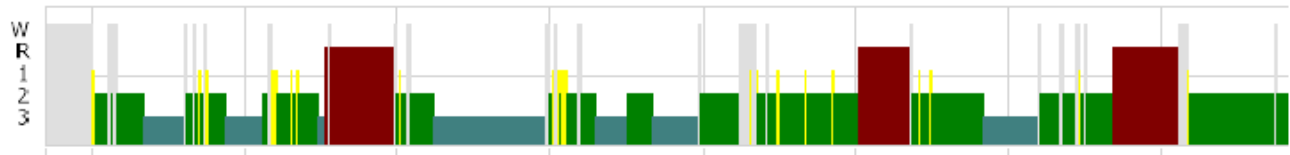




EXPLANATION OF HOME SLEEP REPORT - NOX

The performance of this test by Peninsula Sleep Clinic has been accredited by NATA and the Australasian Sleep Association.

The Sleep Hypnogram:



This graph displays the Sleep Stages of the patient throughout the night. The bars are colour coded as follows:

Colour	Sleep Stage	Description	Normal Values Adult
Wake	Wake	Awake	Up to 15% study time
Yellow	NREM 1	Transitional sleep	≤5% of total sleep time
Green	NREM 2	Light sleep	45-50% of total sleep time
Blue	NREM 3	Deep sleep, hormone release	20-25% of total sleep time
Red	REM	Dreaming, muscle atonia	15-25% of total sleep time

Arousal Graph:



Each line on this graph indicates an arousal (disturbance of sleep) throughout the sleep period. Arousals can be due to sleep disordered breathing, periodic limb movements (PLMs) or spontaneous (origin unknown). In the typical patient, arousals due to sleep disordered breathing tend to be more common when the patient is in REM sleep and lying in the supine position.

Body Position Graph:

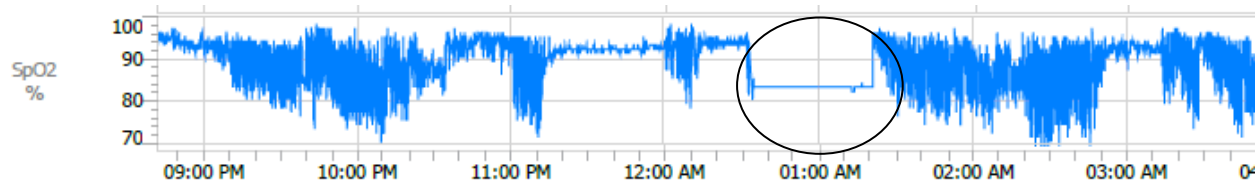


This graph displays the most common body position in each epoch. Body position is indicated by the letter on the left-hand side.

- Up: Upright (out of bed)
L: Left side
S: Supine / Back position (Blue colour)
R: Right side
P: Prone / Front position



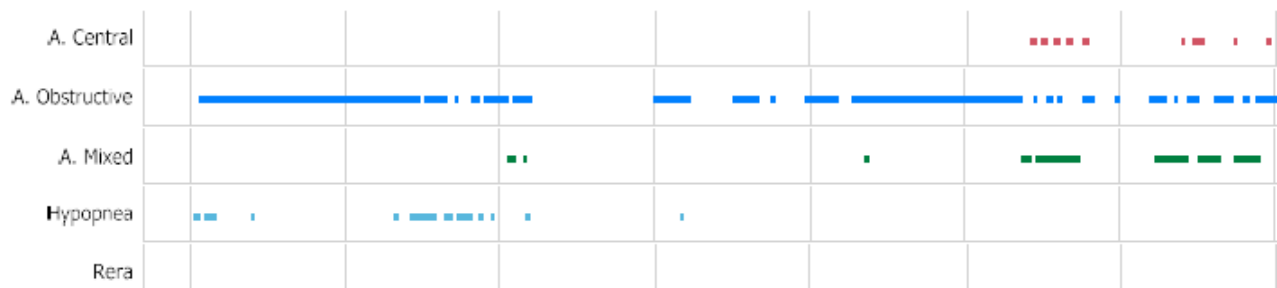
Oxygen Saturation (SpO₂) Minimum/Maximum Graph:



This section displays the minimum and maximum oxygen saturation values for the entire recording period. Note that the scale extends from 70 - 100% oxygen saturation.

Due to the study being unattended artefact (as seen in black circle) is more common and may require a restudy.

Respiratory Event Graph:



This graph displays all the respiratory events marked by the scorer in the study. The abbreviations used in this graph indicate the following:

- A. Central** **Central Apnoea** - a cessation of breathing due to a centrally mediated (CNS) phenomenon causing a complete lack of effort to breathe. Associated with oxygen desaturation.
- A. Obstructive** **Obstructive Apnoea** - a cessation of breathing due to upper airway obstruction. Associated with oxygen desaturation or arousal from sleep.
- A. Mixed** **Mixed Apnoea** - a cessation of breathing due to an event beginning as a central phenomenon, before progressing to an obstructive event.
- Hypopnoea** **Hypopnoea** – partial obstruction of the airway causing a decrease in the patient's tidal volume associated with oxygen saturation and/or arousal from sleep.
- RERA** **Respiratory Effort Related Arousal** - An arousal due to a sequence of breaths with increased respiratory effort and/or minor obstruction of the airway observed, leading to an arousal. These are often referred to as sub-criterion events (do not qualify as an apnoea or hypopnoea, but can fragment the sleep without oxygen desaturation).



Overview Statistics:

AHI: 88.8 ODI: 83.4 Snore %: 26.1

AHI: Apnoea Hypopnoea Index indicates number of events per hour:

<5/hr: Normal

5-10/hr: Mild Obstructive Sleep Apnoea (OSA)

20-30/hr: Moderate OSA

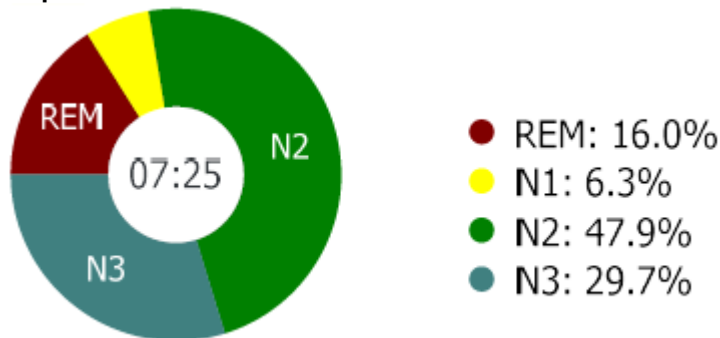
>30/hr: Severe OSA (requires CPAP)

>50/hr: Very severe (requires immediate consultation Sleep Physician and CPAP)

ODI: Oxygen Desaturation Index indicates number of events per hour

Snore %: Indicates % of sleep time when patient was snoring

Sleep Parameters:



REM sleep % of Total Sleep Time = Normal = 15-25%

N1% of TST: Normal = <5%

N2% of TST: Normal = 45-50%

N3% of TST: Normal = 15-25%

Arousals:

Indicates brief episodes of interruption to sleep (not an awakening). Normal ≤ 10 /hr.

Oxygen Saturation:

Gives an overview of overnight oxygenation including lowest SpO2 observed.

Signal Quality and Technical Comments:

Gives an indication of signal quality and scoring issues that may impair results.

Sleep Physician Report:

Details severity of respiratory, arousals, oxygen desaturation events. Provides an indication of sleep quality (Sleep Efficiency >85% normal) and sleep architecture (the position of the sleep stages). Recommends treatment and/or clinical review pathway.

NB: Home Sleep test does not monitor for positional sleep apnoea (as position signal is unverified), periodic limb movement disorders, REM behaviour disorder and sleep hypoventilation disorders.



Terminology:

AHI	Apnoea Hypopnoea Index – the number of apnoeas and hypopnoeas occurring per hour of sleep (Normal < 5/hr).
RDI	Respiratory Disturbance Index – the number of apnoeas and hypopnoeas and sub-criteria flow limitation (Respiratory Effort Related Arousals (RERA's)) occurring per hour of sleep (Normal < 5/hr).
AI	Arousal Index – number of times per hour there has been a brief waking from sleep (3 – 15 seconds of wake) (Normal ≤ 10/hr).
M.A.D.	Mandibular Advancement Device (dental device).
Positional Device	A positional device is worn on the body and vibrates to move the patient off their back
REM Sleep	Dreaming sleep, rapid eye movement sleep. All postural muscles are paralysed.
StopBang	A pre-screening tool to identify moderate to severe sleep apnoea. A score of ≥3 must be met to qualify for a home sleep test under Medicare Guidelines. ¹
ESS	Epworth Sleepiness Scale – a subjective measurement of sleepiness developed at the Epworth Hospital, Victoria (Normal ≤10/24). A score of ≥8 must be met to qualify for a home sleep test under Medicare Guidelines. ²

1 Chung F, Abdullah HR, Liao P. STOP-Bang Questionnaire: A Practical Approach to Screen for Obstructive Sleep Apnea. Chest. 2016 Mar;149(3):631-8. doi: 10.1378/chest.15-0903. Epub 2016 Jan 12. PMID: 26378880.

2 Johns MW. A new method for measuring daytime sleepiness: the Epworth sleepiness scale. Sleep. 1991;14(6):540-5.