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 50 PASM American Academy of SLEEP MEDICINE

 MONTAGE

A quarterly magazine published by the American Academy of Sleep Medicine

VIEWPOINTS Spotlighting women's sleep health

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MONTAGE

With each issue of Montage, we aim to capture the dynamic conversations shaping sleep medicine — highlighting new ideas, celebrating our members and exploring the ever-evolving landscape of patient care.

In this issue, we turn our attention to critical topics that impact both clinicians and patients. Dr. Monica Mallampalli examines the unique challenges women face in sleep health, while the AI in Sleep Medicine Committee discusses the need for equity, bias mitigation and diverse data in AI. We also highlight the AASM's latest statement emphasizing sleepiness as a key patient outcome and discuss how occupational therapy plays a valuable role in improving sleep health.

Our member stories continue to inspire. Dr. Kimberly Hutchison shares how she's making sleep solutions more accessible, from providing care on the Pacific island of Saipan to inventing a device that helps patients. We meet Yash and Sanjay Malhotra, two high schoolers leading Kids Talk Sleep, a nonprofit helping young people prioritize sleep. We also take a look at Marshall Sleep Disorders Center's nearly 30-year journey.

As the AASM celebrates 50 years, our anniversary series honors the pioneers who paved the way. This issue highlights the 1980s, a transformative decade for sleep medicine, and spotlights the contributions of Dr. Mary Carskadon, whose research has shaped our understanding of sleep and circadian rhythms.

We also take a moment to recognize excellence in our field. Meet the 2025 AASM award recipients and newly named Fellows of the AASM — leaders whose work continues to push sleep medicine forward.

Finally, our recurring columns provide practical insights for your daily practice. Sleep Team Talk offers strategies for reducing no-shows, while Coding Quarterly breaks down hypoglossal nerve stimulation for OSA treatment.

We hope this issue informs, inspires and reinforces the connections that make this community so strong. As always, we welcome your stories and insights — because Montage is, at its core, a reflection of all of you.

-The Montage Team



Share your experience in sleep medicine with your fellow members. Submit content to **montage@aasm.org** for it to be considered for publication in an upcoming issue of Montage!



To see current and archived issues of Montage, visit **aasm.org/montage**.

50 American Academy of SLEEP MEDICINE

Montage is a quarterly magazine published by the American Academy of Sleep Medicine. It offers a unique opportunity to recognize our membership and highlight changes in the field by featuring member profiles, exclusive interviews, research advances, and the latest developments impacting patient care.

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VIEW*points*

Shining the spotlight on women and sleep

By Monica Prasad Mallampalli, PhD

There is enough scientific evidence to support the fact that women's sleep is different than men's. For example, women tend to have shorter sleep duration, more slow wave sleep and longer sleep latency compared with men. Sleep in women can vary across the lifespan, and several factors at specific timepoints — such as puberty, pregnancy or menopause — can influence sleep quality. These factors can be biological and physiological, but environmental, cultural, social and other factors also can influence a woman's sleep health.

Certain sleep disorders, like insomnia, circadian rhythm sleep-wake disorders and restless legs syndrome (RLS), are more prevalent in women. The risk for insomnia emerges at puberty with the onset of menses and, interestingly, depression risk coincides with insomnia in this time period. Shift work disorder is more common in women partly due to differences in work patterns: More women tend to work non-traditional hours compared with men. Shift work in women also can increase the risk of breast and endometrial cancer, and almost 70% of women with breast cancer have poor sleep problems. RLS risk increases two-fold from pregnancy to menopause and increases with the number of pregnancies.

Sleep differences between the sexes, including differences in how sleep problems present, can contribute to missed diagnoses. Narcolepsy and obstructive sleep apnea (OSA) diagnoses are often delayed or missed in women. Women with narcolepsy bear a greater disease burden than men, with lower health-related quality

of life and more sleepiness. OSA also presents differently in women compared with men, with women complaining of more fatigue, unrefreshing sleep, depression and insomnia. The lack of sex-specific screening instruments is a major problem leading to underdiagnosis of OSA in women.

The follow-on effects from these diagnostic problems are important to consider. Women with sleep disorders are at an increased risk for cardiovascular and metabolic diseases. Untreated sleep apnea in women can increase the risk of heart failure in women and mortality compared with men. Similarly, sleep problems are common with people living with chronic pain. In fact, insomnia can both result from and contribute to chronic pain — and both conditions disproportionately affect women.

Women's sleep problems go unnoticed partly due to a lack of awareness among women and their physicians. Sometimes women



MONICA PRASAD MALLAMPALLI, PHD

get misdiagnosed with anxiety or depression; both conditions are often co-morbid with sleep disorders. A paucity of sex-specific screening questionnaires or diagnostic tools in a one-size-fits-all approach to treatment also can make it harder for women to get an appropriate diagnosis and the care they need.

These kinds of health care gaps don't only affect women in sleep medicine but also exist to varying degrees in other medical specialties, thanks to certain scientific and policy decisions made decades ago.

It has only been 32 years since women have been included in biomedical research, and this exclusion of females in biomedical research has compromised the health of females to this day. Given that almost all biomedical research previously has used a 70-kg male as the standard to study human health, females have lacked appropriate medical care for years. Basically all information related



to female-specific biology, anatomy, pathology and response to interventions had been disregarded under the assumption that females only differed from males in their reproductive health.

This decision to ignore female biology was based on a guidance issued by the Food and Drug Administration in 1977, which suggested barring women of child-bearing potential from participating in early phases of clinical trials out of fear of harming the unborn children. The decision came not long after birth defects caused by thalidomide and diethylstilbestrol (DES), a synthetic estrogen, had raised acute concerns about the safety of drug trials during pregnancy.

It has only been 32 years since women have been included in biomedical research, and this exclusion of females in biomedical research has compromised the health of females to this day."

However, the 1985 Public Health Services Task Force on Women's Health concluded that the dearth of research on women's health had compromised quality of information and care for women. This prompted women's health advocates to push for inclusion of women and minorities in clinical trials, resulting in the passage of the 1993 NIH Revitalization Act by Congress.

We now know unequivocally, based on a volume of scientific evidence and data, that the health of females extends beyond their reproductive health or capabilities and takes into account all diseases and conditions that affect a woman from head to toe.

Similarly, we have seen a sharp rise in scientific publications on the topic of women and sleep in the last decade. We have also witnessed efforts at the organizational level to advance women's sleep health, such as those led by the Sleep Network at the Society for Women's Health Research (2013-2017), the National Institutes of Health Research Conference on Sleep and Health of Women in 2018, and, most recently, the launch of the Advancing Women's Sleep Health Task Force by the American Academy of Sleep Medicine in 2025. At the Alliance of Sleep Apnea Partners, we too are bringing attention to women's sleep health — and providing tools to help women advocate for their own health. Our educational resources encourage women to seek diagnosis and care if they suspect they have OSA symptoms.

Today, women make up half the population in the United States and spend twice as much time caring for family members compared with men. More importantly, women play a major role in health care decisions for themselves and their families, essentially serving as the chief medical officer of their home. As the share of women in our workforce has grown, so has their insurance coverage: 39 million women aged 18-64 have employment-based coverage of their own, with 29 million women receiving coverage from the private sector. But women are yet to achieve health equity and the opportunity to be as healthy as possible on a par with their male counterparts.

According to a 2024 national poll, women are getting less sleep than they need. Stress is the primary driver of the decline in their sleep quality. Poor sleep and increased stress can have a substantial impact on women's overall health, even beyond the existing inequities. As members of the sleep community, we can do our part to eliminate some of these disparities and advance women's sleep health. Together we can:

- Empower women through education and awareness to take an active role in their health and ensure they get quality sleep.
- Ensure that sleep professionals are aware of women-specific health issues and concerns.
- Enable sleep researchers to take biological sex into account when designing clinical studies and to analyze data and report results based on sex.
- Encourage the sleep industry to consider a personalized approach to diagnostics and treatment by evaluating safety and efficacy of interventions in women and men separately.

Acknowledging that women experience care gaps is the first step. We can all now focus on the real work of bridging the gap, one brick at a time, from understanding the effects of sex hormones on the brain to solving access challenges. We must not rest until we remove all the health disparities that prevent women from receiving quality health care and quality sleep.

For a list of references, visit the online version of this article.

Monica Prasad Mallampalli, PhD, is a subject matter expert on women's health and chief executive officer at the Alliance of Sleep Apnea Partners, a national nonprofit patient advocacy organization. She is a member of the AASM Advancing Women's Sleep Health Task Force.

Awakening digital health equity in sleep medicine

By Drs. Mattina Davenport, Scott Ryals, Trung Le and Vidya Krishnan, on behalf of the AASM Artificial Intelligence in Sleep Medicine Committee

Artificial intelligence (AI) has been increasingly highlighted as a potential tool to enhance population-level sleep health and address gaps in sleep care. There is growing interest in the potential for AI to raise community awareness about sleep health, support the prevention of sleep disorders, improve sleep surveillance and expand access to sleep care. However, the empirical evidence supporting these possibilities remains limited. As AI technologies continue to evolve, careful attention will be needed to ensure equitable access and minimize potential disparities in digital health.

A HISTORICAL DIGITAL DIVIDE

The coronavirus pandemic highlighted the importance of AI health care solutions, telehealth platforms and access to real-time data for self-monitoring. There have been growing expectations that these digitalized processes will help reduce health care costs, facilitate patients' access, improve the quality of care, pave the way for precision medicine to promote better diagnostics and personalized treatments, and reduce population-level health disparities. Despite the earnestness of these hopes, COVID-19 also shed light on the historical digital divide, which has widened during our most recent digital shift. McAuley defined the digital divide as "a societal division between those who have the means and capability to make full use of digital technology and those who lack those means for reasons relating to income, education or age." The National Institute on Minority Health and Health Disparities designates that the following populations experience health disparities: Minoritized racial/ethnic groups (American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino American, Middle Eastern or North African, Native Hawaiian or Pacific Islander), people with lower socioeconomic status, underserved rural communities, sexual and gender minority groups and individuals with disabilities.

In sleep medicine, while there is significant enthusiasm surrounding AI advancements, funding agencies and researchers have yet to fully address key questions such as, "What populations currently benefit from our AI innovations?" and "What populations may face challenges in accessing these advancements?" Given the existing digital divide, addressing these questions remains an important area of focus.

APPLYING A FRAMEWORK FOR DIGITAL HEALTH EQUITY IN SLEEP MEDICINE

As AI implementation expands in sleep medicine, it is important to account for both social determinants of health and digital determinants of health. Digital determinants of health may function independently as barriers and facilitators of the digital divide, interacting with other social determinants of health to impact sleep health and data disparities. The NIMHD Research Framework was recently expanded for digital health equity. This framework outlines how digital environment determinants influence individual health, family/organizational health, community health, and population health level disparities. Some notable digital determinants to consider in sleep medicine include technology access, implicit tech bias, health care infrastructure, community tech norms, data standards, and algorithmic bias. In sleep medicine, more work is needed to formally assess and address how digital determinants of health interact with social determinants of health to shape access to AI innovations and reduce sleep health data disparities across NIMHD-designated health disparate populations.

SLEEP DATA DISPARITIES AND THE MANIFESTATION OF BIAS IN AI

More recent frameworks for AI and sleep medicine are highlighting the importance of leveraging multiple sources of data, such as omics, electronic medical records, objective sleep assessments, environmental data, epigenetics, and additional sleep metadata (e.g., geospatial, insurance claims). With these multiple data sources being leveraged and harmonized, the field of sleep medicine has endless possibilities to study a broader range of sleep disorders, better predict patients' risk, understand how sleep disorders occur and progress, and identify improved strategies to enhance detection, screening and treatment. However, not all populations have the sleep health data that is necessary to equitably pursue this endeavor. In fact, some populations may have systematic differences in the quantity and/or quality of their sleep health data. These sleep health data disparities may cause certain populations to be unable to benefit from the AI discoveries or innovations emerging in sleep medicine. To avoid manifesting biased AI (Table 1), it is becoming increasingly clear that the field of sleep medicine needs to prioritize data collection in real-world settings to increase the representativeness of sleep health data sources.

Table 1 outlines the type of biases that manifest fromdata generation to Al implementation.

TYPE OF BIAS	DESCRIPTION
HISTORICAL BIAS	Bias due to data reflecting historical disparities or biases that existed during the data collection process in which minoritized and/or underserved populations may be underrepresented due to systematic inequalities.
SAMPLING BIAS	Bias resulting from certain members of a population who are systematically more likely to be selected in a sample than others.
REPRESENTATION BIAS	Bias resulting from making decisions based on particular stereotypes of persons or situations.
MEASUREMENT BIAS	Bias resulting from inaccurate measurements for information collected.
ALGORITHMIC BIAS	Systematic errors in an algorithm produce unfair or discriminatory conclusions.
CONFIRMATION BIAS	Bias resulting from a propensity to seek out information that confirms existing beliefs while ignoring information that contradicts them.
INTERACTION BIAS	Bias due to a tendency for individuals to interact more frequently than by chance with others of a certain characteristic or behavior.
GENERATIVE BIAS	Bias resulting from systematic errors in generated data.
DEPLOYMENT BIAS	Bias that arises during the deployment process.
DATA AUGMENTATION BIAS	Although generated, synthetic data can augment the bias from the real-world data that was used, due to data scarcity and/or historical bias in the training dataset or input data.

As AI implementation expands in sleep medicine, it is important to account for both social determinants of health and digital determinants of health."

Final thoughts

In summary, there is incredible potential for AI to benefit all areas of sleep health. These benefits, however, will only be as good as the algorithms (and data) used to develop that AI. Particular care to address and mitigate biases and collect data from diverse populations is key to preventing further widening of the health-related equity gap. We encourage the adopters of emerging AI innovations in sleep medicine to consider this as we move toward improving sleep health for all.

Celebrating the 2025 AASM award recipients

The 2025 AASM awards will be presented to outstanding leaders in sleep medicine on Monday, June 9, during the plenary session of SLEEP 2025 in Seattle.



CAROL ROSEN, MD, FAASM The Distinguished Leadership Award

Dr. Carol Rosen is a professor emerita at Case Western Reserve University School of Medicine and a past board member of the American Academy of Sleep Medicine. She taught pediatric

pulmonary medicine at Baylor, Yale and CWRU, where she led the Rainbow Babies & Children's Sleep Medicine program for over 20 years. She remains active as a member of the AASM Guidelines Advisory Panel and a consultant on National Institutes of Health sleep research. Her clinical and research interests include diagnostic testing for sleep-disordered breathing and managing pediatric sleep disorders. She has received the American Thoracic Society Outstanding Educator Award and Narcolepsy Network Doctor of the Year award.

"I can't imagine a greater honor for my lifelong career in sleep medicine. I am 'faklempt." -C.R.



REENA MEHRA, MD, MS, FAASM The Excellence in Research Award

Dr. Reena Mehra is recognized for research that has directly informed and shaped clinical practice in cardiovascular sleep medicine, with a primary focus on atrial fibrillation. She is the division

head of pulmonary, critical care and sleep medicine and the A. Bruce Montgomery, MD, American Lung Association Endowed Chair in Pulmonary and Critical Care Medicine at the University of Washington. She has authored more than 200 publications, delivered over 350 lectures and mentored more than 45 trainees.

"I am deeply honored to accept this award with the greatest humility for the scientific work that I love. I am profoundly grateful for those who have paved the way to this point. As I have had the privilege to work with many early career scientists, I also hold great optimism knowing that our future is bright." -R.M.



ILENE ROSEN, MD, MSCE The Excellence in Education Award

Dr. Ilene Rosen is an associate professor of medicine at the Perelman School of Medicine and serves as associate dean for graduate medical education (GME) and vice president for

GME at the University of Pennsylvania Health System. A past president of the American Academy of Sleep Medicine, she played a key role in developing competency-based training pathways for sleep medicine. Her research focuses on innovative sleep medicine education and expanding access to care. "I am deeply honored to receive the AASM Excellence in Education Award. This recognition reaffirms my passion to advance sleep education and my commitment to serve as a steward for the next generation of health care professionals. You have inspired me to continue advocating for innovative learning strategies, mentorship and the integration of sleep education into broader medical training. I look forward to my ongoing partnership with the AASM and our community of sleep medicine educators to ensure that we maintain our work to improve sleep health worldwide." -I.R.



NATHANIEL WATSON, MD, MSC, FAASM The Sleep Health Advocate Award

Dr. Nathaniel Watson is a professor and vice chair of faculty affairs in the department of neurology at the University of Washington, where he co-directs the sleep center and directs the

Harborview Medical Center Sleep Clinic. A past president of the American Academy of Sleep Medicine, his current work explores sleep's role in cancer risk, Al in sleep medicine, and improving sleep care for Native American communities. A dedicated advocate, he champions healthy school start times, daylight saving time reform, and transportation safety.

"I am deeply humbled and grateful to receive the AASM Sleep Health Advocate Award. This recognition is a reflection of the collective effort of many, and I am honored to be part of a community dedicated to improving sleep health. It inspires me to continue working toward raising awareness and supporting those in need of better sleep." -N.W.



DENNIS HWANG, MD The Clinical Achievement Award

Dr. Dennis Hwang is the regional co-chair of sleep medicine at Kaiser Permanente Southern California, where he develops clinical strategies to optimize sleep population health and personalized care delivery. His research focuses on

health services, leveraging big data to identify care gaps and develop Al-driven tools for clinical translation. He has chaired and served on multiple AASM committees related to technology and telemedicine, contributing to innovations that enhance sleep medicine care.

"I am extremely honored to receive the AASM Clinical Achievement Award and feel truly blessed to be part of our special sleep medicine community, including the AASM, my colleagues — sleep clinicians and researchers — and industry partners. This award reflects a collaborative environment that fosters the sharing of innovative ideas, driving advancements that improve sleep health for patients everywhere." -D.H. (



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MEMBER Spotlight

Bringing sleep innovation to the Pacific and beyond



With more than 20 years in sleep medicine, Dr. Kimberly Hutchison has dedicated her career to improving patient care and advancing innovative treatments. As the founder of SomnoSeal, she developed a unique device to help people with sleep apnea breathe more easily during sleep. In addition to her work at Oregon Health and Science University in Portland, Dr. Hutchison leads the Saipan Pacific Sleep Center in the Northern Mariana Islands.

Could you share your journey into sleep medicine and neurology? What inspired you to pursue this field, and how has your career evolved?

I've always been captivated by the brain, states of consciousness, and human behavior, and neurology provided a path to explore their intricate interconnections on a deeper level. Specializing in sleep medicine allowed me to explore consciousness further while making a profound difference in people's lives.

Over the years, my career has evolved beyond clinical care. I've focused on education, patient advocacy and innovation. Through my website KimberlyMD.com, my Sleep Warriors community and my work developing SomnoSeal, I hope to make sleep solutions more accessible and effective. My work in Saipan has also given me a unique perspective on sleep health while expanding sleep medicine access to underserved areas.

Opening the Saipan Pacific Sleep Center must have been a significant undertaking. What motivated you to start the center, and what were some of the challenges you faced in building and sustaining this essential service on the island?

I had never heard of Saipan until my family and I decided to move there in 2007 for my husband to provide underserved primary care. I initially planned to take a year off with our young kids, but that plan didn't last long. With no neurologist on the island, I was soon asked to see patients. It became clear that untreated sleep apnea was likely contributing to the high rates of advanced vascular disease and obesity in the native population. I ended up resurrecting a closed facility and began seeing patients in a converted sleep study room.

Eventually, I moved to Portland, Oregon, and created a global health elective to bring neurology and sleep trainees to the island. This year, I led a team of five, including a pediatric neurologist, sleep fellow and senior neurology resident.

The challenges have been significant: low awareness of sleep apnea, CPAP stigma, lack of trained staff, and limited access to well-fitted masks and equipment. Despite these hurdles, keeping the center running has been one of the most meaningful parts of my career.

Could you tell us about SomnoSeal and the inspiration behind developing this innovative device?

SomnoSeal was born out of a real clinical need I saw time and time again in my patients. I've spent years helping people adjust to CPAP therapy, and one of the biggest challenges they face is mouth leaks, which leads to dry mouth, discomfort and poor therapy effectiveness.

I wanted to create something simple, comfortable and reusable — a solution that promotes nasal breathing while reducing leaks, making CPAP and oral appliances more tolerable. Thanks to an innovation grant from OHSU, I collaborated with engineers to develop SomnoSeal, a discreet, low-profile nasal-breathing trainer designed to eliminate oral venting by blocking air from escaping through the



mouth from the inside out, even if the mouth opens slightly. The device allows the jaw to stay relaxed; thus, it generally feels less claustrophobic than other solutions. Patients have found it to be a game-changer — not only improving CPAP effectiveness but also helping them achieve the benefits of nose breathing.

You've created accessible online resources for sleep apnea patients. What gaps in patient education were you aiming to address with this platform, and how has it been received?

While developing SomnoSeal, I had to step outside the clinic and into the online world to find beta testers. What I discovered shocked me: So many patients were struggling with their therapies, and misinformation about sleep apnea and CPAP was everywhere.

Realizing the urgent need for better education, I created CPAP101, an online course designed to help CPAP beginners navigate therapy with step-by-step guidance. I also launched Sleep Bytes — weekly short videos answering common questions about sleep apnea and CPAP. I've now created over 120 Sleep Bytes, and the response has been incredible. What started as a way to fill an education gap has grown into a community of "Sleep Warriors" — a group of patients eager to take control of their sleep health. I love that this has evolved into more than just a platform; it's a dynamic space where I can listen, learn and collaborate to improve sleep therapy solutions.

In addition to patient care, you teach medical students, residents, and fellows at Oregon Health and Science University. What's one piece of advice you consistently share with future sleep medicine specialists?

One piece of advice I consistently share is to find balance. As a female physician with a family, I've navigated the complexities of balancing career, personal life and passion projects, and I encourage my trainees to be intentional about doing the same.

Beyond clinical work, I stress the importance of staying engaged in something that fuels their curiosity and personal fulfillment. Sleep medicine is a rapidly evolving field, and whether it's research, innovation, patient education or advocacy, having an area of focus outside of patient care can be the key to a long, meaningful and rewarding career.

Recognizing the 2025 AASM Fellows

Congratulations to the 21 members recognized as 2025 Fellows of the AASM! This prestigious honor highlights outstanding contributions in sleep medicine, significant achievements in the field and dedicated AASM membership.

To qualify, applicants must be active members for five consecutive years and undergo a rigorous review, including recommendations and evidence of accomplishments in scholarship, service or education. A review panel evaluates applications, with final approval by the AASM board of directors. Fellows earn the esteemed "FAASM" designation, showcasing their expertise and commitment to the field. The 2026 application period opens this fall. Learn more at aasm.org/fellow-membership. ()

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SHARED Stories

Kids Talk Sleep: How two brothers are in



Sanjay



When Yash and Sanjay Malhotra, 17 and 14, respectively, walk into an elementary school auditorium, the energy is palpable. As founders of Kids Talk Sleep, a nonprofit they launched to teach children the value of healthy sleep habits, the brothers bring a youthful enthusiasm that resonates with their young audience. Their mission is simple yet impactful: to make sleep "cool" and show how prioritizing it can enhance every aspect of life, from academics to sports performance.

Yash, a high school senior, explained how Kids Talk Sleep evolved from a previous project.

"Earlier on, in middle school for me and elementary school for Sanjay, we started Kids Talk Sports with one of our friends," he said. "We were doing this over Zoom. We would record videos having sports debates and talking about fantasy football. In our research, we started looking at what players were doing to improve their performance. One of the things was sleep. We had an 'aha moment' — we can help our friends and educate other kids."

The shift to Kids Talk Sleep started with YouTube videos and grew into live presentations.

"We try to focus on connecting with kids through sports, like how Tom Brady goes to sleep at 9 p.m. [most nights]," Yash explained. "If you can do the same, you're going to improve your athletic performance. Kids Talk Sports gave us experience making videos and seeing what kids like, and we've been able to transfer it over."

The brothers pivoted to focus exclusively on sleep in 2022, incorporating Kids Talk Sleep as a 501(c)(3) nonprofit. What started as a series of YouTube videos guickly grew into live school presentations and donation drives. Yash and Sanjay credit their parents for inspiring their passion. Their mother, Dr. Shalini Paruthi, is a sleep physician and advocate. Their father, Dr. Raman Malhotra, a past president of the AASM, is also deeply involved in advancing awareness and education about sleep.

But the heart of Kids Talk Sleep lies in Yash and Sanjay's ability to connect with their peers. Their presentations to third, fourth and fifth graders are as engaging as they are educational.

Yash explained, "We try to make it fun for them. Our main goal is to get them to remember 10 hours of sleep. So, one of our favorite activities is having them do 10 rounds of the wave."

The brothers also share tips for real-life challenges, like how to handle sleepovers.

"Obviously, it's harder to get 10 hours of sleep," Yash admitted. "But if you can prepare the night before and sleep the night after and try to do as much of your bedtime routine at a friend's house, that would be the best way."

Their presentations include relatable examples, often featuring their favorite athletes. They also distribute AASM sleep worksheets to teachers, ensuring the lessons extend beyond the assembly.

While Yash and Sanjay take the lead in presenting for Kids Talk Sleep, their parents are key behind the scenes. They help fine-tune presentations, asking questions and making sure everything is accurate.

The family's advocacy efforts don't stop at local schools. Both brothers have participated in lobbying efforts on Capitol Hill alongside their parents. Dr. Malhotra's work with the AASM and Dr. Paruthi's advocacy with the Restless Legs Syndrome Foundation have inspired their sons to amplify their voices.

Alongside Dr. Paruthi, Yash and Sanjay took part in advocacy efforts for the RLS Foundation on the Hill.

Yash reflected on the experience: "We gave our stories as children suffering with restless legs syndrome, and I think that was really interesting for the staffers to hear because they don't get a lot of kids who come in to advocate."

Sanjay agreed.

nspiring a generation to prioritize sleep



"I think it was important for [staffers] to hear our perspective about what it's like to have RLS," he said. "They can make connections, like they knew a family member or friend who might have had RLS, and they wouldn't know [what it was] because they did not know much about [RLS]."

Beyond education and advocacy, Kids Talk Sleep has a charitable arm. The brothers have donated about \$3,000 worth of brand-new sleep-related items to a youth shelter in St. Louis.

"We started with our own neighborhood and went from door to door with our flyer. We got a pretty good turnout with that," Yash said. "We were able to hand-deliver items to the shelter."

Their mission is simple yet impactful: to make sleep "cool" and show how prioritizing it can enhance every aspect of life, from academics to sports performance. While Yash and Sanjay's work has already made a meaningful impact, they have big plans for the future. They hope to expand their presentations to more schools and reach younger audiences, including kindergartners, first and second graders.

"I think the earlier kids start to realize the importance of sleep, [the more likely they are to] prioritize it," Yash said. "Our goal is to make sleep cool. If we can do that for younger kids, hopefully it [will] stick with them."

They're also exploring systemic issues like high school start times. As students themselves, they've experienced the strain of balancing academics, sports and social lives with proper sleep.

"We have been exploring how we can delay school start times because there have been many studies showing how it affects children, and teenagers especially," Sanjay said. "Maybe we'll start with our own school."

Their work with Kids Talk Sleep has also shaped their career aspirations. Both brothers are considering paths in health care and research. Yash plans to study public health and eventually attend medical school, with a focus on addressing sleep disparities in vulnerable populations.

Yash, reflecting on his experience at SLEEP 2024 in Houston, shared, "Some of my favorite things were the posters and the exhibit hall. They were mainly made by medical students, and some of them were there to present their research projects, which was inspiring to me, as someone who wants to do research in the future."

Sanjay shares similar ambitions.

"I feel like Kids Talk Sleep has absolutely started to shape my future. I would love to go into pre-med and then go into sleep medicine," he said. "I've met a lot of people who have changed the sleep medicine field, done groundbreaking research and played huge roles in the field. I would like to add to their research or find something new to help advance our knowledge of sleep."

Dr. Paruthi is thrilled to see her sons embrace their passions and explore the impact of sleep health.

"Yash and Sanjay have two parents who prioritize and value sleep and have dedicated our lives to advancing awareness, education, and better access to care and treatment," she said. "My husband and I have always thought, would we encourage our children to enter the medical field? I think it's the most fulfilling job ever to help people in their time of need. Medicine is a great way to do that. If they go to med school, and if they go on to become physicians, well, that would just be fantastic."

With a supportive family, a growing nonprofit, and a mission to inspire others, Yash and Sanjay Malhotra are proving that advocacy knows no age limit. Their efforts to make sleep education fun and relatable could transform how the next generation prioritizes sleep — one wave at a time.

Discovery and dedication: How Dr. Mary Carskadon advanced sleep science



Mary Carskadon, PhD, followed an unconventional path to become a leading voice in sleep science. It started in 1970 with an unexpected call from Dr. William Dement, a pioneer in the field and the husband of her cousin Pat. He recruited her to work with him at Stanford University.

"At the time, I was one year out of college and lacking direction for my future," Dr. Carskadon recalled. "Moving from family and the support of good friends was not comfortable for me — I was much more shy in those days. That said, I knew the Dements, which helped with the transition."

That decision changed her life and the trajectory of sleep science itself.

Moving across the country to California was a leap of faith. She bought a Volkswagen from Dr. Christian Guilleminault, a fellow sleep researcher, and got to work helping Dr. Dement set up the Stanford Sleep Disorders Clinic. At the clinic, which was among the first in the nation, Dr. Carskadon found herself immersed in groundbreaking research.

Her early tasks included analyzing sleep diaries and working with PSG data, but it was the development

of the multiple sleep latency test (MSLT) that marked her first major contribution to the field.

"We thought we had a good tool for measuring physiological sleepiness and helping to confirm the diagnosis of narcolepsy," she explained. "My early dissertation work confirmed to me the MSLT's research utility, though there was skepticism from senior sleep scientists."

Decades later, the MSLT remains in use around the world to assess excessive daytime sleepiness.

"I remain staggered that the measure is still in use and has garnered over 13,000 citations!" Dr. Carskadon said.

The work at Stanford wasn't all serious. Summers meant "sleep camp," when the team transformed a fraternity house into a research facility.

"Sleep camp was fun and fascinating and opened up enormous opportunities for novel research in children and adolescents. I cannot imagine a better place for me to begin exploring science," Dr. Carskadon reminisced.

It was during one of these camps that she encountered her first patient with severe obstructive sleep apnea (OSA). "[The patient's] snoring was loud enough to hear up and over a hill outside the frat house. Then, [he] rang for a restroom trip, but the tech couldn't get into the bedroom or arouse him and came to wake me up -1 lived in the sleep camp building. The PSG was kaput. When I got to the room, we finally got the door open. [The patient] had fallen out of bed to block the door, and he'd gone back to sleep. There's more to this story, and it was definitely memorable!"



CELEBRATING TRAILBLAZERS in Sleep Medicine

Despite moments of doubt — she once considered leaving California to return to Pennsylvania — Dr. Carskadon stayed on, encouraged by Dr. Dement. She edited papers, including some of Dr. Guilleminault's early work, and she even helped write test questions for the first certification exams in clinical polysomnography. These experiences deepened her commitment to sleep research and set the stage for a career that would influence countless lives.

Today, Dr. Carskadon directs the E.P. Bradley Hospital Sleep Research Laboratory and is the principal investigator for the COBRE Center for Sleep and Circadian Rhythms in Child and Adolescent Mental Health. Her work has expanded the understanding of how sleep changes across development and the role of circadian rhythms in adolescence. onsets on the MSLT with a sleep onset latency well under five minutes — a clear sign of insufficient sleep.

Beyond research, Dr. Carskadon has mentored generations of scientists, many of whom credit her with shaping their careers. Her prestigious summer internship program at the Bradley Sleep Lab, named in honor of Dr. Dement, continues to inspire young researchers.

Dr. Carskadon has also been a champion for women in science, advocating for greater representation and leadership opportunities. She is a past president of the Sleep Research Society, where she organized the Women in Sleep Research interest group, and a co-founder of the Northeastern Sleep Society. Her leadership roles include serving as an appointed member of the National Commission



MARY CARSKADON *(center)*, PICTURED WITH MARK MAHOWALD *(left)* AND ANDREW CHESSON *(right)* IN 2003.

on Sleep Disorders Research, which was established by Congress in 1988. The commission's report led to the creation of the National Center on Sleep Disorders Research in 1993. Her editorial work for journals like Behavioral Sleep Medicine and Sleep Advances has further cemented her influence in the field.

Her accolades include the AASM's Distinguished Leadership Award, Excellence in Research Award, and Sleep Health Advocate Award. She has also received the National Sleep Foundation's Lifetime Achievement Award. In 2005, the Sleep Research Society honored her with the Outstanding Educator Award, which was later renamed in her honor as the Mary A. Carskadon Outstanding Educator Award.

Dr. Jennifer Martin, a past president of the AASM, summed up Dr. Carskadon's legacy: "Dr. Carskadon is a brilliant scientist who shared her vast wisdom, impeccable attention to detail and desire for truth with all of us who

Dr. Carskadon's research revealed that insufficient sleep in teens undermines alertness, disrupts mental health, and heightens the risk of alcohol and drug use. By highlighting these critical consequences, she underscored the urgent need for later school start times. Her research contributed to policy shifts, including recommendations from the American Academy of Pediatrics, American Academy of Sleep Medicine, and CDC to delay school start times.

Her passion for this issue was reinforced by both a tragic event and striking research findings. A high school student driving home late from a college interview collided head-on with another student, and both were killed instantly, highlighting the real-world dangers of insufficient sleep in teens. Her research further confirmed the risks, showing that half of 10th graders transitioning from a school start time of 8:25 a.m. to 7:20 a.m. experienced REM were fortunate enough to call her a mentor, advisor and friend."

From her early days at Stanford to her ongoing research and advocacy, Dr. Carskadon's career is a testament to the power of curiosity and resilience. Her work continues to shape how we understand sleep and its profound impact on health, particularly for children and adolescents. And her story — a young woman taking a chance on a fledgling field — remains an inspiration to those who dream big and dare to follow unexpected paths.

This article is part of a series celebrating the AASM's 50th anniversary, where we highlight the impactful careers and ongoing contributions of leaders in sleep medicine.

AASM Through the Decades

The **1980s** and the Building Blocks of Progre

The 1980s were a whirlwind decade. While MTV turned music into a visual art form, and Pac-Man fever swept the nation, sleep medicine was undergoing its own transformation. The Association of Sleep Disorders Centers was busy building the foundation for what would become a vital medical specialty, shaping the future one milestone at a time.

As the Rubik's Cube challenged minds across America, the ASDC focused on advancing education. The organization's Education Committee distributed materials to every U.S. medical school, ensuring future physicians understood the importance of sleep in overall health. Meanwhile, Dr. Colin Sullivan published his landmark study on CPAP therapy for obstructive sleep apnea, setting the stage for a treatment that would change millions of lives.

That same year, as the "Smurfs" debuted on Saturday mornings and "Raiders of the Lost Ark" wowed audiences in theaters, the ASDC hosted its first annual meeting in Dallas. With around 150 attendees, the event was an intimate gathering where researchers and clinicians shared groundbreaking ideas.

As Ronald Reagan won reelection in a landslide, and Cabbage Patch Kids took over toy stores, the mid-1980s saw the ASDC begin offering individual memberships through the newly formed Clinical Sleep Society, led by Dr. Philip Westbrook and his wife, Carol. Membership grew to about 700 people by August 1985, demonstrating the increasing recognition of sleep medicine's importance. As the organization evolved, so did its identity. By 1987, reflecting its expanding reach and influence, the ASDC-CSS rebranded as the American Sleep Disorders Association, and Dr. Thomas Roth succeeded Dr. William Dement as president.

By the late '80s, with acid-wash jeans in style and George Michael's "Faith" topping the music charts, the ASDA was making waves in Washington, D.C. Dr. Dement and others successfully advocated for congressional funding to study sleep disorders, leading to the creation of the National Commission on Sleep Disorders Research in 1988. The following year, the ASDA accredited the first sleep fellowship programs at Georgetown University, Stanford, and the State University of New York at Stony Brook.

With the number of accredited sleep centers skyrocketing from 16 in 1980 to 137 by 1989, the 1980s marked the decade when sleep medicine found its stride and stepped confidently into the future.

Turn no-shows into yes-shows: How sleep teams keep patients on schedule

By Matthew Anastasi, sleep team resources manager

Welcome back to Sleep Team Talk, a column that looks at our field through the lens of the sleep team member. In this issue, we will field a question asked by a clinical coordinator who is struggling with a concern common to many sleep disorders centers.

> I manage a sleep lab and clinic that is experiencing a high patient no-show rate, and this is causing disruptions to our practice. What do I do?

Patient no-shows are one of the most significant factors contributing to rising health care costs, limited resource capacities, and an increased demand for providers and testing. For these reasons, making efficient use of clinical resources is critical to the delivery of high-quality care.

THE PREVALENCE OF NO-SHOWS

Sleep centers suffer one of the highest cancellation rates in medical specialties due to the high level of procedural dependencies and scheduling complexity. No-show rates were cited at 21.2% in a 2020 study of 2,532 clinical sleep visits. Factors associated with a higher incidence of no-show rates included younger age (17–40 years: 21.5%), appointment type (new: 30.5%) and insurance status (no insurance: 24.6%).

THE REPERCUSSIONS OF NO-SHOWS

According to various studies, the impact of patient no-shows includes a significant loss of revenue for health care professionals, estimated at around \$150 billion annually across the U.S. health care system. On average, no-shows can cost a single-physician medical practice \$150,000 per year. Missed appointments reduce patient access to care and leave time slots unfilled. Patients with a history of no-shows are also less likely to return, disrupting long-term care continuity.

STRATEGIES SLEEP TEAMS SWEAR BY

Although these statistics paint a bleak picture of the issue, there are several effective strategies to take your sleep disorders center from "no-show" to "yes-show."

Problem: Patient unpreparedness or anxiety before a sleep study

Solution: According to respiratory therapist Peter Allen, an experienced clinician and former lab manager, "For a patient at high risk for no-show, get them in for a tour. Enhance your scheduler's skills to answer questions and eliminate patient concerns before they come in. Have your scheduler ask the patient, 'Why do you need a sleep study?', 'How are you getting here?' and 'How are you getting home?'

Have the sleep study on *their* schedule, not yours. With this approach, I had a 98% show rate."

Sleep technologist Michael Montanye, a 25-year clinical coordinator, is a proponent of personal reminder calls: "Automated calls are convenient but impersonal and give the patient an opportunity to simply press the 'N' to cancel. More importantly, in-person calls give us an opportunity to answer questions or concerns that they may have prior to their study, reinforcing our pretest education."

Problem: Lack of transportation

Solution: Offer telemedicine options and home sleep apnea tests (HSATs) for distant patients. Sleep technologist and clinical coordinator Matt Halscheid said, "Removing patient transportation barriers through rideshare services or transport reimbursement can be highly effective in keeping the beds filled."

Problem: Insurance authorization clearance

Solution: Develop an in-house program for seeking pre-authorizations with a target of requiring them at least two weeks before the appointment to prevent last-minute cancellations due to failed pre-authorizations. Set up a dedicated waiting list and actively backfill from it, prioritizing patients with approved authorizations and those with the longest wait times or highest need.

QUALITY ASSURANCE AND IMPROVEMENT

To promote departmental awareness, track and report no-show rates as part of regular correspondence with your sleep team. Include patient-reported reasons for cancellations on this dashboard to identify patterns and adjust the scheduling approach as needed. This creates a phenomenon known as the "Hawthorne Effect," in which simply directing attention to a problem can lead to novel approaches that produce positive outcomes.

According to sleep technologist Matt Halscheid, "Some possible future and creative mechanisms would be to utilize technology and automation through the leveraging of Al assistance to flag patients at high risk for no-show so that they can be targeted for additional reminder calls and preparation."

Given a no-show rate of 20%, consider the impact of reducing it to 10%. If you schedule 4,000 patients a year, that improvement would result in 400 fewer cancellations annually! Reducing cancellations improves operational efficiency, revenue retention and patient care continuity.

To have your sleep team-related inquiry answered in a future "Sleep Team Talk," please submit your question to sleepteam@aasm.org.

CODING *Quarterly*

Hypoglossal nerve stimulation for the treatment of obstructive sleep apnea

Hypoglossal nerve stimulation for treating obstructive sleep apnea (OSA) became a viable clinical option following its FDA approval in the United States in 2014. Sleep medicine providers will typically bill codes 95970, 95976 and 95977, which are used for the programming and analysis of the neurostimulator devices. Proper coding and billing depend on whether the programming is simple or complex, and if it's initial or subsequent. Billing considerations include:

- Medical necessity: Documentation should support the need for device adjustment. If performed during a postoperative period, ensure it is separately billable and not bundled.
- Modifier use: Use modifier 26 only if the interpretation and programming are performed. Use modifier TC only if the technical aspect of programming is performed. Use modifier 59 (distinct procedural service) if multiple programming sessions are performed on the same date with separate circumstances.
- Frequency and payer guidelines: Some insurers limit how frequently codes can be billed. Preauthorization might be required for complex reprogramming. Ensure the correct ICD-10 codes (e.g., G47.33 – OSA) are linked appropriately.
- 4. **Code selection and misuse:** Choosing the wrong CPT codes can lead to claim denials. Misclassifying reprogramming sessions (simple versus complex) can result in down coding or audits.
- Global period issues: If programming is done during the global period of the implantation surgery, some payers may deny it unless modifier 58 (staged procedure) is appended.
- 6. **Payer-specific challenges:** Medicare may have different rules than private insurers for reporting monitoring and device programming. If the programing services are provided by an out-of-network provider, reimbursement may be significantly reduced or denied.

CORRECT BILLING FOR MONITORING AND PROGRAMMING

- Post-implantation programming: This would be performed to optimize therapy.
- Reprogramming in response to inadequate treatment outcomes: This would include persistent OSA symptoms despite prior settings.
- Changes in stimulation parameters due to patient reported discomfort: This would include side effects due to tongue movement issues or pain.
- 4. **Device troubleshooting:** A suspected malfunction or unexpected variation in therapy effectiveness.

- 5. **Periodic reassessment of therapy efficacy:** When indicated by the treating physician.
- Pre- and post-surgical testing: To place a hypoglossal nerve stimulator, a recent diagnostic polysomnogram is required. The voltage titration study occurs three months after activation of the device and would be billed with 95810.

INCORRECT BILLING FOR MONITORING AND PROGRAMMING

- Routine device interrogation: If performed without programming adjustments (some payers consider this part of standard follow-up care).
- 2. **Duplicate billing:** This would occur when the monitoring and reprogramming codes are billed on the same day as the implantation or revision surgery.
- Billing the incorrect CPT code: The billing of 95976 or 95977 when only simple adjustments were made (use 95970 instead).

STRATEGIES TO AVOID BILLING ISSUES

- 1. **Verify payer policies**: Check coverage rules for the programming codes.
- 2. **Preauthorization compliance:** Obtain approvals before performing programming services.
- 3. Use correct CPT codes and modifiers: Align documentation with the services provided.
- 4. **Ensure detailed documentation:** Clearly state the necessity for the monitoring, programming, adjustments and patient outcomes.
- 5. **Monitor denials and appeals when needed:** Track claim denials to identify patterns and submit appeals when justified.

POSTOPERATIVE MANAGEMENT AND DEVICE ACTIVATION

Device activation occurs approximately four weeks after surgical implantation to allow for healing. During activation:

- 1. **Device calibration:** Stimulation settings are adjusted to optimize airway patency without causing discomfort.
- 2. **Patient training:** Patients are educated on using the remote control to activate and deactivate the device.
- 3. **Follow-up:** Regular follow-ups ensure proper device function and monitor therapeutic efficacy.

CPT CODES		
95970	Device analysis only, without programming, subsequent visits only (not at time of generator implantation)	
95976	Device analysis and simple programming (not at the time of generator implantation)	
95977	Device analysis and complex programming (not at the time of generator implantation)	
95977	(not at the time of generator implantation)	

Surgical codes for hypoglossal nerve stimulation are 64582-84

CASE

This is a 72-year-old male with complaints of snoring, feeling unrested upon awakening and daytime somnolence. The patient usually goes to bed at 11 p.m. with sleep onset within 15-20 minutes and wakes up at 6 a.m. The patient's Epworth Sleepiness Scale score was 7. The patient does not use tobacco. He drinks 3-4 glasses of wine per night. Medical history is significant for hypertension and peptic ulcer disease. Current medications include amlodipine and olmesartan. No known allergies.

The patient underwent a home sleep apnea test and was diagnosed with severe OSA with a respiratory event index of 45.9/hour. He was initiated on APAP therapy with download data revealing a mean pressure of 8 cm H2O with a resultant apnea-hypopnea index of 1.6/hour. Over the course of the next two years, he developed increasing difficulty tolerating PAP therapy with decreasing adherence. He was referred for a hypoglossal nerve stimulator with a repeat HSAT confirming severe OSA with an REI of 40.7/hour.

One month after surgical insertion, the hypoglossal nerve stimulator was activated with a range of 0.7-1.7 volts. He

subsequently underwent a titration study and was found to be effectively treated with 1.3 volts with a resultant AHI of 1.7/hour.

Based upon the above case, the appropriate code to bill is **95976** - Device analysis and simple programming (not at the time of generator implantation).

ROLE OF SLEEP MEDICINE PHYSICIANS

Sleep medicine physicians play a pivotal role in the success of hypoglossal nerve stimulation therapy. Key responsibilities include:

- 1. **Patient identification:** Screening and referring suitable candidates based on clinical and polysomnographic data.
- 2. **Preoperative evaluation:** Collaborating with surgeons to ensure comprehensive assessment, including drug-induced sleep endoscopy.
- Postoperative monitoring: Assessing therapeutic outcomes through follow-ups and polysomnography.
- 4. **Patient education:** Providing guidance on realistic expectations, adherence and troubleshooting.

CONCLUSION

Proper billing and coding of hypoglossal nerve stimulation monitoring codes require a thorough understanding of CPT code selection, payer policies and documentation best practices. To minimize claim denials, providers should ensure accurate coding, justify medical necessity, and apply correct modifiers when needed. Given the evolving landscape of reimbursement for these codes, staying updated on payer-specific policies and proactively addressing billing challenges will help optimize reimbursement and ensure compliance.

SLEEP FACT SLOTH

HONEY BEES NEED TO SLEEP IN THE DARK

Researchers at the University of California San Diego have found that artificial light at night disrupts the circadian rhythms of honey bees, reducing their sleep and posing a threat to their essential role as pollinators. Their ability to "dance," which is essential

for their communication, is hindered if they do not get enough sleep.

Sources:

https://today.ucsd.edu/story/sleep-is-no-light-matter-for-bees and https://doi.org/10.1038/s41598-024-73378-9



In CONVERSATION



The evolution of care at Marshall Sleep Disorders Center

We sat down with **Amy Sampson, RPSGT, CCSH, from the Marshall Sleep Disorders Center in Alabama,** a facility that has proudly maintained accreditation for nearly 30 years, to discuss its growth, innovations and dedication to advancing sleep medicine.



You've been with the center since it earned its first accreditation in 1996. What are the most notable changes or advancements you've seen during this time?

One of the most notable advancements has been the transition from analog signals to fully digital sleep systems. This shift revolutionized data collection and analysis, enabling more precise and efficient assessments of sleep patterns. Digital systems offer enhanced signal clarity, better storage capabilities and streamlined workflows, improving diagnostic accuracy and patient outcomes. They've also facilitated integration with emerging technologies like cloud-based platforms, transforming how sleep disorders are monitored and managed.

The center has grown from a two-bed clinic in 1995 to an eight-bed facility with a multidisciplinary team of physicians and sleep techs. What were the biggest challenges in achieving this growth, and how has the expansion impacted the care you provide?

Our growth has significantly enhanced the care we provide, allowing us to serve more patients with diverse sleep disorders. However, a key challenge has been recruiting, training and retaining skilled sleep technicians to meet the increased demand while maintaining high-quality care. Expanding the team and integrating specialized expertise have strengthened our diagnostic capabilities and personalized treatment approaches, ensuring that each patient benefits from comprehensive, collaborative care.

Marshall Sleep Disorders Center serves as a clinical site for Wallace State Community College students. How does this partnership contribute to the field of sleep medicine?

By serving as a clinical site, we provide hands-on training to future sleep technologists, equipping them with the practical skills and

experience needed to excel in this specialized field. This collaboration not only helps address workforce shortages but also ensures a high standard of care by fostering a new generation of well-trained professionals. Together, we're strengthening the sleep medicine community and improving patient outcomes through education and innovation.

Can you tell us about the Marshall Sleep Medicine Academy? What is its role within the center, and what are the goals you hope to achieve through its initiatives?

When the pandemic struck, sleep centers, like many other allied health care fields, had significant challenges in retaining staff essential for completing sleep studies. We have long benefited from being a clinical site for the Wallace State Community College polysomnograrphic technology program, relying on a consistent stream of technicians through clinical rotations and potential hires. However, the pandemic disrupted this pipeline, creating staffing shortages.

In response, the Marshall Sleep Medicine Academy emerged. As an ASTEP accredited training site, it provides hands-on training to future sleep technologists, equipping them with the practical skills needed to address workforce shortages not only in our own center but also across our affiliate systems facing similar challenges. Our academy fosters multidisciplinary collaboration among health care professionals and focuses on improving workforce readiness, enhancing patient care through innovation and raising awareness about sleep disorders. By cultivating skilled professionals, it supports our mission to deliver exceptional care and drive progress in this ever-evolving field.

To learn how to become a clinical site for a CoA-PSG polysomnographic technology program, contact CoA-PSG executive director Laura Rea at Irea@CoA-PSG.org or (682) 231-3011. To learn how to become an ASTEP Intro to Sleep Medicine for Technologists Accredited Course Provider, visit astep.aasm.org or call the AASM at (630) 737-9700.

COMMUNITY Voices

Let's not snooze on occupational therapy's role in sleep health

By Carissa Hess, OTD

Occupational therapy promotes participation and performance in daily life through engagement in meaningful activities (occupations). Occupational assessment and intervention are used by occupational therapy practitioners (OTPs) to promote overall health and well-being for individuals of all ages in a variety of settings. Sleep and rest are identified as essential occupations within the Occupational Therapy Practice Framework (4th ed., OTPF-4: AOTA, 2020) and are said to be pillars in the occupational therapy scope of practice. However, they have been widely overlooked by clinicians. OTPs possess a unique role in addressing sleep health through screening, evaluation and interventional strategies such as environmental adaptation, modifying habits and routines, using cognitive behavioral strategies, addressing sensory modulation and more.

As a seasoned OTP who lives with narcolepsy, I have experienced how deficits in the occupation of sleep can affect performance and participation in other meaningful occupations. As a recent graduate of Indiana Wesleyan University's occupational therapy doctorate program, I have made it my mission to contribute to the evidence regarding occupational therapy's role in sleep health, facilitate multidisciplinary collaboration surrounding sleep, enhance the knowledge and implementation rate of sleep intervention among OTPs, and facilitate positive change in the lives of those who experience sleep-related disturbances. My doctoral capstone project provided me with the perfect opportunity to embark on this mission to create waves in the sleep and occupational therapy communities.

I felt led to address sleep in the pediatric population in hopes of promoting good sleep health early in life. I developed occupational therapy-based sleep programming for my capstone project at Ivy Rehab for Kids. This programming equipped caregivers and their children with holistic treatment, education and resources to help improve sleep quality and daytime performance. Further, it enhanced the knowledge of other therapy practitioners to aid in understanding how poor sleep health can affect client outcomes, overall occupational performance/well-being, and when a referral to a physician is warranted. The program's objectives helped integrate sleep health into the daily practice routines of practitioners at Ivy Rehab for Kids by incorporating sleep screening, assessment and intervention. Further, it improved caregiver knowledge and integration of that knowledge into daily routines to promote improvements in sleep health and overall well-being.

Within the pediatric therapy setting, many behaviors and symptoms that children present with, such as hyperactivity, impulsivity, low energy, poor attention, mood dysregulation and sensory-seeking /avoiding behaviors, could all be derived from inadequate sleep health. Pediatric therapists provide services to enhance child development, and sleep is a foundational component of healthy development that can and should be addressed by OTPs.



Outpatient therapy settings provide a great opportunity to address pediatric sleep concerns within the entire family unit; we know that when children aren't sleeping, their caregivers aren't sleeping either, creating an unhealthy cycle. This is where the holistic approach and expertise of occupational therapists really have an opportunity to shine.

A large gap in the care of individuals who have poor sleep health could easily be bridged by OTPs. Let's face it: Sleep medicine professionals are in high demand and don't always have the time to spend discussing interventional strategies and techniques in detail with their patients. Living with narcolepsy has provided me with the luxury of dealing with my fair share of sleep clinicians. Unfortunately, I have experienced far too many of the quick appointments that were nothing more than a sleep specialist popping in, changing my meds, throwing a handout at me, and sending me on my way to be seen again in six months. I know that lifestyle changes are another huge factor in maintaining my well-being, and that has rarely been addressed in detail at my appointments.

Sleep medicine professionals have the opportunity to partner with occupational therapy practitioners to improve the overall sleep quality and well-being of their patients. Improving interprofessional collaboration between the communities of occupational therapists and sleep specialists would help lessen the burden on sleep clinicians while increasing positive outcomes and the quality of life of their patients. Make it your goal to learn more about how occupational therapy can help you and your patients live a healthier, more meaningful life.

Carissa Hess is a recent April 2025 graduate of Indiana Wesleyan University's occupational therapy doctorate program. ()

New AASM statement: Sleepiness is a critical patient outcome

Value 21 1 Table 1 April 1 April 1

The AASM has released a new position statement emphasizing the clinical importance of sleepiness, available now in the June issue of the *Journal of Clinical Sleep Medicine*.

The statement highlights that sleepiness is a

critical patient-reported outcome that is associated with increased risk for adverse health effects and diminished quality of life. It underscores the need for proper evaluation and management of sleepiness to ensure patient safety and patient-centered care. Excessive sleepiness, which affects one-third of U.S. adults, can impair cognitive function, mood, performance, health and safety, increasing the risk of injury or even death in severe cases. Sleepiness is a significant symptom of sleep-wake disorders and serves as a marker of insufficient sleep. The AASM stresses that addressing sleepiness

should be a fundamental aspect of patient-centered care, requiring greater health care system support. Additionally, the statement calls for further research and innovation to improve the treatment of sleep-wake disorders, including studies that support the development of tailored therapies for daytime sleepiness.

By recognizing sleepiness as a critical clinical issue, the AASM aims to improve patient outcomes and promote awareness of its impact on health and daily functioning.

Storytelling as sleep therapy: The Cozy Critters approach

Sleep studies can be an intimidating experience for children, as the unfamiliar environment, monitoring equipment, and overnight stay often cause stress and anxiety. To help ease these challenges, some clinicians and parents are exploring creative tools, such as the ad-free kids' podcast Cozy Critters.

Cozy Critters is a bedtime podcast that takes children on calming adventures to visit the world's coziest critters. It features soothing soundscapes, animal insights, and guided breathing exercises designed to help kids unwind before sleep.

Doug Fraser, the creator and host of Cozy Critters, believes the podcast could offer comfort to children undergoing sleep studies.

"The gentle storytelling and familiar soundscapes provide a sense of normalcy and calm, helping reduce stress and anxiety," he said. "By creating a peaceful auditory backdrop, the podcast may also help children settle into a restful

state, which is crucial for obtaining accurate study results."

In addition to its potential benefits in clinical settings, Fraser points to the broader role podcasts can play in pediatric sleep care.

"Podcasts are a powerful, screen-free tool for promoting relaxation and establishing healthy sleep routines," he explained. "At home, they can become part of a consistent bedtime ritual, signaling to a child's brain that it's time to wind down. In clinical settings, they can help create a soothing environment, making the experience less daunting and more natural for young patients."

While tools like Cozy Critters might not replace traditional methods of preparing children for sleep studies, they could complement clinical and at-home strategies for promoting relaxation and comfort. Whether as a bedtime ritual or a calming distraction in a clinical setting, podcasts like this offer an interesting way to support children's emotional and physiological needs during sleep care.

You can listen to Cozy Critters ad-free on Apple Podcasts, Spotify, PodBean, iHeartRadio and other popular platforms, or on Yoto, the kids' speaker device.



For more than 25 years, the AASM Foundation has been the leading organization helping investigators, community leaders, and clinicians address the challenges of the evolving field of sleep.

Making the future bright for the field of sleep medicine has always been our priority, and we are proud to share our purpose and values that have guided our leaders and volunteers in implementing our strategic plan.

Our Purpose

Investing in people, research, and communities to improve the sleep health of all people. Our programs support the people, research, and communities that are *Championing a Bright Future in Sleep Health.*

Learn more about our achievements and become a donor today by visiting **foundation.aasm.org**

Our Values

Collaborative Evidence-Generating Inclusive Innovative Strategic



The AASM Foundation has reached the Platinum Transparency Seal from Candid. Learn more about the seal by viewing our profile on GuideStar.



Unlock the Gold Standard in Sleep Medicine!

Elevate your sleep disorder center into a beacon of excellence with American Academy of Sleep Medicine accreditation! This prestigious recognition is not just a badge; it's a powerful statement of quality and trust that can elevate your facility to new heights. As the only accreditation dedicated exclusively to sleep medicine, AASM provides expert guidance from our experienced accreditation team every step of the way! Enjoy the benefits of achieving AASM accreditation for an impressive five-year term, all at a fantastic value.

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