Home Oxygen Therapy /

An Analysis of Recent Medicare Payment Policy

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Introduction

More than 1 million Medicare beneficiaries are dependent on home oxygen therapy. These patients are typically frail, and need regular oxygen to engage in the routine activities of daily living. Beginning with the Balanced Budget Act of 1997 (BBA), the Centers for Medicare & Medicaid Services (CMS) adjusted Medicare payment rates for home oxygen therapy several times. The purpose of this monograph is to analyze the home oxygen therapy payment policy changes that Congress has enacted over the past 11 years, including provisions of current law that are scheduled to significantly affect Medicare spending on home oxygen therapy starting in 2009.

This monograph is an updated analyses of Avalere's 2007 report, "Home Oxygen Therapy: An Analysis of Recent Medicare Payment Policy," in which we quantified the combined magnitude of pending payment policy changes at that time. Since then, Congress enacted the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA), imposing additional payment reductions on the home oxygen therapy providers. As policymakers evaluate policy options across the Medicare provider payment systems, this report provides a cumulative assessment of each of the many overlapping home oxygen therapy payment reductions over the past several years.

Since 1997, Congress has enacted the following policy changes that affected or will soon affect the home oxygen therapy market:

1997 – 2003: The BBA reduced home oxygen payment rates by 25 percent effective January 1, 1998, and by an additional 5 percent effective January 1, 1999. The BBA also eliminated the annual inflation updates for Medicare home oxygen payment rates, which had been part of the program's payment policy since 1989. Congress allowed small, temporary payment rate increases of 0.3 percent in 2001 and an additional 0.3 percent in 2002, but then rates returned in 2003 to their 2000 levels.

2003 – 2005: In the Medicare Modernization Act of 2003 (MMA), Congress directed CMS to set its rates at levels not to exceed the median prices paid in each state by the private health plans that contract with the federal government to provide health insurance for federal workers through the Federal Employees Health Benefits Program (FEHBP). CMS implemented this policy in April 2005 after publication of a MMA-mandated study by the Department of Health and Human Services Office of the Inspector General (OIG). The policy reduced payment rates by an average of 8.6 percent for stationary oxygen modalities and by 8.1 percent for portable oxygen modalities.

2005 – Future: Through MMA, the Deficit Reduction Act of 2005 (DRA), and MIPPA, Congress enacted three major changes in Medicare payment policies for home oxygen providers. Medicare's expenditures on home oxygen therapy will not begin to reflect these changes until 2009. These payment policy changes are as follows:

- **Competitive Bidding for Durable Medical Equipment (DME):** The MMA required CMS to implement competitive bidding for certain types of DME, including oxygen equipment. CMS initiated the first round of competitive bidding between providers within each of the 10 largest Metropolitan Statistical Areas (MSAs).[1] On July 1, 2008, CMS began making payments to the contract-awarded providers for the first round, using the average competitively bid rates for oxygen equipment.

  CMS issued a final regulation on April 10, 2007, identifying plans to begin setting payment rates in a second round of competitive bidding between providers in an additional 70 MSAs in 2009.[2] They were also planning additional rounds for 10 MSAs in 2010 and for another 10 MSAs in 2011. However, MIPPA delayed the competitive bidding program, and imposed a payment reduction instead (see below). Specifically, MIPAA rescheduled the first round of competitive bidding until 2009, and cancelled the contracts initially awarded to providers in the first round. Due to CMS' past experience and administrative processes involved with competitive bidding, we anticipate that competitively bid payment rates will actually take effect in 2010. Further, MIPPA delayed the second round of competitive bidding for providers in the next 70 MSAs until 2011. It also stipulated that additional competitive bidding rounds occur after 2011.
- **Payments to Home Oxygen Providers Reduced by 9.5 Percent:** Because MIPPA delayed the first round of the competitive bidding process, Medicare will not experience savings initially anticipated from this payment change. To offset the impact of competitive bidding delays, MIPPA also instituted a 9.5 percent reduction in payments to all oxygen providers nationwide for items and services included in the first round of competitive bidding beginning January 1, 2009. We estimate that this provision will reduce Medicare spending on home oxygen therapy by almost $300 million in 2009.
- **36-Month Capped Rental Period:** Until Congress enacted this provision in the DRA, CMS made monthly payments to a beneficiary's home oxygen therapy provider for the entire period of medical necessity. Effective January 1, 2006, the DRA changed this by requiring CMS to discontinue monthly payments to home oxygen therapy providers for equipment rental services after 36 months of continuous use of the equipment by a Medicare beneficiary (the first time this policy will affect the program is January 2009). As a result, CMS will discontinue payments to providers for equipment rental, regardless of the patient's ongoing medical need for home oxygen therapy.

  The DRA also required the oxygen provider to transfer ownership of the equipment to the Medicare beneficiary after the 36-month rental period. However, MIPPA repealed this provision, allowing providers to maintain ownership of the oxygen equipment after the rental period. Even though Medicare payments for oxygen equipment will cease after 36 months, MIPPA requires providers to furnish equipment to Medicare beneficiaries during any period of medical need for the

[1] The 10 largest MSA's excluded New York, Los Angeles, and Chicago.

[2] CMS-1270-F, 72 FR 17992.

remainder of the reasonable useful lifetime of the equipment. The equipment's reasonable useful lifetime is based on the date that the provider first delivers it to the beneficiary rather than the age of the equipment. MIPPA also requires CMS to continue to make payments to providers for delivering oxygen contents to beneficiaries after the 36-month rental period.

MIPPA also allows CMS to designate payment to providers for "reasonable and necessary" maintenance after the 36-month rental period. Traditionally, CMS considered both routine and non-routine maintenance to be reasonable and necessary. However, in drafting the implementing regulations to MIPPA, CMS concluded that it is reasonable and necessary to pay providers for routine maintenance of oxygen equipment beyond the 36-month rental period, but not for non-routine services, such as emergency or required disposable supplies. As a result, CMS will only pay providers for routine maintenance of oxygen equipment in 2009. In the final rule dated November 19, 2008, CMS invited comments regarding whether these routine maintenance payments to providers should continue beyond 2009.

We estimate that the 36-month capped rental policy will reduce Medicare expenditures for home oxygen by approximately $550 million beginning in 2009.

Key New Assumption Underlying Analysis of 36-month Capped Rental Period's Impact on Medicare Spending

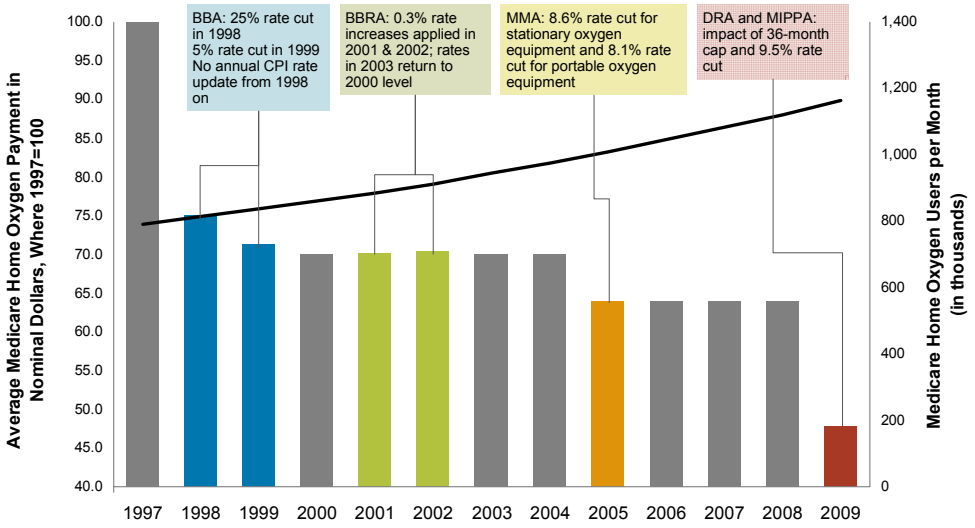
In the November 2006 final regulations for home oxygen therapy payment policy,[3] CMS refers to a September 2006 report by the OIG that indicated an estimated 22 percent of Medicare patients continue using home oxygen therapy beyond 36 continuous months.[4] In addition to the OIG, other researchers have cited estimates of the percentage of beneficiaries that will continue to use home oxygen therapy beyond 36 months. For example, the Medicare Payment Advisory Commission (MedPAC) recently cited a CMS estimation of 36 percent.[5] These are much larger estimates of affected beneficiaries than indicated in the data that were available at the time the DRA was "scored" by the Congressional Budget Office (CBO) in 2005 and early 2006. At that time, CBO made the best estimate it could based on the information to which it had access. This subsequent information would likely affect CBO's cost-estimate assumptions if they repeated the "scoring" exercise today. According to our own analyses of Medicare claims files, we conclude that 26 percent of Medicare beneficiaries will continue to use home oxygen therapy beyond 36 continuous months. Thus, we used this 26 percent figure to estimate upcoming changes in home oxygen therapy spending.

[3] CMS 1304-F, 71 FR 65930.
[4] HHS, Office of the Inspector General, *Medicare Home Oxygen Equipment: Cost and Servicing*, September 2006, Figure 2.
[5] *Medicare payment basics: Oxygen and oxygen equipment payment system*, October 2008, MedPAC.

Cumulative Effect of Medicare Home Oxygen Therapy Payment Rate Changes, 1997-2009

Figure 1 summarizes the cumulative effect of all of the Medicare home oxygen payment rate reductions that occurred or will occur between 1997 and 2009. Our analysis indicates that the average Medicare home oxygen payment by 2009 will be less than half of what it was in 1997. If price inflation also were factored in, the negative change in payment from 1997 to 2009 would be even greater. While the nominal dollar decreases during this time period, the number of Medicare home oxygen users increases each year. We estimated the number of users in each year by inflating or deflating CMS' estimate of monthly users for 2006 by actual and projected CMS Part B enrollment as well as a "home oxygen therapy user growth factor" of +2 percent[6]. The "home oxygen therapy user growth factor" accounts for annual growth in the number of Medicare home oxygen therapy patients over and above population growth. The "factor" was estimated based on our analysis of assumptions used by the CBO and by the CMS Office of the Actuary when projecting baseline growth in Medicare home oxygen therapy expenditures.

FIGURE 1 Cumulative Impact of Medicare Home Oxygen Payment Rate Reductions, 1997-2009



The values shown for 2009 include the estimated combined effects of 1) payment rate reductions from the MIPPA 9.5 percent reductions and 2) decreases in total Medicare spending for home oxygen resulting from the first impact of the 36-month rental cap in January 2009 (policy took effect on January 1, 2006).

Medicare Home Oxygen Therapy Baseline Spending Estimates

Table 1 presents our analysis of total Medicare fee-for-service baseline spending on home oxygen therapy under current law, for calendar years 2008 and 2009. The amounts shown include total spending financed by Medicare and beneficiaries' coinsurance and deductible payments. The analysis excludes spending by Medicare Advantage plans on home oxygen therapy services.

[6] We obtained CMS' estimate of monthly users for 2006 from table 3a. Monthly Payment Amounts Calculations for 2006 (see http://www.cms.hhs.gov/DMEPOSFeeSched/Downloads/Oxygen_Table_3a_2006.pdf).

Methodology of Analysis

All Medicare baseline spending estimates rely on two key factors: price and quantity. The following section describes the assumptions and data sources we used to determine these two factors for this analysis.

1. Price is the average Medicare payment amount per unit of service. This analysis uses 2008 payment amounts as well as estimated reductions to these payment amounts in 2009 resulting from the 9.5 percent reduction.
2. Quantity is the total number of services Medicare pays for, which in turn depends on the number of services per beneficiary and the number of beneficiaries using the service. Because Medicare typically pays for home oxygen therapy at the rate of one unit of service per beneficiary per month, the number of services Medicare pays for depends entirely on the assumed average number of oxygen therapy users per month. This analysis used CMS' estimated average number of users per month in 2006, then grew that number each year by CMS-projected Part B enrollment growth plus the "home oxygen therapy user growth factor" of +2 percent.

The results of our baseline spending estimates, along with a complete listing of data sources, are shown in Table 1. We estimate that Medicare spending on home oxygen therapy will actually decrease by approximately 27 percent in 2009 as a result of the impact of the 36-month capped rental period and the 9.5 percent MIPPA-stipulated payment reductions.

TABLE 1 Estimated Medicare Baseline Spending for Home Oxygen, 2008-2009 (Dollars in thousands, by calendar year)

	2008 Est.	2009 Est.
Total Medicare Fee-for-Service (FFS) Allowed Charges Before Impacts of Pending Current Law Policies	$2,994,883	$3,109,695
Reductions in FFS Allowed Charges Expected to Result from Current Law Policies:		
DRA: 36-Month Capped Rental Period	$—	-$550,305
MIPPA: 9.5% Reduction	$—	-$295,443
Subtotal, Expected Effects of Current Law Policies	$—	-$845,748
Total FFS Allowed Charges Including Impacts of All Current Law Policies	$2,994,883	$2,263,947

Data sources: CMS' Table 3a. Monthly Payment Amounts Calculations for 2006 (see http://www.cms.hhs.gov/DMEPOSFeeSched/Downloads/Oxygen_Table_3a_2006.pdf); CMS' Durable Medical Equipment, Prosthetics, Orthotics, and Supplies (DMEPOS) 2008 Fee Schedule (revised June 4, 2008); CMS Office of the Actuary, 2008 *Medicare Trustees Report*, Table III.A.3; CMS' 2003-2006 5 percent Standard Analytical files.

Medicare Home Oxygen Therapy Baseline Spending Estimates: State-level Estimates

The analysis presented in Table 2 examines the estimated state-level effects of the 36-month capped rental period and the 9.5 percent payment reduction, which will reduce Medicare expenditures for home oxygen therapy on January 1, 2009. A state-level analysis may be useful for policymakers in understanding the variable regional impacts that the pending payment reductions could have.

Methodology of Analysis

This analysis distributed the total estimated savings amounts for 2009 according to each state's percentage of the total U.S. Medicare oxygen user population. Thus, the analysis assumes that the 26 percent of all Medicare home oxygen patients who will be affected by the capped rental period policy are distributed across the states in the same proportion as the total Medicare oxygen user population.

- Table 2 presents the results of the state-by-state impact analysis. Results are shown in terms of the policy's—the 36-month cap rental period and the 9.5 percent reduction—estimated impact on the number of Medicare beneficiaries in each state and on total Medicare expenditures for Medicare home oxygen patients in each state.
- Over 30,000 Medicare beneficiaries in Florida could be affected in 2009 by the 36-month capped rental period. Texas could see close to 30,000 Medicare home oxygen therapy patients affected as well, and California an estimated 23,000.
- The years shown in the table are calendar years and the amounts shown are estimated total Medicare allowed charges (i.e., amounts include payments made by CMS and by beneficiaries through Part B coinsurance).

TABLE 2 Estimated Effects by State of Medicare Baseline Spending Changes for Home Oxygen Therapy Resulting from the 36-Month Capped Rental Period and the 9.5 Percent Reduction, 2009

State	Number of Medicare Beneficiaries in State on Home Oxygen Therapy, 2005	Percent of Total Medicare Beneficiaries on Home Oxygen Therapy, 2005	Estimated Number of Beneficiaries for Whom Medicare Will End Stationary Oxygen Equipment Payments, 2009*	Proportional Share of Total Estimated Savings from DRA 36-Month Capped Rental Period Policy, 2009 ($M)	Proportional Share of the 9.5 Percent Reduction, 2009 ($M)	Total Impact, 2009 ($M)
Florida	125,200	8.6%	32,552	-$47.1	-$25.3	-$72.3
Texas	110,200	7.5%	28,652	-$41.4	-$22.2	-$63.7
California	88,400	6.0%	22,984	-$33.2	-$17.8	-$51.1
Ohio	66,000	4.5%	17,160	-$24.8	-$13.3	-$38.1
Michigan	60,900	4.2%	15,834	-$22.9	-$12.3	-$35.2
New York	60,200	4.1%	15,652	-$22.6	-$12.1	-$34.8
Pennsylvania	57,000	3.9%	14,820	-$21.4	-$11.5	-$32.9
Illinois	53,400	3.7%	13,884	-$20.1	-$10.8	-$30.9
North Carolina	52,800	3.6%	13,728	-$19.9	-$10.7	-$30.5
Tennessee	47,500	3.2%	12,350	-$17.9	-$9.6	-$27.4
Colorado	42,200	2.9%	10,972	-$15.9	-$8.5	-$24.4
Georgia	40,500	2.8%	10,530	-$15.2	-$8.2	-$23.4
Indiana	40,300	2.8%	10,478	-$15.2	-$8.1	-$23.3
Virginia	39,200	2.7%	10,192	-$14.7	-$7.9	-$22.6
Missouri	38,600	2.6%	10,036	-$14.5	-$7.8	-$22.3
Kentucky	34,800	2.4%	9,048	-$13.1	-$7.0	-$20.1
Oklahoma	25,700	1.8%	6,682	-$9.7	-$5.2	-$14.8
New Jersey	25,200	1.7%	6,552	-$9.5	-$5.1	-$14.6
Arizona	25,000	1.7%	6,500	-$9.4	-$5.0	-$14.4
South Carolina	24,900	1.7%	6,474	-$9.4	-$5.0	-$14.4
Washington	24,600	1.7%	6,396	-$9.3	-$5.0	-$14.2
Alabama	24,400	1.7%	6,344	-$9.2	-$4.9	-$14.1
Wisconsin	24,100	1.6%	6,266	-$9.1	-$4.9	-$13.9
Arkansas	22,400	1.5%	5,824	-$8.4	-$4.5	-$12.9
Utah	21,400	1.5%	5,564	-$8.0	-$4.3	-$12.4
Massachusetts	20,400	1.4%	5,304	-$7.7	-$4.1	-$11.8
Maryland	19,900	1.4%	5,174	-$7.5	-$4.0	-$11.5
Mississippi	19,200	1.3%	4,992	-$7.2	-$3.9	-$11.1
Kansas	18,800	1.3%	4,888	-$7.1	-$3.8	-$10.9
Louisiana	18,300	1.3%	4,758	-$6.9	-$3.7	-$10.6
New Mexico	18,000	1.2%	4,680	-$6.8	-$3.6	-$10.4
West Virginia	17,700	1.2%	4,602	-$6.7	-$3.6	-$10.2
Oregon	16,800	1.1%	4,368	-$6.3	-$3.4	-$9.7
Iowa	16,500	1.1%	4,290	-$6.2	-$3.3	-$9.5
Minnesota	16,200	1.1%	4,212	-$6.1	-$3.3	-$9.4

Nevada	15,200	1.0%	3,952	-$5.7	-$3.1	-$8.8
Connecticut	13,000	0.9%	3,380	-$4.9	-$2.6	-$7.5
Nebraska	11,300	0.8%	2,938	-$4.2	-$2.3	-$6.5
Idaho	10,700	0.7%	2,782	-$4.0	-$2.2	-$6.2
Montana	10,700	0.7%	2,782	-$4.0	-$2.2	-$6.2
Wyoming	8,000	0.5%	2,080	-$3.0	-$1.6	-$4.6
Maine	7,700	0.5%	2,002	-$2.9	-$1.6	-$4.4
New Hampshire	5,700	0.4%	1,482	-$2.1	-$1.1	-$3.3
South Dakota	5,500	0.4%	1,430	-$2.1	-$1.1	-$3.2
Delaware	4,200	0.3%	1,092	-$1.6	-$0.8	-$2.4
North Dakota	3,400	0.2%	884	-$1.3	-$0.7	-$2.0
Rhode Island	2,900	0.2%	754	-$1.1	-$0.6	-$1.7
Vermont	2,800	0.2%	728	-$1.1	-$0.6	-$1.6
Hawaii	1,900	0.1%	494	-$0.7	-$0.4	-$1.1
Alaska	1,500	0.1%	390	-$0.6	-$0.3	-$0.9
District of Columbia	1,200	0.1%	312	-$0.5	-$0.2	-$0.7
TOTAL	**1,462,500**	**100.0%**	**380,250**	**-$550.0**	**-$295.0**	**-$845.0**

*Calculated by multiplying the number of Medicare beneficiaries affected by the 36-month capped rental period as of January 1, 2009, (equal to 26 percent of beneficiaries who were using home oxygen therapy as of January 1, 2006) by the total number of beneficiaries in each state. Numbers may not sum to totals due to rounding.

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