Congress, Medical professions and
others concerned with the SOAR Act of 2024

I support **S.3821 - SOAR Act of 2024** and would like to offer my thoughts as a user of liquid oxygen (LOX). I have a vested interest in oxygen reform and agree that a paradigm shift is needed. Because of the Medicare payment schedule, I need to buy my liquid oxygen equipment and pay cash to have my LOX reservoirs filled. It is extremely difficult to find a company that will fill my LOX reservoirs. Without supplemental oxygen I would die. Without LOX I would be alive but not living!

In September, 2014 I got my first prescription for supplemental oxygen and purchased a home concentrator. A month later I purchased an Inogen One G3 with 4 settings for ambulatory oxygen. It didn't produce the oxygen I needed. It was a struggle to stay active and my FEV1 dropped from 47% of expected in January 2015 to 30% of expected in August 2018 because I wasn't getting the ambulatory oxygen I needed.

In 2018 I began using a Respironics Self-Fill system with 3,000 PSI tanks that allowed me to use more LPM for 2 to 3 hours per day while active. Life got a little better and I stopped the downward spiral of deconditioning that caused my FEV1 to drop so drastically in the previous three years.

I bought my first LOX equipment in spring 2020. In June 2022 I found an affordable and reliable source of LOX which allows me to play pickleball for three hours, refill my portable units and stay active the rest of the day. I started an upward spiral of reconditioning. In December 2023 my FEV1 was 45% of expected. LOX allowed me to drastically increase my activity and begin regaining the strength I had lost from not getting the needed oxygen.

Liquid Oxygen Gives Me a LIFE!

My experiences and medical records show that staying as active as possible lowered my overall health costs and contributed to my quality of life even when I wasn't getting the oxygen I needed. I know getting the oxygen I needed (LOX) put my upward spiral of reconditioning and getting healthier on an upward trajectory and increased my quality of life. Getting the needed oxygen and increased activity will do the same for many. It will also add to the fiscal health of our country's budget by keeping us healthier and out of the hospital.

I have a diagnosis of COPD & Chronic Respiratory Failure with Hypoxia and play pickleball four times a week with 10 LPM of LOX. More people with my diagnosis could be playing pickleball, or at least being more active and healthier with the needed oxygen and support.

Getting the needed oxygen makes us physically and mentally healthier with a higher quality of life!

Gerald (Skip) Miller

hors.sens1@gmail.com

I have difficulty hearing on the phone. Please email me before calling. 208-792-1239

My website https://hors-sens.com/oxygen/oxygen.html will supply more information.

My Oxygen Reform paper @ https://hors-sens.com/lox.html

Oxygen Reform & A Reset for the Treatment of COPD

This paper has been extremely hard to write. Looking back at memories from the past and trying to decide which ones to share has brought a lot of emotions that I didn't realize were there. At times I have had to stop, put my face in my hands and shed a tear or two. Now that I have Liquid Oxygen I have forgotten or didn't want to remember or think about, the struggle to stay active while my body was starved for oxygen. Writing this brought it forward and what I believe made it so hard is that medical liquid oxygen is widely available but out of reach of us who need it. My struggle to stay active and the suffering it caused was totally unnecessary.

Contents

See the difference when I am getting the oxygen I need!

Liquid Oxygen allows me to get the oxygen I need to stay active. It allows me to build a deck and help my daughter and son in law make improvements to their property. It allows me to play pickleball and exercise. It allows me to visit national parks, museums, attend local events and actively participate in society. Being active has reversed the downward spiral of deconditioning. I am stronger, healthier - both physically and mentally, and have a higher quality of life now.

For years the medical community has told me to stay physically active but only prescribed the minimum oxygen I need to stay alive.

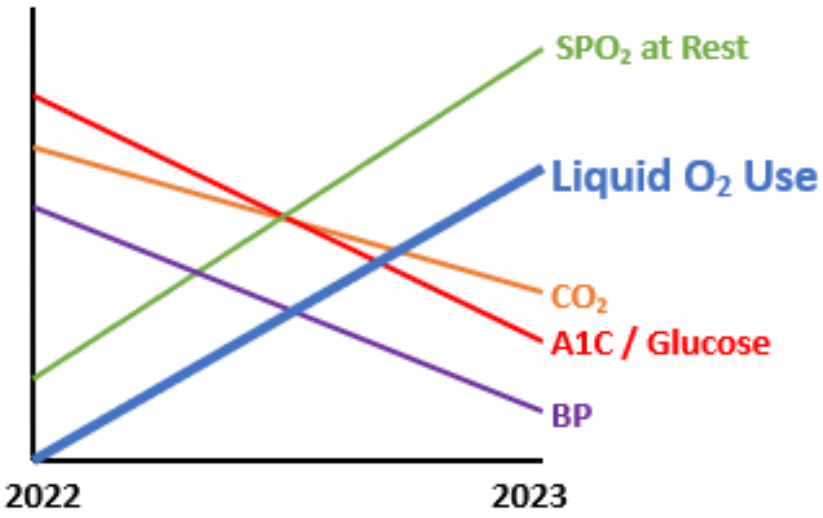
With low blood oxygen levels normal activities like showering and doing dishes, shopping and visiting friends become difficult to impossible and blood oxygen levels drop into the seventies and eighties. Not only is it hard to get off the couch while struggling to breathe, it is hard to find the motivation.

Liquid Oxygen makes it easier but I still need to find the motivation and put out the effort to stay active. With reconditioning, activities become easier and that motivates me to do more, starting an upward spiral of activity, reconditioning and motivation leading to a healthier and higher quality of life.

My life is much better with liquid oxygen but it does not matter whether you use a POC, tanks, LOX or a LIFE 2000 Ventilator as long as you get the oxygen you need. With mild COPD and the right skills, you may be able to start the upward spiral without supplemental oxygen.

I still have COPD and Chronic Respiratory Failure with Hypoxia. Getting the oxygen I need doesn't change that. I am often short of breath but my blood oxygen levels are higher and my heart rate lower. I am not cured but much healthier!

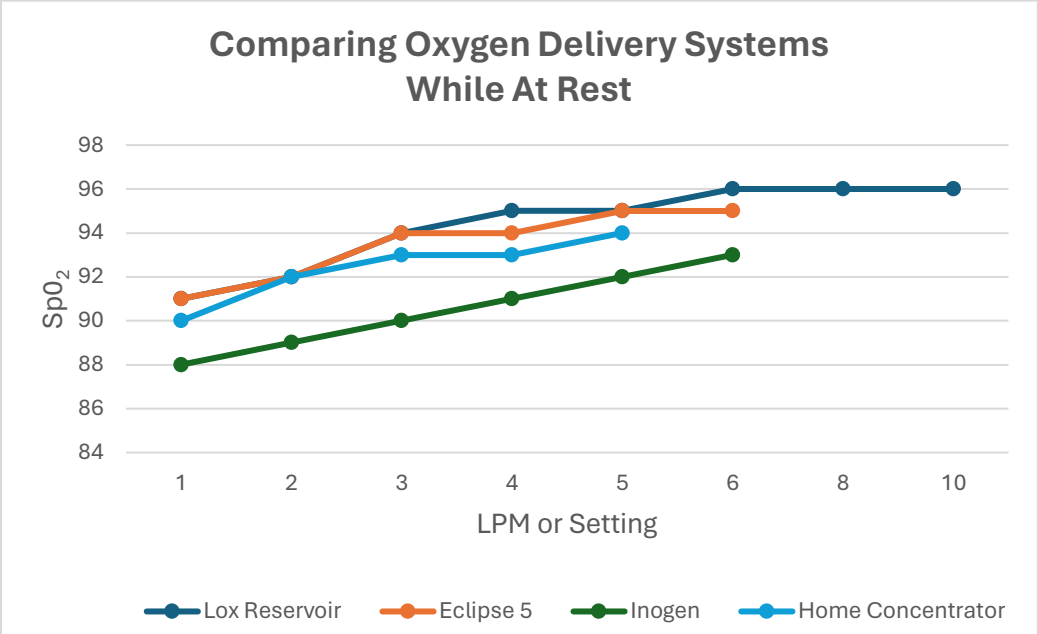
Below is a chart that displays some of the changes in my health since I have started using LOX.



Liquid oxygen did not do this! But it did allow the activity needed to get healthier.

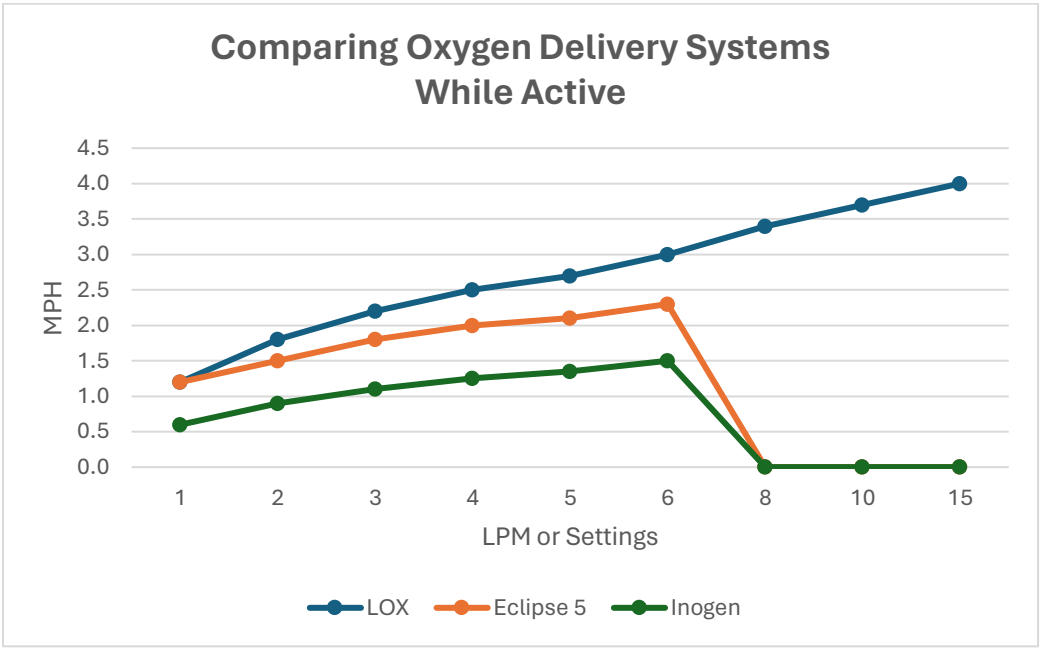
(For the graph values and details visit *https://hors-sens.com/11-23-bro.pdf.)*

Comparing Oxygen Delivery Systems



The Sp0$_2$ & MPH for LOX, the Eclipse 5, and the home concentrator are from a recent self test.

I have researched and used Inogen POCs in the past but do not currently have one. The Sp0$_2$ & MPH for Inogen is taken from past experience and research.



As you can see, the LOX is the only option that has allowed me the level of activity to lower my weight, A1C, et. I can't be as active as I need to stay healthy without it.

My Four Pillars for a Reset of the Treatment of COPD

1) **Oxygen prescriptions need to be based on oximeter readings while at rest and active.**
2) **Portable Oxygen Concentrator settings need changed so they are equivalent to Liter Per Minute.**
3) **Education on realistic blood oxygen levels is needed.**
4) **Offer more respiratory therapy to:**
   a) **Help individuals understand realistic blood oxygen levels.**
   b) **Promote oximeter use to get the needed oxygen.**
   c) **Educate on the benefits of using the needed oxygen.**
   d) **Develop personalized programs to help patients stay active.**

I support the "***Four Pillars for Oxygen Reform***" as a user of liquid oxygen *living a full life outside of my primary residence.* Because of my experiences I believe a reset for the treatment of COPD is necessary to take advantage of oxygen reform.

Almost 10 years ago, in September 2014, a good blood oxygen level for me was 91%, but I was seldom above 90% and was in the 70's far too often. By 2014 I had been using an oximeter for about 5 years to learn good breathing skills and trying to keep my blood oxygen levels in the mid-eighties to low nineties. If LOX had been available to me then . . .

My Experiences Supporting a Reset for the Treatment of COPD.

I was working full-time in the produce department at a local grocery store that was a part of a small chain of mini-marts and grocery stores. Two of us worked in the produce department, the manager and me. I could order and take over for him when needed. It was physical labor and I used my oximeter often and pursed lip breathing was a way of life. I also played tennis 3 or 4 days a week.

In September 2014 I became so tired I didn't know if I could make it another day! I went to my doctor and told him that. He gave me a shot (prednisone?) and a prescription for 2 LPM of supplemental oxygen. I don't believe he knew what else to do with me. What he did was enough to keep me out of the hospital.

I bought a rebuilt Respironics EverFlo home concentrator from a used medical equipment store. The respiratory therapist that worked there managed to convince me I really needed it and that it would make a world of difference. She was right and may have saved my life. After I brought my EverFlo home I didn't want to shut it off to go to work or play tennis. All I wanted to do was stay home breathing supplemental oxygen. At that point I knew I wanted a portable source for supplement oxygen. I had already asked a doctor, a DME and respiratory therapist about liquid oxygen and they all told me, "It is not available!" I needed to look for a POC.

In my experience it is next to impossible to get a straight answer about POCs from the manufactures, companies that sell them, the medical community, respiratory therapists, DMEs

or any other place. Inogen and the company I bought my POC from both convinced me an Inogen One G3 would meet my needs with its 5 settings. I was shipped an Inogen One G3 with 4 settings with an oxygen output of 840 ml per minute instead of the 1050 ml per minute I was promised. They didn't care about my needs! They simply wanted to sell me a POC. I needed to get a new DME when I officially moved to North Carolina and don't think much has changed in the last 10 years when getting a POC.

I took a PFT in January, 2015, and was told I had severe COPD (emphysema) and would qualify for Social Security Disability Income. I sent in an application the first of May, 2015, and was accepted the first of August, 2015. My last day of work at the grocery store was July 20, 2015, about two weeks before I was accepted by SSDI.

If I had been able to get liquid oxygen in 2014 I believe I would still be working Today!

From 2014 to the first of 2018 I played some tennis, rode an electric bike and I stayed as active as possible but was in a downward spiral so common with COPD. In 2018 I took a second PFT that proves it. Saying it was a real struggle to stay active is an understatement.

I tried an Eclipse 5 for the first three months of 2018. It showed me what more oxygen could do but it was too heavy. I then got the Respironics UltraFill System with 3,000 psi self-fill tanks which would allow me to play a couple of hours of tennis at 8 LPM and then go grocery shopping. The downside was that I would spend the next 16 to 20 hours filling my tanks. The 3,000 psi tanks allowed me to spend more time on my electric bike and being out and about. Staying active was still a struggle but easier than it had been for three years with only my Inogen G3 for ambulatory oxygen.

In August 2018 I had another PFT and my FEV1 had dropped from 47% of expected to 30% of expected. The previous three years had been a struggle for my body as well as to stay active, but know I started reconditioning while using the UltraFill supplemental oxygen system. By this time, I didn't care what my prescription for oxygen said and used 3 LPM at rest and up to 10 LPM when playing tennis. I used 7 or 8 LPM most of the time while playing tennis. At 10 LPM my tanks did not last long.

In September 2018 I started a 3-month respiratory therapy program at a local hospital. I learned a few things and the respiratory therapists answered questions with good information. I was able to experiment some with oxygen. On a treadmill I set the speed so my blood oxygen level was steady at 88% with 8 LPM, then had a therapist turn on a big fan pointed straight at me. When it was turned on my $Sp0_2$ immediately began to drop. The oxygen that normally pooled around my nose was being blown away. I often wear a K95 mask with a breather and a hole cut in the mask in front of my mouth when playing pickleball or outside in the wind. It makes a difference. I had the opportunity to use the LIFE 2000 Ventilator for part of one therapy session. I wanted one but neither Medicare or Medicaid would get it for me.

During covid it was hard to stay active. My electric bike and good bike trails in Lewiston, Idaho, and Clarkston, Washington, were a lifesaver. I could remain active, meet and talk to people with good space between us. That was when I began wearing K95 masks. I didn't start cutting a hole in them until I started playing pickleball in late spring of 2022.

In 2020 I found a small LOX Companion reservoir and two 1000T portable units on eBay. They were $3,500 less than buying new. I took a chance and bought them. They worked but for another two years my use was limited by the cost of LOX. In 2021 I bought another mid-sized reservoir on eBay and headed for North Carolina.

I was in North Carolina for six months before I found a business to fill my LOX reservoirs. It was a reliable source for liquid oxygen at a price I could afford and it made a huge difference in my life. In 2022 I bought two large reservoirs from a DME that didn't need them anymore for $100 each. They threw in a Companion 550 portable unit for free.

The first three months with a reliable and affordable source of LOX proved it was what I needed. For over six years I knew medical liquid oxygen was available in the communities I lived in but I couldn't get it. So FRUSTRATING!

I have a Honda Element car and can strap either of my smaller reservoirs in and use it to fill a portable unit. It makes camping trips possible as no electricity is needed with LOX. Life is better.

Over the last two years my physical conditioning has continued to improve even though I am getting older. Two years ago, if I went out and worked on digging a ditch for an hour, I would be tired and sleep good that night. Now I am able to spend well over three hours at a time out working. I still get tired and sleep well but my muscles don't get anywhere near as sore.

Congress began taking steps to lower what they paid for supplemental oxygen in the late 1990s and in 2006 started the mess (system) we have today. Medicare lowered what it would pay for liquid oxygen and the use of liquid oxygen dropped drastically. POCs kept many of us alive, but on a downward spiral to poor health, hospitalizations and big bills for Medicare to pay.

From my point of view as a person living with COPD who has had to be creative to stay alive and with many experiences, we not only need Oxygen Reform, but also a reset for the treatment for COPD and other respiratory diseases to take advantage of Oxygen Reform. Twenty-five years ago LOX was keeping us active and it needs to be brought back! And we need to learn how to take advantage of it!

"*When compared with small oxygen cylinders, portable liquid oxygen showed benefit to patients by improving their compliance with the treatment and the time spent out of home. It also improved their quality of life and was preferred by the patients."*

Chronic Respiratory Disease 2005; *https://journals.sagepub.com/doi/pdf/10.1191/1479972305cd088ed*

Oxygen prescriptions need to be based on oximeter readings while at rest and active.

Oxygen levels drop when showering and many with COPD don't know it is okay to use more oxygen. It is sad when someone struggles to shower when all they need to do is use a higher LPM. A few words from a doctor or respiratory therapist could make our lives much easier.

I use oximeter readings to keep my blood oxygen in a range allowing me to stay active and healthy.

- While at rest I want my $Sp0_2$ to stay in the low to mid 90s.
- With minimal movement, like getting a cup of coffee or walking to the bedroom, I want my $Sp0_2$ to stay in high 80s to mid 90s, for me this usually requires 3 to 4 LPM.
- With light exertion, like doing dishes and other household chores, I want my $Sp0_2$ to stay in the mid 80s to mid 90s, for me this usually requires 4 to 5 LPM.
- For activities like shopping or visiting a museum I want my $Sp0_2$ to stay in the low 80s to mid 90s, for me this usually requires 5 to 8 LPM.
- Pickleball and other higher exertion activities I want my $Sp0_2$ to stay in the low 80s to mid 90s, for me this usually requires 8 to 15 LPM, depending on the exertion level.

When active it does not bother me to drop to the lower blood oxygen levels but I expect them to start rising when I slow down or stop moving. I also watch my heartrate on the oximeter.

Playing a friendly game of pickleball I may use 8-10 LPM, and with players that challenge my ability in a competitive game I may use 15 LPM.

Oxygen prescriptions should be based on actual needs to remain active

I am sure there are many like me who would be healthier and have a higher quality of life with more education on maintaining healthy blood oxygen levels and access to the oxygen we need.

Education on realistic blood oxygen levels is needed.

A great many people with COPD believe they need to keep their blood oxygen levels ($Sp0_2$) between 88% and 92%. For a few that may be true, but should not be a blanket statement! The Myths about blood oxygen levels are a real sore spot for me because I have spent thousands (tens of thousands??) of hours with a $Sp0_2$ in the 70s and 80s. I know that wasn't good for me but believe sitting on the couch would have been far worse.

For justification of keeping blood oxygen levels between 88% and 92% I often hear, "brain cells start dying below a $Sp0_2$ of 88%." When I ask to see the supporting research on brain cells dying at a $Sp0_2$ below 88% the reply is usually along the lines of, **"WHY RISK IT?"**

If brain cells start dying when blood oxygen levels drop below 88% I can't understand why an Australian soccer team was allowed to spend seven days in La Paz, Bolivia (12,000 ft. elevation) with blood oxygen levels below 85% for 3 days and below 88% for 7 days. From the study, *"Changes in blood gas transport of altitude native soccer players near sea-level and sea-level native soccer players at altitude"* @https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3903154/

> "COPD and conditions associated with chronic respiratory failure
>
> In the ***treatment of exacerbations*** of chronic obstructive pulmonary disease (COPD), oxygen should be titrated to achieve a target oxygen saturation range of 88–92%. This results in a greater than twofold reduction in mortality, compared with the routine administration of high-concentration oxygen therapy. - From: Acute use of oxygen therapy " https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4653960/#:~:text=COPD%20and%20conditions%20associated%20with,oxygen%20therapy%20(see%20Box).

"With COPD keep your $Sp0_2$ between 88 to 92%," is a Myth

> ***"Oxygen therapy and inpatient mortality in COPD exacerbation***
> ***One-year mortality***
>
> *Mortality at 1-year post discharge in those treated with supplemental oxygen In patients who received supplemental oxygen on admission and survived to discharge, the risk of death at 1year was 28%. The 12-month mortality rates, excluding inpatient deaths, were: 87% or less=32%, 88%–92%=31%, 93%–96%=23%and 97%–100%=28% (including inpatient deaths these figures were 43%, 37%, 32% and 40%) (figure 3). The 93%–96%group had a significantly lower risk of death than the 88%–92%group,"*
>
> https://emj.bmj.com/content/emermed/38/3/170.full.pdf

I would like to keep my at rest blood oxygen level in the group that had a significantly lower risk of death (93%--96%) but I go lower than 93% at times.

Blood oxygen levels vary in healthy people and those with respiratory illnesses and to a degree our bodies adapt. For me a $Sp0_2$ below 88% does not mean I need a quick trip to an emergency room, but for my daughter it may be a good idea unless she is in La Paz, Bolivia. If my blood oxygen level drops below 80% while I am playing pickleball I don't need to go to the hospital as long as it rises quickly (within a minute or two) when I stop to catch my breath. I have never had to stop a game of tennis or pickleball because of a low blood oxygen reading because it always rises quickly as I catch my breath. Not often, but I have stopped a game a time or two to let my heart rate drop. Times to recover will differ.

To get a prescription for oxygen my $Sp0_2$ needed to drop below 88% yet I am not supposed to let my $Sp0_2$ drop below 88%. That makes no sense at all.

In a respiratory therapy program I was in, they preferred we stay above a $Sp0_2$ of 88% but grudgingly allowed us to go into the mid-eighties. The pulmonologist that oversaw the therapy program thought the benefit of added exertion was beneficial. I have had several doctors who felt the same way. From my experiences I know dropping below kept me healthy by allowing me to remain active.

POC settings need changed so they are equivalent to LPM.

POCs are great if you are getting the oxygen needed to stay active and healthy but they will not meet the needs of many. If you need over 3.5 LPM a POC with 6 settings is not going to meet your needs. Luggable POCs provide more oxygen, and settings are closer LPM but are considerably heavier.

A Pharmaceutical company would not be allowed to label one of their manufactured drugs in a way that obscures the medical dosage per pill.

Currently POC manufacturers are purposefully obscuring the dosage of oxygen provided per setting on the portable oxygen concentrators they manufacture.

With a POC, liquid oxygen, treadmill and oximeter I can prove POC settings are not equivalent to LPM. I can prove it mathematically as well.

Making POC settings equivalent to LPM will make it easier for people get the oxygen they need and reduce confusion surrounding portable oxygen concentrators for users, the general public, and for many in the medical community.

Money is now being spent on POCs that don't get the patient the oxygen they need which contributes to a downward spiral of deconditioning leading to suffering, hospitalizations and an early death.

Offer more respiratory therapy to:

I believe respiratory therapists are needed to ensure that patients are getting the supplemental oxygen necessary to help them live full lives outside the home. If I would have had a respiratory therapist with realistic knowledge to turn to for support and education I would have struggled less and stayed healthier.

Help us understand realistic blood oxygen levels for ourselves.

This would have been a great help to me. We are the only ones to live with our illness every day! Group activities would be a good way.

Oximeters are import to ensure we are getting the oxygen we need.

An oximeter is the only way to know if you're getting the oxygen you need for all activities.

Help with exercise programs, staying active and reconditioning.

Respiratory therapy will need to improve and expand its programs to help us take advantage of Oxygen Reform and receive the funding to get it done.

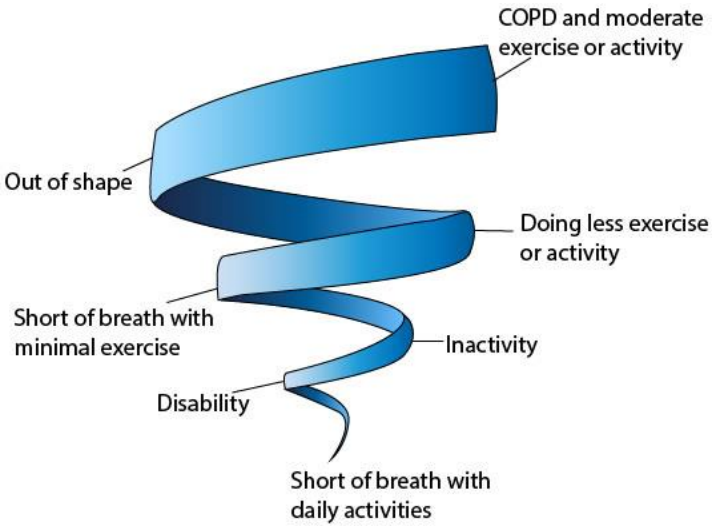
Help us see the benefits of staying active.

The benefits may come slowly over time. Encouragement and education will be needed.

Oxygen reform is necessary and so is increased respiratory therapy

When Congress took the money away from liquid oxygen but kept funding for oxygen concentrators the medical communities and other businesses followed the money. POC manufacturers became, and still are a quickly growing industry. POCs are unable to provide many with respiratory illnesses the ambulatory oxygen they need to stay active which leads to less activity, a downward spiral and expensive medical care with frequent hospitalizations.

Downward Spiral of Deconditioning



My Lungs My Life

https://www.mylungsmylife.org/topics/group-1/what-makes-you-breathless/what-happens-when-you-are-not-so-active/

Getting the needed ambulatory oxygen can slow and sometimes even reverse the downward spiral lowering hospitalizations and other expensive medical care. I know what liquid oxygen has done for me and am sure it would help prevent hospitalizations in others as well. Liquid oxygen of getting the needed oxygen may also help keep those with previous hospitalizations from being hospitalized repeatedly.

Oxygen Reform and a Reset for the Treatment of COPD will reduce medical costs and patient suffering While Offering a Higher Quality of Life.

A win for the Medicare budget and those with respiratory illnesses!

Improving physical activity in COPD: towards a new paradigm

“Conclusion Physical activity is reduced in patients with COPD. This is associated with a higher risk of hospital admission and an increased risk of mortality, and also places patients with COPD at risk of developing comorbidities. Importantly, physical activity is a potentially modifiable risk factor. It follows that improving physical activity allows the patients to take a productive part in daily life and may also confer long term health benefits. The assessment of physical activity and the interpretation of results is an area that has garnered considerable interest. Both subjective and objective instruments for evaluating physical activity have advantages and disadvantages. Patient compliance, appropriate assessment period, and accurate interpretation of data are essential for a precise estimation of daily physical activity. There is limited and inconsistent evidence on the effectiveness of interventions (PR and bronchodilators) for improving physical activity. These inconsistencies may be partly due to patient choice and whether they choose to maintain the life style options explained during their pulmonary rehabilitation. A combination of individualized PR programs and pharmacotherapy in conjunction with behavioral modification may be the way forward to help patients adopt a more active lifestyle.”

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4176094/pdf/1465-9921-14-115.pdf

The ability of physical activity in reducing mortality risks and cardiovascular loading and in extending life expectancy in patients with COPD

“Abstract

For chronic obstructive pulmonary disease (COPD), the role of physical activity in reducing COPD mortality and heart loading and in extending life expectancy remains unclear. Participants in comprehensive medical screening were recruited with spirometry on everyone. We analyzed physical activity volume calculated from intensity, duration and frequency of self-reported exercise history. Deaths were identified from the National Death File. The impacts of physical activity on mortality, heart rate and life expectancy were analyzed. Among the cohort of 483,603 adults, 32,535 had spirometry-determined COPD, indicating an adjusted national prevalence of 11.4% (male) and 9.8% (female). On the average, COPD increased all-cause mortality with a hazard ratio of 1.44 and loss of 6.0 years in life expectancy. Almost two thirds (65%) of the causes of deaths were extra-pulmonary, such as cardiovascular disease, diabetes, cancer and kidney diseases. In addition, COPD was associated with increases in heart rate proportionate to its severity, which led to higher mortality. Participants with COPD who were fully active physically could reduce mortality and have improved heart rates as compared with those without physical activity. In addition, their life expectancy could be extended close to those of the no COPD but inactive cohort. Fully active physical

activity can help patients with COPD overcome most of the mortality risks, decrease heart rate, and achieve a life expectancy close to that of patients without COPD. The effectiveness of physical activity on COPD is facilitated by its systemic nature beyond lung disease.

In conclusion, COPD is a prevalent disease in Asian countries and impacts survival in all stages. Around 65% of deaths related to COPD are attributed to extra-pulmonary disease and the increased heart rate caused by COPD, indicating systemic involvement. The abbreviation of life expectancy of around 6 years by COPD can be mostly reversed by fully active exercise, especially in female patients. Prescribing regular exercise to patients with COPD is quite important and needs to be incorporated into the care bundle."

https://pubmed.ncbi.nlm.nih.gov/34737308/#:~:text=Fully%20active%20physical%20activity%20can,systemic%20nature%20beyond%20lung%20disease

Activity Promotion: A Paradigm Shift for Chronic Obstructive Pulmonary Disease Therapeutics

"Many patients with chronic obstructive pulmonary disease (COPD) lead unsatisfying, sedentary existences, worn down by years of dyspnea and exacerbations. A downward spiral links progressive inactivity to accelerating disability and premature mortality. Indeed, cross-sectional COPD studies have demonstrated that inactivity isa potent predictor of early death. It should be considered a high priority for future COPD therapies to ameliorate inactivity.

. . .

It is notable that the studies of interventions designed to increase activity levels in COPD have not featured long-term follow up. Durability of activity improvement resulting from physical activity interventions has been hard to achieve in older adults (38). Especially in the case of pulmonary rehabilitation, there is reason to question whether short-term increases inactivity levels will persist in most participants unless the pro-gram features a formal long-term component

If activity promotion is to be a major goal for patients with COPD, a major rethinking of our therapeutic strategies will be required. Pulmonary rehabilitation seems like a good place to start: behavior modification has always been at least an informal part of such programs. Activity promotion might be seen as a coprimary goal along with exercise capacity enhancement. Scientifically based strategies for activity promotion might be incorporated, much as they are for exercise capacity enhancement. It seems entirely plausible that the exercise tolerance enhancing potential of bronchodilators or of ambulatory oxygen therapy will not translate into increased activity in everyday life in the majority of patients with COPD. In particular, it might be considered that, if a goal of ambulatory long-term oxygen therapy is to promote activity, it might be considered worth while only if delivered in conjunction with an activity enhancement intervention. Whether pulmonary rehabilitation programs could be adapted to this purpose requires investigation."

https://www.atsjournals.org/doi/epdf/10.1513/pats.201101-001RM?role=tab

Optimizing Home Oxygen Therapy

“Abstract

More than 1.5 million adults in the United States use supplemental oxygen for a variety of respiratory disorders to improve their quality of life and prolong survival. This document describes recommendations from a multidisciplinary workshop convened at the ATS International Conference in 2017 with the goal of optimizing home oxygen therapy for adults. Ideal supplemental oxygen therapy is patient-specific, provided by a qualified clinician, includes an individualized prescription and therapeutic education program, and offers oxygen systems that are safe, promote mobility, and treat hypoxemia. Recently, patients and clinicians report a growing number of problems with home oxygen in the United States. Oxygen users experience significant functional, mechanical, and financial problems and a lack of education related to their oxygen equipment—problems that impact their quality of life. Health care providers report a lack of readily accessible resources needed to prescribe oxygen systems correctly and efficiently. Patients with certain lung diseases are affected more than others because of physically unmanageable or inadequate portable systems. Analysis is needed to quantify the unintended impact that the Centers for Medicare and Medicaid Services Competitive Bidding Program has had on patients receiving supplemental oxygen from durable medical equipment providers. Studies using effectiveness and implementation research designs are needed to develop and evaluate new models for patient education, identify effective ways for stakeholders to interface, determine the economic benefit of having respiratory therapists perform in-home education and follow-up testing, and collaborate with technology companies to improve portable oxygen devices. Generation of additional evidence of the benefit of supplemental oxygen across the spectrum of advanced lung diseases and the development of clinical practice guidelines should both be prioritized.”

https://www.thoracic.org/statements/resources/copd/optimizing-home-oxygen-therapy.pdf

The above Report was put out 2018

It is now 2024 and nothing has changed