The Journal of Arthroplasty 31 (2016) 938–944

Contents lists available at ScienceDirect

The Journal of Arthroplasty

journal homepage: www.arthroplastyjournal.org

AAHKS Symposium: The Future is Here - Bundled Payments and ICD-10

The Physician as the Provider at Risk: Rolling the Dice

Stephen B. Murphy, MD [a, *], Nicholas J. Bolz, BS [b], David P. Terry, MBA [c], Carl T. Talmo, MD [a], Michael N. Fehm, MD [d]

[a] Department of Orthopaedic Surgery, Tufts University School of Medicine, New England Baptist Hospital, Boston, Massachusetts
[b] Department of Orthopaedic Surgery, New York University Langone Medical Center, Hospital for Joint Disease, New York, New York
[c] Archway Health Advisors, Harvard Innovation Launch Lab, Allston, Massachusetts
[d] Excel Orthopaedic Specialists, Woburn, Massachusetts

ARTICLE INFO

Article history:
Received 12 February 2016
Accepted 13 February 2016
Available online 2 March 2016

Keywords:
value-based purchasing
bundled payments for care improvement
physician group practice
managed care organization
gainsharing
comprehensive care for joint arthroplasty

ABSTRACT

Background: There is significant need for physician innovation and leadership in health care as we adapt to bundled payment models of health care delivery.
Methods: We engaged a collective of 16 different private company orthopedic physician groups to apply to become episode initiators under BPCI models 2 and 3. The application process itself provided historical cost data, enabling each group to independently decide whether or not to proceed with the BPCI initiative.
Results: Ultimately, 7 of the private orthopedic groups decided to continue with the BPCI initiative. At the first quarter reconciliation, savings ranged from 9% to 17% across the participating groups.
Conclusion: The more leadership surgeons provide in value base care provision, the more our patients and health care system will benefit from optimization of care delivery.

Episode-based bundled payments are becoming increasingly common in total joint arthroplasty as health care in the United States transitions from a volume-based service model to value-based purchasing. Traditionally, the episode of care for joint arthroplasty patients has not been comprehensively coordinated. The Innovation Center at the center for Medicare and Medicaid services (CMS) has created the Bundled Payments for Care Improvement (BPCI) initiative to improve care while reducing the cost of an episode of care, ensuring value for the money that CMS spends. 'In Model 2, the episode of care includes a Medicare beneficiary's inpatient stay in the acute care hospital, post-acute care and all related services during the episode of care, which ends either 30, 60, or 90 days after hospital discharge [1]'. There is significant room for savings if health care providers are able to lower costs below the episode's target price; however, quality of care must be maintained or improved.

During the BPCI open enrollment period, 2013 through 2014, CMS invited varying organizations to become episode initiators, including physician group practices (PGPs), hospitals, and hospital networks. As part of precedence rules that are applied when CMS determines to which Awardee to assign a clinical episode, priority was given to PGPs if the PGPs and their respective hospitals applied to the BPCI program simultaneously. This may be because the surgeons are the central focus of each patient's care and are in the best position to improve care while reducing cost. Managed care organizations (MCOs), such as hospital systems, have progressively seized control of medicine over the past 3 decades. Large MCO and contracting networks regionally have been associated with the highest costs without demonstrable improvement in quality compared to the surrounding lower cost peers [2], indicating that they may not be the most effective drivers of the shift to bundled payments. BPCI represents a tremendous opportunity

One or more of the authors of this paper have disclosed potential or pertinent conflicts of interest, which may include receipt of payment, either direct or indirect, institutional support, or association with an entity in the biomedical field which may be perceived to have potential conflict of interest with this work. For full disclosure statements refer to http://dx.doi.org/10.1016/j.arth.2016.02.042.

The statements contained in this document are solely those of the authors and do not necessarily reflect the views or policies of CMS. The authors assume responsibility for the accuracy and completeness of the information contained in this document.

* Reprint requests: Stephen Murphy, MD, Tufts University School of Medicine, New England Baptist Hospital, 125 Parker Hill Avenue, Suite 545, Boston, MA, 02120.

http://dx.doi.org/10.1016/j.arth.2016.02.042
0883-5403/

for surgeons to provide leadership in the comprehensive care of each patient.

Surgeon involvement is imperative if health care is to truly achieve value-based care. Surgeons have face-to-face relationships with our joint arthroplasty patients and those relationships commonly last for decades. By contrast, an MCO may only have a relationship with a joint arthroplasty patient for a day or 2 with leading program administrators commonly having no direct relationship with the patient. Furthermore, surgeons are typically the only potential stakeholders who dedicate their professional careers to patients treated by joint arthroplasty surgery and to the practice and medical advancement of our field. The joint arthroplasty surgeon determines the indications for surgery preoperatively, performs the surgery, assumes much of the medical risk, and is the primary permanent contact related to surgery. As such, the surgeon is in a natural position to provide even more comprehensive leadership.

Fortunately, the BPCI structure allows surgeons who are affiliated with multiple MCOs and networks to work together as leaders of care in our field, irrespective of our network affiliations, and to assume leadership over the entire episode of care for our patients. By contrast, MCO-led BPCI programs separate surgeons by MCO network, thereby prohibiting rather than promoting joint arthroplasty surgeons from collaboration. In this report, we recount our experiences in developing a private physician BPCI initiative while exploring why PGPs should become episode initiators in BPCI.

Methods

Our physician-led BPCI program began with surgeons founding an organization (Ortho New England Group, LLC, Boston, MA) to serve as an Awardee Convener (AC) in the BPCI program. Awardee conveners are defined as 'the Model 2 Awardee, which is financially liable for all NPRA and Excess Spending Amounts owed to CMS for Episodes of Care generated by all Episode Initiators'. In order to do this, we collaborated with a health care management start-up (Archway Health, Boston, MA) and engaged 16 private company orthopedic groups in the application. These groups were geographically located in Connecticut, Massachusetts, New Hampshire, and Maine. The application process itself provided historical data for each PGP, enabling each to independently decide whether or not to proceed with the model. Our particular BPCI initiative initially involved assessment of all orthopedic medical severity diagnosis–related groups (MS-DRG). The groups that elected to proceed in the model selected to do so with MS-DRG 469 and 470, which include major joint arthroplasty or reattachment of the lower extremity with and without major complications or comorbidities, respectively. Physician-led BPCI programs are certainly not unique as CMS reported in November 2015 that of the 1277 new episode initiators in the BPCI as of the 10/1/2015 enrollment closure, 305 were PGPs and over 100 were orthopedic groups [1].

Results

Historical Data

As part of the application to BPCI model 2 and model 3, we received historical data for the PGPs that applied to become episode initiators. The data included all orthopedic episodes from July 2009-2014. Of the 16 initial practices, 7 ultimately proceeded with BPCI for DRG-469 and 470, going at risk either on 4/1/15 or 7/1/15. All groups selected 30-day risk periods to simplify the scope of the project at the outset and because these parameters can be changed quarterly. Of the remaining groups, 6 had historical spends so low that improvement opportunity was too small to justify the financial risk. One group had a change of tax ID number during the historical period, limiting the available data. From the data available, it did not appear prudent to proceed with BPCI. Another group had a very close pre-existing relationship with an organization that could also serve as their AC. They elected to proceed in concert with the other organization after Ortho New England Group LLC filed the application and analyzed the historical data. The remaining 2 groups decided not to proceed.

Early Improvement

Based on the initial data assessment, it was clear that the participating PGPs were experiencing reductions in the cost of postacute services. Figure 1 illustrates the reduction in the skilled nursing facility (SNF) days per major joint episode for one of the PGPs. In addition, 30-day readmission rates fell from over 7% in the baseline period to less than 2% in the first 2 performance quarters.

The first quarter reconciliation for the period of Q2 2015 was received in January 2016. One group in the Ortho New England program achieved savings of over 17% per case while a second group achieved a savings of 9% per 30 day episode versus their respective target prices.

Discussion

Opting Out

Two groups decided not to proceed with the BPCI initiative, even with opportunity for improvement. The specific reasons for choosing not to proceed were varied. Some groups had differing opinions among the surgeons in the group. In some cases, surgeons had or desired to have administrative positions in their contracting networks or hospitals. In other cases, the hospitals did not want the groups to move forward with the application because surgeons would have had priority over the hospital.

Cost Variation

Analysis of the joint arthroplasty data provided insight into the care of our patients that had not been previously available. This is especially significant as many of our surgeons have performed thousands of joint arthroplasty cases in their careers. The cost variation between different practices was large, with the average cost of some groups being 150% more than others in the same region. Because acute care hospital costs and home health agency (HHA) costs are very similar because of DRG and Home Health Resource Group payments, respectively, most of the cost variation resulted from variance in utilization of SNFs and to a lesser extent, readmission costs.