paragraph of their CONCLUSIONS as follows:

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*To understand the financial impact of BPCI, CMS created a matched comparison group of all Medicare beneficiaries and tabulated their spending under the BPCI rules. Both the BPCI and matched comparison groups were compared to their baseline from Q4 2011 through Q3 2012 to find an intervention effect. They found no difference in readmission rates or episode spending between BPCI and the comparison groups.*

This raises the question of the value of BPCI. The authors suggest that their report is a study of whether the institution made or lost money on the Bundle program. I cannot find any information in the manuscript that addresses this point. Believe me, I wish I could. The specific question that institutions ask is whether the Bundle program allows them to be solvent, to cover costs, and even make a profit. This manuscript does not address this issue and, as such, it is really a description of the way that BPCI is implemented in a single program.

There are questions about risk stratification and true cost accounting that surface when discussing the topic of bundled payments. Many of these questions are unanswerable based on the authors' assessments of their own data. There is a complicated formula used to estimate the bundled target price. This formula is very dependent on individual institutions' historical cost structure and prior claims data. The bundled care target price differs across many different surgical practices, so many questions about BPCI, and by association the questions of readers, are not able to be answered—again “more questions than answers.”

To summarize, this manuscript outlines some, but not all, of the nuances of BPCI. The idea that cost containment, with focus on readmissions, is necessary and provides worthy improvements is an underlying theme of this manuscript, but little useful information about prevention or risk assessment related to this subject is included in the manuscript. Rather, the authors are constrained to focus on issues in their institution, almost certainly related to the individual programmatic

idiosyncrasies, without a broader view. I think that the individual programmatic issues addressed in this manuscript are worth bringing to the consciousness of cardiothoracic surgeons, but there needs to be some “reality testing” that explains how BPCI is actually constructed and implemented at the national level as well as how BPCI may impact patient care. At present, BPCI is a closed structure that is not open to public scrutiny. Each program that participates in BPCI has its own set of nondiscoverable Medicare reimbursements. What little evidence there is suggests some gaps between traditional Medicare reimbursement and BPCI payments.<sup>4–6</sup> There are shortcomings associated with BPCI reimbursements, but this topic would not go away and should be raised to the consciousness of cardiothoracic surgeons. There is an apparent need for development of resource information about BPCI and further assessments of the impact of BPCI on individual cardiac surgical centers. Future developments in BPCI implementation must be done with care and with use of adequate information science to guide decisions.

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