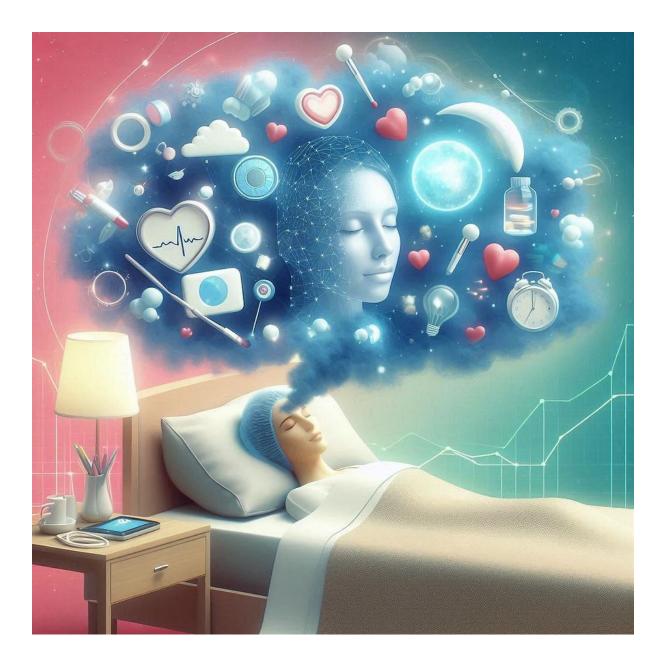
## 5. CPAP therapy and the potential benefits of delivering more personalised care with connected devices

This is the 5th and final series of blogs that explore the concept of Personalised Sleep Medicine and why it matters to patients and clinicians.



Sleep Medicine services throughout the UK have been severely impacted by significant events over the last 4 years, seeing ongoing shortages of devices in the midst of a global pandemic.

This has resulted in long waiting lists for diagnosis and treatment of this common condition. More personalised technology enabled sleep medicine choices are currently available for people living with sleep apnoea. Meeting the GIRFT 18-week referral to diagnosis and treatment standard for Sleep Apnoea is an ongoing challenge for sleep medicine services across the whole of the UK (1).



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As outlined in the previous series of blogs, the case for delivering a more personalised sleep medicine service is well made.

However, how can delivering a personalised approach to supporting people diagnosed with Sleep Apnoea even be achievable in this current landscape?

In blog one we have outlined the evolution of CPAP therapy devices from the early 1980's to the current day with modern CPAP device hardware and cloud-based software that supports remote patient monitoring and remote reviews where it is suitable to do

so. This is attractive to patients, healthcare providers, and clinical services as there is reduced travel for patients and clinicians, reduced loss of work productivity and reduced fossil fuel consumption and travel costs.

In blogs 2-4 we have outlined the significant multi-morbidity that Sleep apnoea is frequently associated with where patients often suffer from multiple chronic conditions simultaneously. Common comorbidities in individuals with sleep apnoea include hypertension, metabolic diseases such as obesity and diabetes, cerebrovascular and cardiovascular diseases. Studies indicate that a significant proportion of people with sleep apnoea are multimorbid at the time of diagnosis, with many presenting with four or more chronic conditions. This complex interplay of multiple health issues highlights the need for a comprehensive and personalised approach to treatment and management

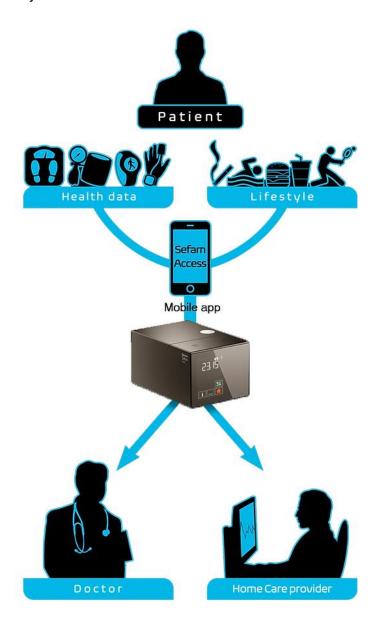
#### Sefam UK and Personalised Medicine

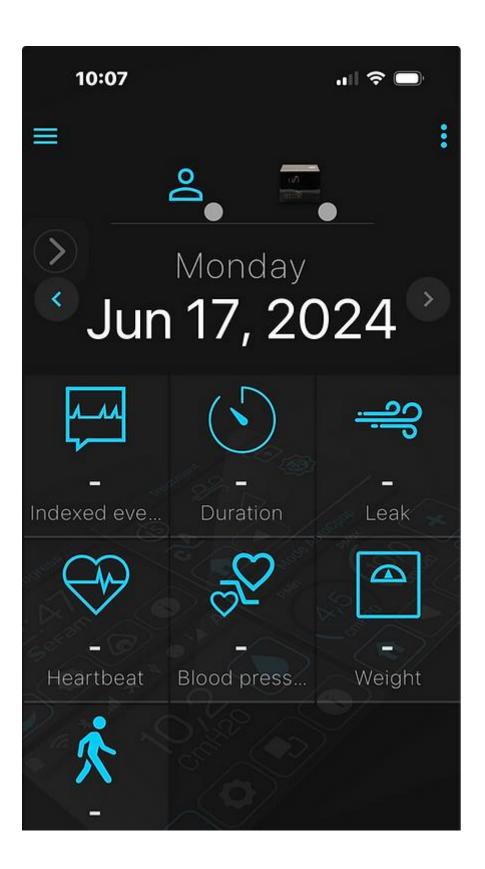
### What technologies help manage and support personalised medicine

The Sefam S.Box is an innovative CPAP/APAP/NIV device designed to help Sleep Medicine clinicians and support their patients to effectively manage their sleep apnoea. Here are some key features of the Sefam S Box hardware and software feature that can support a more personalised approach to people with Sleep apnoea:

Patient Support technologies

### The Sefam S Box Ecosystem





The Sefam Access Lite patient app allows people to monitor their therapy data,

including mask on time, mask leak rates, and residual breathing pauses know as known as the AHI.

# Sefam solutions to address Sleep Apnoea and its bidirectional relationship with Cardiovascular and Cerebrovascular disease



<u>Blue</u>tooth connected scales for monitoring weight loss



Bluetooth connected activity trackers and heart rate variability monitoring for measuring exercise activity



Bluetooth connected blood pressure monitoring capability and heart rate variability tracking

# Sefam solutions to address the relationship between Sleep Apnoea, Obesity and Type 2 diabetes



Blue tooth scales for tracking prescribed weight loss management programme

Sefam solutions for Sleep apnoea and tracking heart rate variability and exercise



Activity tracking in real time for measuring exercise activity and monitoring heart rate variability improvements over time.

Sefam solutions for measuring Integrated Oximetry and Polygraphy in Sefam Analyse



An optional integrated oximetry and PolyLink module for home polygraphy testing under therapy

With its connectivity, remote monitoring capabilities, and user-friendly design, the Sefam S Box can support CPAP users to take an active role in managing their sleep apnoea, leading to better treatment outcomes and improved quality of life.

The technology to support a personalised approach to Sleep Medicine is available and clinicians can work with their patients to co-develop a tailored approach to meet the health care need of individuals while encouraging them to take a more active role in the management of their condition.

While these approaches can help improve personalised sleep medicine services, it's important to note that systemic challenges like funding, staffing, and resource allocation in the NHS will continue to impact the ability to provide fully personalised care in a timely manner.

1. Respiratory-Medicine-Oct21L.pdf (gettingitrightfirsttime.co.uk)