

ComfortCare Closing the Diagnostic Gap in Home Sleep Apnea Testing

Background

80 million
US adults have obstructive sleep apnea (OSA)¹

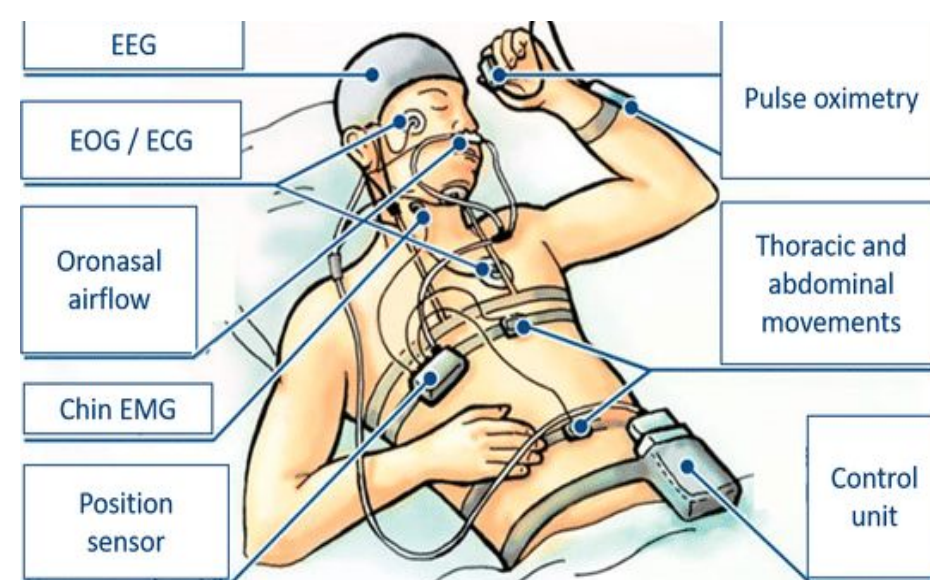


Missed diagnoses increase the risk of^{7,8,9}:

Cardiovascular Disease
Cognitive Decline
Metabolic Function



Gold Standard
Polysomnograph (PSG)



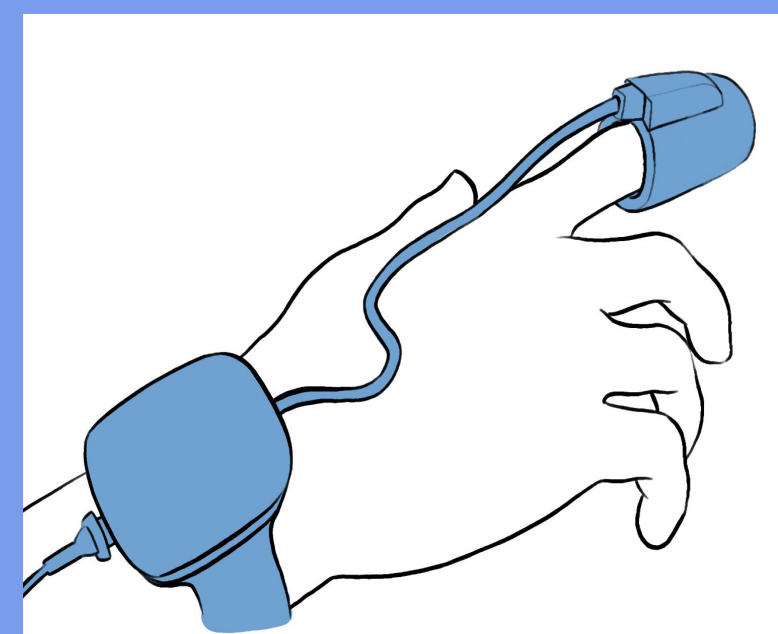
Expensive

Limited Availability

Uncomfortable

Insurance Prefers

Home Sleep Apnea Test (HSAT)



Heart Rate/
SpO2

Wrist Motion

Arterial Tone

Limited Physiological Signals

Limitations of HSATs

17% false negative rate with HSAT³

25% misclassified severity with HSAT⁴

When an HSAT doesn't successfully diagnose a patient⁵...

Only 20% follow up with a PSG and get diagnosed⁶

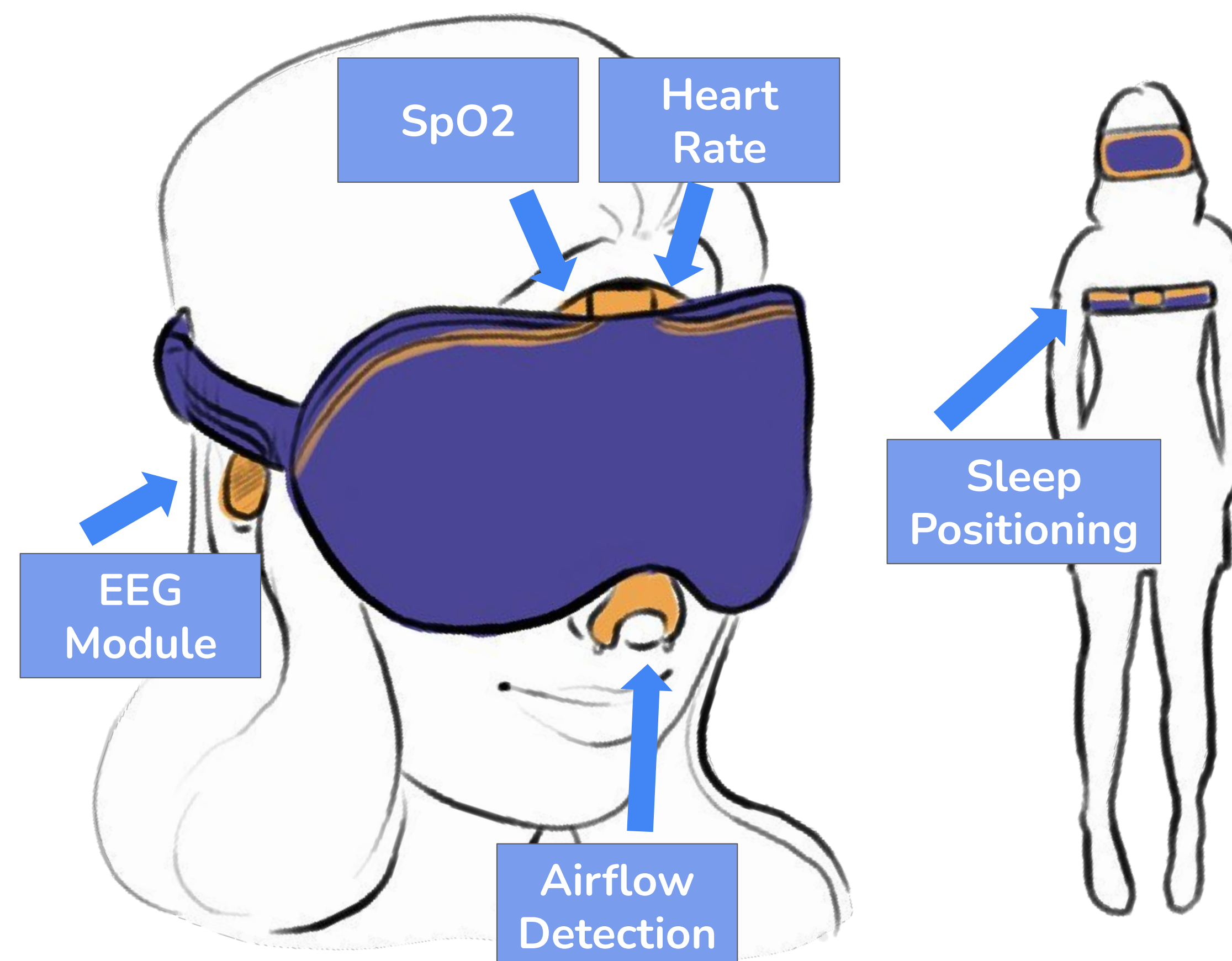
Opportunity

\$150 Billion
Cost of untreated obstructive sleep apnea (OSA) in the US¹⁰

\$19,500/year
Extra healthcare costs for patients with untreated OSA¹¹

Sleep clinicians need an **at-home** solution that enables **accurate sleep staging**, reducing **misclassification** and **improving detection** of REM-dependent and non-desaturating apnea.

Our Solution: ComfortCare



ComfortCare converts missed diagnoses into treated patients, reducing healthcare costs and enabling earlier, more effective intervention.

Device Features

EEG-enabled sleep staging
Enables true TST-based AHI calculation

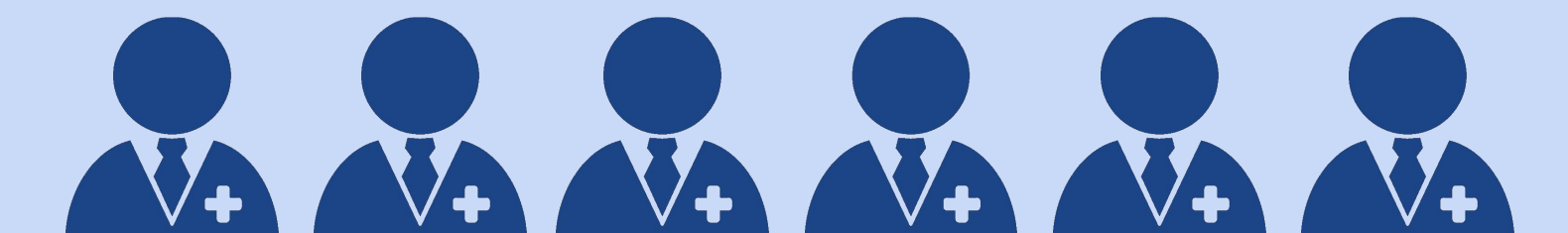
Multimodal sensing via:
Airflow (nasal cannula)
SpO₂ + pulse (oximetry)
Sleep positioning (accelerometer)

Comfort-first architecture
Designed for natural sleep behavior

Clinically relevant outputs
Sleep-stage correlated respiratory events
Improved detection of mild + REM apnea

Progress

Interviewed 6 JH Sleep Clinicians



HSAT inconclusive in 5 - 10% of patients

Validation on necessity of sensor stack

Creation of Alpha Prototype

Sleep Staging Validation

Diagnostic Validation

Clinical Studies/Pilots

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