

Home Oxygen Therapy / An Analysis of Recent Medicare Payment Policy

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Summary

Beginning with the Balanced Budget Act of 1997, Medicare has adjusted payment rates for home oxygen therapy several times over the past decade. The purpose of this monograph is to analyze comprehensively all of the home oxygen therapy payment policy changes that Congress has enacted over the past ten years, including two major provisions of current law that are scheduled to significantly affect Medicare spending on home oxygen therapy starting in 2009.

This analysis is the first time that the combined magnitude of these pending payment policy changes has been quantified. Policymakers may wish to consider the cumulative impacts of all the payment policy changes for home oxygen therapy enacted over the past ten years—including those that have not yet affected Medicare spending, but that will under current law—as they evaluate policy options across all Medicare provider payment systems.

Over the 1997-2010 timeframe, three sets of policy changes affecting the home oxygen therapy market have been enacted by Congress:

1997 – 2003: The Balanced Budget Act of 1997 (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—in perpetuity—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 Medicare 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). Implemented by Medicare in April 2005 after publication of an MMA-mandated study by the Department of Health and Human Services Office of the Inspector General, the effective outcome of this policy was to reduce payment rates by an average of 8.6 percent for stationary oxygen modalities and by 8.1 percent for portable oxygen modalities.

2005 – 2010: Two major changes in Medicare payment policy have been enacted by Congress, but their impacts on Medicare expenditures for home oxygen therapy will not be felt until 2008 and especially in 2009 and 2010. These payment policy changes are the following provisions:

- **Competitive Bidding for Durable Medical Equipment (DME):** The MMA requires Medicare to implement competitive bidding for certain types of DME, including oxygen equipment. Under final regulations published by CMS¹ on April 10, 2007, competitively bid payment rates for home oxygen therapy will take effect on April 1, 2008 in 10 of the largest Metropolitan Statistical Areas (MSAs) in the U.S. Payment rates will be set through competitive bidding in an additional 70 MSAs (for a total of 80 MSAs) effective April 2009, with an additional 10 MSAs added in 2010 and 2011. Providers that are not accepted into the competitive bidding program by Medicare will be excluded from participating in the affected MSAs.

¹ CMS-1270-F, 72 FR 17992.

Based on CMS figures published in the final regulation for competitive bidding, we estimate that the competitive bidding program will reduce Medicare expenditures for home oxygen by an estimated \$260 million in 2009 and by an additional \$380 million in 2010.

- **36-Month Capped Rental Period:** Until Congress enacted this provision in the DRA, Medicare made monthly payments to the beneficiary's home oxygen therapy provider for as long as the patient required the therapy. Title to (i.e., ownership of) the oxygen equipment remained with the home oxygen therapy provider. That paradigm shifted with enactment of the DRA. Effective January 1, 2006, Medicare will 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 (i.e., the first time this policy will impact the program is January 2009). Medicare payment for equipment rental will be discontinued regardless of the patient's ongoing medical need for home oxygen therapy. Medicare will continue to make payments to the provider for delivery of oxygen contents to a beneficiary and for non-routine equipment maintenance.

We estimate that the 36-month capped rental period policy will permanently reduce Medicare expenditures for home oxygen by approximately \$400 million to \$500 million per year, beginning in 2009.

Key New Assumption Underlying Analysis of 36-month Capped Rental Period's

Impact on Medicare Spending: In November 2006 final regulations for home oxygen therapy payment policy, CMS² refers to a September 2006 report from by the HHS Office of the Inspector (OIG) that indicated an estimated 22 percent of Medicare patients—or an average of just over 230,000 Medicare beneficiaries per month in 2009—continue using home oxygen therapy beyond 36 continuous months.³ This is a much larger number 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. New information, such as the September 2006 OIG report, that has become available since then would probably affect CBO's cost-estimate assumptions if the “scoring” exercise were repeated today.

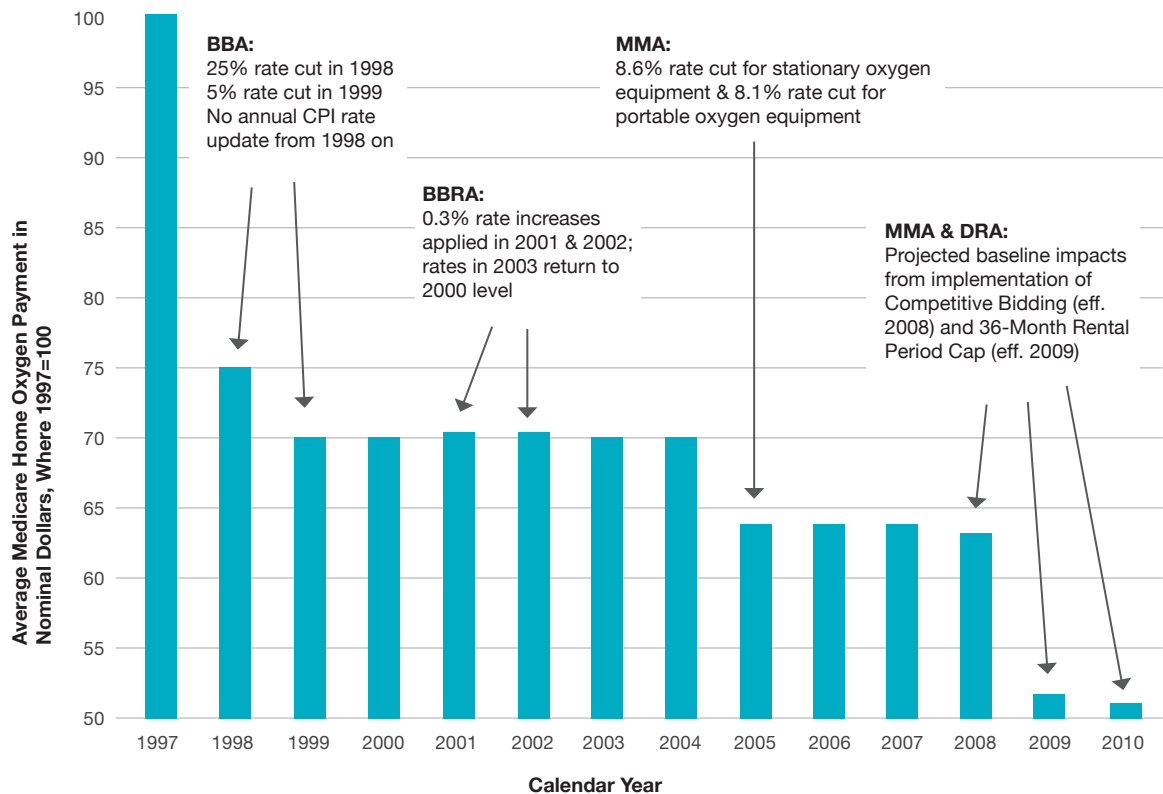
² CMS-1304-F, 71 FR 65930.

³ HHS, Office of the Inspector General, *Medicare Home Oxygen Equipment: Cost and Servicing*, September 2006, Figure 2.

Cumulative Effect of Medicare Home Oxygen Therapy Payment Rate Changes from 1997 to 2010

Figure 1 summarizes the cumulative effect of all of the Medicare home oxygen payment rate changes that have occurred or will occur between 1997 and 2010. It should be noted that this analysis does not attempt to adjust Medicare payment levels for consumer price inflation that has occurred since 1997, for which Medicare’s home oxygen therapy payment rates have not been updated since before 1997. As it is, the analysis indicates that the average Medicare home oxygen payment by 2010 will be almost half what it was in 1997. If price inflation also were factored in, the cumulative negative change in payment from 1997 to 2010 would be even greater.

Figure 1. Cumulative Impact of Medicare Home Oxygen Payment Rate Changes, 1997-2010



The values shown for 2008, 2009, and 2010 include the estimated combined effects of 1) payment rate reductions from competitive bidding expansion to 80 MSAs in 2009, 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 (on page 5) presents our analysis of total Medicare fee-for-service baseline spending on home oxygen therapy under current law, from calendar year 2004 through 2010. 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.

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 the weighted average monthly payment amounts, and the distribution of users across oxygen equipment categories, published by CMS in the November 2006 final payment policy regulation.⁴
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 a "home oxygen therapy user growth factor" of +2%. 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, and was estimated based on our analysis of assumptions used by the Congressional Budget Office (CBO) and by the CMS Office of the Actuary when projecting baseline growth in Medicare home oxygen therapy expenditures.

⁴The analysis assumed that CMS will accurately adjust these oxygen payment amounts in 2008-2010 to maintain budget-neutrality against actual increases in the use of new oxygen-generating portable equipment (OGPE) technology by Medicare beneficiaries. CMS currently projects reductions in the weighted average monthly payment amounts for stationary equipment in 2008-2010, but states that actual payment rates will be revised in future to assure budget neutrality (CMS, *Methodology for Calculating Budget Neutral Monthly Payment Rates for Oxygen and Oxygen Equipment*, Nov. 2006, Table 4).

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 almost 19 percent from calendar years 2008 to 2009, as a result of the first baseline impact of the 36-month capped rental period, which began January 1, 2006.
- Savings from competitive bidding also are expected to grow significantly between 2008 and 2010, as the program is implemented in many more areas of the country during that period.

Table 1. Estimated Medicare Baseline Spending for Home Oxygen, 2004-2010 (Dollars in thousands, by calendar year)

	2004 Actual	2005 Actual	2006 Estimated	2007 Estimated	2008 Estimated	2009 Estimated	2010 Estimated
Total Medicare Fee-for-Service (FFS) Allowed Charges Before Impacts of Pending Current Law Policies	\$2,669,003	\$2,679,455	\$2,785,335	\$2,872,408	\$2,983,036	\$3,101,235	\$3,219,061
Year-to-year change	9.6%	0.4%	4.0%	3.1%	3.9%	4.0%	3.8%
Reductions in FFS Allowed Charges Expected to Result from Current Law Policies:							
MMA: DMEPOS							
Competitive Bidding—							
Home Oxygen Portion	\$ —	\$ —	\$ —	\$ —	-\$36,720	-\$260,440	-\$382,840
DRA: 36-Month							
Capped Rental Period	\$ —	\$ —	\$ —	\$ —	\$0	-\$449,554	-\$474,643
Subtotal:	\$ —	\$ —	\$ —	\$ —	-\$36,720	-\$709,994	-\$857,483
Total FFS Allowed Charges Including Impacts of All Current Law Policies	\$2,669,003	\$2,679,455	\$2,785,335	\$2,872,408	\$2,946,316	\$2,391,241	\$2,361,577
Year-to-year change	9.6%	0.4%	4.0%	3.1%	2.6%	-18.8%	-1.2%

Data sources: CMS, *Medicare Part B Physician/Supplier Data by BETOS, Calendar Year 2004 and 2005*; CMS, *Methodology for Calculating Budget Neutral Monthly Payment Rates for Oxygen and Oxygen Equipment*, Nov. 2006, Tables 2 and 5; CMS, *Final Rule for DMEPOS Competitive Bidding (CMS-1270-F)*, Tables 11 and 13; CMS Office of the Actuary, *2007 Medicare Trustees Report*, Table III.A.3; HHS, Office of the Inspector General, *Medicare Home Oxygen Equipment: Cost and Servicing*, September 2006, Figure 2.

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

The analysis presented in Table 2 (on page 7) examines the estimated state-level effects of the 36-month capped rental period, 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.

A limitation of the analysis presented here is that it does not include the estimated state-level effects of the implementation of competitive bidding for home oxygen therapy. As shown in Table 1, the bulk of the projected savings from competitive bidding will start to accrue in 2009, when the program expands from its current 10 MSAs to an additional 70 MSAs. The locations of these 70 MSAs will not be announced by CMS until 2008. Not knowing exactly where most of the competitive bidding payment policy will be implemented in 2009 and 2010 makes it difficult to model the policy's impact on a sub-national level, so we chose to focus this state-level analysis on the 36-month capped rental period policy, for which we could make a reasonable assumption (described below) about how the total Medicare payment effects would be distributed across states.


Methodology of Analysis:

- This analysis distributed the total estimated savings amounts for 2009 and 2010 according to each state's percentage of the total U.S. Medicare oxygen user population. Thus, the analysis assumes that the 22 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 estimated impact on the number of Medicare beneficiaries in each state, on total Medicare expenditures for Medicare home oxygen patients in each state, and on a "per patient" basis for each Medicare home oxygen therapy patient in the state.
- In Florida, almost 20,000 Medicare beneficiaries could be affected in 2009 by the reality of the 36-month capped rental period. In Texas, California, and Ohio, over 10,000 Medicare home oxygen therapy patients may be affected in 2009.
- 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 Medicare 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, 2009-2010

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 (\$ Millions)	Estimated Per Patient Impact, 2009 (\$)	Proportional Share of Total Estimated Savings from DRA 36-Month Capped Rental Period Policy, 2010 (\$ Millions)	Estimated Per Patient Impact, 2010 (\$)	Estimated Total Two-Year Impact, 2009-2010 (\$ Millions)	Estimated Per Patient Two-Year Impact, 2009-2010 (\$)
Florida	125,200	8.6%	19,700	-\$38.5	-\$307	-\$40.6	-\$325	-\$79.1	-\$632
Texas	110,200	7.5%	17,400	-\$33.9	-\$307	-\$35.8	-\$325	-\$69.6	-\$632
California	88,400	6.0%	13,900	-\$27.2	-\$307	-\$28.7	-\$325	-\$55.9	-\$632
Ohio	66,000	4.5%	10,400	-\$20.3	-\$307	-\$21.4	-\$325	-\$41.7	-\$632
Michigan	60,900	4.2%	9,600	-\$18.7	-\$307	-\$19.8	-\$325	-\$38.5	-\$632
New York	60,200	4.1%	9,500	-\$18.5	-\$307	-\$19.5	-\$325	-\$38.0	-\$632
Pennsylvania	57,000	3.9%	9,000	-\$17.5	-\$307	-\$18.5	-\$325	-\$36.0	-\$632
Illinois	53,400	3.7%	8,400	-\$16.4	-\$307	-\$17.3	-\$325	-\$33.7	-\$632
North Carolina	52,800	3.6%	8,300	-\$16.2	-\$307	-\$17.1	-\$325	-\$33.4	-\$632
Tennessee	47,500	3.2%	7,500	-\$14.6	-\$307	-\$15.4	-\$325	-\$30.0	-\$632
Colorado	42,200	2.9%	6,600	-\$13.0	-\$307	-\$13.7	-\$325	-\$26.7	-\$632
Georgia	40,500	2.8%	6,400	-\$12.4	-\$307	-\$13.1	-\$325	-\$25.6	-\$632
Indiana	40,300	2.8%	6,300	-\$12.4	-\$307	-\$13.1	-\$325	-\$25.5	-\$632
Virginia	39,200	2.7%	6,200	-\$12.0	-\$307	-\$12.7	-\$325	-\$24.8	-\$632
Missouri	38,600	2.6%	6,100	-\$11.9	-\$307	-\$12.5	-\$325	-\$24.4	-\$632
Kentucky	34,800	2.4%	5,500	-\$10.7	-\$307	-\$11.3	-\$325	-\$22.0	-\$632
Oklahoma	25,700	1.8%	4,000	-\$7.9	-\$307	-\$8.3	-\$325	-\$16.2	-\$632
New Jersey	25,200	1.7%	4,000	-\$7.7	-\$307	-\$8.2	-\$325	-\$15.9	-\$632
Arizona	25,000	1.7%	3,900	-\$7.7	-\$307	-\$8.1	-\$325	-\$15.8	-\$632
South Carolina	24,900	1.7%	3,900	-\$7.7	-\$307	-\$8.1	-\$325	-\$15.7	-\$632
Washington	24,600	1.7%	3,900	-\$7.6	-\$307	-\$8.0	-\$325	-\$15.5	-\$632
Alabama	24,400	1.7%	3,800	-\$7.5	-\$307	-\$7.9	-\$325	-\$15.4	-\$632
Wisconsin	24,100	1.6%	3,800	-\$7.4	-\$307	-\$7.8	-\$325	-\$15.2	-\$632
Arkansas	22,400	1.5%	3,500	-\$6.9	-\$307	-\$7.3	-\$325	-\$14.2	-\$632
Utah	21,400	1.5%	3,400	-\$6.6	-\$307	-\$6.9	-\$325	-\$13.5	-\$632
Massachusetts	20,400	1.4%	3,200	-\$6.3	-\$307	-\$6.6	-\$325	-\$12.9	-\$632
Maryland	19,900	1.4%	3,100	-\$6.1	-\$307	-\$6.5	-\$325	-\$12.6	-\$632
Mississippi	19,200	1.3%	3,000	-\$5.9	-\$307	-\$6.2	-\$325	-\$12.1	-\$632
Kansas	18,800	1.3%	3,000	-\$5.8	-\$307	-\$6.1	-\$325	-\$11.9	-\$632
Louisiana	18,300	1.3%	2,900	-\$5.6	-\$307	-\$5.9	-\$325	-\$11.6	-\$632
New Mexico	18,000	1.2%	2,800	-\$5.5	-\$307	-\$5.8	-\$325	-\$11.4	-\$632
West Virginia	17,700	1.2%	2,800	-\$5.4	-\$307	-\$5.7	-\$325	-\$11.2	-\$632
Oregon	16,800	1.1%	2,600	-\$5.2	-\$307	-\$5.5	-\$325	-\$10.6	-\$632
Iowa	16,500	1.1%	2,600	-\$5.1	-\$307	-\$5.4	-\$325	-\$10.4	-\$632
Minnesota	16,200	1.1%	2,600	-\$5.0	-\$307	-\$5.3	-\$325	-\$10.2	-\$632
Nevada	15,200	1.0%	2,400	-\$4.7	-\$307	-\$4.9	-\$325	-\$9.6	-\$632
Connecticut	13,000	0.9%	2,000	-\$4.0	-\$307	-\$4.2	-\$325	-\$8.2	-\$632
Nebraska	11,300	0.8%	1,800	-\$3.5	-\$307	-\$3.7	-\$325	-\$7.1	-\$632
Idaho	10,700	0.7%	1,700	-\$3.3	-\$307	-\$3.5	-\$325	-\$6.8	-\$632
Montana	10,700	0.7%	1,700	-\$3.3	-\$307	-\$3.5	-\$325	-\$6.8	-\$632
Wyoming	8,000	0.5%	1,300	-\$2.5	-\$307	-\$2.6	-\$325	-\$5.1	-\$632
Maine	7,700	0.5%	1,200	-\$2.4	-\$307	-\$2.5	-\$325	-\$4.9	-\$632
New Hampshire	5,700	0.4%	900	-\$1.8	-\$307	-\$1.8	-\$325	-\$3.6	-\$632
South Dakota	5,500	0.4%	900	-\$1.7	-\$307	-\$1.8	-\$325	-\$3.5	-\$632
Delaware	4,200	0.3%	700	-\$1.3	-\$307	-\$1.4	-\$325	-\$2.7	-\$632
North Dakota	3,400	0.2%	500	-\$1.0	-\$307	-\$1.1	-\$325	-\$2.1	-\$632
Rhode Island	2,900	0.2%	500	-\$0.9	-\$307	-\$0.9	-\$325	-\$1.8	-\$632
Vermont	2,800	0.2%	400	-\$0.9	-\$307	-\$0.9	-\$325	-\$1.8	-\$632
Hawaii	1,900	0.1%	300	-\$0.6	-\$307	-\$0.6	-\$325	-\$1.2	-\$632
Alaska	1,500	0.1%	200	-\$0.5	-\$307	-\$0.5	-\$325	-\$0.9	-\$632
District of Columbia	1,200	0.1%	200	-\$0.4	-\$307	-\$0.4	-\$325	-\$0.8	-\$632
TOTAL	1,462,500	100.0%	230,300	-\$449.6	-\$307	-\$474.6	-\$325	-\$924.2	-\$632

*Calculated by multiplying the estimated total number of Medicare beneficiaries affected by the 36-month capped rental period as of 1/1/2009 (equal to 22 percent of beneficiaries who were using home oxygen therapy as of 1/1/2006) by each state's percentage of total Medicare home oxygen therapy users in 2005. Numbers may not sum to totals due to rounding



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