DON'T ROLL THE DISE: MAKE EVERY DIAGNOSTIC PROCEDURE THERAPEUTIC

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The Sleep Patient Journey

By the time many obstructive sleep apnea (OSA) patients reach specialty care, they're exhausted both literally and emotionally. Consider a patient like Mark, a 55-year-old who had struggled with continuous positive airway pressure (CPAP) for years. Mark had experienced over a decade of CPAP challenges, including claustrophobia, nasal irritation, restless sleep, and persistent nasal obstruction that did not respond to medical therapy. His baseline NOSE score was 55, reflecting significant symptomatic burden. Like Mark, many patients with OSA have already tried and failed CPAP therapy, and studies show that 30–60% of OSA patients cannot tolerate CPAP long term.[1] As a result, many seek more effective, lasting solutions such as Inspire® or other sleep-surgery options. Drug-Induced Sleep Endoscopy (DISE) is routinely performed to confirm candidacy for implant therapy. It's a crucial step in the process, but it's purely diagnostic, providing no therapeutic benefit for the patient who takes time off work for the procedure. DISE provides essential diagnostic information, but for many patients, the procedure may feel like another pause in a long journey towards symptom relief.

That missed opportunity matters. Up to 70% of OSA patients also have nasal airway obstruction (NAO), which increases nasal resistance, promotes mouth breathing, and contributes to airway collapse during sleep.[2] When nasal airflow is limited, patients must breathe through the mouth, which makes the pharyngeal airway more collapsible and reduces the effectiveness of OSA therapies such as CPAP, oral appliances, and hypoglossal nerve stimulation (HGNS). Addressing NAO during DISE can improve sleep quality and quality of life, whether a patient ultimately does or does not proceed with Inspire. For Inspire candidates, that missed opportunity becomes even more significant when you consider how long it takes to experience benefit.

The typical Inspire pathway, from consultation through DISE, implant, and titration, takes several months before most patients begin to feel improvement. While VivAer® does not treat OSA, incorporating it into DISE procedures has been associated with meaningful improvements in nasal breathing early in the

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pathway without disrupting Inspire candidacy or timing. This gives patients a noticeable improvement in airflow and comfort while they progress toward implant therapy. In Mark's case, VivAer was selected due to its minimally invasive nature and compatibility with the DISE setting. Mark experienced minimal post-procedure pain and reported improved nasal breathing within 2–3 weeks, with his NOSE score improving from 55 to 10, and ESS score improving from 7 to 3. He ultimately proceeded with Inspire and is doing well within a green care pathway, demonstrating how early nasal intervention can support confidence and momentum during the sleep-surgery process.

From Diagnostic to Therapeutic

Integrating VivAer into DISE transforms the encounter from purely diagnostic to therapeutic. By incorporating VivAer into the same session, physicians can both evaluate and treat nasal airway obstruction, providing a therapeutic benefit. Many patients report noticeably easier breathing shortly after the procedure.

For the patient experience, this shift is powerful. Instead of waking up from DISE having undergone only an evaluation, they leave knowing that something was done to help improve their breathing. It turns what might otherwise be perceived as a lost day devoted solely to diagnosis into a meaningful therapeutic encounter within the same setting, enhancing both efficiency and patient-perceived value.

Clinical Data Demonstrate Durable Results and Improved Sleep

VivAer has been demonstrated as an effective treatment for patients with NAO. VivAer has been shown in randomized and long-term cohort studies to provide meaningful and durable improvement in nasal airway obstruction. Reported responder rates typically fall in the high-80% to low-90% range, with benefits maintained in studies with follow-up extending to three and four years.[3,4]

Treating NAO with VivAer has been shown to improve sleep-related outcomes. In the VATRAC study, patients experienced an average 4.9-point reduction in Epworth Sleepiness Scale (ESS) scores overall and an 8.8-point reduction among those with excessive baseline sleepiness.[5] Participants also reported less snoring and a decrease in nasal medication use, reinforcing the link between nasal airflow and restorative sleep.[6] At 48 months after treatment, 96% of patients reported less trouble sleeping, demonstrating durable improvements in both breathing and sleep.[5]

Professional societies recognize this connection. The American Academy of Otolaryngology–Head and Neck Surgery (AAO-HNS) states that "nasal surgery, such as septoplasty, turbinate surgery, and procedures aimed to address nasal valve collapse, is a beneficial adjunct in the treatment of adult OSA."[7] By addressing nasal resistance early, patients may breathe better, sleep better, and experience improved outcomes across their chosen therapy pathway.

Clinical and Economic Benefits for Physicians

Adding VivAer to DISE also makes clinical and practical sense. The patient is already sedated, the airway is fully visualized, and the tools are easily incorporated into the surgical setup. Performing both procedures together consolidates appointments, anesthesia, and recovery while advancing patients toward improved outcomes.

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From a procedural standpoint, the Aerin Medical Console and VivAer stylus integrate smoothly into the DISE workflow with minimal setup. VivAer uses temperature-controlled radiofrequency (TCRF) to gently remodel tissues to help restore natural airflow. The treatment typically adds only five to ten minutes to the procedure, does not interfere with Inspire candidacy, and generally requires minimal recovery. The additional time is small, but the potential impact for patients is significant.

From a facility standpoint, performing both procedures together improves overall resource efficiency without extending anesthesia or room time while supporting a more comprehensive, patient-centered approach to airway management. VivAer is also reimbursed differently from DISE.

VivAer & DISE Reimbursement Medical National Average[8]

	With VivAer*	Without VivAer
ASC	**$4,915** CPT: 30469, 30117, 42975	**$792** CPT: 42975
HOPD	**5,916** CPT: 30469	**$1,724** CPT: 42975
RVUs	**5.92** units	**1.58** units

*Based on Medicare National Averages - does not include cost of device.

Improving Sleep Outcomes Across the Pathway

Addressing NAO during DISE helps patients make measurable progress sooner, regardless of whether they go on to receive implant therapy. For those who pursue Inspire, improving nasal airflow via nasal surgery can enhance comfort, support therapy adherence, and lead to better overall outcomes.[9] Inspire's post-implant guidance also recommends evaluating and treating nasal resistance in cases where patients experience difficulty with device tolerance or limited effectiveness, reinforcing the importance of comprehensive airway management.[10]

By identifying and treating NAO during DISE, ENTs can help patients experience early relief, breathe more easily, and move through the sleep-surgery pathway with greater confidence. It is a simple and efficient way to connect diagnosis with treatment and make every DISE count. For patients like Mark, this approach transforms the sleep-surgery journey from a long stretch of waiting into a series of meaningful, confidence-building steps toward better breathing.

As sleep surgery continues to evolve, the goal is not only to observe airway behavior but to address it in real time. DISE provides the visualization. VivAer provides the action. Together, they give patients a tangible path toward better breathing, better sleep, and a better quality of life.

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The VivAer® Stylus is indicated for use in otorhinolaryngology (ENT) surgery for the coagulation of soft tissue in the nasal airway, to treat nasal airway obstruction by shrinking submucosal tissue, including cartilage in the internal nasal valve area.