

Analysis of the Cost of Providing Durable Medical Equipment to the Medicare Population

Measuring the Impact of Competitive Bidding

Study Highlights

Authors: Allen Dobson, Ph.D., Steven Heath, M.P.A., Kennan Murray, M.P.H., Dylan Kilby, Joan E. DaVanzo, Ph.D., M.S.W.
Contact: Steven Heath, steven.heath@dobsondavanzo.com; 703-260-1763

About the Study

The Centers for Medicare and Medicaid Services (CMS) established a competitive bidding (CB) program in 2003 for Medicare Part B durable medical equipment, prosthetics, orthotics and supplies (DMEPOS). The purpose of the program is to facilitate the setting of prices through allotting contracts for the rights to supply DMEPOS to Medicare beneficiaries within competitive bid areas (CBA). It was anticipated that CB could save Medicare money if successfully and properly implemented.

In practice, the CB program has been controversial. Detractors argue that the CB process by design produces payments that lack transparency and do not support providers' acquisition, service, and distribution costs,^{1,2} often resulting in reduced efficiency.³ If so, large segments of the industry are financially vulnerable, as are Medicare beneficiaries. However, at this point in time, CMS contends that the CB process meets its objectives.

This paper presents an analysis of the costs incurred by providers of DMEPOS in providing equipment and associated services to the Medicare beneficiary population as gathered through a survey effort. It further compares these costs to current payments under the CB program as calculated using the weighted average Medicare reimbursement per unit. The study was commissioned by the American Association for Homecare (AAHomecare) in order to inform policy makers of the financial consequences of the CB process to the Medicare DMEPOS provider community and ultimately, to the Medicare beneficiary. The results of the study indicate that Medicare payments under CB do not cover providers' costs and may threaten beneficiary access and service quality, particularly in rural areas.

Competitive Bidding

The CB process requires DMEPOS providers to submit bids for selected products from specific product categories. The criteria for winning a bid are price, meeting the applicable quality standards, and meeting organizational financial standards. Winning providers who accept contracts from CMS are required

to accept all requests from Medicare beneficiaries for bid items and are reimbursed at the price determined by the auction. The price is derived from the median of all winning bids for an item in a CBA.⁴

Importantly, bidders are not aware of the prices bid by others. Since the auction is non-transparent with an "essentially arbitrary set of vendors," the resultant price is non-competitively determined from a marketplace perspective.⁵ The literature on CB, as summarized in our full report, suggests that the process contains design flaws, some of which have encouraged bidders to submit low bids that can lead to reimbursement levels which do not cover actual costs. The theoretical research contends that CMS' use of the median-pricing auction with nonbinding bids may not be the most efficient or effective methodology for pricing DMEPOS.⁶ According to a recently published study, the median pricing system is "likely [to] result in supply shortages, diminished quality and service to Medicare beneficiaries, and an increase in long-term total cost."⁷ Thus, there is extensive controversy surrounding the CB process and its ultimate effect on both providers and Medicare beneficiaries. This study seeks to obtain and provide information on the extent to which CB has led to reimbursement levels that are below providers' cost.

Methodology

In order to determine the cost of providing DMEPOS to Medicare beneficiaries, our analytic methodology comprised four steps: 1) creation of a technical advisory panel (TAP) to assist in the design of the cost survey; 2) development of the cost survey instrument to capture the costs of supplying DMEPOS; 3) administration of the cost survey with ongoing technical assistance to respondents; and 4) analysis of the costs of providing DMEPOS to Medicare beneficiaries as gathered from the survey in comparison to Medicare reimbursement.

The relationship between product cost and this average reimbursement, or the percent of costs covered, is the focus of our analysis. The total cost of providing a given product was

¹ Cramton, P. et al. "Letter from 167 Concerned Auction Experts on Medicare Competitive Bidding Program." Received by Pete Stark, 26 Sept. 2010. Retrieved from <http://www.cramton.umd.edu/papers2010-2014/comments-of-concerned-auction-experts-on-medicare-bidding.pdf>

² Cramton, P. et al. "Letter from 244 Concerned Auction Experts on Medicare Competitive Bidding Program." Received by Barack Obama, 17 June 2011. Retrieved from <http://www.cramton.umd.edu/papers2010-2014/further-comments-of-concerned-auction-experts-on-medicare-bidding.pdf>

³ Cramton, P., Ellermeyer, S., and Katzman, B. (2015). "Designed to Fail: The Medicare Auction for Durable Medical Equipment." *Economic Inquiry*, 53(1), 469-485.

⁴ Centers for Medicare and Medicaid Services. (2012). Overview of the DMEPOS Competitive Bidding Program. Retrieved from <http://www.dmeocompetitivebid.com/palmetto/cbic.nsf/vMasterDID/79NTSG0132>

⁵ Tozzi, J. and Levinson, B. (2012). The Need for a Clinical Trial of CMS' Competitive Bidding Program for Durable Medical Equipment. The Center for Regulatory Effectiveness. Washington, DC.

⁶ Cramton, P., Ellermeyer, S., and Katzman, B. (2015). "Designed to Fail: The Medicare Auction for Durable Medical Equipment." *Economic Inquiry*, 53(1), 469-485.

⁷ Ibid.

calculated as the sum of 1) the cost of goods, 2) the indirect costs allocated to the product category, and 3) the direct costs allocated to the product category.

Study Findings

1. The survey was distributed via Survey Monkey and made available on the AAHomecare website. The distribution list included, but was not limited to, members of AAHomecare. Completed surveys were obtained from 27 respondents. Survey respondents represent 12.7% of the Medicare expenditures for the HCPCS surveyed.
2. We believe that the survey results are generally representative of industry costs. If anything, firms that were able to complete the survey are highly sophisticated in cost accounting and are, therefore, likely to have a lower cost structure than the industry as a whole.
3. On average, all DMEPOS HCPCS included in the survey were reimbursed at 88% of overall cost, which is considerably below costs. The median percent of costs covered for each DMEPOS product category under study is presented below.

Exhibit ES-1: Percent of Costs Covered by Medicare

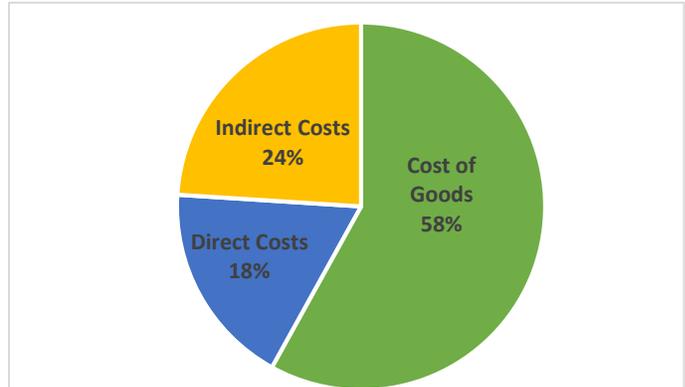
DMEPOS Product	Median Percent of Costs Covered
Standard Beds	69.58%
Heavy Duty Beds	90.35%
Liquid Oxygen	86.91%
All Other Oxygen	94.60%
BiPAP with Supplies	91.52%
CPAP with Supplies	67.83%
Walkers	83.88%
Lightweight Wheelchairs with Elevating Leg Rests	82.72%
Lightweight Wheelchairs with Footrests	82.79%
Standard Wheelchairs with Elevating Leg Rests	80.55%
Standard Wheelchairs with Footrests	71.35%
All Products Overall	87.68%

Source: Dobson | Davanzo DMEPOS Cost Survey

4. Of interest is the consistency of findings across providers, regardless of size, and across DMEPOS products (not shown in ES-1), in that the resultant payment-to-cost ratios calculated are typically well below 100 percent. This suggests that respondents who were able to complete the survey did so in a consistent fashion with highly consistent results.
5. The cost of goods alone, while important, does not comprise the overall cost of providing care. As shown in Exhibit 2, the cost of goods accounts for just over half of the overall cost of providing DMEPOS to Medicare beneficiaries. For the bona fide bid process, providers are only asked to provide an invoice showing that they can purchase the product at a cost below the bid price.⁸ Other operational costs, which account for 42 percent of overall costs, are not evaluated in the bid process.
 - CB prices must cover all costs, not just the cost of goods.
 - Products must be delivered and consumers educated in their use.

- These activities require corporate infrastructure and significant labor input.
- Eventually, competitive bids that only cover the cost of goods are incomplete indicators of CB’s adequacy.

Exhibit ES-2: Breakdown of the Cost of Providing DMEPOS to Medicare Beneficiaries



Source: Dobson | Davanzo DMEPOS Cost Survey

6. Our survey results do not reflect consistent scale; both large and small providers show relatively low payment-to-cost ratios.
7. Quality of service in rural areas is particularly threatened as there appears to be little opportunity to cover inadequate payments. This is because rural areas do not have the population density to win exclusive contracts, or make up for the revenue cost differential through volume. Anecdotal evidence suggests that even large companies are limiting services to rural areas by closing rural locations, limiting service areas, and/or offering fewer deliveries per month.
8. Our data suggest that there is very little room to cost-shift since public payers (Medicare and Medicaid) represent 45 percent of industry revenues and Medicaid payments have begun to fall in line with CB reimbursement. The omnibus bill passed in late December of last year (PL 114-113) contained a provision that will limit the federal portion of Medicaid reimbursement for CB items to CB prices starting January 1, 2019. While this does not require states to lower the overall reimbursement rate for DMEPOS, the state would be responsible for making up the payment difference. Additionally, in the private sector, many commercial and Medicare Advantage payers are reimbursing at or below Medicare CB payment rates, and TRICARE follows the discount Medicare fee schedule. This means that providers of DMEPOS have little opportunity to cost-shift and recover revenue lost from public payers.
9. The consistency of our findings indicates that the current CB process is financially unsustainable.
10. The CB process is fundamentally flawed in that CMS is currently paying the industry far less than the total costs incurred in providing DMEPOS goods and services to Medicare beneficiaries.

⁸ 72 Fed. Reg. 18047, Tuesday, April 10, 2007.

11. The CB process does not seem to produce competitive market prices for goods or services.

12. The literature, as summarized in our full report, indicates that this may be due to the way the CB process is designed.

13. Given the design of the current CB system, there is no reason to assume that the process is sustainable in the long run for a large part of the industry. If Congress and/or CMS wish to see a sustainable industry, the public policy process may need to reconcile key aspects of CB as recommended in the Crampton report.⁹

Conclusion

The CB process has been controversial in its implementation, with detractors arguing that, by design, reimbursement resulting from CB does not cover providers' costs. The results of this survey demonstrate that CB is likely to be endangering the stability of the DMEPOS market upon which millions of Medicare beneficiaries rely. This instability is a result of Medicare payments that are at levels consistently below the cost of supplying DMEPOS. These findings are consistent across the providers who completed the survey.

Two key areas which demonstrate problems with the construction of the CB bid process are that:

- The bidding process is non-transparent and does not encourage bidders to include all costs in their bids. These factors lead to the reimbursement failures seen in the survey.
- CMS only considers the cost of goods when ensuring that no contracts are awarded below cost. CMS does not take into account all of the other costs that go into supplying DMEPOS to Medicare beneficiaries. This is insufficient to ensure that providers are not bidding in ways that are harmful to the stability of the market.

The CB process produces an auction that is not designed to reveal actual prices, and payments therefore drop below costs. There are three options that providers can take when payments are lower than costs: (1) make gains in efficiency; (2) implement cuts (which harms quality); or (3) go out of business. This survey shows that gains in efficiency have not yet reduced costs to bid prices.¹⁰ Additionally, size does not matter, and big companies cannot successfully supply DMEPOS to all Medicare beneficiaries, especially in rural areas. Our study indicates that while large firms sometimes show more favorable payment to cost ratios, this is not true across all product categories. Few product categories thus far have allowed for costs to be recovered through volume. Additionally, there is little opportunity for DMEPOS providers to shift costs from Medicare to other payers.

The fact that, under CB, the median cost coverage under Medicare is often substantially below break-even is highly problematic for the DMEPOS industry and for Medicare beneficiaries. These low reimbursement rates may ultimately force some providers out of business. Other providers will have to raise prices or downsize operations, leading to a decrease in access to and quality of care for all patients. Overall, the CB program has the potential to significantly impact beneficiary access to needed equipment and harm the DMEPOS industry as a whole. Congress and CMS should consider changes to the CB process in order to have a stable and sustainable DMEPOS system.

⁹ Cramton, P., Ellermeyer, S., and Katzman, B. (2015). "Designed to Fail: The Medicare Auction for Durable Medical Equipment." *Economic Inquiry*, 53(1), 469-485.

¹⁰ Hayford, T., Nelson, L. & Diorio, A. (2016). Projecting Hospitals' Profit Margins Under Several Illustrative Scenarios (Working Paper Series 2016-04). Washington, DC: Congressional Budget Office.