

Efficacy of virtual-only visits for OSA in longitudinal CPAP compliance

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INTRODUCTION

Obstructive Sleep Apnea (OSA) affects 80 millions adults in the US. There is only 1 board-certified sleep physician for every 59,000 Americans. Therefore, timely access to sleep care including diagnosis and treatment remains a challenge leading to significant co-morbidities and economic burden. Our study explores virtual only care as the pathway for OSA care. We hypothesize that virtual care is effective and non-inferior to managing patients with OSA and could be used as a reliable care model for longitudinal care.

METHODS

A retrospective chart review of adult patients with OSA for whom Continuous Positive Airway Pressure (CPAP) therapy was prescribed between March 2022 to September 2024 was done. Data collected included baseline demographics, results of home sleep apnea testing/polysomnogram, Epworth Sleepiness Score, PAP therapy compliance and residual Apnea Hypopnea Index (AHI). Patients were seen only virtually and by the same board-certified sleep physician.

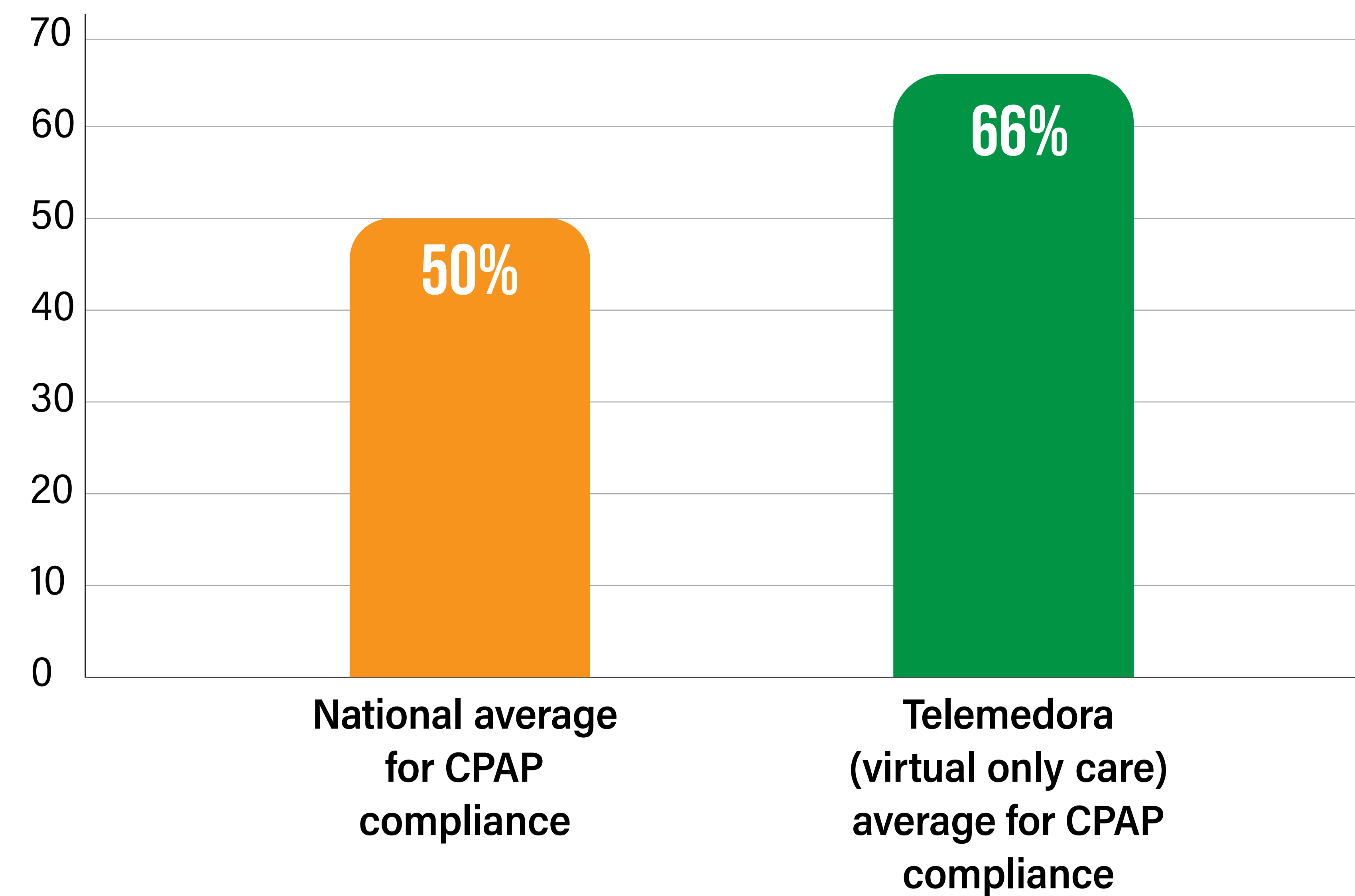
Inclusion criteria:

- a. Adults (≥ 18 years) virtually seen for suspected OSA or those for management of previously diagnosed OSA.
- b. Patients who were treated with CPAP/Bi-Level PAP therapy.
- c. Patients who had been seen for at least 12 months and had 12-month CPAP compliance data available.

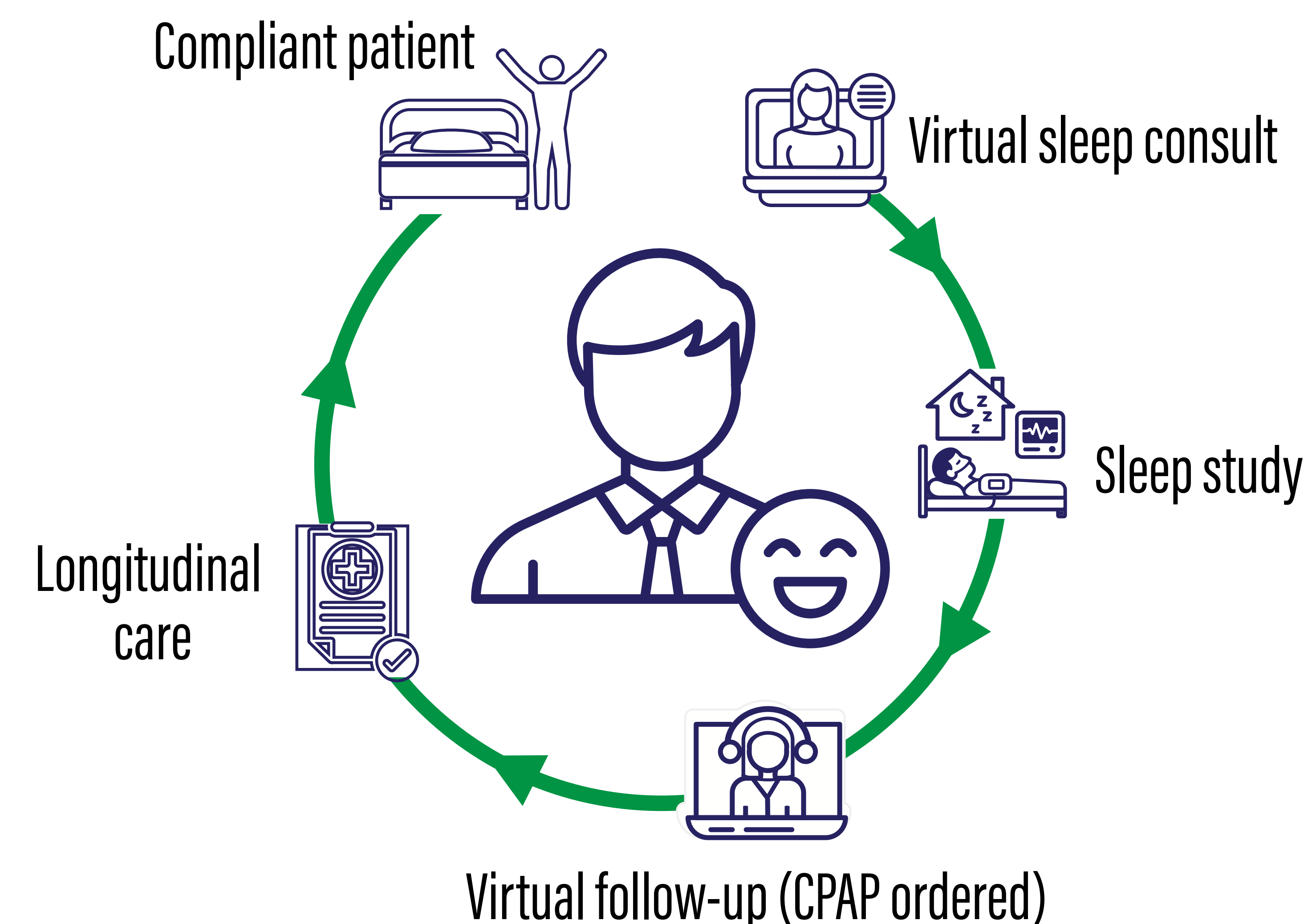
Exclusion criteria:

We excluded patients who were prescribed CPAP but did not return for follow-up at 1 year, those who had change of modality from CPAP to Bi-Level PAP.

Comparison of CPAP compliance at 12 months



Teledora's Workflow



RESULTS

Of a total of 21 patients, 12 (57%) were males and 9 (43%) were females with a median age of 40.5 years and median BMI of 30.55. Patients were diagnosed with mild to severe OSA. The percentage of patients who met CMS CPAP compliance criteria, i.e. >4 hours of CPAP use at least 70% of nights at 12 months was approximately 66%. All patients had residual AHI of less than 5 except 1. These results are at par or somewhat better than what has been reported nationally for in-person care at 1 year. Some studies reported 1 year CPAP compliance at 50-55%. However, our study showed 12-month CPAP compliance of 66%.

CONCLUSION

With shortage of board-certified sleep physicians, virtual care delivery has the potential to be the sole form of care delivery for OSA as treatment option and for longitudinal care.

SUPPORT

None.

REFERENCES

1. Wickwire E, et. al. Lower socioeconomic status and co-morbid conditions are associated with reduced CPAP adherence among older adult medicare beneficiaries with obstructive sleep apnea, Sleep Dec.2020, Volume 43, Issue 12.
2. Continuous Positive Airway Pressure (CPAP) Therapy for Obstructive Sleep Apnea (OSA). CMS.gov