



Inspire Medical Systems, Inc.

May 2024

NYSE: INSP

Disclaimer

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “could,” “future,” “outlook,” “intend,” “target,” “project,” “contemplate,” “believe,” “estimate,” “predict,” “potential,” “continue,” or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words. The forward-looking statements in this presentation relate to, among other things, statements regarding the planned investments in our business, our growth strategies, the expected timing of regulatory approval and market introduction for new products, including the Inspire V neurostimulator, the potential impact that our growth strategies and initiatives may have on our business, full year 2024 financial and operational outlook, the ability of our SleepSync™ digital health platform to drive growth, and positive insurance coverage of Inspire therapy and improvements in patient flow, care pathway capacity, market access, clinical data growth, product development, indication expansion, market development, and prior authorization approvals.

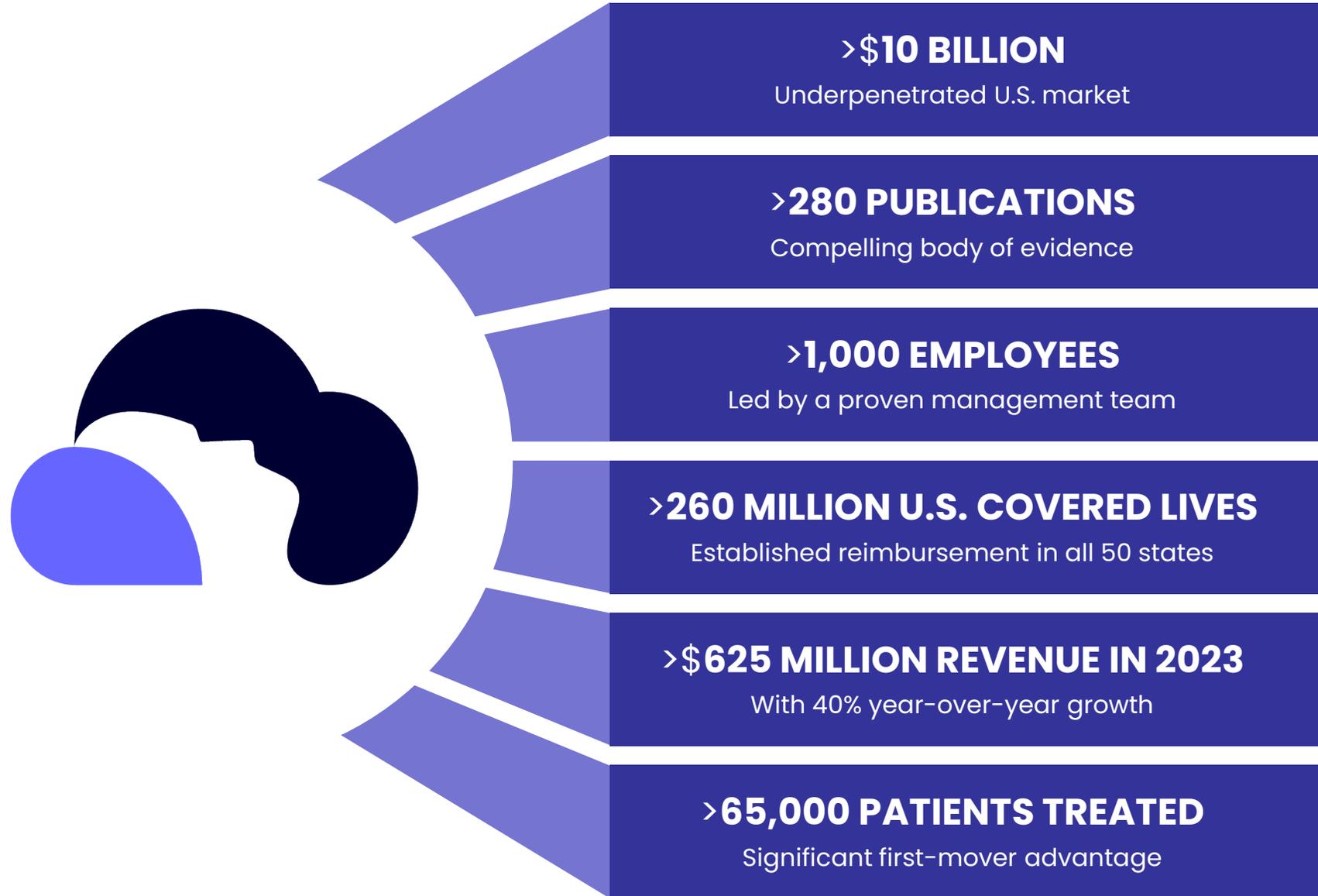
These forward-looking statements are based on management’s current expectations and involve known and unknown risks and uncertainties that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, estimates regarding the annual total addressable market for our Inspire therapy in the U.S. and our market opportunity outside the U.S.; future results of operations, financial position, research and development costs, capital requirements and our needs for additional financing; commercial success and market acceptance of our Inspire therapy; the impacts of public health crises and pandemics; general and international economic, political, and other risks, including currency and stock market fluctuations and the uncertain economic environment; challenges experienced by patients in obtaining prior authorization; our ability to achieve and maintain adequate levels of coverage or reimbursement for our Inspire system or any future products we may seek to commercialize; competitive companies and technologies in our industry; our ability to enhance our Inspire system, expand our indications and develop and commercialize additional products; our business model and strategic plans for our products, technologies and business, including our implementation thereof; our ability to accurately forecast customer demand for our Inspire system and manage our inventory; our dependence on third-party suppliers, contract manufacturers and shipping carriers; consolidation in the healthcare industry; our ability to expand, manage and maintain our direct sales and marketing organization, and to market and sell our Inspire system in markets outside of the U.S.; risks associated with international operations; our ability to manage our growth; our ability to increase the number of active medical centers implanting Inspire therapy; our ability to hire and retain our senior management and other highly qualified personnel; risk of product liability claims; risks related to information technology and cybersecurity; risk of damage to or interruptions at our facilities; our ability to obtain regulatory approvals for, and commercialize, our Inspire therapy and system, or the effect of delays in obtaining regulatory approvals or commercializing; FDA or other U.S. or foreign regulatory actions affecting us or the healthcare industry generally, including healthcare reform measures in the U.S. and international markets; the timing or likelihood of regulatory filings and approvals; risks related to our debt and capital structure; our ability to establish and maintain intellectual property protection for our Inspire therapy and system or avoid claims of infringement; tax risks; risks that we may be deemed an investment company under the Investment Company Act of 1940; regulatory risks; the volatility of the trading price of our common stock; and our expectations about market trends. Other important factors that could cause actual results, performance or achievements to differ materially from those contemplated in this presentation can be found under the captions “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our most recently filed Annual Report on Form 10-K as updated in our most recently filed Quarterly Report on Form 10-Q, and as such factors may be updated from time to time in our other filings with the SEC, which are accessible on the SEC’s website at www.sec.gov and the Investors page of our website at www.inspiresleep.com. These and other important factors could cause actual results to differ materially from those indicated by the forward-looking statements made in this presentation. Any such forward-looking statements represent management’s estimates as of the date of this presentation. While we may elect to update such forward-looking statements at some point in the future, unless required by applicable law, we disclaim any obligation to do so, even if subsequent events cause our views to change. Thus, one should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date of this presentation.

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Company Overview

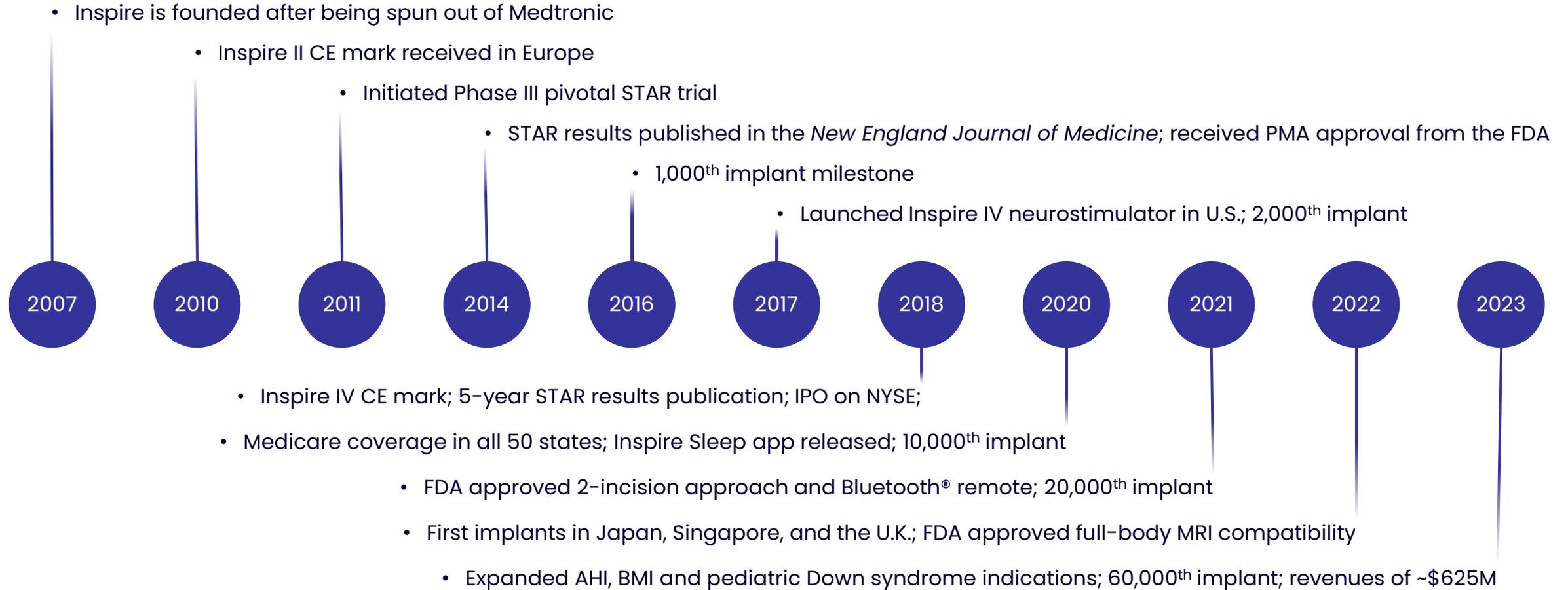
The first and only...

Innovative, closed-loop,
neurostimulation
technology
for Obstructive Sleep
Apnea (OSA)

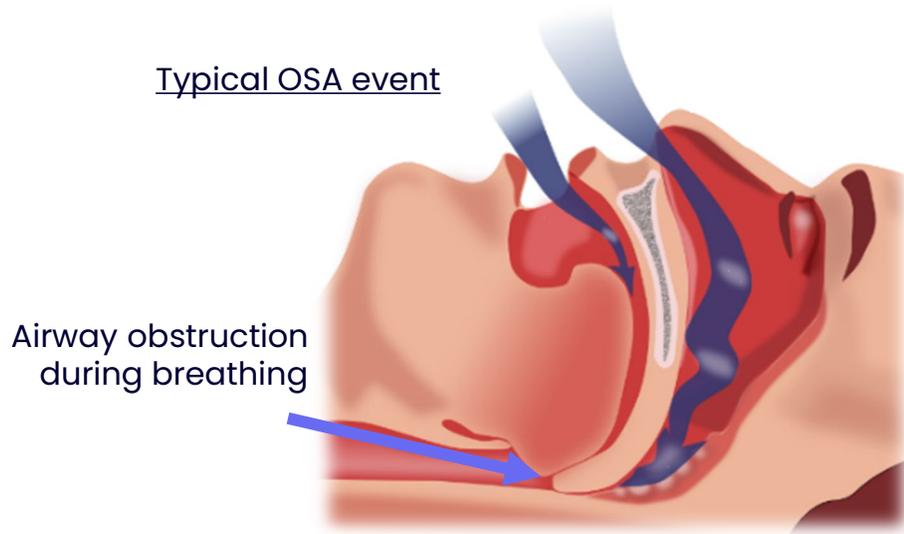


Company Overview

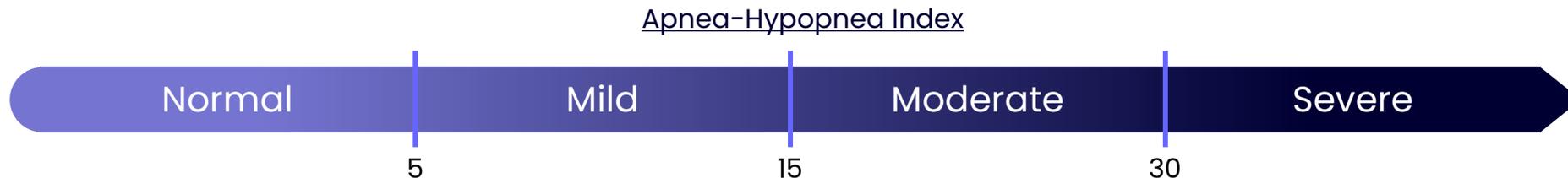
Our History and Key Milestones



Obstructive Sleep Apnea is Caused by Blockage that Prevents Airflow to the Lungs



- Results in repeated arousals and oxygen desaturations
- Severity of sleep apnea is measured by frequency of apnea or hypopnea events per hour, which is referred to as the Apnea-Hypopnea Index (AHI)



OSA is a Chronic Disease That is Often Untreated and Proven to be Linked to Serious Health Risks

Typical Patient Profile

- High risk patients: obese, male or of advanced age
- Common first indicator: heavy snoring
- Other indicators:
 - Lack of energy
 - Headaches
 - Depression
 - Nighttime gasping
 - Dry mouth
 - Memory or concentration problems
 - Excessive daytime sleepiness

Exacerbated Health Risks

2x

The risk for stroke¹

5x

The risk for cardiovascular mortality³

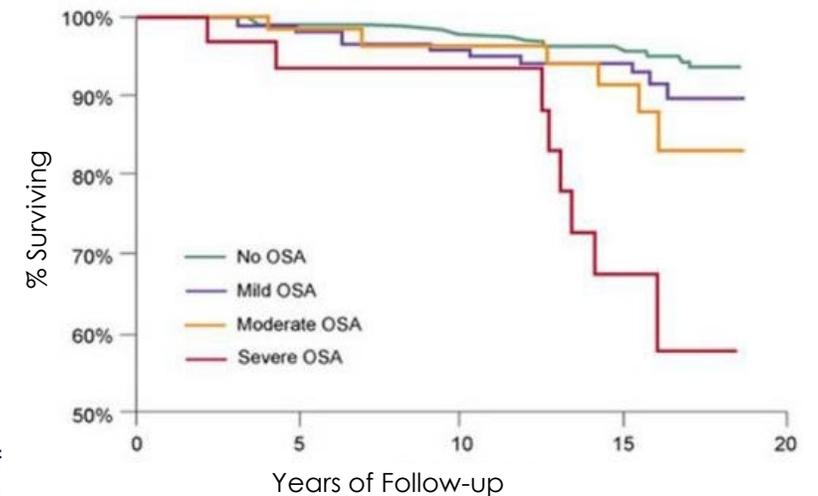
2x

The risk for sudden cardiac death²

57%

Increased risk for recurrence of Atrial Fibrillation after ablation⁴

Increased Risk of Mortality⁵



1. Redline et al, The Sleep Heart Health Study. Am J Res and Crit Care Med 2010.

2. Gami et al, J Am Coll Cardiol 2013.

3. Young et al, J Sleep 2008.

4. Li et al, Europace 2014.

5. Prospective Study of Obstructive Sleep Apnea and Incident Coronary Heart Disease and Heart Failure from SHHS and Wisconsin Sleep Cohort Study.

Current Treatment Options, Such As CPAP and Invasive Surgeries, Have Significant Limitations

CPAP is the first-line therapy...

- Demonstrated improvements in disease severity and long-term gold standard therapy
- Major limitation as a therapeutic option is primarily due to low patient compliance (~35%–65%)

Drivers of Non-Compliance

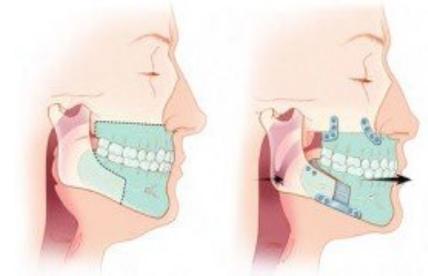
- Mask Discomfort
- Mask Leakage
- Pressure Intolerance
- Skin Irritation
- Nasal Congestion
- Nasal Drying
- Nosebleeds
- Claustrophobia
- Lack of Intimacy



...with surgical alternatives for treatment



Uvulopalatopharyngoplasty (UPPP)



Maxillomandibular Advancement (MMA)

- Several variations of sleep surgery
- Success rates vary widely (30% - 60%)¹
- Irreversible anatomy alteration
- Inpatient surgery with extended recovery

1. Shah, Janki, et al; American Journal of Otolaryngology (2018). Uvulopalatopharyngoplasty vs. CN XII stimulation for treatment of obstructive sleep apnea: A single institution experience.

Strong Market Opportunity Exists for an Alternative to CPAP that is Effective and Minimally Invasive

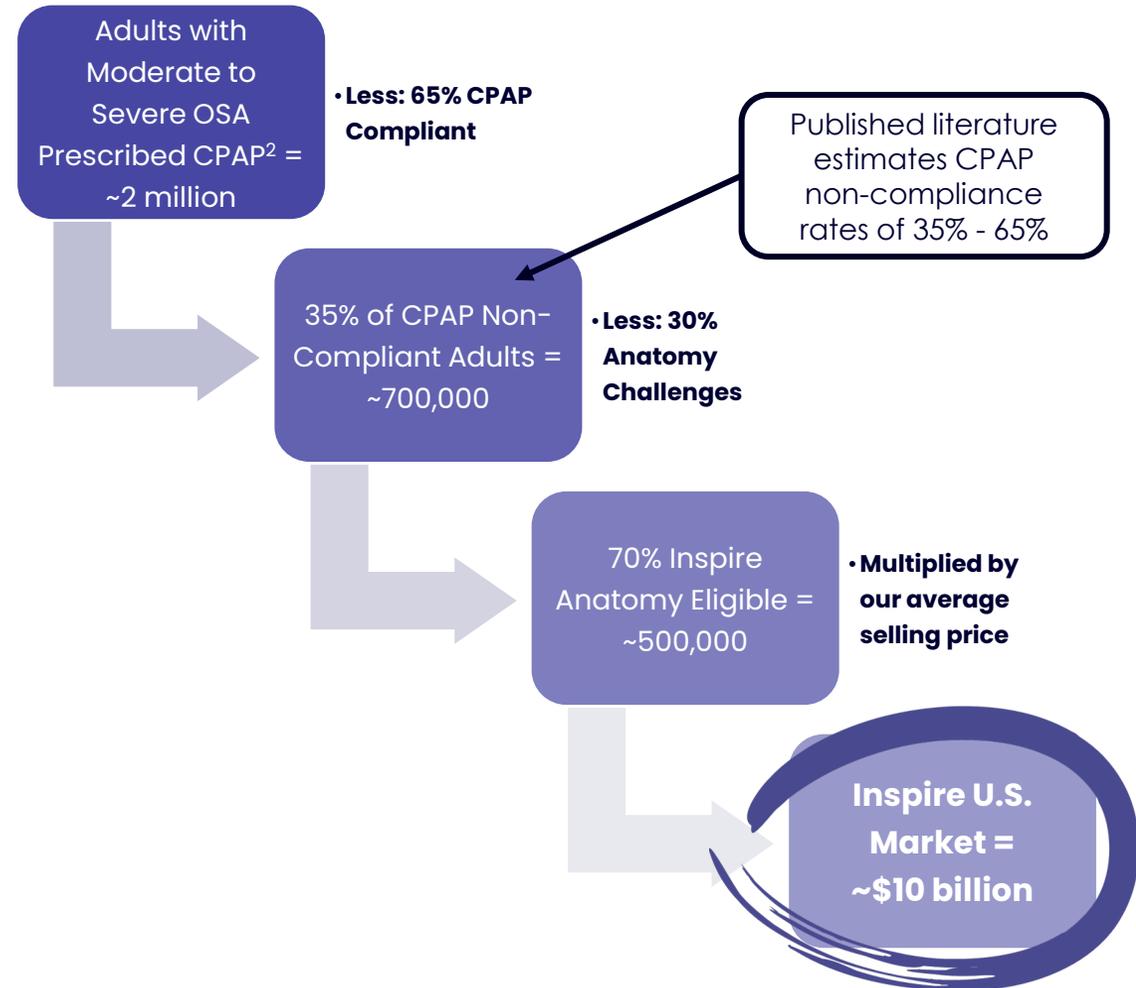
Prevalence & Economic Costs

- Sleep apnea affects +100 million people worldwide¹
- Approximately 17 million individuals in the U.S. with moderate to severe OSA
 - Annually, ~2 million adult patients are prescribed a CPAP device²
- Annual U.S. economic costs of untreated moderate to severe OSA are estimated to be between \$65 - \$165 billion³
- OSA economic costs are potentially greater than asthma, heart failure, stroke, and hypertensive disease
- OSA is associated with an increase in:
 - Rate & severity of vehicle accidents
 - Increased healthcare utilization
 - Reduction of work performance
 - Occupational injuries

1. Source: World Health Organization.

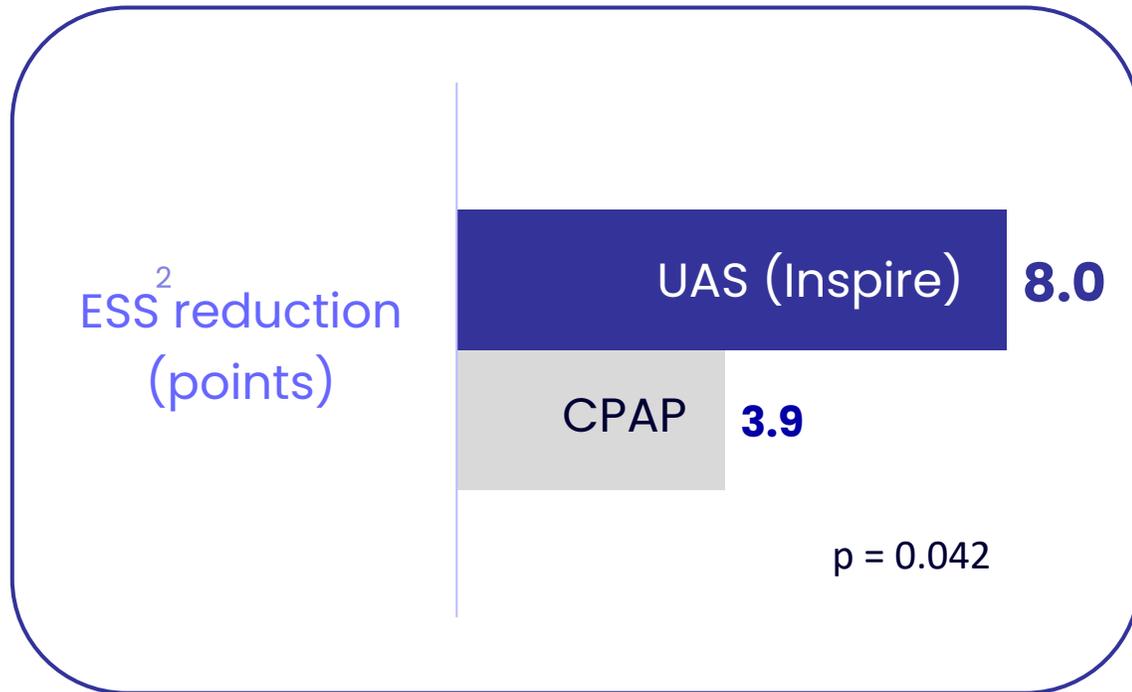
2. Company estimates.

3. Represents moderate to severe OSA. Source: McKinsey & Company, 2010.

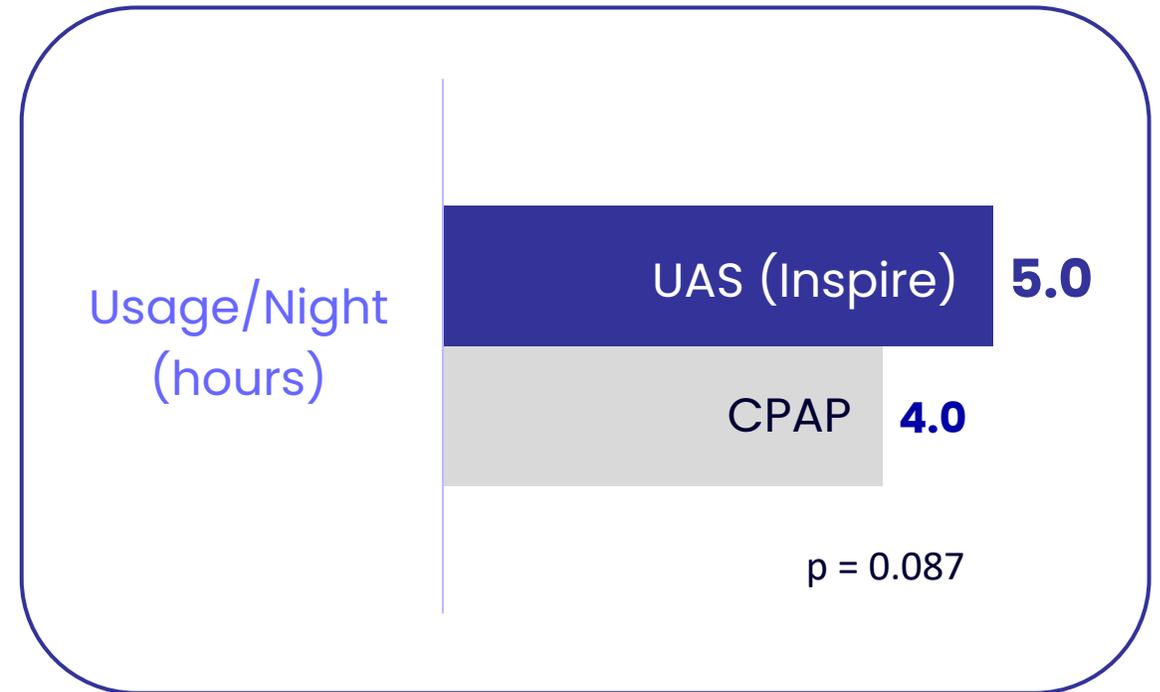


Compared to CPAP, Inspire has been Demonstrated to be Better at Improving OSA Symptoms, Potentially with Greater Therapy Adherence

Sleepiness Reduction¹



Therapy Adherence¹



1. Heiser, Sleep & Breathing 2022
Comparison between baseline and 12-month follow-up between matched cohorts
2. Epworth Sleepiness Scale

Inspire Therapy is an Innovative and Proven Solution for Patients with OSA

System

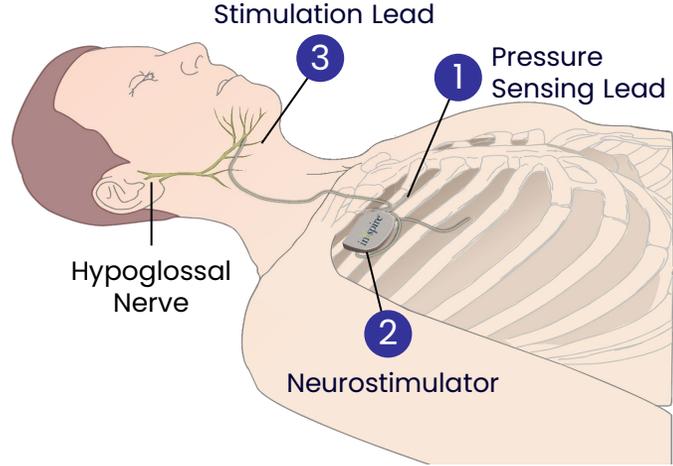


The image shows three components of the Inspire system: a small, clear, oval-shaped pressure sensing lead (labeled 1), a silver quarter coin for scale, and a black, handheld patient remote with a green screen (labeled 3). The pressure sensing lead is labeled with 'Inspire Sleep Apnea Innovation STIM SENSE', 'SN AIR304131C', 'Model 3026', and 'Inspire Medical Systems'.

Three implanted devices and patient remote:

- 1 Pressure sensing lead:** detects when the patient is attempting to breathe
- 2 Neurostimulator:** houses the electronics and battery power for the device
- 3 Stimulation lead:** delivers electrical stimulation to the hypoglossal nerve

Procedure



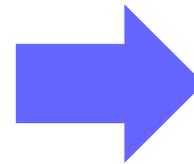
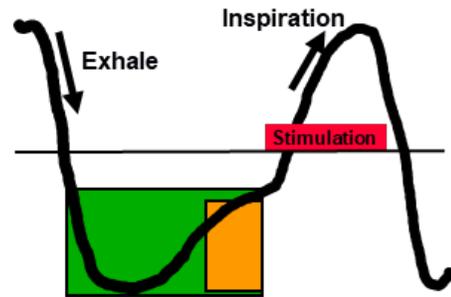
The diagram illustrates the procedure for implanting the Inspire system. It shows a patient's head and neck in profile, with the hypoglossal nerve highlighted. A stimulation lead (labeled 3) is shown entering the neck and connecting to the hypoglossal nerve. A pressure sensing lead (labeled 1) is shown entering the chest and connecting to the neurostimulator (labeled 2) implanted in the chest area.

- Typically, a 60–90 min outpatient procedure
- Requires two small incisions
- Patients typically recover quickly and resume normal activities in just a few days

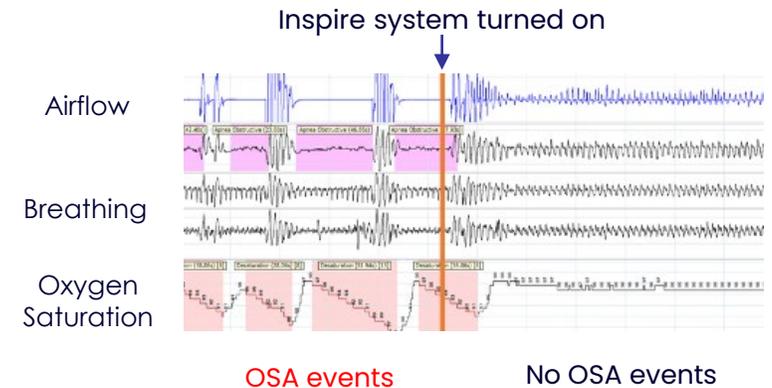
Inspire Therapy Utilizes a Proprietary Closed-loop Sensing Algorithm to Modulate Therapy Delivery

Proprietary Algorithm

- Active while patients sleep
- Closed-loop system which senses breathing patterns
- Provides stimulation during inspiratory phase of respiration maintaining open airway

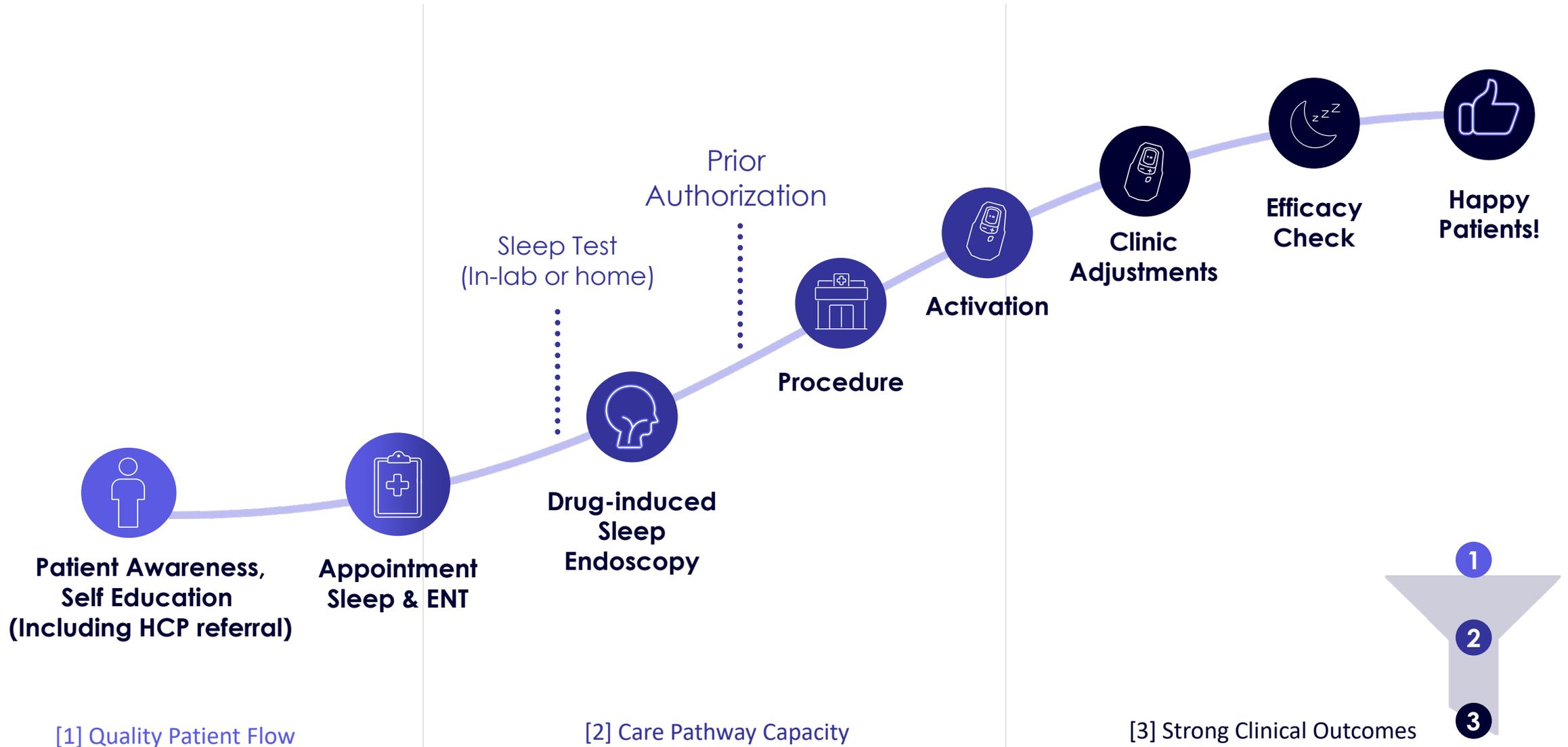


Clinical Effect

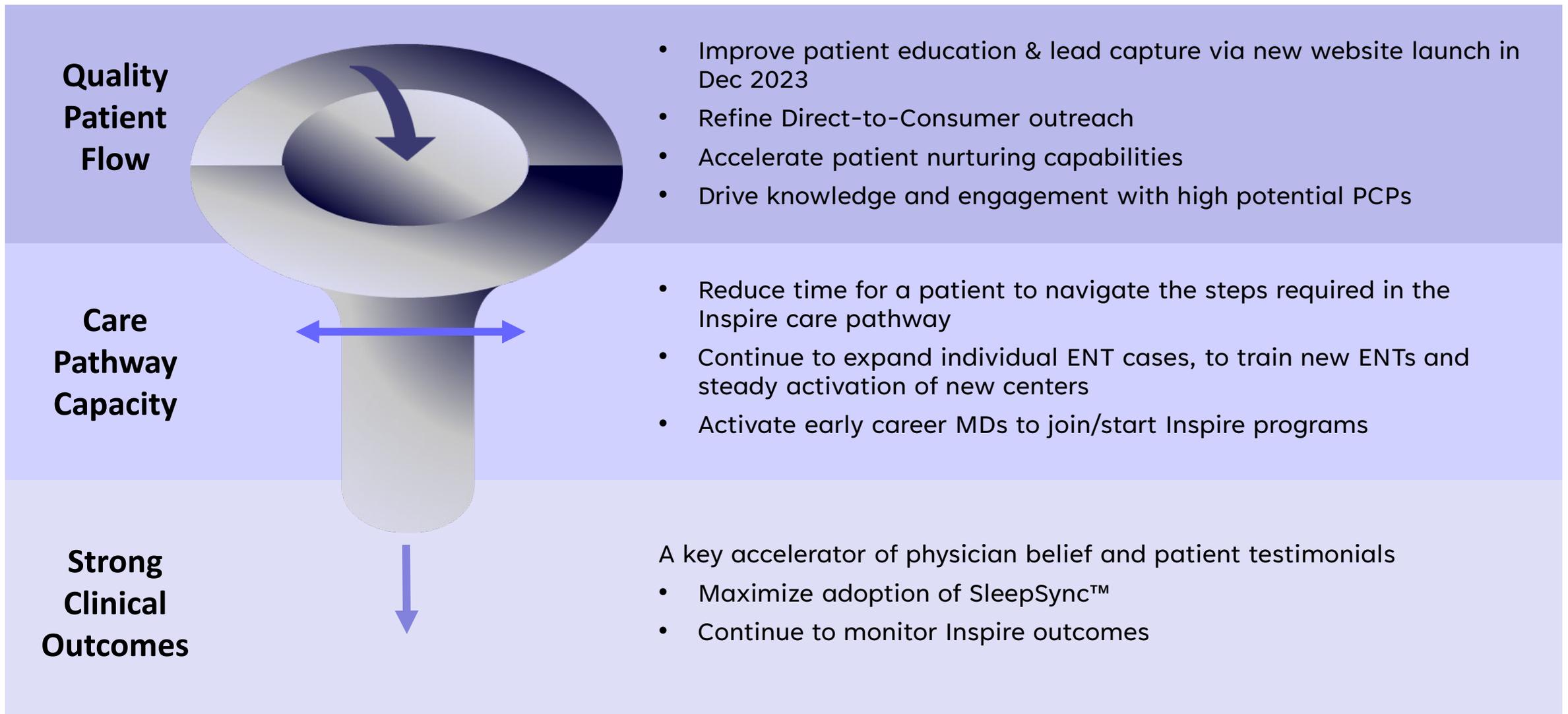


The Inspire Patient Journey

Multi-specialty care continuum



Three Key Areas Will Drive Our Success in 2024 & Beyond



Q1 2024

> 65K

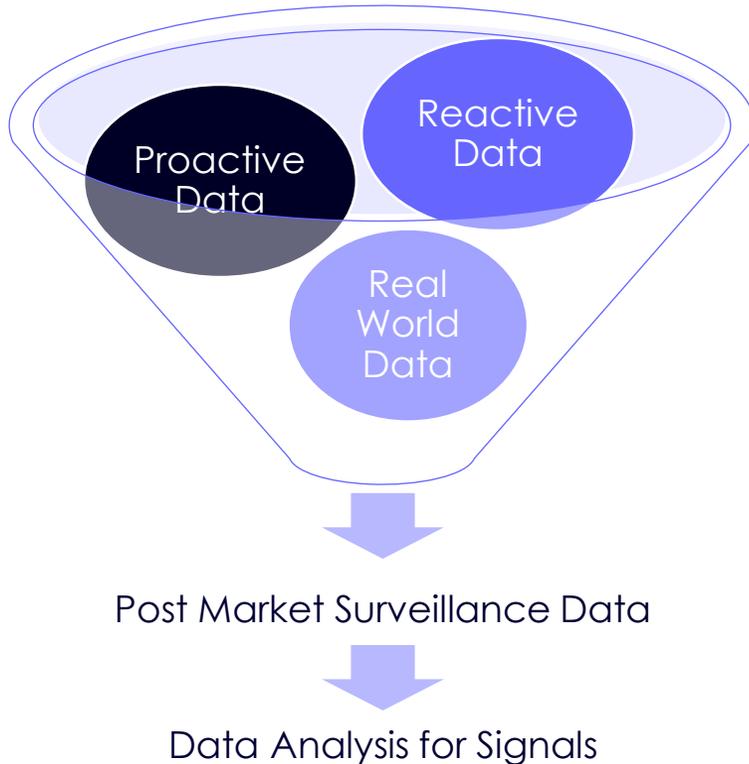
Number of patients
treated with Inspire
therapy to date



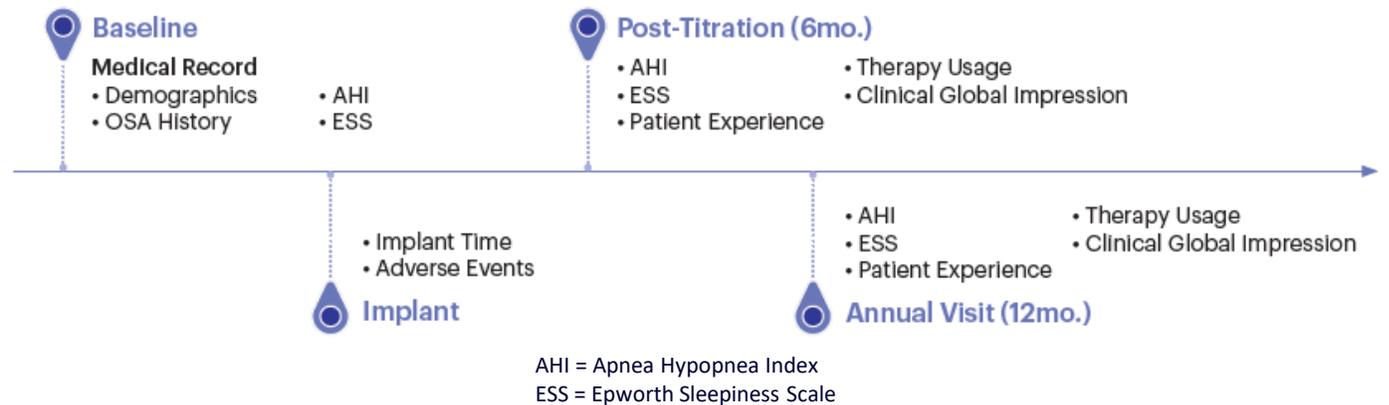
~ 16 minutes between implants

Continuous Data Collection and Outcomes Monitoring

- Collect real-world, international outcomes data
- Eligibility – ALL patients receiving Inspire therapy
- ADHERE Registry – 5,000 enrollments at 62 medical centers (enrollment complete)
- Transition to ADHERE 2.0 as part of Inspire SleepSync™ in the U.S.



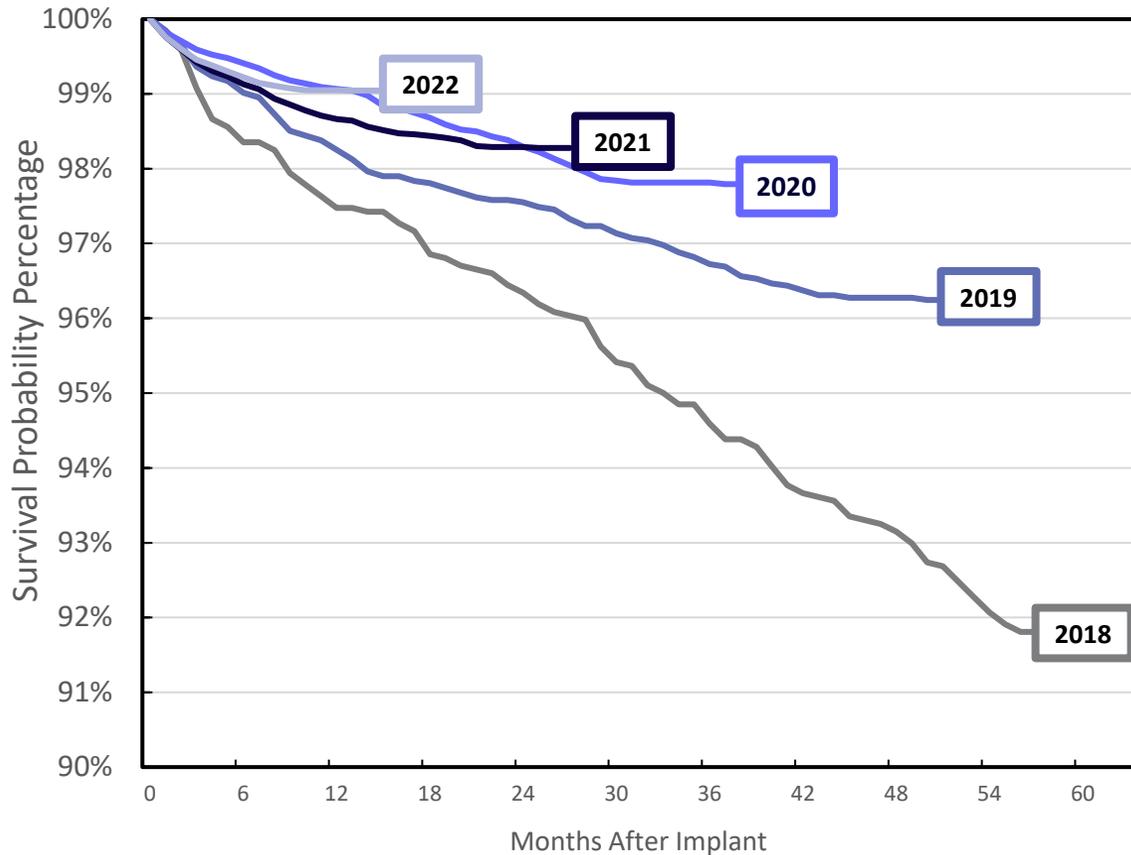
Registry Data Collection



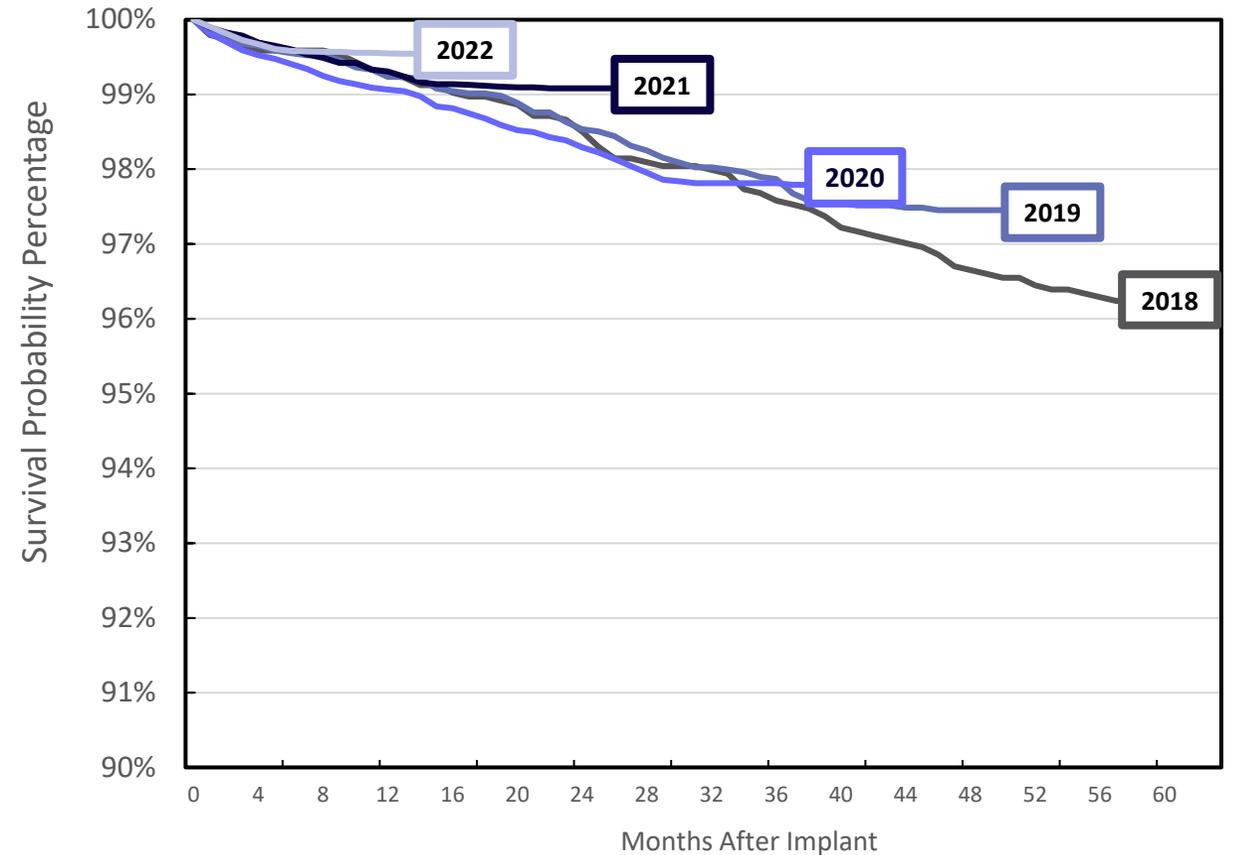
Inspire Patient Experience Report - Safety

Consistent increase in device survivability to both revision and explant year after year

Freedom from Revision by Implant Year



Freedom from Explant by Implant Year



Inspire's Focus is to Maintain Strong Patient Outcomes

How does Inspire compare against your previous experience with CPAP?

91%¹ Say Inspire is better

I would recommend Inspire to a friend or family member.

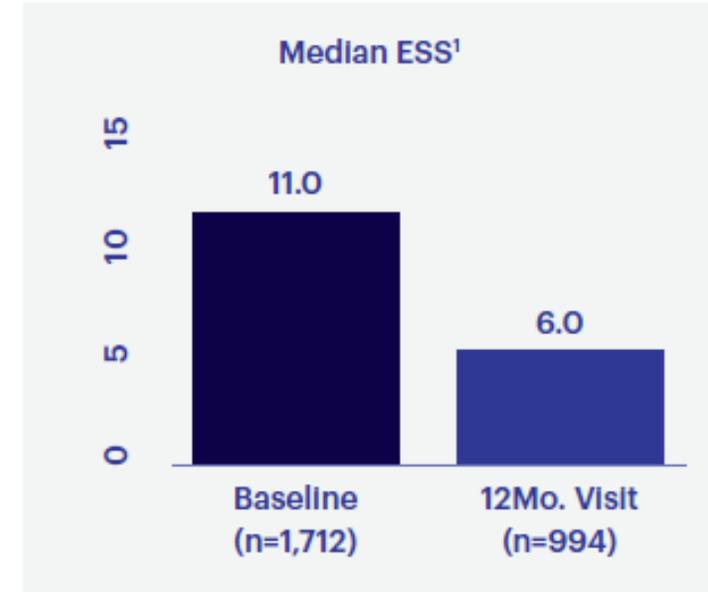
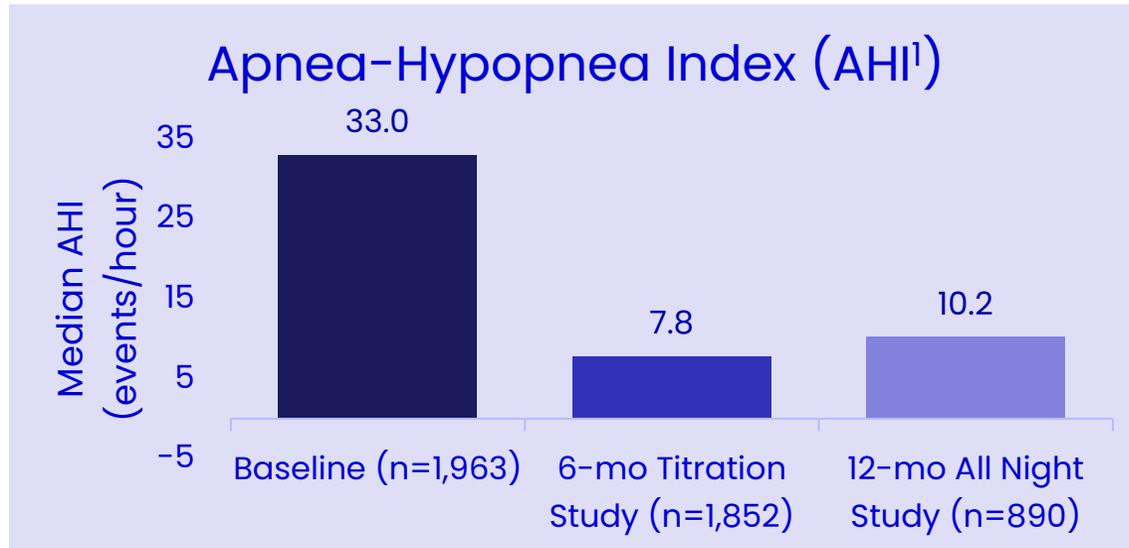
93%¹ Agree or strongly agree

Given the chance, I would choose to receive Inspire again.

92%¹ Agree or strongly agree

Overall, how satisfied are you with Inspire?

90%¹ Satisfied or very satisfied



Hours of nightly use @ 12-months (n=913)¹



UAS usage of 5.7 hours/night at 12-months exceeds average CPAP usage levels from major clinical studies.^{2,3}

1. Bosschieter et al. Similar effect of hypoglossal nerve stimulation for OSA in five disease categories. J Clin Sleep Med. 2022 Jun 1;18(6):1657-166.

SleepSync™ Digital Health Platform Accelerates Growth



Patient
Inspire App



Clinician
SleepSync™ Web Portal



Remote patient management

- Symptom Relief
- Adherence
- Disease Burden (Future)
- Remote Adjustments (Future)



Dynamic patient engagement

- Find a doctor
- Customized education
- Track therapy & sleep quality
- Virtual check-ins

Efficient care coordination

- Access therapy quality measures
- Manage patients by exception
- Grow confidence & productivity
- Support sleep practice economics

Enhanced by Strategic Integrations

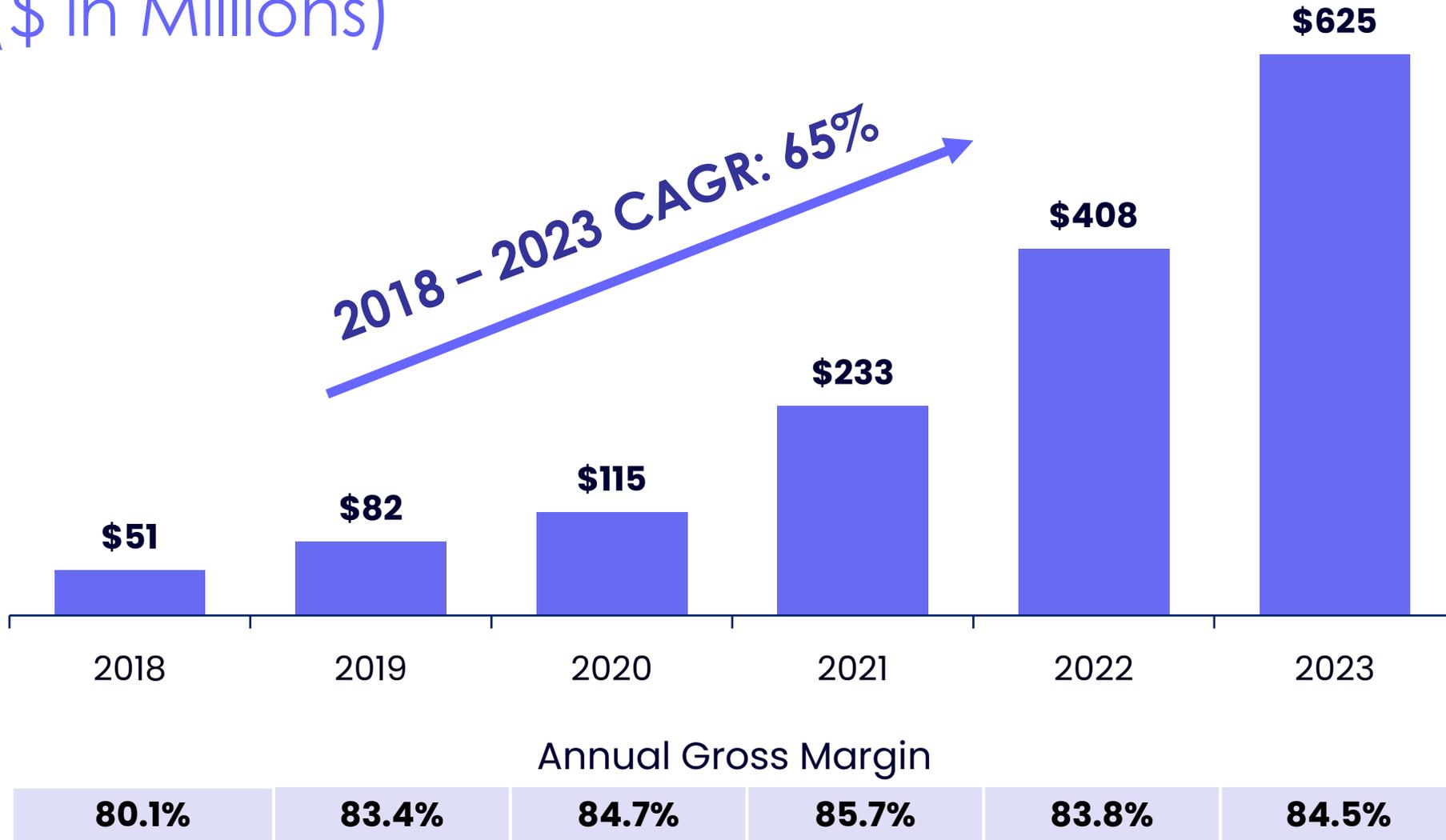
- Electronic medical records (Future)
- Sleep coaching, telemedicine, and efficient home sleep apnea testing

Growing Inspire Value

- Expanding sleep clinician confidence & capacity enables more patients to benefit from Inspire
- Automated real-world clinical studies
- SaaS revenue possibilities (Future)

Annual Revenue and Gross Margin

(\$ in Millions)



2024 Guidance:

- FY2024 revenue range of \$783M-\$793M, representing 25%-27% growth over FY2023
- FY2024 gross margin between 83%-85%
- FY2024 EPS \$0.10-0.20

Q1 Business Highlights

(As of March 31, 2024)

Continued Commercial Expansion

- Activated 66 new centers in the U.S. bringing the total to 1,246 U.S. centers providing Inspire therapy
- Created 11 new sales territories in the U.S. bringing the total to 298 U.S. sales territories
- Surpassed 65,000 patients treated with Inspire therapy

Strong Financial Performance

- Generated \$164.0 million of revenue in the first quarter, a 28% increase over the same quarter last year
- Achieved gross margin of 84.9% in the first quarter
- Improved loss per share to \$0.34 compared to \$0.53 in the same prior year period

Our Growth Strategy

1

Ensure Strong Clinical Outcomes

Through planned and controlled market expansion and robust physician training

2

Improve the Customer Experience

By enhancing interconnectivity, simplifying the care pathway, and closely tracking outcomes

3

Promote Widespread Consumer Awareness

Amongst patients, ENT/Sleep physicians, and general practitioners

4

Drive Continued Commercial Scale

Commensurate with new center additions and leveraging consumer outreach programs

5

Invest in Research & Development

Driving breakthrough technology innovation and expanded indications

6

Facilitate International Market Expansion

Further penetrating existing markets and entering into new geographical locations

Inspire Way



We are a medical technology company committed to enhancing patient lives through sleep innovation

“Put the patient first and you will never lose your way.”

**Drive
Therapy
Adoption**

**Demonstrate
Operational
Excellence**

**Strengthen
Organizational
Culture**

**Focused on Outcomes. Fueled by Innovation. Grounded in Integrity.
Committed to Compliance. Leading with Respect. Positively Persistent.**

**No mask.
No hose.
Just sleep.TM**



Appendix

Consolidated Statements of Operations & Comprehensive Loss

(Unaudited) (In thousands, except share and per share amounts)

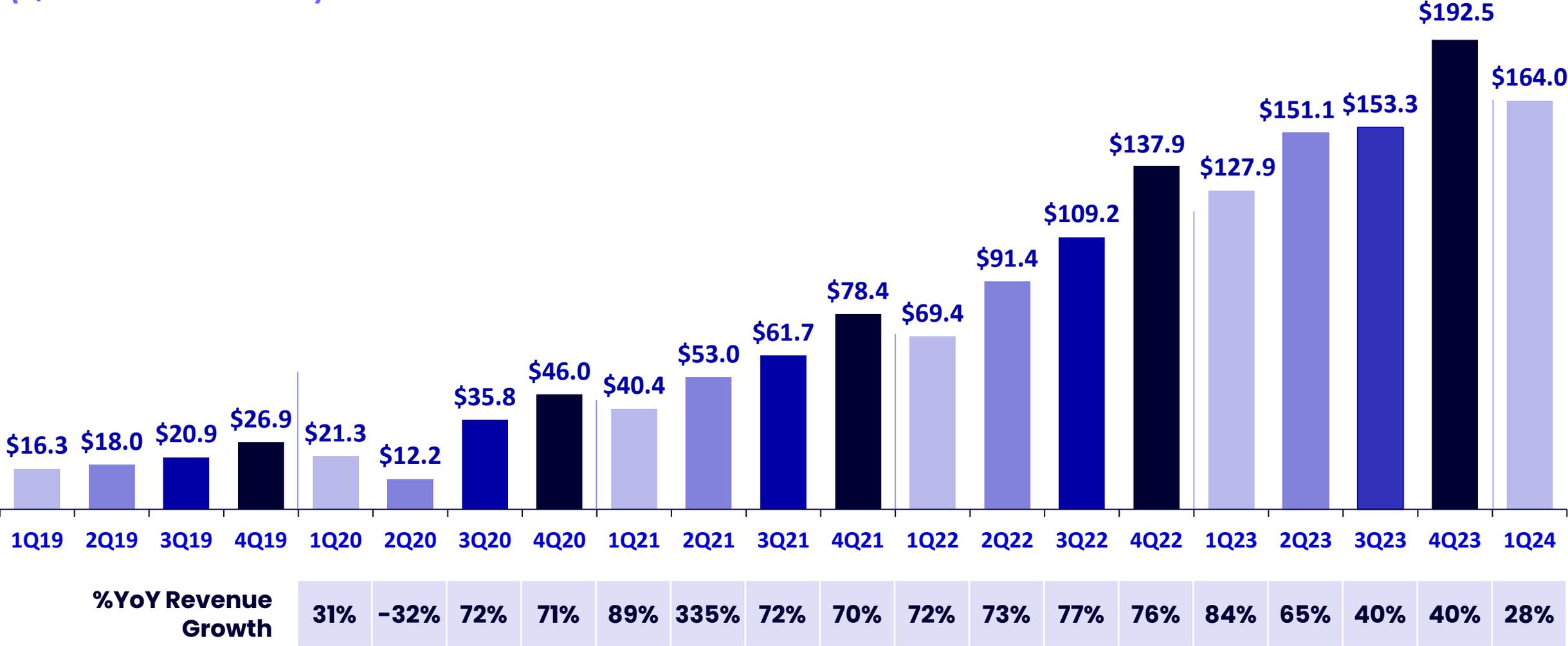
	Three Months Ended March 31,	
	2024	2023
Revenue	\$ 164,010	\$ 127,897
Cost of goods sold	24,757	19,888
Gross profit	139,253	108,009
<i>Gross margin</i>	84.9%	84.4%
Operating expenses:		
Research and development	28,850	25,519
Selling, general and administrative	125,621	101,988
Total operating expenses	154,471	127,507
Operating loss	(15,218)	(19,498)
Interest and dividend income	(5,923)	(4,273)
Other expense (income), net	60	(17)
Loss before income taxes	(9,355)	\$ (15,208)
Income taxes	650	216
Net loss	\$ (10,005)	\$ (15,424)
Foreign currency translation (loss) gain	(134)	105
Unrealized (loss) gain on investments	(542)	13
Total comprehensive loss	\$ (10,681)	\$ (15,306)
Basic and diluted loss per share	\$ (0.34)	\$ (0.53)
Basic and diluted weighted average shares outstanding	29,615,166	29,089,950

Condensed Consolidated Balance Sheets (Unaudited) (In thousands)

	March 31, 2024	December 31, 2023
Assets		
Current assets:		
Cash, cash equivalents, and short-term investments	\$ 441,361	\$ 460,375
Accounts receivable, net	72,333	89,884
Inventories	48,974	33,885
Prepaid expenses and other current assets	9,546	9,595
Total current assets	<u>572,214</u>	<u>593,739</u>
Investments, long-term	27,803	9,143
Property and equipment, net	52,281	39,984
Other non-current assets	33,544	33,945
Total assets	<u>\$ 685,842</u>	<u>\$ 676,811</u>
Liabilities and stockholders' equity		
Total current liabilities	\$ 72,172	\$ 78,105
Total non-current liabilities	24,646	26,192
Total liabilities	<u>96,818</u>	<u>104,297</u>
Stockholders' equity:		
Common Stock	30	30
Additional paid-in capital	944,298	917,107
Accumulated other comprehensive income	124	800
Accumulated deficit	<u>(355,428)</u>	<u>(345,423)</u>
Total stockholders' equity	<u>589,024</u>	<u>572,514</u>
Total liabilities and stockholders' equity	<u>\$ 685,842</u>	<u>\$ 676,811</u>

Quarterly Revenue

(\$ in Millions)



Strong Management Team



Tim Herbert
Chair, President & Chief
Executive Officer



Rick Buchholz
Chief Financial Officer



Ezgi Yagci
Vice President,
Investor Relations



Randy Ban
Chief Commercial Officer



Bryan Phillips
SVP, General Counsel &
Chief Compliance Officer



Dr. Charisse Sparks
Chief Medical Officer



Phil Ebeling
Chief Operating Officer



Carlton Weatherby
Chief Strategy Officer



John Rondoni
Chief Technology Officer

Supporting Patients on their Path to Inspire



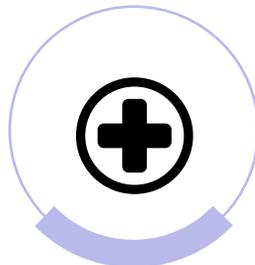
Awareness with direct-to-consumer outreach programs



Patient education using the InspireSleep.com website
Community health talks
Physician Consultations



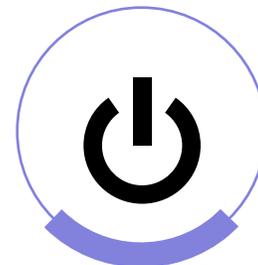
Inspire Advisor Care Program (ACP)



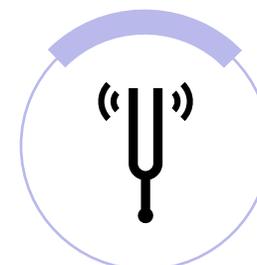
DISE/Prior Authorization



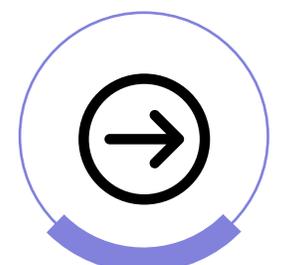
Implant



Activation



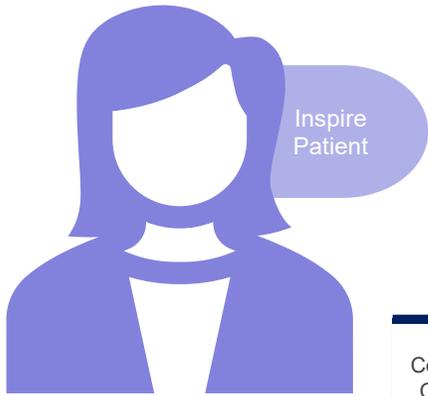
Fine-tune



Life with Inspire – Patient management with SleepSync™

Time from ACP contact to implant can be as much as six months

THE PATIENT JOURNEY



Challenges

What is the biggest pain point for patients?

- Patients need sufficient information to feel prepared to take the next step with Inspire
- There are limited ways to engage with Inspire for support and education
- It is difficult to schedule an appointment
- Sleep Studies can take months for patients to get
- Time for scheduling DISE
- Time for scheduling implant
- Patients need support through the therapy optimization process

SUPPORT

What key investments and programs is Inspire investing in to support patients?

- Updated website content for patients
- Chatbot improvements with two-way text messaging
- Lead capture + scoring
- Lead nurturing via email, text, phone
- Request a call for nights/weekends
- Digital scheduling through ACP
- Ognomy, Lofta, EnsoData
- Increase ENT capacity to grow number of Inspire procedures
- Expect Inspire V to reduce OR time
- Expect PREDICTOR to replace DISE for many patients
- SleepSync™ cloud-based patient management system to support patient from contact to post-implant sleep management

Patient Engagement Conversion Initiatives

Improving Patient Engagement Conversion Initiatives

- Digital scheduling has shown significant improvements with initial sites
- Patient education using chat guide bot
- Patient nurturing with auto-email system
- Improved patient tracking with SleepSync™



Improving Patient Experience and Reducing Time-to-Implant

- Inspire V neurostimulator with internal sensor expected to reduce OR time and improve patient experience
- PREDICTOR study intended to replace DISE with office airway measurement for vast majority of patients
- Continued development of Inspire VI and VII for auto-activation and future auto-titration

Increasing ENT Capacity to Further Grow Utilization

- Work with ENTs to optimize time by ensuring support team (sleep physicians) engages and conducts longitudinal patient management
- Train additional ENTs in the practice
- Continue to add new centers with ability to quickly grow utilization (complete teams)



SleepSync™ Patient Management System Increases Utility

- Longitudinal Patient Engagement from first contact to long after Inspire implant
- Fully incorporate both Objective data (utilization, sleep performance) and Subjective data (e-visit, questionnaires) to support strong patient outcomes
- Future enhancements including Remote Patient Programming and Physician notifications

Health Economics: Untreated OSA Cost Burden

Growing evidence that CPAP intolerance is linked to higher healthcare costs¹

JCSM | Journal of Clinical Sleep Medicine

SCIENTIFIC INVESTIGATIONS

Older adult US Medicare beneficiaries with untreated obstructive sleep apnea are heavier users of health care than matched control patients

Emerson M. Wickwire, PhD^{1,2}; Sarah E. Tom, PhD³; Aparna Vadlamani, MS⁴; Montserrat Diaz-Abad, MD²; Liesl M. Cooper, PhD, MBA⁵; Abree M. Johnson, MS, MBA⁶; Steven M. Scharf, MD, PhD²; Jennifer S. Albrecht, PhD¹

SCIENTIFIC INVESTIGATIONS

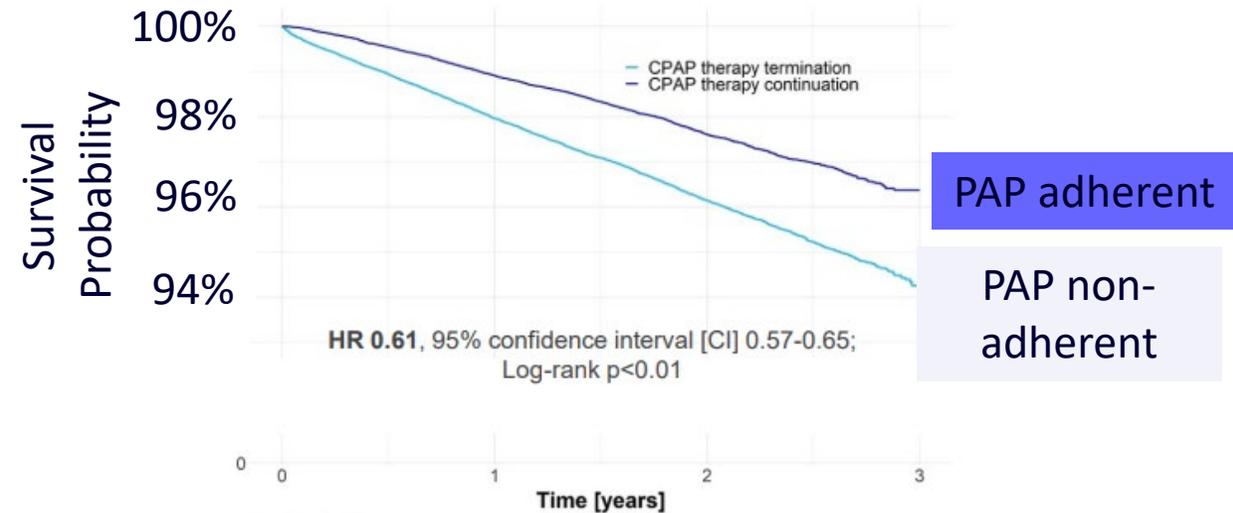
CPAP adherence is associated with reduced inpatient utilization among older adult Medicare beneficiaries with pre-existing cardiovascular disease

Emerson M. Wickwire, PhD^{1,2}; M. Doyinsola Bailey, MPH³; Virend K. Somers, MD PhD⁴; Liesl M. Oldstone, PhD, MBA⁵; Mukta C. Srivastava, MD⁶; Abree M. Johnson, MS, MBA⁶; Steven M. Scharf, MD, PhD²; Jennifer S. Albrecht, PhD³

- Untreated OSA patients had ~\$20,000 higher total annual Medicare costs
- CPAP intolerant patients had higher Medicare utilization than PAP tolerant

1. Wickwire JCSM 2020; Wickwire Sleep Breathing 2022
2. Pepin, ERS 2021 Conference

ALASKA-Study – non-adherent patients have greater chance of mortality (n>176,000)²



Conclusions:

- Prioritize PAP intolerant to therapy, especially those with CV disease
- Addressing PAP intolerance improves mortality

Sustainability at Inspire

Committed to improving the economic, social, and environmental impacts that our business has on the communities in which we operate, as well as our customers, business partners, suppliers, employees, and stockholders.

ENVIRONMENTAL

We work to operate our business responsibly and reduce our impact on the environment wherever feasible.

- Board and executive officers are responsible for oversight, identification, and communication of all climate-related risks and opportunities.
- By 2026, we aim to implement a formal environmental quality management system in line with International Organization for Standardization (ISO) 14001 standards to mitigate climate-related risks.

SOCIAL

Product safety and quality are of the utmost importance at Inspire. We also pride ourselves on our innovative and collaborative work environment, which we believe has driven our success and which we seek to uphold through an inclusive workforce, generous compensation and benefits, open communication, a focus on employee health, well-being and engagement, and robust training and development programs.

- Our company's success is built on our enduring commitment to product quality and patient outcomes.
- In 2023, women comprised ~48% of our global workforce. We actively seek candidates from all backgrounds.
- Aim to foster a culture of continuous learning with significant investments in our people through programs focused on leadership and professional development.

GOVERNANCE

We strive to maintain strong governance practices and high standards of ethics, compliance, and accountability designed to provide long-term value creation opportunities.

- Governance practices include regular consideration and assessment of our governance structure, board and committee function, and board and management succession.
- Strong and diverse Board collectively possessing a range of qualifications, skills, and experiences that align with our long-term strategy and business needs.
- Sustainability matters overseen by Board, executive leadership, and cross-functional team.

Our Intellectual Property Portfolio

(as of December 31, 2023)

- Covers aspects of our current Inspire system and future product concepts
 - 80 issued U.S. patents (expiring between 2029 and 2041) and 81 pending U.S. patent applications
 - 55 issued foreign patents and 79 pending foreign patent applications
- 175 pending and registered trademark filings worldwide
- Competitive position enhanced by trade secrets, proprietary know-how and continuing technological innovation
- Entered into an agreement with Medtronic in 2007 to make, use, import, and sell products and practice methods in the field of electrical stimulation of the upper airway for the treatment of OSA
 - Royalty-free license agreement
 - Perpetual license (no right of termination)