by Berkley Bedell, Foundation for Alternative and Integrative Medicine (www.faim.org)

## Chronic Obstructive Pulmonary Disease (COPD)

Chronic obstructive pulmonary disease (COPD) is a term referring to two lung diseases, chronic bronchitis and emphysema, that are characterized by obstruction to airflow that interferes with normal breathing. COPD is the third leading cause of death in America, claiming the lives of 124,477 Americans in 2007. That is one death every 4 minutes. More than 12 million people are diagnosed with COPD. There are another 15 million undiagnosed or in early stages of COPD. A conservative estimate would indicate that the number of newly diagnosed COPD cases could equal 3 million per year creating a huge impact on health care in the near future. A Lung Association survey revealed that half of all COPD patients (51%) say their condition limits their ability to work. It also limits them in normal physical exertion (70%), household chores (56%), social activities (53%), sleeping (50%) and family activities (46%).

In 2010, the cost to the nation for COPD was projected to be approximately \$49.9 billion, including \$29.5 billion in direct health care expenditures, \$8.0 billion in indirect morbidity costs and \$12.4 billion in indirect mortality costs. COPD patients spend an average of \$4000 per year for care currently. Other estimates place costs much higher with attributable cost of COPD averaging about \$6,300. With a 10 year life expectancy once diagnosed health care costs (assuming no increase) total between \$40,000 and \$63,000 per person.

Pharmacologic treatment can improve and prevent symptoms, however, efficacy of inhaled glucocorticosteroids in modifying long-term decline in lung function has not been confirmed and continues to be under study. Chronic treatment with systemic steroids involves the risk of serious side effects; therefore these are used mostly for acute exacerbations. Use of inhaled steroids has been shown to increase the risk of pneumonia among those with COPD. According to conventional medicine COPD lung damage is irreversible. Even though these treatments can help prevent symptoms and reduce the frequency and severity of exacerbations they are not curative and the patient continues a gradual decline in health. Bottom line - there is no good conventional treatment.

<sup>&</sup>lt;sup>1</sup> Centers for Disease Control and Prevention. National Center for Health Statistics. Final Vital Statistics Report. Deaths: Final Data for 2007. Vol. 58, No. 19, May 2010.

<sup>&</sup>lt;sup>2</sup> http://www.nhlbi.nih.gov/health/public/lung/copd/campaign-materials/html/copd-atrisk.htm

<sup>&</sup>lt;sup>3</sup> http://www.rightdiagnosis.com/c/copd/stats.htm

<sup>&</sup>lt;sup>4</sup> Confronting COPD in America, 2000. Schulman, Ronca and Bucuvalas, Inc. (SRBI) Funded by Glaxo Smith Kline.

<sup>&</sup>lt;sup>5</sup> U.S. Department of Health and Human Services. National Institutes of Health. National Heart Lung and Blood Institute. Morbidity and Mortality: 2009 Chartbook on Cardiovascular, Lung and Blood Diseases.

<sup>&</sup>lt;sup>6</sup> http://www.ncbi.nlm.nih.gov/pubmed/18620852

<sup>&</sup>lt;sup>7</sup> Rabe K. Treating COPD: The Trial, P Values, and The Dodo. New England Journal of Medicine. 2007; 258:851.

<sup>&</sup>lt;sup>8</sup> Ernst P, Gonzalez AV, Brassard P, Suissa S. Inhaled Corticosteroid Use in Chronic Obstructive Pulmonary Disease and the Risk of Hospitalization for Pneumonia. American Journal of Respiratory and Critical Care Medicine. 2007; 176:162-6.

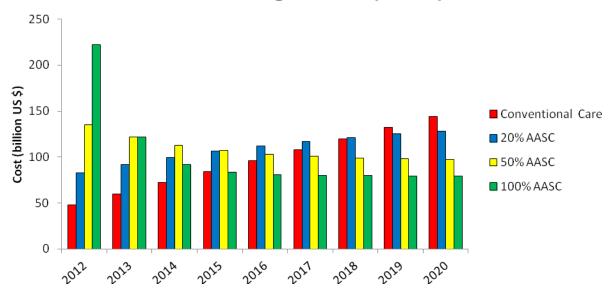
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Autologous adult stem cell(AASC) therapies for COPD in clinics abroad range from \$15,000 to \$22,000. The therapy helps to repair and regenerate the lung tissue that is affected. Using the body's own repair system gives the potential to reverse lung damage. With an annual number of COPD patients (12 million) living for an average of 10 years, increasing in numbers by about 3 mill per year, costing the system approximately \$40,000 each during their term of illness, the health care system will pay \$1190 billion for that care. Averaging these figures over 9 years, if 20% of the patients receive AASC therapy the annual savings would be \$23 billion; 50% receiving AASC would be a savings of 24 billion; and 100% of the patients receiving AASC would be an average annual savings of \$30 billion. (Calculated using conventional care cost of \$4,000 annually, an AASC cost of \$18,500 with an increase in diagnosed cases of 3 million annually and a 70% success rate of AASC).

We have spoken with a woman who received AASC therapy for COPD. Prior to her treatment she was on steroid inhalants and oxygen 24 hours of the day. She could not walk up more than three stairs without stopping to get her breath. After the AASC treatment, she is totally free of her need for drugs and auxiliary oxygen and goes dancing three nights a week. The long term cost savings is a factor, but the human element is the greatest with this disease. The pain and suffering as a person slowly suffocates is real. As stated above, there is no restorative treatment available in conventional medicine so to be able to offer these patients an option to heal is critical.

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# **Cost of Lung Disease (COPD)**



-		20% receiving	50% receiving	100% receiving
Year	Conventional Care	AASC	AASC	AASC
2012	48	83	135	222
2013	60	92	122	122
2014	72	100	113	92
2015	84	106	107	83
2016	96	112	103	81
2017	108	117	101	80
2018	120	121	99	80
2019	132	125	98	79
2020	144	128	97	79
total cost	1190	985	974	918

\*all numbers in billion dollars

Calculated: conventional care \$4,000 per patient

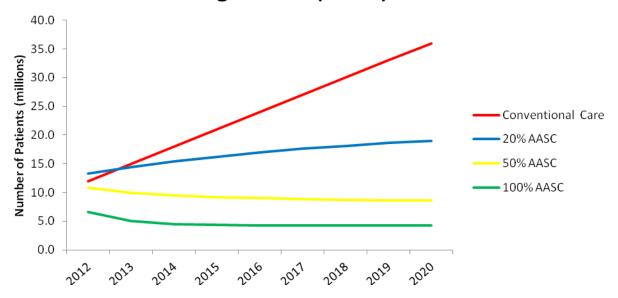
AASC treatment \$18,500 per patient

AASC success rate: 70%

Increase of 3 million cases per year

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# # of Lung Disease (COPD) Patients



		20% receiving	50% receiving	100% receiving
Year	Conventional Care	AASC	AASC	AASC
2012	12.0	13.3	10.8	6.6
2013	15.0	14.4	10.0	5.0
2014	18.0	15.4	9.5	4.5
2015	21.0	16.2	9.2	4.4
2016	24.0	17.0	9.0	4.3
2017	27.0	17.6	8.8	4.3
2018	30.0	18.1	8.7	4.3
2019	33.0	18.6	8.6	4.3
2020	36.0	19.0	8.6	4.3

\*all numbers in millions of patients

AASC success rate of 70%