# OUT OF GAS: HOW OXYGEN THERAPY FELL APART IN THE U.S.

The World Health Organization (WHO) lists oxygen as an "essential medicine." Unfortunately, over the last 30 years, a series of federal policy decisions has reduced access to oxygen therapy for many who need it the most.

Medicare launches with an oxygen therapy benefit for the growing home medical equipment industry. Suppliers are reimbursed by the volume of oxygen they provide, whether by compressed gas cylinders or liquid oxygen reservoirs.

1965

The Omnibus Budget Reconciliation Act of 1987 is passed. In response to perceptions of widespread fraud, waste, and abuse (which were never substantiated), durable medical equipment (DME) reimbursement switches from a "reasonable cost" model to a defined fee schedule. Oxygen concentrators essentially become rental equipment reimbursed with a monthly fee. In addition, oxygen reimbursement becomes "modality neutral," meaning higher-cost delivery methods (such as liquid oxygen) are less feasible to provide. As a result, many suppliers begin phasing them out, as well as reducing other

1987

1997

The Balanced Budget Act of 1997 is passed.

by an additional 5% cut in 1999. Inflation-

2008. DME suppliers are forced to cut costs

again by further reducing clinical staff and

available equipment types.

reimbursement to take effect in 1998 followed

related reimbursement adjustments based on

the Consumer Price Index (CPI) are frozen until

It requires a 25% reduction in oxygen

The portable oxygen concentrator (POC) is invented, using the same molecular sieve technology as home concentrators but with miniaturized electronics and onboard batteries. Because the sieves and compressors used are smaller, they cannot produce as much oxygen as the larger home machines. To compensate, they deliver oxygen in pulses rather than a continuous flow. While beneficial to many, without proper training in its use, this difference often leads to confusion and poor tolerance.

2002

The Deficit Reduction Act (DRA) of 2005 is passed. The DRA cuts overall oxygen reimbursement in the United States by an additional \$500 million by "capping" reimbursement for stationary oxygen equipment rentals at 36 months beginning in 2009. However, DME suppliers are still responsible for providing repair and maintenance support (without payment) for the remaining 24 months of the "reasonable useful lifetime" of oxygen equipment. They may continue to charge a small fee for portable system refills.

2005

The initial bid program having finally been implemented and deemed a "success," CMS expands the CBP from nine bidding regions to 100, covering approximately 80% of all Medicare beneficiaries. The maximum monthly rental fee in the US is \$177.36, only 80% of which is reimbursed by Medicare (20% is paid by the beneficiary). For comparison, monthly oxygen reimbursement prior to 1997 as approximately \$400 per month.

2013

After an additional round of revised bids in 2015, CMS pauses the next scheduled round of bid requests in order to review still more issues discovered in the CBP. To compensate, an inflation adjustment of 2.4% is added to the 2015 reimbursement fee levels. In comparison, the overall US inflation rate during this time was 7.9%. Monthly rental fees now range between \$68-74 in competitive bidding areas.

2019

2024

The Supplemental Oxygen Access and

Reform (SOAR) Act is introduced in both

chambers of Congress, SOAR is based

ensuring the delivery of supplemental

on four pillars of needed reforms:

oxygen therapy is patient-centric

of rights), ensuring liquid oxygen

therapists to help train people on

the proper use of their equipment,

and standardizing documentation

requirements to promote accuracy and

defend against fraud, waste, and abuse.

(including developing a patient bill

equipment is available for those who

need it, enabling access to respiratory

# 1970's

Home oxygen concentrators enter broad use. Oxygen reimbursement remains based on quantity of oxygen used (calculated by the patient's prescribed flow rate multiplied by the hours used, but with lower delivery costs, suppliers are able to invest in benefits like hiring clinicians to train new patients on the use of their equipment and ongoing re-evaluation.

#### Sources:

www.congress.gov

https://www.cms.gov/medicare/payment/fee-schedules/dmepos/dmepos-fee-schedule

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5478017

https://www.atsjournals.org/doi/10.1513/AnnalsATS.201703-2090C/

https://oig.hhs.gov/documents/evaluation/2596/0EI-01-15-00041-Complete%20Report.pdf

https://www.atsjournals.org/doi/full/10.1164/rccm.202202-0238LE

The COPD Foundation would like to thank Mr. Joseph Lewarski, MHA, RRT, FAARC for his assistance in developing this timeline

# 2003

The Medicare Prescription Drug Improvement Act is passed. Best known for creating the Medicare Part D prescription drug benefit, the MPDA also calls for the establishment of what becomes known as the Competitive Bidding Program (CBP). The CBP is intended to address continued perceptions of DME overpayments through the solicitation of bids, the lowest of which would become the reimbursement rate for all suppliers in a particular region.

## 2008

After several delays due to problems with the bidding process, the CBP is formally implemented on July 1. On July 15, Congress overrides a Presidential veto to pass the Medicare Improvements for Patients and Providers Act, canceling all awarded contracts, requiring a complete rebid process in 2009, delaying implementation of those bids until 2011, exempting certain rural areas from the program, and addressing many of the immediately-obvious structural flaws in the initial design of the CBP.

#### 2018

The American Thoracic Society Nursing Assembly Oxygen Working Group publishes the results of their survey of 1,926 oxygen therapy patients regarding the adequacy and utility of their equipment and suppliers. 51% reported at least one problem with their therapy, including equipment malfunction or being unable to actually carry their "portable" oxygen system. 35% reported feeling unprepared to use their equipment properly. Only 10% reported being trained to use their equipment by a health care professional.

## 2022

Dr. Kevin Duan and associates publish an analysis of trends in home respiratory equipment since the dawn of the CBP. Data indicate claims for liquid oxygen equipment have dropped 90% (suggesting this modality is all but extinct in the US) and that the number of claims per supplier have increased roughly 20%, indicating significant market consolidation. The analysis would seem to cast doubt on the 2018 CMS Office of the Inspector General (OIG) report asserting that the CBP did not "disrupt beneficiary access to oxygen equipment and contents."

