
Improving Quality of Life Through Better Sleep Health Management

Sleep health is taken lightly or often ignored by both the patient and the healthcare system. We know that sleep ailments, if left untreated, result in serious comorbidities. Besides significantly straining the healthcare system, this has a strong human angle as well. Somnoware is developing disruptive technology to enable physicians and integrated health systems more effectively tackle this situation.



Over 20 million people in the U.S. are estimated to suffer from moderate to severe obstructive sleep apnea (OSA). A seminal study by Harvard Medical School¹ estimates the direct and indirect healthcare costs of OSA to be around \$90 billion a year. It also has a direct impact on the patient's quality of life -- with comorbidities including congestive heart failure, stroke, sexual dysfunction, and type 2 diabetes. With obesity rate in the American population expected to rise to 50% by 2030², the incidence of OSA is likely to continue to rise.

Direct and indirect healthcare costs of obstructive sleep apnea (OSA) in the U.S. are \$90 billion a year.

¹ "The Price of Fatigue: The surprising economic costs of unmanaged sleep apnea", Harvard Medical School and McKinsey & Company.

² "Obesity and Severe Obesity Forecasts Through 2030", Centers of Disease Control and Prevention.

Challenges in Diagnosis and Management of Sleep Apnea

Only 20% of sleep apnea cases are currently diagnosed. While diagnosis numbers are likely to improve a bit due to home-based and lower cost sleep testing, more disruptive innovations are needed to create a significant dent in this number.

Among those diagnosed, therapy compliance continues to be a major problem. Studies indicate that 60% of diagnosed patients completely stop using positive air pressure (PAP) systems within the first year of prescription. Even among people who continue use, masks are often not changed at the desired 3-month interval and supplies are not restocked. As a result, there is a significant drop in the efficacy of therapy over time.

Somnoware is Driving Disruptive Innovation

At Somnoware, we are changing this situation through disruptive technology innovation. We have developed workflow automation and predictive machine learning technologies that empower sleep physicians and PAP manufacturers to enable better management of sleep apnea.

“Somnoware reduces time to interp by 80% and therapy adherence by 30%.”

Sleep Physicians

We are arming sleep physicians with data and insights that enable them to accelerate the diagnosis of sleep apnea and improve therapy compliance. Somnoware provides physicians a snapshot of diagnosis reports, PSG charts, and therapy adherence that can be reviewed with patients during face-to-face visits. The platform provides rich data and predictive insights that brings patients closer to physicians during long-term therapy. The result is a solution that reduces time to interp by 80% and increases therapy adherence by 30%.



PAP masks are often not changed at the desired 3-month interval.



PAP Manufacturers

The Somnoware platform seamlessly integrates with durable medical equipment (DME) providers, enabling physicians submit one-click orders of PAP equipment. It also facilitates easier ordering of replacement masks and other supplies. This results in greater therapy compliance and ensures that patients are continually using their PAP equipment in the most optimal manner.

Providing Masks on Shorter Intervals is not Overutilization

As a result of using Somnoware, insurance companies and healthcare systems are likely to spend significantly more money on the diagnosis and management of sleep apnea. It will lead to more frequent replacement of masks and other PAP supplies. There is some concern that this may lead to overutilization. However, we believe that this

\$1 spent on diagnosis and treatment of sleep apnea saves over \$15 in public health and safety costs.

is a small price to pay for achieving a drastic reduction in the cost of sleep apnea to the healthcare system.

A single dollar spent in diagnosing and treating sleep apnea saves over fifteen dollars in public health and safety costs. It also significantly improves the quality of life for Americans and improves workforce productivity.

Somnoware is working hard to enable this change by developing disruptive technologies. But we know that real change can only be achieved through a strong partnership between physicians, equipment manufacturers, insurance companies, healthcare systems, and technology companies. Let us all join together to get rid of this scourge that is impacting the quality of life of our citizens in such a major way!

“More frequent replacement of PAP supplies is a small price to pay for managing sleep apnea.”

For more information, please visit: www.somnoware.com.

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