

## Methodology for Calculating Budget Neutral Monthly Payment Rates for Oxygen and Oxygen Equipment

The following provides additional information on the several step methodology used to calculate the national monthly payment rates for the oxygen and oxygen equipment classes listed in table 4 below on an annual budget neutral basis for items furnished on or after January 1, 2007. This methodology is summarized in a final rule implementing these changes, which was issued on November 1, 2006. As explained in the final rule, this methodology was developed in response to comments received on a proposed rule published on August 3, 2006 (71 FR 44082). This additional information is being provided to promote transparency.

- We obtained the latest available data shown in Table 1 from our statistical analysis contractor (SADMERC) on the number of beneficiaries using oxygen equipment described by HCPCS codes E0424, E0431, E0434, E0439, E1390, E1391, and E1392.

Table 1. Number of Medicare Beneficiaries Using Oxygen

<b>Claims Received from July 1, 2006 through September 30, 2006</b>		
Procedure Code	Procedure Description	Allowed Beneficiaries
E0424	Stationary compressed gas oxygen	536
E0439	Stationary liquid oxygen	57,414
E1390	Oxygen concentrator	989,034
E1391	Oxygen concentrator, dual	25
	<b>Total users of stationary equipment</b>	<b>1,047,009</b>
E0431	Portable gaseous oxygen	633,630
E0434	Portable liquid oxygen	82,268
E1392	Portable oxygen concentrator	3,248

- We used this data to count the number of beneficiaries using items in each equipment class shown in Table 2. Oxygen generating portable equipment (OGPE) consists of oxygen transfilling units and portable concentrators. Since we did not have data on the number of beneficiaries using liquid or gaseous stationary systems who also use portable equipment, we assumed that virtually all beneficiaries who use liquid or gas stationary systems also use portable systems. Thus, we assumed that those 57,950 beneficiaries using liquid/gas stationary systems (57,414 for code E0439 + 536 for code E0424 = 57,950) use liquid/gas portable equipment as well.

- We next calculated the total number of concentrator and portable equipment users. We added the number of beneficiaries who used portable gas and liquid systems, codes E0431 and E0434 respectively. This yields a total of 715,898 beneficiaries (633,630 + 82,268). From this total, we subtracted 57,950 (the number of beneficiaries using both stationary and portable liquid or gaseous oxygen systems). This yields 657,948 beneficiaries who use both concentrator and portable oxygen systems. Table 1 shows 989,059 beneficiaries using oxygen concentrators. To calculate the number of beneficiaries who use only concentrators, we subtracted the total number of concentrator and portable equipment users, which is 657,948, from 989,059 which yields 327,863. Thus, the data show a total of 1,047,009 beneficiaries using oxygen. Of this total, 327,863 used concentrators only; 657,948 used concentrators and portable equipment; 57,950 used liquid/gas and portable equipment; and 3,248 used the portable oxygen concentrators that are considered new technology of equipment. Table 2 shows the categories of oxygen users as we have calculated.

Table 2. Categories of Oxygen Users

<b>Equipment/Modality</b>	<b>Number of Beneficiaries</b>
Stationary Concentrator Only	327,863
Liquid/Gas Stationary AND Portable Equipment	57,950
Concentrator AND Portable Equipment	657,948
Stationary AND OGPE	3,248
<b>TOTAL NUMBER OF BENEFICIARIES</b>	<b>1,047,009</b>

- We had to make an assumption about the percent of beneficiaries who will use OGPE equipment after the new classes and payment rates go into effect. While we have 2006 data on the number of beneficiaries using portable concentrators (code E1392), we do not have actual data on beneficiaries using oxygen transfilling equipment since we did not have a separate code for such equipment prior to October 1, 2006. Therefore, separate data is not available for oxygen transfilling equipment. During 2006, Medicare claims data from the SADMERC show that 0.3 percent of beneficiaries used portable concentrators. In the course of developing its September 2006 report Medicare Home Oxygen Equipment: Cost and Servicing (OEI-09-04-00420), the Office of the Inspector General (OIG) found that 1.4 percent of beneficiaries began using transfilling equipment in 2004. In addition, analysis of the effects of the new payment classes that was submitted for our consideration assumed a shift of 5 percent of beneficiaries towards OGPE in the first year. Other information we received suggested that less than 10 percent of beneficiaries will use OGPE. Thus, for the purpose of calculating budget-neutral rates, we are assuming that 5 percent of beneficiaries will use OGPE, which includes both portable concentrators and transfilling machines, after the new classes and payment rates go in effect. However, we will monitor actual use and, as part of our annual budget-neutrality determination, we will

revisit this assumption on an annual basis and make adjustments through program instructions to rates applicable after 2007 if utilization of oxygen equipment by beneficiaries is different from our assumptions.

- We used a five year period for determining the rate changes because the reasonable useful lifetime policy for DME equipment allows Medicare payment for a new piece of equipment after five years of use. Therefore we assumed that Medicare would make three years of rental payments and two years of payment for beneficiaries who require oxygen contents. Table 3e (furnished in a separate document) shows our estimate of Medicare spending for oxygen equipment and contents when the 36-month rental cap for oxygen equipment is operational for five years, prior to and after the changes in payment rates and classes. To calculate budget neutral rates, we compared estimates of Medicare spending for oxygen equipment and contents based on current classes and payment rates and the revised classes and payment rates. We used the average of the current monthly payments per State weighted by actual utilization by State to determine the average Medicare payment for each class of oxygen and oxygen equipment. We used \$199.84, the weighted average 2006 fee schedule amount, for beneficiaries using stationary equipment only. For beneficiaries using both portable equipment and either a stationary concentrator or stationary liquid tanks, we added \$31.79, the weighted average 2006 add-on payment for portable oxygen, to the base rate of \$199.84 to get \$231.63. During the ownership period, we also used \$154.90 (the weighted average 2006 fee schedule amount for oxygen contents, for liquid and portable oxygen contents) and \$20.77 (the weighted average 2006 fee schedule amount for portable oxygen contents, for portable contents only).
- The 2007 national monthly payment rate for delivery of stationary or portable oxygen contents is \$77.45. Therefore, the combined 2007 national monthly payment rate for delivery of both stationary and portable oxygen contents is \$154.90 ( $\$77.45 + \$77.45$ ). The 2007 national monthly add-on payment rate for OGPE of \$51.63.
- To estimate the total expenditures for oxygen and oxygen equipment for when the 36-month rental cap is operational for five years, we multiplied the monthly payment rate for each category of equipment by the total number of users of each such category, then by the percent of users at the midpoint of each of the three equipment rental years, by 12 for the number of months in a year. Then, we multiplied the monthly payment rate for each category of oxygen contents by the total number of users at the midpoint of each of two beneficiary ownership years by 12 months. We added the estimated spending for equipment and contents to obtain the five year total of payments for equipment and contents. For example, to determine expenditures for year 1 for beneficiaries using concentrators only, we multiplied 327,863 beneficiaries by 61 percent by 12 months by \$199.84 to get \$479.6 million. We performed the same type of calculation for each beneficiary category of user for each year of the three years of rental and two

years of ownership. This results in an estimate of spending of \$3.515 billion.

- We used data obtained by the OIG, including data from Figure 2 in their September 2006 report, on the distribution of the number of beneficiaries using stationary concentrators by the number of months rented. This OIG data is based on an analysis of a 1-percent sample of beneficiaries whose Medicare payments for oxygen concentrators began in 2001. The data show 61 percent of oxygen users at the midpoint of the first year of a rental period, 36 percent at the midpoint of the second year of a rental period, 26 percent at the midpoint of the third year of a rental period. We obtained data that OIG furnished showing that 19 percent of beneficiaries were continuing to use oxygen equipment at the midpoint of the fourth year of a rental period. We estimated that 14 percent of beneficiaries use oxygen equipment at the midpoint of the fifth year of a rental period based on data from our statistical analysis contractor.
- We then used this same methodology to estimate Medicare spending incorporating the payment rate changes in the final rule. Since spending is greater under the payment rate changes in the final rule, we applied a budget neutrality adjustment to the monthly payment amount for stationary equipment in order to achieve the same expenditures that would be spent under payment rates without changes in the final rule. Table 3e shows this calculation of Medicare spending for oxygen equipment and contents under the revised national limited monthly payment rates for contents during the ownership period, and with the OGPE add-on. We calculated Medicare spending with these figures, using the same methodology described above to estimate Medicare spending incorporating the rate changes in the final rule. These rate changes result in Medicare spending of \$3.677 billion, an increase of 4.61 percent. To achieve the same expenditures of \$3.515 billion that would be spent under payment rates without the changes in the final rule, we need to apply a budget neutrality adjustment of 5.23 percent to the monthly payment amount for stationary equipment. The budget-neutrality adjustment is 5.23 percent, even though total spending is 4.61 percent higher under the content and OGPE rates in the final rule because the budget-neutrality adjustment is applied only to spending for stationary equipment but not to the \$31.79 add-on payment for portable oxygen equipment and the \$51.63 add-on payment for OGPE. As a result, a larger budget-neutrality adjustment (5.23 percent) is needed because it is applied to a smaller amount of total dollars.

Applying this 5.23 budget-neutrality adjustment to the monthly payment amount for stationary equipment yields a monthly payment amount of \$189.39 (\$199.84 times 0.9477 equals \$189.39). For those beneficiaries using both stationary and adding the portable equipment, the add-on of \$31.79 results in monthly payment amounts during the rental period of \$221.18 (\$189.39 plus \$31.79 = \$221.18) for concentrator and portable equipment, as well as and for liquid and portable equipment. For those using stationary and OGPE, adding the OGPE add-on of \$51.63 to the stationary payment of \$189.39 results in monthly payment amounts during the rental period of \$241.02.

These are our current estimates of Medicare national limited monthly payment rates based on 2006 data on the number of oxygen users and their distributions across types of equipment used, and 2004 data on the distribution of users by number of months they use oxygen equipment. We estimated spending when the rental cap is operational for five years, but we also calculated budget-neutral rates when the policy is operational for one, two, three and four years incorporating the rate changes that would begin in each year. In 2006, 2007, 2008 and 2009, Medicare payment rates would be different because for example, in 2009, only the increased payment for three years of OGPE and a single year of contents during ownership would apply. And in 2008, only three years of OGPE add-on payments would apply without increased payments for contents during ownership.

- Tables 3a, 3b, 3c, and 3d (furnished in separate documents) show the current estimate of Medicare payment rates for each of years 2006, 2007, 2008 and 2009. We have calculated budget-neutral rates for each year from 2006 through 2010, but applying the methodology described above. This results in smaller budget-neutrality adjustments in the early years and larger ones in the later years because the increased expenditures in the first three years result primarily from the OGPE add-on payment. The full effect of the higher payments for portable oxygen contents will not be realized until 2010, the first full year of equipment ownership for beneficiaries who have been renting oxygen equipment on a continuous basis since 2006. We used a five year period for determining the rate changes because we used a five year reasonable useful lifetime period for oxygen equipment.
- Table 4 shows the 2007 budget neutral monthly payment rates and our estimates of the budget neutral monthly payment rates for 2008 through 2010 for the five classes of oxygen and oxygen equipment, in addition to the combined rates for stationary and portable oxygen contents. The rates for stationary equipment decrease by year to offset the new OGPE class and the increase in portable contents rate. Table 5 shows the 2007 monthly payment rates that apply to all beneficiaries who use oxygen equipment on or after January 1, 2007, including both new and existing users. Table 5 also shows our estimates of the monthly payment rates for 2008 through 2010 for four of the most common combinations of oxygen equipment.

Table 4. – Current Weighted Average Monthly Payment Amounts Compared to Monthly Payment Rates for New Classes of Oxygen and Oxygen Equipment

DURING EQUIPMENT RENTAL PERIOD (36 MONTHS)

Oxygen Class	Current	2007	2008	2009	2010
Stationary Equipment (offset needed)	\$199.84	\$198.40 (-1.44)	\$198.40 (-1.44)*	\$193.21 (-6.63)*	\$189.39 (-10.45)*
Portable Add-on	\$31.79	\$31.79	\$31.79	\$31.79	\$31.79
OGPE Add-on	N/A	\$51.63	\$51.63	\$51.63	\$51.63

CONTENTS PAYMENTS AFTER EQUIPMENT OWNERSHIP

Oxygen Class	Current	2007	2008	2009	2010
Stationary & Portable Contents	\$154.90	\$154.90	\$154.90	\$154.90	\$154.90
Portable Contents Only	\$20.77	\$77.45	\$77.45	\$77.45	\$77.45
Stationary Contents Only	N/A	\$77.45	\$77.45	\$77.45	\$77.45

\* Rates for 2008 and beyond are budget-neutral based on assumed OGPE utilization of 5 percent. Actual OGPE utilization will be reviewed on an annual basis and rates will be adjusted, if necessary, through program instructions to ensure annual budget neutrality.

Table 5. – Payments for Various Combinations of Oxygen Equipment (estimated for calendar years 2008 thru 2010)

<b>Categories of Equipment</b>	<b>During Rental Period</b>	<b>Contents After Ownership</b>
<u>Concentrator only</u>		
2007/2008	\$198.40	\$0
2009	\$193.21	\$0
2010	\$189.39	\$0
<u>Concentrator + gaseous portable</u>		
2007/2008	\$230.19 (198.40 + 31.79)	\$77.45
2009	\$225.00 (193.21 + 31.79)	\$77.45
2010	\$221.18 (189.39 + 31.79)	\$77.45
<u>Concentrator + OGPE</u>		
2007/2008	\$250.03 (198.40 + 51.63)	\$0
2009	\$244.84 (193.21 + 51.63)	\$0
2010	\$241.02 (189.39 + 51.63)	\$0
<u>Liquid/gas stationary &amp; portable</u>		
2007/2008	\$230.19 (198.40 + 31.79)	\$154.90 (77.45 x 2)
2009	\$225.00 (193.21 + 31.79)	\$154.90 (77.45 x 2)
2010	\$221.18 (189.39 + 31.79)	\$154.90 (77.45 x 2)

These estimates assume that 5 percent of oxygen users will use OGPE equipment in all years. However, we will monitor actual use and, as part of our annual budget-neutrality determination, we will revise these estimated payment rates if actual OGPE utilization is different from our assumption. We will also revise the payment rates in the future based on updated data on distribution of beneficiaries using oxygen equipment and the number of months they use the equipment.