

Ambulatory surgery center payment models: current trends and future directions

Heeren S. Makanji, Vivek K. Bilolikar, Dhruv K. C. Goyal, Mark F. Kurd

Department of Orthopaedic Surgery, Rothman Institute, Thomas Jefferson University, Philadelphia, PA, USA *Correspondence to:* Dhruv K. C. Goyal, BA. Rothman Orthopaedic Institute, 125 South 9th Street Suite 1000, Philadelphia, PA 19107, USA. Email: dhruvkcgoyal@gmail.com.

Submitted Apr 16, 2019. Accepted for publication Jul 02, 2019. doi: 10.21037/jss.2019.08.07 View this article at: http://dx.doi.org/10.21037/jss.2019.08.07

The total health care expenditure in 2017 was \$3.5 trillion dollars-an increase of 3.9% over the previous year and up from \$2.6 trillion in 2010 (1,2). With these numbers predicted to grow at an annual rate of 5.5%, the Centers for Medicare and Medicaid Services (CMS) have been piloting new programs and payment systems to reduce costs and incentivize physicians and healthcare organizations to provide cost-effective care (2-4). In 1983, medicare introduced the inpatient prospective payment system in the hopes that hospitals and physicians would start to provide more patient care in the outpatient setting. Since then, the number of surgeries performed as outpatient procedures has increased dramatically from 3.7 million in 1981 to over 32.0 million in 2005 (5). In 2017, more than 50% of all outpatient surgeries were conducted in ambulatory surgery centers (ASCs)-a market which is projected to reach \$40 billion in 2020 (6).

At the center of this massive growth are ASCs. ASCs exclusively provide outpatient surgeries (same-day or 23-h stay) which typically focus on a small subset of routine procedures and treatments. This approach allows ASCs to reduce the overall perioperative costs of surgery—largely those associated with post-operative care—while still being able to produce equivalent outcomes and maintain a high rate of patient satisfaction (2,5-7). Between 1996 and 2008, there was a massive growth of ASCs because reimbursement rates were slightly higher when compared to those received by hospitals. However, since the adoption of the Affordable Care Act (ACA), reimbursements to ASCs have become approximately 42% less when compared to hospitals for the same procedure—a phenomenon which has blunted the growth and widespread use of ASCs (2,5-8). Despite

this change, the ASC industry still reports revenues of approximately \$24 billion, with an annual growth rate of 5%—a financial opportunity which many large practices, companies, and hospital systems have recognized in recent years (7).

The ASCs specifically operated by larger hospitals are referred to as hospital outpatient departments (HOPDs). The distinction between an ASC and an HOPD is important due to different payment systems that are used by CMS for reimbursement. The HOPD reimbursement rates are in part determined by the hospital market basket, whereas the ASC reimbursement rates are subject to the consumer price index (CPI) (2). The difference in these payment metrics creates a disparity in the compensation for similar services because the CPI is a poor proxy for the inflation that the healthcare sector experiences. This is largely because the CPI considers the prices that all consumers pay for goods, 42% of which comes from real estate, whereas the hospital market basket focuses on goods purchased by hospitals-60% of which comes from wages and benefits (2). This discrepancy resulted in an ASC reimbursement rate of 56% of that paid to HOPDs (2). In 2019, CMS has updated the payment factors for ASCs to utilize the hospital market basket index instead of the CPI, which should begin to equalize the payments between the HOPDs and ASCs and move towards site-neutral payments (9). It is important to note that when CMS was asked how the gap between ASC and HOPD payments should be expected to close, the organization admitted the HOPD rate would most likely drop to match the ASC rate, and not the reverse (9). That being said, for deviceintensive procedures where use of the device may be 30% or more of the overall procedure costs, CMS will make

special considerations. This insight is especially important for reimbursement rates for HOPDs, where many of these procedures are performed (10).

Spine surgery specifically represents an area of tremendous growth and potential in the ASC environment. Spine procedures often represent 20% to 25% of orthopedic procedures but contribute more than 50% to the profit (7). Therefore, the combination of high revenues per procedure observed in spine surgery with an ASC's ability to reduce operating room and post-operative costs—approximately 60% cost savings during spine procedures-represents a unique opportunity to achieve extremely favorable profit margins. In practice, this has resulted in one of the highest operating room profit margins (7). Although high profits justify performing more spine surgeries at ASCs, it is essential to determine which of these procedures can be safely and effectively performed in these environments (7). By and large, a patient's preoperative risk factors-including age greater than 80 years, body mass index (BMI) over 25, chronic obstructive pulmonary disease, obstructive sleep apnea, history of transient ischemic attack or stroke, hypertension, and previous cardiac surgery-have the most significant impact on the safety of ambulatory procedures. Patients with these types of co-morbidities are typically treated in an inpatient setting for postoperative monitoring and so that any potential postoperative complicationswhich may contribute to the overall higher cost of spine procedures typically observed in the hospital settingmay be properly managed (7). Studies have shown that performing cervical spine procedures-including anterior cervical discectomy and fusion procedures, cervical disc replacements, and posterior laminoforaminotomies-at ASCs is relatively safe with most patient reporting good or excellent results (7).

In terms of lumbar surgery, single level lumber decompression is the single most common spinal procedure performed at ASCs and has shown to be effective and safe when compared to inpatient surgery. On the other hand, lumbar fusions performed in the ambulatory setting have been associated with relatively high hospital re-admittance and emergency room visit rates (15%) compared to analogous procedures performed in the hospital setting (4%) (7).

Currently, the predominant payment model for spine surgery—and healthcare in the United States as a whole is the fee-for-service (FFS) model: providers are reimbursed for every component of care provided regardless of cost, quality, or the outcome. This model provides a significant amount of financial stability for providers as they treat patients; however, this system typically incentivizes providers to over-utilize the system and over-treat (4,11). On the opposite end of the spectrum is the global payment model, a type of capitation system in which a flat fee is paid to providers for the total management of a patient population throughout a year; additional interventions do not result in extra reimbursements in this system. As each procedure represents a cost to the provider, this model may incentivize providers to not only minimize overall costs, but to also reduce the volume of procedures-many of which may be expensive and burdensome to the patient (4,11). Lastly, episode-based, or "bundled" payments represent a middle ground between the FFS model and global payment model. In this model, there is a single reimbursement per episode of care (4,11). This single payment is expected to cover all aspects of care in a given episode, placing the responsibility on providers to disperse the funds for the various services required in that particular treatment course. Bundled payments provide an incentive for providers to lower the costs of management for each particular episode of care and improve outcomes; however, since payments are still made for each episode of care encountered, providers are not necessarily encouraged to reduce the total number of patients whom they treat (4,11-13). Overall, the bundled payments model has shown to improve continuity and coordination of care, thereby reducing overutilization of the health system by 5-15% and healthcare spending by 10% (14,15). Table 1 compares the current ASC payment models in effect.

Currently, the FFS model is the dominant payment model in spine surgery; however, many orthopedic care organizations expect 30-45% of patients to be covered under bundled payments in the coming years (11). In particular, spinal procedures that have well defined postoperative courses and lead to minimal complications are ideally suited for the bundled payment model. The costsaving ability of ASCs combined with the structure of the bundled payments model should serve to reduce overall healthcare spending, while simultaneously improving patient continuity of care and profit margins for outpatient centers. For ASCs to fully capitalize on the financial opportunities presented by bundled payments, they must preoperatively stratify patients by taking into account patient demographics, comorbidities, social determinants of health, as well as anticipate postoperative complications (2,3,7,12,14-17).

Bundled payment contracts have been shown to increase patient volume from large-scale employers, like Walmart;

Journal of Spine Surgery, Vol 5, Suppl 2 September 2019

_	1	1,		
	Payment model	Fee-for-service	Episodic care (bundled payments)	Global payment
	Overview	Each service rendered is reimbursed individually	Physician/group is given a single comprehensive payment for the complete care of the episode.	Physician/group receives a single payment to care for a population of payments, irrespective of actual services rendered.
	Physician incentive	Higher case and procedure Volume	Higher case volume and cost saving	Low utilization of resources
	Physician financial risk	Low	Medium	High

 Table 1 Comparison of payment models

thus, ASCs are in a prime position to capitalize on this larger volume of patients due to increased procedural capacity and more efficient operating rooms (5,16,18). However, without effective risk stratification of patients, the bundled payment model may in fact saddle ASCs with higher episodic costs. With CMS continually reforming healthcare payment models, bundled payments should be expected to grow in popularity as they provide an excellent compromise between incentivizing providers to render costeffective, high-quality care, while still maintaining surgeon case volume.

Acknowledgments

None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

References

- Martin AB, Hartman M, Washington B, et al. National Health Care Spending In 2017: Growth Slows To Post-Great Recession Rates; Share Of GDP Stabilizes. Health Aff (Millwood) 2019;38:101377hlthaff201805085.
- Manchikanti L, Singh V, Hirsch JA. Saga of payment systems of ambulatory surgery centers for interventional techniques: an update. Pain Physician 2012;15:109-30.
- 3. Cuckler GA, Sisko AM, Poisal JA, et al. National Health

Expenditure Projections, 2017-26: Despite Uncertainty, Fundamentals Primarily Drive Spending Growth. Health Aff (Millwood) 2018;37:482-92.

- 4. Rossi VJ, Ahn J, Bohl DD, et al. Economic factors in the future delivery of spinal healthcare. World J Orthop 2015;6:409-12.
- Munnich EL, Parente ST. Procedures take less time at ambulatory surgery centers, keeping costs down and ability to meet demand up. Health Aff (Millwood) 2014;33:764-9.
- 2018 Ambulatory Surgery Center Current Market Report. Health Industry Distributers Association. Sep 2018. Available online: https://www.hida.org/distribution/ research/market-reports/2018-Ambulatory-Surgery-Center-Market-Report.aspx
- Kurd MF, Schroeder GD, Vaccaro AR. Spine Surgery in an Ambulatory Setting: What Can Be Done Safely? JBJS Rev 2015. doi: 10.2106/JBJS.RVW.N.00093.
- Korol S. Orthopedic surgery payments lower at ASCs than HOPDs. Becker's Spine Review. 2018 [cited 2018 Dec 20]. Available online: https://www.beckersspine.com/orthopedicspine-practices-improving-profits/item/43629-orthopedicsurgery-payments-lower-at-ascs-than-hopds.html
- Dyrda L. Is CMS committed to site-neutral payments? What the proposed 2019 OPPS may indicate for ASCs. Becker's ASC Review. 2018 [cited 2019 Jan 09]. Available online: https://www.beckersasc.com/asc-coding-billingand-collections/is-cms-committed-to-site-neutralpayments-what-the-proposed-2019-opps-may-indicatefor-ascs.html
- Bishop R. Looking back at 2018: What a year for ASCs! Becker's ASC Review. 2018 [cited 2019 Jan 09]. Available online: https://www.beckersasc.com/asc-turnaroundsideas-to-improve-performance/looking-back-at-2018what-a-year-for-ascs.html
- 11. Kazberouk A, McGuire K, Landon BE. A Survey of

Makanji et al. ASC payment models

Innovative Reimbursement Models in Spine Care. Spine (Phila Pa 1976) 2016;41:344-52.

- Cutler DM, Ghosh K. The potential for cost savings through bundled episode payments. N Engl J Med 2012;366:1075-7.
- 13. Mechanic RE. Opportunities and challenges for episodebased payment. N Engl J Med 2011;365:777-9.
- Piccinin MA, Sayeed Z, Kozlowski R, et al. Bundle Payment for Musculoskeletal Care: Current Evidence (Part 1). Orthop Clin North Am 2018;49:135-46.
- Piccinin MA, Sayeed Z, Kozlowski R, et al. Bundle Payment for Musculoskeletal Care: Current Evidence (Part 2). Orthop Clin North Am 2018;49:147-56.

Cite this article as: Makanji HS, Bilolikar VK, Goyal DKC, Kurd MF. Ambulatory surgery center payment models: current trends and future directions. J Spine Surg 2019;5(Suppl 2):S191-S194. doi: 10.21037/jss.2019.08.07

- Sullivan R, Jarvis LD, O'Gara T, et al. Bundled payments in total joint arthroplasty and spine surgery. Curr Rev Musculoskelet Med 2017;10:218-23.
- Schneider L. Bundled Payments in Spine Surgery: Lessons Learned. SpineUniverse. 2018 [cited 2018 Dec 20]. Available online: https://www.spineuniverse.com/ professional/news/bundled-payments-spine-surgerylessons-learned
- Dyrda L. 7 key thoughts on bundled payments in spine
 + 4 spine surgeon predictions. 2018 [cited 2018 Dec 20].
 Available online: https://mail.beckersspine.com/spine/
 item/39857-7-key-thoughts-on-bundled-payments-in spine-4-spine-surgeon-predictions.html

S194