



Improving the HSAT Workflow with Sleep Study Management and Total Sleep Time

EnsoSleep Case Study: Improving the HSAT Workflow with Sleep Study Management and Total Sleep Time

About Awaken2Sleep

Dentists can treat patients diagnosed with obstructive sleep apnea (OSA) by delivering an oral appliance instead of CPAP, if recommended based on sleep results. One of the ways to test patients for OSA is with home sleep apnea testing (HSAT), however, not all dental practices have the time or capacity to support an HSAT program. Awaken2Sleep (A2S) provides dental sleep medicine coaching, training services, and home sleep apnea testing (HSAT) support for several hundred dental practices around the country.

Awaken2Sleep's HSAT Interpretation program offers a low-cost approach for dental practices to identify at-risk patients for OSA to get them a test and a diagnosis from a sleep physician. Once studies are completed by patients and uploaded to A2S from dental practices, their panel of board certified sleep physicians provides an interpretation and treatment recommendation. On the back end, sleep coaching programs feature registered, experienced professionals to support patients. This combined package of services provide an all-in-one solution to meet the needs of their dental customer base.

For CEO and Co-founder Michael Cowen, Awaken2Sleep's ability to support dental practices who want to own and operate their own HSATs without adding staff is immensely valuable in the fight against sleep disorders. Cowen is also constantly looking for ways to add more value to his own operations. One way A2S has improved the efficiency of their operation is EnsoSleep AI Scoring for multiple HSAT devices and an all-in-one Study Management platform that offers the team customized report generation.

[“EnsoSleep is a simple, automated system that adds accuracy as well as beautiful reports that are easily updated and customized based on our organizational preferences,”](#) said Michael Cowen, CEO and Co-Founder of Awaken2Sleep.

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Workflow Challenges Before EnsoSleep

Cowen's team provides a holistic HSAT operation for dental practices, supporting interpretation and clinical input for both dentists who own and operate their own HSATs and those who prefer a 3rd party shipping model.

For those with a 3rd party shipping model, Awaken2Sleep's team receives the referral and sends out a home testing unit. Patients take their test, send it back, and ultimately receive their interpreted results from their dentist. But the process of scoring and interpreting that study involves a lot of handoffs, involved parties, and possible roadblocks to completion.

“Challenges included regular discussions and debates over events in HSATs, general frustration with artifact in studies, undue time spent scoring tests with complex results that required more attention to detail, further time spent wondering about the accuracy of HSAT results, and a lengthy, manual report creation process,” shared Cowen.

Beyond those challenges, the team also stored patient data on “a confusing file management system” that was a semi-patchwork combination of virtual EMRs, online storage sites, and physical servers, all of which required expertise to maintain. The singular solution to address all these challenges? [EnsoSleep Study Management and AI Scoring with Total Sleep Time](#).

**General Artifact
in Sleep Studies**



**Time Consuming,
Complicated
Report Generation**

**Worries Over
HSAT Accuracy**



**Confusing File
Management
System**

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EnsoSleep Simplifies, Standardizes Workflow

Just as the Awaken2Sleep team provides a way for dental practices to help patients in the sleep care continuum, EnsoSleep provides support for Awaken2Sleep to maximize their operation. Instead of using a physical file management system to manage all their HSATs, EnsoSleep Study Management offers a single cloud-based solution for all studies.

With EnsoSleep Study Management, all the devices used by A2S's affiliated organizations - including ApneaLink Air, Braebon Medibyte Jr, NightOwl, Nox T3, Philips Alice NightOne, SleepImage, Somnomedics, Synergy ZMachines, and WatchPAT - can be displayed in the same platform, accessible from any computer or device with internet access.

“It is very valuable to have all the sleep studies in one standardized format. Additionally, many HSAT softwares generate reports that are lack-luster, so EnsoSleep adds a level of complexity to our system. EnsoSleep makes beautiful, customizable reports that work for all our devices and make it easy to share results with patients,” said Cowen.

Dynamic, intuitive, customizable reports simplify and standardize the reporting process for several hundred referring organizations' different devices. But streamlining the study management workflow isn't the only area where EnsoSleep assists the A2S team.

Home Sleep Testing Devices Actively Used by Dental Organizations in Awaken2Sleep's Network:

- ApneaLink Air
- Braebon Medibyte Jr
- NightOwl
- Nox T3
- Philips Alice NightOne
- SleepImage
- Somnomedics
- Synergy ZMachines
- WatchPAT

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EnosSleep Adds Speed and Accuracy

For years, Awaken2Sleep's board certified scorers would manually score sleep studies, taking anywhere from 15 minutes on an easy, negative OSA study to more than an hour on complex studies with high AHI severity levels and/or artifact in the data. Because of this, the A2S team needed an accurate solution to speed up the scoring and interpretation process.

Almost immediately after adding EnsoSleep, AI Scoring helped A2S cut down on the time spent scoring sleep studies substantially, allowing techs to review more studies and support an ever growing number of dental practices. More than the increased speed, however, for Cowen, the value of EnsoSleep AI Scoring comes from the addition of Total Sleep Time for HSATs. Per Cowen, many HSAT devices that A2S deploys don't provide a measurement of total sleep time, so adding one is an important benefit of providing EnsoSleep-supported interpretations on a study. "When a study doesn't have total sleep time as the criteria for scoring, it skews the numbers and can even make the study invalid in some cases. Adding the level of accuracy to our reports and being able to scale into scoring more home tests with a high level of accuracy was important to our development. EnsoSleep Total Sleep Time allows us to do this," Cowen said. Ultimately, the accuracy provided by total sleep time helps improve the confidence physicians have in the results they share with their patients.

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Faster Patient Results with EnsoSleep

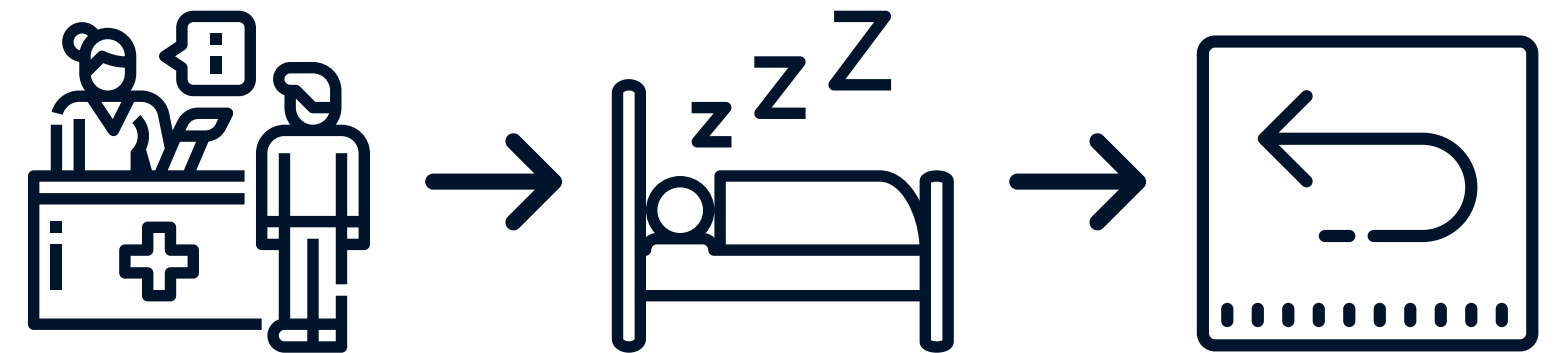
In 2023, the average turnaround time for a patient in the Awaken2Sleep network to receive a result from their physician after taking a test is down to just 24-72 hours. No more waiting around weeks for results, sleeping even worse due to stress. Patients now have information as early as the week of their original dental appointment.

That's the type of speed Awaken2Sleep can provide patients with the help of EnsoSleep.

“Practices can talk to a patient that came in today and was screened as high risk, get them tested tonight, and reappoint them to come back within a week because the results will be ready in three days. That's a pretty simple workflow,” said Cowen, adding: “We're not talking months, we're talking days to weeks, which propels people to say yes, because they really want the help.”

Providing that type of efficiency boost is what EnsoSleep did for Awaken2Sleep's workflow. [How can AI Scoring and Study Management maximize your sleep center operation?](#)

The Awaken2Sleep Workflow with EnsoSleep AI Scoring and Sleep Study Management



Patient is screened,
Prescribed an HSAT.

Patient takes sleep
test at home.

Patient returns
HSAT device.



EnsoSleep scores and
annotates the study.

Physician meets with
patient to discuss
results and treatment.

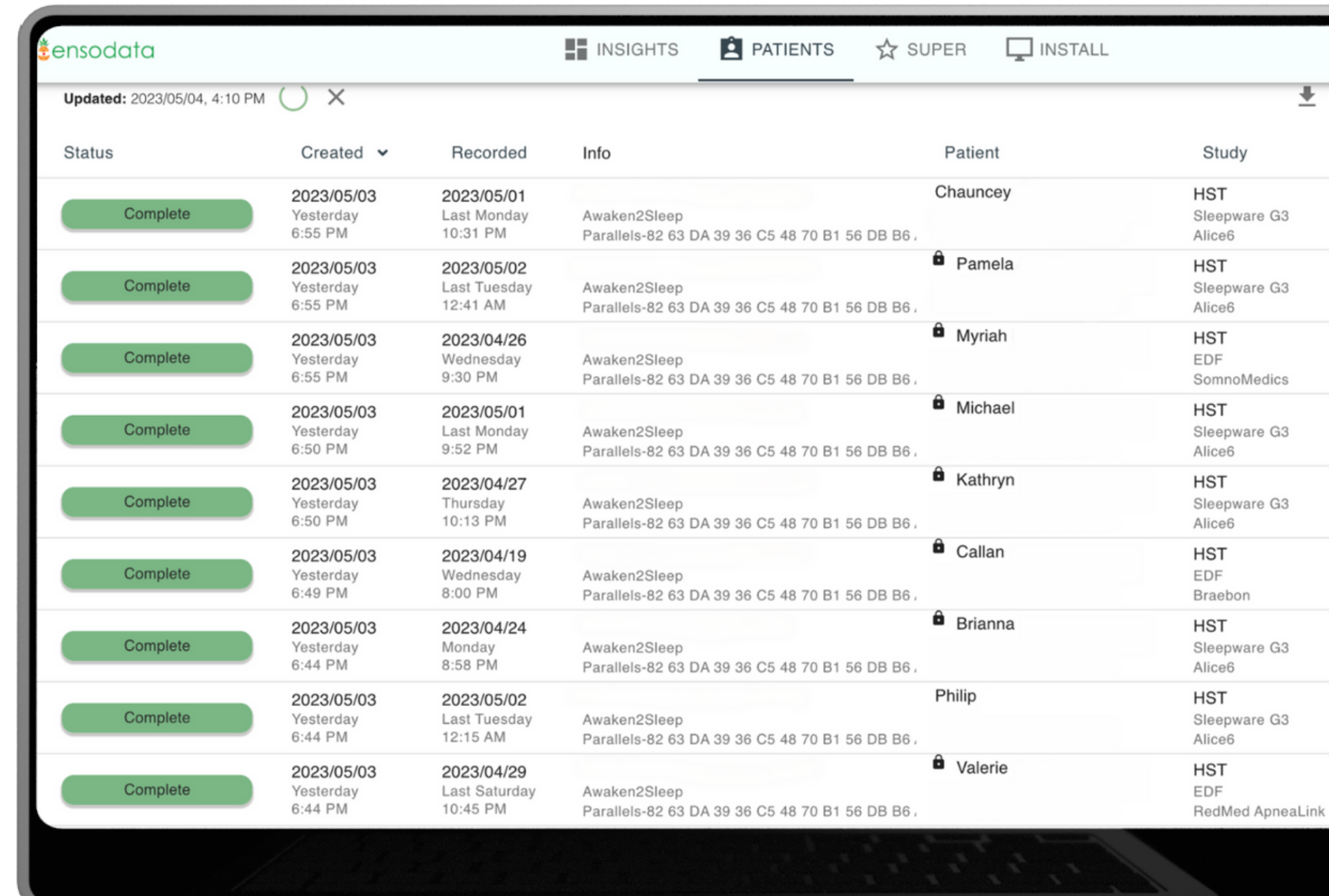
Patient begins
treatment, hopefully
begins to sleep better.

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EnsoSleep **simplifies and accelerates the sleep testing, diagnosis, and treatment workflow**, providing sleep teams with more opportunities to expand patient care, improve outcomes, reach more patients, and impact sleep center growth.

Trusted in over 500 US sleep clinics, EnsoSleep **reduces time spent scoring HSATs by 68% and PSGs by 62%**.

[Schedule an EnsoSleep Demo](#)



The screenshot displays the EnsoSleep software interface. At the top, there is a navigation bar with the EnsoSleep logo, 'INSIGHTS', 'PATIENTS', 'SUPER', and 'INSTALL' options. Below the navigation bar, a status bar indicates 'Updated: 2023/05/04, 4:10 PM'. The main content is a table with columns for Status, Created, Recorded, Info, Patient, and Study. The table lists ten completed sleep studies with their respective dates, times, and patient information.

Status	Created	Recorded	Info	Patient	Study
Complete	2023/05/03 Yesterday 6:55 PM	2023/05/01 Last Monday 10:31 PM	Awaken2Sleep Parallels-82 63 DA 39 36 C5 48 70 B1 56 DB B6 .	Chauncey	HST Sleepware G3 Alice6
Complete	2023/05/03 Yesterday 6:55 PM	2023/05/02 Last Tuesday 12:41 AM	Awaken2Sleep Parallels-82 63 DA 39 36 C5 48 70 B1 56 DB B6 .	Pamela	HST Sleepware G3 Alice6
Complete	2023/05/03 Yesterday 6:55 PM	2023/04/26 Wednesday 9:30 PM	Awaken2Sleep Parallels-82 63 DA 39 36 C5 48 70 B1 56 DB B6 .	Myriah	HST EDF SomnoMedics
Complete	2023/05/03 Yesterday 6:50 PM	2023/05/01 Last Monday 9:52 PM	Awaken2Sleep Parallels-82 63 DA 39 36 C5 48 70 B1 56 DB B6 .	Michael	HST Sleepware G3 Alice6
Complete	2023/05/03 Yesterday 6:50 PM	2023/04/27 Thursday 10:13 PM	Awaken2Sleep Parallels-82 63 DA 39 36 C5 48 70 B1 56 DB B6 .	Kathryn	HST Sleepware G3 Alice6
Complete	2023/05/03 Yesterday 6:49 PM	2023/04/19 Wednesday 8:00 PM	Awaken2Sleep Parallels-82 63 DA 39 36 C5 48 70 B1 56 DB B6 .	Callan	HST EDF Braebon
Complete	2023/05/03 Yesterday 6:44 PM	2023/04/24 Monday 8:58 PM	Awaken2Sleep Parallels-82 63 DA 39 36 C5 48 70 B1 56 DB B6 .	Brianna	HST Sleepware G3 Alice6
Complete	2023/05/03 Yesterday 6:44 PM	2023/05/02 Last Tuesday 12:15 AM	Awaken2Sleep Parallels-82 63 DA 39 36 C5 48 70 B1 56 DB B6 .	Philip	HST Sleepware G3 Alice6
Complete	2023/05/03 Yesterday 6:44 PM	2023/04/29 Last Saturday 10:45 PM	Awaken2Sleep Parallels-82 63 DA 39 36 C5 48 70 B1 56 DB B6 .	Valerie	HST EDF RedMed ApneaLink