ARTP SLEEP:

S-NEWS

Dreaming of a better night's sleep

In this issue:

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Send your articles to S-NEWS@artp.org.uk

Editor's Welcome

Welcome to another issue of S-NEWS!

In this issue we get to re-visit some of the fabulous sleep posters from the ARTP 2018 conference- another year for good quality research within the area of sleep. We also have our latest Sleep Person article from Sara Parsons, Consultant Clinical Scientist and Co-Chair of the ARTP Sleep Committee.

Furthermore I am excited to introduce you to a new article, which will hopefully become a standard part of S-NEWS: Research in Sleep, written by Gavin Comber. This section will look specifically at changes in research over the past months- an opportunity to stay in sync with the ever changing world of research.

As usual please get in touch if you have anything you would like including in our next issue of S-NEWS. I hope you enjoy this issue!

Best wishes,

Alison

S-NEWS@artp.org.uk

Dates for your diary:

- 19 -20th June 2018, ARTP Advanced Sleep Course, Birmingham
- 15-19th September 2018, ERS International Congress 2018, Paris
- 25th September 2018, ARTP Basic Sleep Course, Birmingham
- 31st January - 1st February 2019, ARTP Annual Conference, Glasgow.

ARTP Sleep People:
Sara Parsons, Consultant Clinical Scientist, St. George's University Hospital

I think it is safe to say many respiratory physiologists do not plan on being a physiologist. Often having completed a degree in a relevant field they are presented with an option of physiology. Not entirely sure what it is all about they embark on the discovery…. Well, this is what happened to me anyway.

During my last year undertaking a BSc (Hons) in Sport and Exercise Science, I applied for a 2 year MSc in Physiotherapy at Cardiff University. It was during this time my Dad saw a newspaper advertisement for a trainee clinical physiologist at Cheltenham Hospital, to complete a degree and be paid, result! Having chosen the physiology modules during my initial degree I was intrigued. So I researched the post and applied. I remember the interview like it was yesterday; I was super keen and loved the look of the lab. The attraction of Physiology with payment, work experience in a hospital and getting hands on with patients, plus the high likelihood of having a job at the end of the degree was very appealing. And I have never looked back, well until now.

I began in 2004 in a small team at Cheltenham General Hospital with block release weeks in London and Bristol, predominantly learning lung function and working my way to the world of sleep. I was not overly keen on sleep as an observer because of the smelly masks. It wasn't until I had the lectures at university I began to really enjoy it; that and learning not to breathe in when opening a CPAP bag! During my final year, Dr Adrian Kendrick offered me a job in the sleep unit at Bristol Royal Infirmary. It was a very big decision, as I really enjoyed working at Cheltenham but having the opportunity to work in a specialist centre was too good an offer to pass up; so I moved with my partner to Bristol. I graduated in 2008 and won the ARTP Part 2 Sue Hazard award for my achievements. I was a qualified B5 Clinical Physiologist for the next two years. I used this time to focus on gaining experience in sleep diagnostics (full polysomnography, MSLT, MWT and OSLER) obtaining the RPSGT in 2010, invasive and non-invasive ventilation including cough assist and suction, and observing the consultant sleep clinics. The ventilation service required a member of the team to be on-call so this was a challenging time as I hate being woken in the middle of the night, let's say I really like my sleep, and to be called and have to actually make a decision at 3 o'clock in the morning was tough. It was during this period of time that my soft spot for MND started to develop.

I also became a junior member of the teaching team helping on the basic sleep course and the BSc respiratory specialist weeks, initially running the practical sessions and

progressing to delivering lectures until the end of the ‘old’ degree in 2014. I completed the City and Guilds Level 3 award in Preparing to Teach in the Lifelong Learning Sector in 2010 and became a work based assessor.

In 2010 I was promoted to the Lead Clinical Physiologist for Diagnostics (B7) which included managerial responsibilities such as authorising leave and returns to work, until I resigned from the department in 2012. During these two years, I became part of the sleep consulting team allowing me to learn from Dr Adrian Kendrick and the medical team. Learning to take a full history and listening to the patient in front of me directing me on which investigations and referrals are needed.

In June 2012, I saw an advert for a Chief Clinical Physiologist at St George’s Hospital and thought it sounded good, although I never intended to move to London. The hustle and bustle always put me off. Nonetheless, something drew me to the role and so I applied. To be honest I never thought I would be successful and so when I was offered the job I was gobsmacked! I didn’t really think about having to relocate, so my then fiancé and I had to make a relatively quick decision. We moved to London, it was a bit of a busy time of year moving job, relocating, getting married and a honeymoon all within 2 months. Luckily my new employers supported my month of leave! I soon settled, initially with just a team of 4 that quickly grew in to a team of 9 over 5 years. I have enjoyed developing the service, expanding predominantly the sleep side (I know a little biased), improving patient pathways, lecturing, and undertaking research and audits having presented at ERS Amsterdam and conferences in Majorca and Marseille, and performing highly complex sleep and NIV clinics over the next four years. It was during this time I set up a brand new respiratory physiology paediatrics service. Consequently, as the department has grown I have been fortunate being able to develop my team - one now leads the adult service and another leads the paediatrics service with myself overseeing, supporting their development, and helping them to develop the service further. It was all of this experience that helped me achieve a B8c Consultant Clinical Scientist in 2017.

I run the non-invasive ventilation service with my close colleague and office roomie, Sam Prigmore, and we have a blast! We have experienced some very challenging and emotional times with our MND patients but we support each other, this is incredibly important when dealing with end of life care and ventilation removal. I am fortunate to run my own Consultant sleep clinics and although I have the independence, the respiratory team take a full MDT approach and we learn from each other. My day is very varied; I may be in clinic, on the ward, visiting an NIV patient at home/hospice or in front of my PC researching, and writing presentations.

Since moving to George’s, I have also developed the spirometry course and have the pleasure of working with Martyn Bucknall at St George’s University, providing sleep and ventilation lectures for BSc respiratory students, writing and marking exams and being part of the HCS committee. We also have PTP students every year. Students are rewarding to teach; they are driven and use the topic as a platform for discussion, sharing experiences and ideas. It keeps me on my toes!

To be honest with you, I was late in joining an ARTP committee but a Friday evening at the 2016 ARTP conference (slightly inebriated) I was talking to Dr Vicky Cooper. I have thoroughly enjoyed being a part of the committee and working together to make a difference. Being able to have a say in our profession, making the most of the advice and support from fellow colleagues as well as obtaining a wider understanding of the processes involved and having a voice to highlight the profession even further is very powerful. It is for these reasons I agreed to be co-chair of the sleep committee.

Now it is 11pm and time for sleep!

Fisher & Paykel Healthcare Ltd
Respiratory Care Humidification Seminar Programme

The Respiratory Care Seminar enables clinicians to consolidate and build their knowledge on a range of respiratory related topics applicable to both the hospital and community environment.

Key topics include:
- Physiology of the Respiratory System
- Humidification and its role in maintaining respiratory function
- Obstructive Sleep Apnoea and CPAP treatment
- NIV – non-invasive ventilation and patient compliance
- Nasal High Flow therapy – use in the chronic care setting

Practical workshops throughout the day will help to consolidate learning, whilst providing the opportunity for delegates to try out the different therapies for themselves. By the end of the day, attendees will have a good understanding of current practices in the UK, as well as insight and ideas on how patient adherence and outcomes can be improved.

To support our commitment to education this day is free of charge and inclusive of all refreshments and lunch.

Upcoming courses:

- 31st May 2018, Bristol
- 8th November 2018, London
- 17th January 2019, Manchester

For more information and to register, please visit: https://education.fphcare.co.uk/education/educational-events

Accreditation - Royal College of Nursing for **7 CPD hours**

ARTP PRACTITIONER LEVEL PULSE OXIMETRY AND LIMITED POLYSOMNOGRAPHY CERTIFICATE

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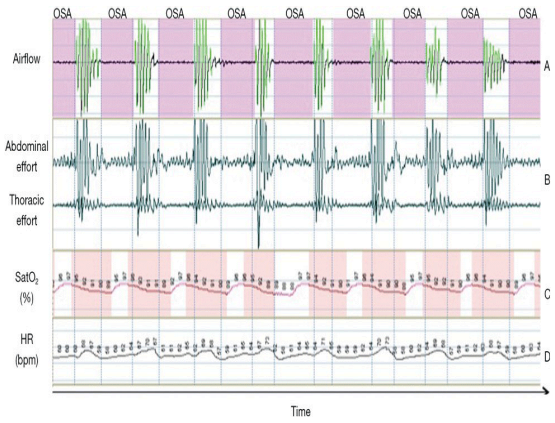

FURTHER INFORMATION:

WWW.ARTP.ORG.UK/EN/SLEEP

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ARTP OVERNIGHT PULSE OXIMETRY CERTIFICATE

Effects on CPAP use of remote monitoring and a patient support mobile app; experience in a UK sleep support service

H. Engleman, C. Stitt, L. Creswick, N. Cachada[1] M. Thomas J. Leahy, S. Martin[1], N. Derashri, T. Kelly

Philips Sleep Support Services, Philips Respironics, City Fields Way, Tangmere, Chichester PO20 2FT

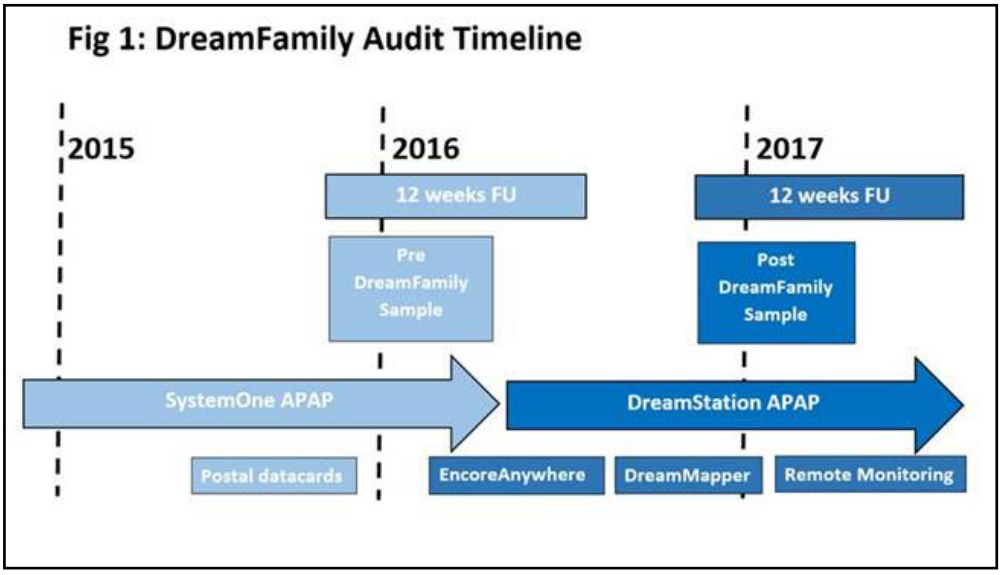
Introduction:

Previous studies have supported that the introduction and implementation of enhanced technology in the form of remote monitoring and patient support apps can improve CPAP use rates (1-3). We opted to assess this in an audit comparing CPAP use in a UK sleep service, before and after their early implementation.

Design:

Philips Sleep Support Service (PSSS) co-manages APAP therapy of 12,000 UK patients, and in 2016 rolled out Philips Respironics' DreamFamily products and technologies.

To evaluate effects on CPAP use of enhanced service provision, two comparator patient cohorts were identified; one from the 6 month period before (Sep 2015-Apr 2016) and one after (Sep 2016-Apr 2017) the changeover. Between these, the DreamMapper patient support mobile app launched in the UK, and within PSSS, DreamStation instead of SystemOne APAP devices, and remote data monitoring by modem was instituted (Fig 1).

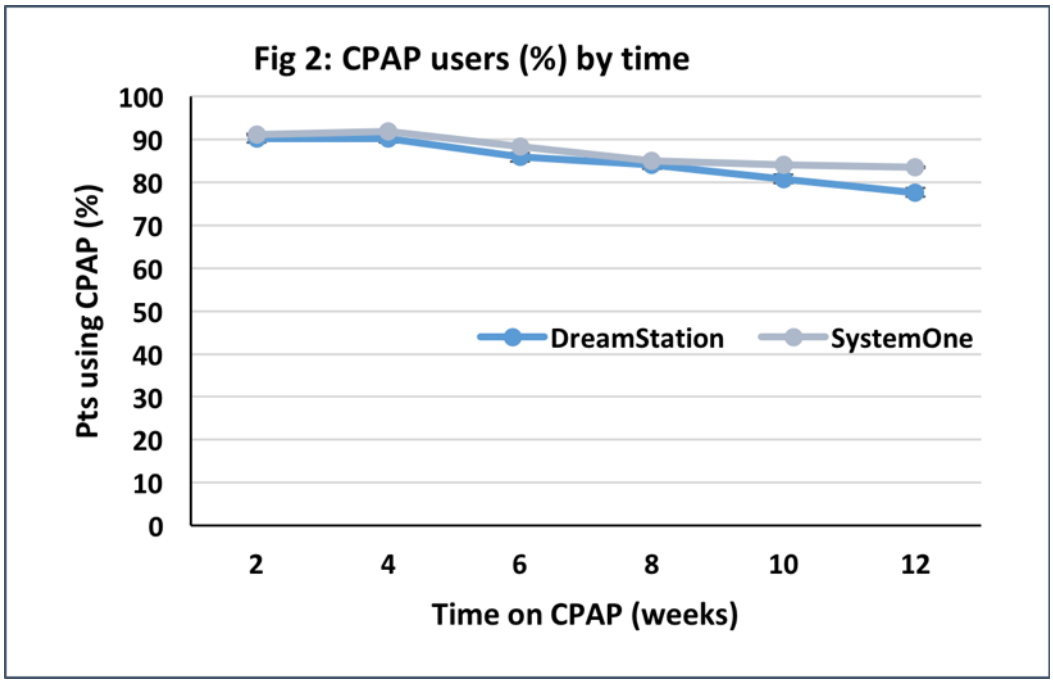


Each cohort comprised all new PSSS patients referred from two partnered NHS centres. CPAP use data were collected (by postal data-card in SystemOne and remote monitoring in Dreamstation) for each of 6, 2-week bins over each patient's first 12 weeks of treatment.

We conducted two analyses sequentially. The first assessed the overall effect on CPAP use of rolling out the DreamFamily suite of products, by using unpaired t-tests to compare the SystemOne and DreamStaion cohorts. In the second, the DreamStation cohort was retrospectively sub-divided into those who had activated DreamMapper (n=99) or not. CPAP use at each time-point was compared by unpaired one-way ANOVA of the three conditions: SystemOne, DreamStation without DreamMapper and DreamStation with DreamMapper.

Results:

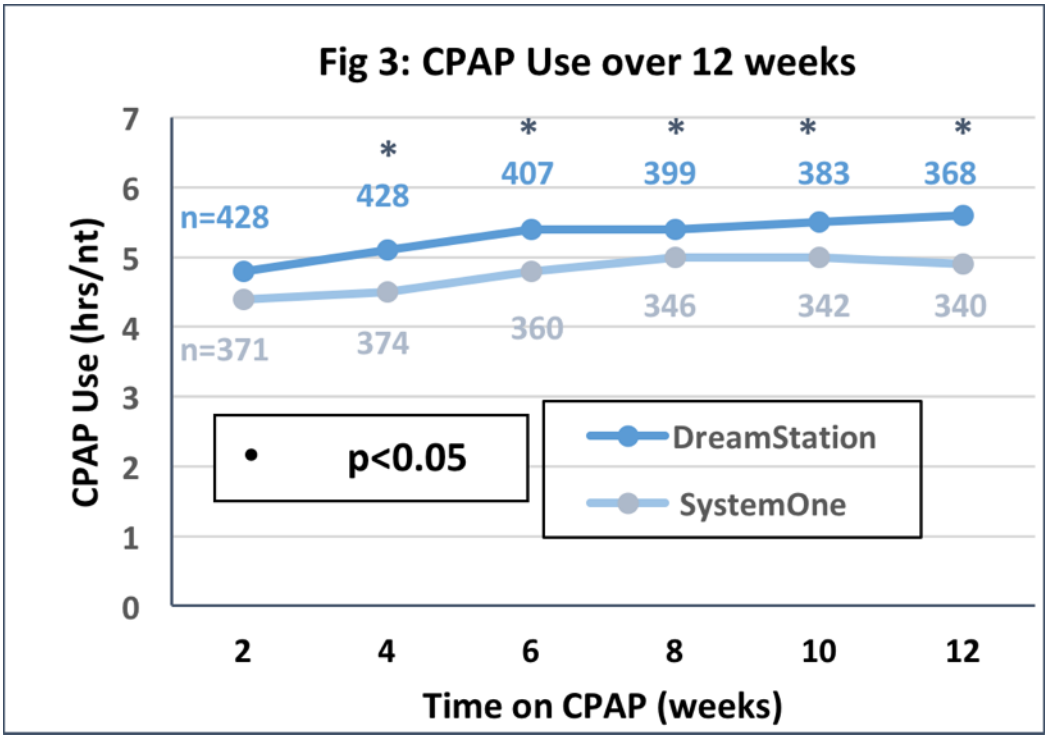
407 patients commenced APAP with SystemOne (2015/2016 cohort) and 474 with DreamStation devices (2016/17 cohort), with 99 of the latter downloading DreamMapper. CPAP use data were available for 91% of cases at 2 weeks and 81% at 12 weeks (Fig 2).



Analysis 1:

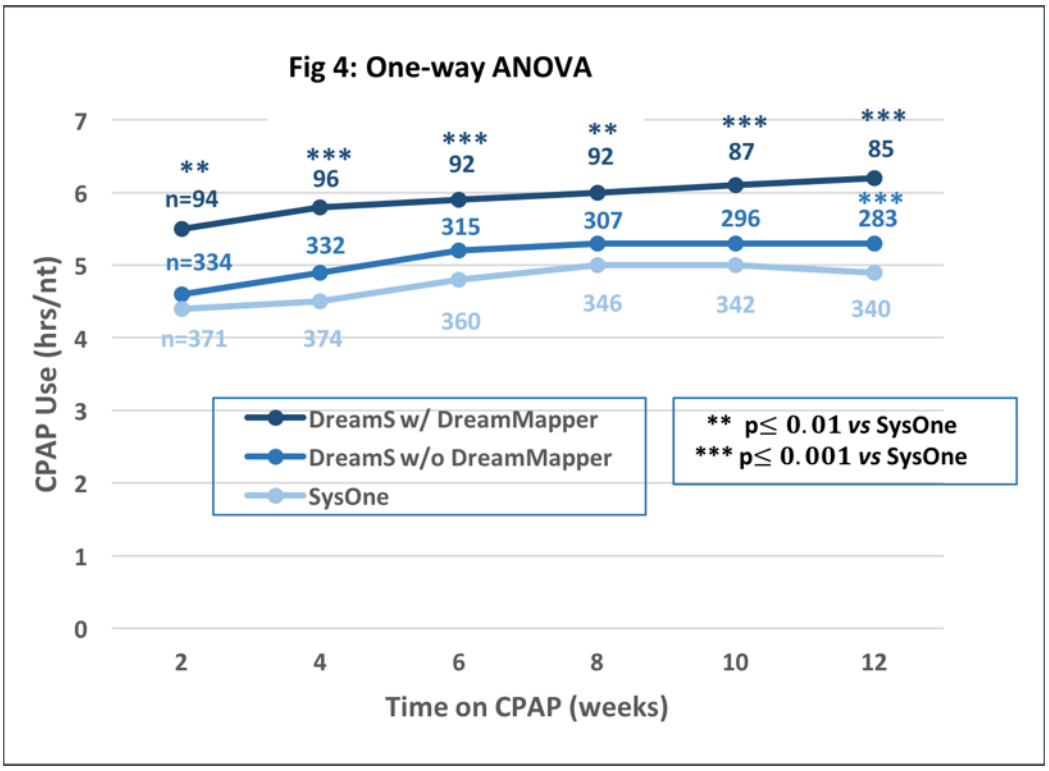
CPAP use was significantly higher in the DreamStation group ($p<0.03$) at all time-points except the first ($p=0.06$) (Fig 3). Average differences in CPAP use at the six time points ranged from +0.4 to +0.7 hours/night.

Overall CPAP use over 12 weeks averaged 4.8 ± SD 2.7 hours/night (SystemOne) and 5.3 ± 2.5 hours/night (DreamStation) ($p<0.01$). The increase in CPAP use averaged 0.5 hours/night, or 10%- an inter-treatment effect size (DreamStation vs SystemOne) of 0.2 SDs.



Analysis 2:

Fig 4 shows average nightly CPAP use over time for the three groups, with DreamStation patients divided into those who downloaded DreamMapper or not.



CPAP use by DreamStation patients also downloading DreamMapper was significantly higher than in SystemOne patients ($p \leq 0.01$) at every time point. The difference in CPAP use between these groups averaged 1.1 hrs/nt, or a 27% increase.

Conclusions:

In a UK audit, the implementation of enhanced technology by a sleep service and its patients resulted in statistically and clinically significant improvements to CPAP use. Limitations included that we could not strictly identify in which patients remote monitoring had been conducted, or in which patients downloading DreamMapper this had been more used. However, patients downloading DreamMapper showed larger enhancements in CPAP use than those who did not. Findings support the patient benefits of remote monitoring to assist troubleshooting and mobile apps to promote patients' self-help,

References:

1. Weaver & Grunstein. Adherence to CPAP Therapy; the challenge to effective treatment. Proc Am Thor Soc 2008 Feb 15; 5(2): 173–178.

2. Hardy et al. DreamMapper: a mobile application and website to engage sleep apnea patients in PAP therapy and adherence to treatment. Philip Respironics White Paper, Nov 2016.

3. Pittard et al. The use of SleepMapper (a patient self-management application) improves CPAP adherence in Australian patients. Philip Respironics White Paper, Nov 2015.

Have you read any interesting sleep articles in the news? Get in touch!

A comparison of the respiratory inductive plethysmography (RIP) measures as a surrogate to nasal flow (NF) in paediatric cardiorespiratory sleep studies

Gallagher. A, Russo. K, Laverty. A, Davies. M, Raywood. E, Abel. F Dr.; Respiratory Sleep Unit, Great Ormond Street Hospital for Children NHS Foundation Trust

Introduction: The AASM Manual for the Scoring of Sleep and Associated Events 2012 V2.4[1], advise the use of alternative airflow channels in the absence of the oronasal thermistor and nasal pressure transducer (used to score apnoeas and hypopneas, respectively); the RIPflow and RIPsum channels, in order to score respiratory events. This study aims to compare which is the most suitable channel to use for the scoring of respiratory events in paediatric cardiorespiratory sleep studies.

Methods: 21 patients, 7 each from mild, moderate and severe Obstructive Sleep Apnoea (OSA) study outcomes, based on Obstructive Apnoea Hypopnoea Index (OAHI) were selected randomly from all baseline cardiorespiratory studies recorded within the last 12 months that met specified quality criteria (NF (square root transformation of nasal pressure) present for 100% of the night and an in-house quality rating ='5' (maximum) for the respiratory effort bands). 4 of the studies were discarded as they did not meet the criteria (n=17). The studies were duplicated with patient details, previous scoring and video removed. Each study was scored by a physiologist using the RIPsum or RIPflow as the surrogate airflow channel. The process was then repeated with the alternative RIPflow or RIPsum channel used. The original scoring plus the two blinded scoring sessions were then compared for NF, RIPflow and RIPsum. Respiratory events were scored using the current AASM 2012 V2.4 Guidelines[1].

Results: A Wilcoxon signed-rank tests was used to identify differences in AHI, the Obstructive AHI (OAHI), Central AHI (CnAHI) or Unclassified AHI (UAHI) when scored using the Nasal cannula versus RIPsum or RIPflow (see Table 1).

Table 1. Sleep study outcomes according to different airflow measures. (Significant at $p<0.05$), n= 17

Sleep Study Outcome	NC Median (IQR)	RIPSUM Median (IQR)	p^*	RIPFLOW Median (IQR)	p^{**}
AHI	6.30 (4.85,11.85)	6.40 (4.30,12.90)	0.344	6.00 (4.40,12.10)	0.288
OAHI	5.50 (3.55,9.25)	4.90 (3.70,12.05)	0.717	5.50 (2.95,11.15)	0.477
CnAHI	0.30 (0.00,1.80)	0.30 (0.00,0.75)	0.018	0.00 (0.00,0.90)	0.195
UAHI	0.00 (0.00,0.05)	0.10 (0.00, 0.40)	0.959	0.00 (0.00, 0.45)	0.953

*: Wilcoxon signed rank test (NF vs RIPSUM)
**: Wilcoxon signed rank test (NF vs RIPFLOW)
IQR: Interquartile range

Table 1.2 demonstrates the correlation of the obstructive events scored using each RIP channel.

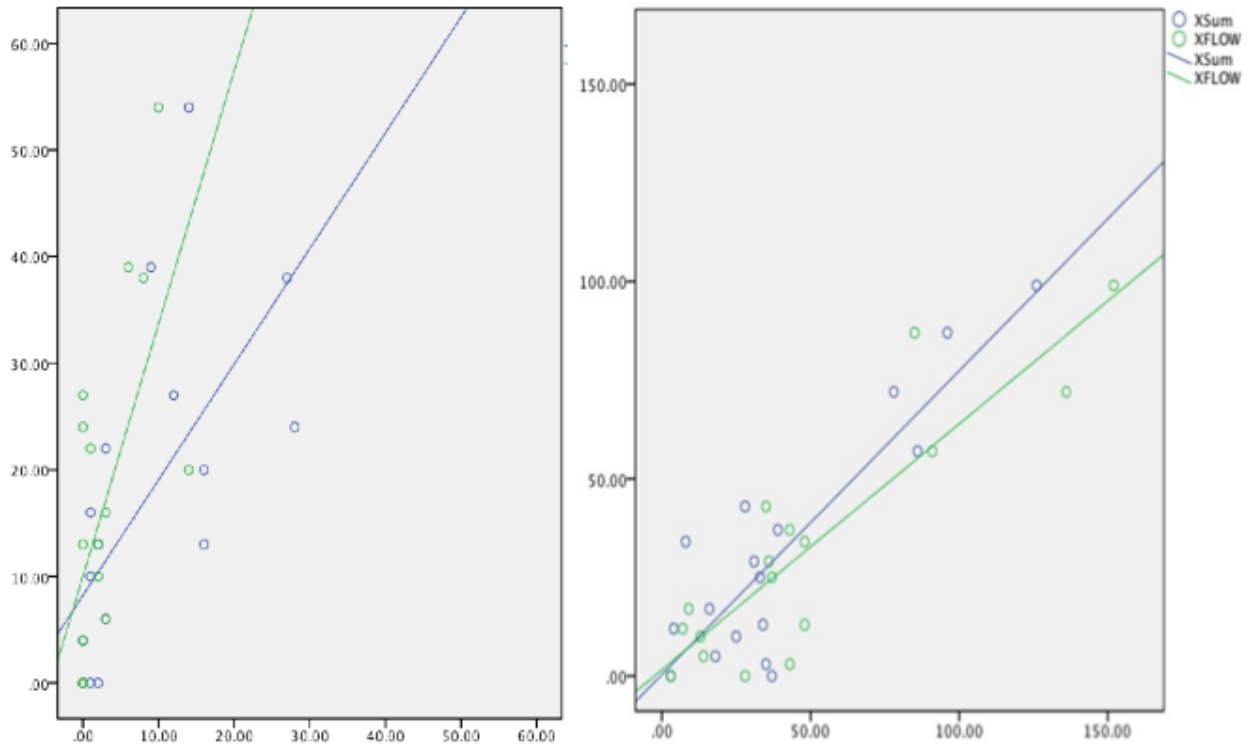
Table 1.2 Spearman's rho correlation of obstructive events scored between RIP measures and NF (O=obstructive, M= mixed, A=apnoea, H= hypopnoea.) *significant p = 0.05, n=17

	Spearman's rho coefficient	*p* Value
RIPsum VS NF		
OA	0.752*	<0.001*
OH	0.602*	0.011*
MA	0.173	0.507
RIPflow VS NF		
OA	0.597*	0.011*
OH	0.754*	<0.001*
MA	0.433	0.082

*: Significant at <0.05

Figure 1 suggests a difference in marking obstructive apnoeas or hypopnoeas . The alternative channels appear to score less apnoeas and more hypopnoeas than gold standard NF.

Figure 1. Number of obstructive apnoeas (left) and hypopnoeas (right) scored using the NF in comparison to the two alternative airflow channels. (X = RIP).



Conclusion: Current study suggests that when scoring obstructive respiratory events there is no difference in outcome measures when using either alternative airflow measure compared to the gold standard NF. There is no evidence to suggest which RIP is more favourable. There was a strong positive correlation found between the obstructive event indices scored using NF and both RIP measures (less significant for MA). Alternative airflow measures were noted to have a preference for scoring hypopnoeas rather than apnoeas. There were no central hypopnoeas recorded using the RIPsum; further study is required to assess whether RIPsum can reliably be used to score central sleep disordered breathing.

Data suggest there was a greater chance of correct OSA severity diagnosis using the RIP measures when the OAHI was severe. Further study would be required to assess whether a particular RIP measure may be more reliable for correct diagnosis of disease severity. Further study is also required to ascertain whether a certain RIP measure scored more frequently the correct event to the NF i.e. score a hypopnoea instead of an apnoea.

References; 1. Berry RB, Brooks R, Gamaldo CE, et al; for the American Academy of Sleep Medicine. The AASM Manual for the Scoring of Sleep and Associated Events; Rules, Terminology and Technial Specifications. Version 2.4. Darian, IL: Academy of Sleep Medicine; 2017.

Do you know someone who may benefit from being an ARTP Sleep member?

"ARTP Sleep" is now being developed to represent and support all healthcare professionals in the delivery of care, training and development of sleep services.

Who Should Join ARTP Sleep?

ARTP Sleep represents and supports all healthcare professionals in the delivery of care, training and development of sleep physiology measurement and therapeutic services. This includes but is not limited to:

-ATOs and HCAs working in oximetry clinics
-Sleep and respiratory physiologists performing sleep diagnostics/working in CPAP clinics.
-Sleep physiologists and technologists involved in PSG units
-Sleep and NIV nurses
-Physiotherapists involved in sleep apnoea services
-Physicians in sleep medicine
-Orthodontists and maxillofacial technicians who support sleep and snoring clinics
-General Practitioners with an interest in sleep medicine (GPwSI & non-GPwSI)

Registration forms and FAQs can be viewed here

Pillow Talk:

Manufacturers news, new equipment and a bit of gossip!

Intus Healthcare:

Provent Sleep Therapy is now available through Intus Healthcare.

Provent Therapy is a simple, non-invasive treatment for Obstructive Sleep Apnoea (OSA). The Provent Nasal Device uses a valve design that attaches over the nostrils and is secured in place with hypoallergenic adhesive. The valve opens and closes, redirecting air through small holes to create resistance when breathing out. This resistance then creates the positive pressure in the airway typically provided by CPAP therapy.

It is intended for use by those who have been unable to maintain compliance with CPAP therapy; instead providing a comfortable alternative that is also discreet and convenient. Provent therefore provides clinicians with a plan-B for those patients who simply cannot tolerate or maintain acceptable compliance levels with CPAP.

It is a disposable, single-use device sold in monthly packs. Provent Sleep Therapy is CE and FDA approved, with numerous publications demonstrating its effectiveness in treating mild and moderate OSA.

Provent can also be purchased by patients directly from CPAP.co.uk/provent

Contact Intus Healthcare for more information – trade@intushealthcare.eu

Itamar Medical:

Itamar Medical is adding automatic detection of Central Sleep Apnoea, and Cheyne Stokes Respiration, to the capabilities of its WatchPAT device. Following two years of research and development, the company successfully developed an accurate method to automatically detect CSA without using a nasal Airflow, through innovative analysis of chest movements, and Peripheral Arterial Tone that is measured at the finger. The company had already received FDA for this new capability, following a successful multi-centre validation study, and is currently in the process of submitting for CE.

This new feature further enhances the WatchPAT unique advantage of integrated automatic scoring of Sleep Apnoea that is both FDA approved and CE marked. A well validated capability that eliminates the necessity for manual scoring. WatchPAT's auto-scoring is supported with numerous peer reviewed validation studies comparing it to the gold standard, and showing overall correlation of 88.9% in AHI score. Furthermore, WatchPAT is unique in its FDA and CE approval for accurate automatic detection of sleep/wake and sleep stages, without the use of EEG.

Fisher & Paykel:

Fisher & Paykel Healthcare have had a very exciting start to 2018 with the launch of their new Respiratory Care Seminar programme - an accredited educational offering for all healthcare professionals covering topics including OSA and treatments for chronic respiratory conditions such as NIV and Nasal High Flow therapy.

We were also delighted to launch the new SleepStyle™ AUTO/CPAP device at the January ARTP meeting in Brighton. SleepStyle™ has simplicity woven into its design and every detail has been considered to make CPAP therapy easy and comfortable. We have interviewed hundreds of patients and customers, spent countless hours designing and testing to ensure that it is a product that patients can use and want to use. Having been awarded the American Arthritis Foundation's Ease of Use Commendation, this machine is recognized as a product proven to make life easier for people who have arthritis and other physical limitations. SleepStyle™'s integrated modem and **Bluetooth®** technology options give you as a clinician, choice and flexibility to provide you with information you need when you need it. Patients can also now track their progress via the new SleepStyle app and web.

The next big project on the F&P horizon is the upcoming CARE convention taking place on June 11th and 12th 2018 at Warwick University. The Sleep and Respiratory programmes have got some fantastic speakers and topics and the best poster submitted will win one lucky person £1000 towards an educational event.

Fisher & Paykel Healthcare are constantly striving to improve care and outcomes through inspired and world-leading healthcare solutions, so watch this space as we continue to expand our range of medical devices and educational offerings here in the UK.

NEW:

Research in Sleep:

Welcome to the new feature where we will discuss all things pertaining to research and innovation within sleep physiology. We aim to bring you summaries on recent studies that are both relevant and interesting to the membership. These may be large multi-centre trials or smaller local audits that are sent in to be showcased. In addition to this, we will also aim to answer any questions from the readers either in the following edition or on other ARTP platforms such as the Forum and Twitter.

There is a wealth of studies out there revolving around sleep medicine and here are some of the highlights from the last six months!!!

- As a potential surgical cure for OSA Shah et al (2018) have compared Hypoglossal nerve stimulation (HNS) with uvulopalatopharyngoplasty (UPPP). They demonstrated that of 20 patients undergoing HNS the mean AHI was reduced from 38.9 to 4.5. This is compared to a mean reduction from 40.3 to 28.8 for those undergoing UPPP.

- Shim et al (2018) have conducted a randomised sham controlled analysis investigating CPAP therapy on left ventricular diastolic function. Following 3 months of therapy, they found a reduction in mean diastolic BP, nocturnal diastolic BP, arterial elastance index and ventricular-vascular coupling index with an increase in diastolic mitral annular velocity.

- Hwang et al (2018) have investigated the effect of tele-monitoring and education on CPAP adherence. A four arm study involved 1455 patients who were screened for OSA, 556 of which were commenced on CPAP. The use of CPAP tele-monitoring with automated feedback significantly improved 90-day adherence compared to usual care ($P = 0.0002$). Average CPAP usage in usual care was 3.8 hours $\pm$2.5, compared to 4.4 hours $\pm$2.2, with tele-monitoring with automated feedback. Tele-education also improved outpatient clinics attendance rates.

- Anabel et al (2017) have set out suggested clinical predictors of blood pressure reduction following initiation of CPAP in 88 patients with severe OSA. Following 6 months of CPAP, it was observed that nocturnal hypertension, circadian BP and night-time heart rate could be used to predict BP response.

- Hiasa et al (2018) have shown a reduction in hospitalisation frequency and length of stay in patients with chronic heart failure (CHF) following initiation on domiciliary adaptive servo ventilation (ASV). Admissions fell from 2.3 to 1.0 per patient per year with mean length of stay reducing from 64.4 to 22.8 days per patient per year with a 37% reduction in healthcare costs after ASV initialisation.

Research and innovation are crucial components of any developing industry or service with healthcare being no exception. Without these important steps we would never have seen the introduction of any of the pieces of equipment or medication used to diagnose, monitor or treat sleep disorders. Without it, CPAP masks might still look like this:

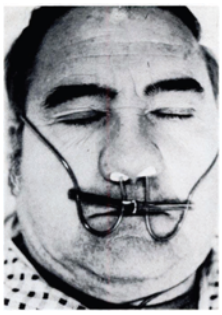


Photo reproduced from Stephen et al (1984). An early attempt to make nasal CPAP more comfortable with the use of flexible tubing surrounded by foam to create a seal.

Lastly, if you have any current or past research projects that you think may be of interest to the readers of S-NEWS, would like a round up of research in a particular area or any ideas you would like to put to the ARTP Research & Innovation Committee, please get in touch.

You can also follow the ARTP Research and Innovation Committee @ARTP_Research on twitter for all the latest announcements and news.

Gavin Comber – Respiratory Clinical Scientist

Correspondence – gavin.comber@nhs.net

References

Castro-Grattoni, A., Torres, G., Martínez-Alonso, M., Barbé, F., Turino, C., Sánchez-de-la-Torre, A., Cortijo, A., Duran-Cantolla, J., Egea, C., Cao, G. and Sánchez-de-la-Torre, M. (2017). Blood pressure response to CPAP treatment in subjects with obstructive sleep apnoea: the predictive value of 24-h ambulatory blood pressure monitoring. *European Respiratory Journal*, 50(4), p. 1700651.

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Sleep In the News:

BTS Position Statement:

On the 30th April 2018 the British Thoracic Society (BTS) released a position statement on driving and OSA. This document discusses the guidance we should be giving patients with OSA regarding to their legal obligations in terms of driving. To review this document please click **here**

"Nokia Sleep"- the newest sleep gadget to hit the market

There are many sleep trackers available on the market at present - the newest of which is the Nokia Sleep - a small pad that rests under your pillow as you snooze. With a pressure monitor that utilities ballistocardiography it is said to monitor your movement, respiration rate and heart rate. It then uses wifi to connect to an app on your phone allowing you to examine how successful your nights sleep was on a scale of 1-100. Its market price point is said to be around $100. But just how much better is this item that all the others that flood the market? To read more about this product please click **here**.

"The Verge" has also reviewed this new product against a well known app "Sleep Cycle" which again tracks your sleep, but from your phone. It also allows you to set a variable alarm which is designed to wake you whilst in a light sleep and in turn theoretically making it easier for you to get out of bed! To read the full review on this item please click **here**.

Changing our sleep pattern to boost our health?

The BBC recently reported that night owls have an increased risk of early death, psychological disorder and respiratory illness, due to "social jet jag". The requirement to wake early for work commitments means that many people are having to start their day before they are ready, resulting on negative effects on the body. The more pronounced this social jet lag is the more risk you are under.

Using light to manipulate when we start to feel tired may be a way to get around this issue. Getting plenty of sunlight in the morning and less artificial light at night can help to train the body to feel sleepy earlier in the evening. This however is not an easy fix -the BBC states it is important for workplaces to also aid in this change. To read the article in full click **here**.