

# Advances in Treating Sleep Apnea

**Thomas Minor, MD**

Boulder Valley Pulmonology

303-872-9930

**Angela Paddack, MD**

Boulder Medical Center, Otolaryngology - Ear, Nose & Throat

303-309-9376



**Dr. Thomas Minor**  
**Pulmonology & Sleep Medicine Specialist**



**Dr. Angela Paddack**  
**Otolaryngology & Inspire Surgeon**

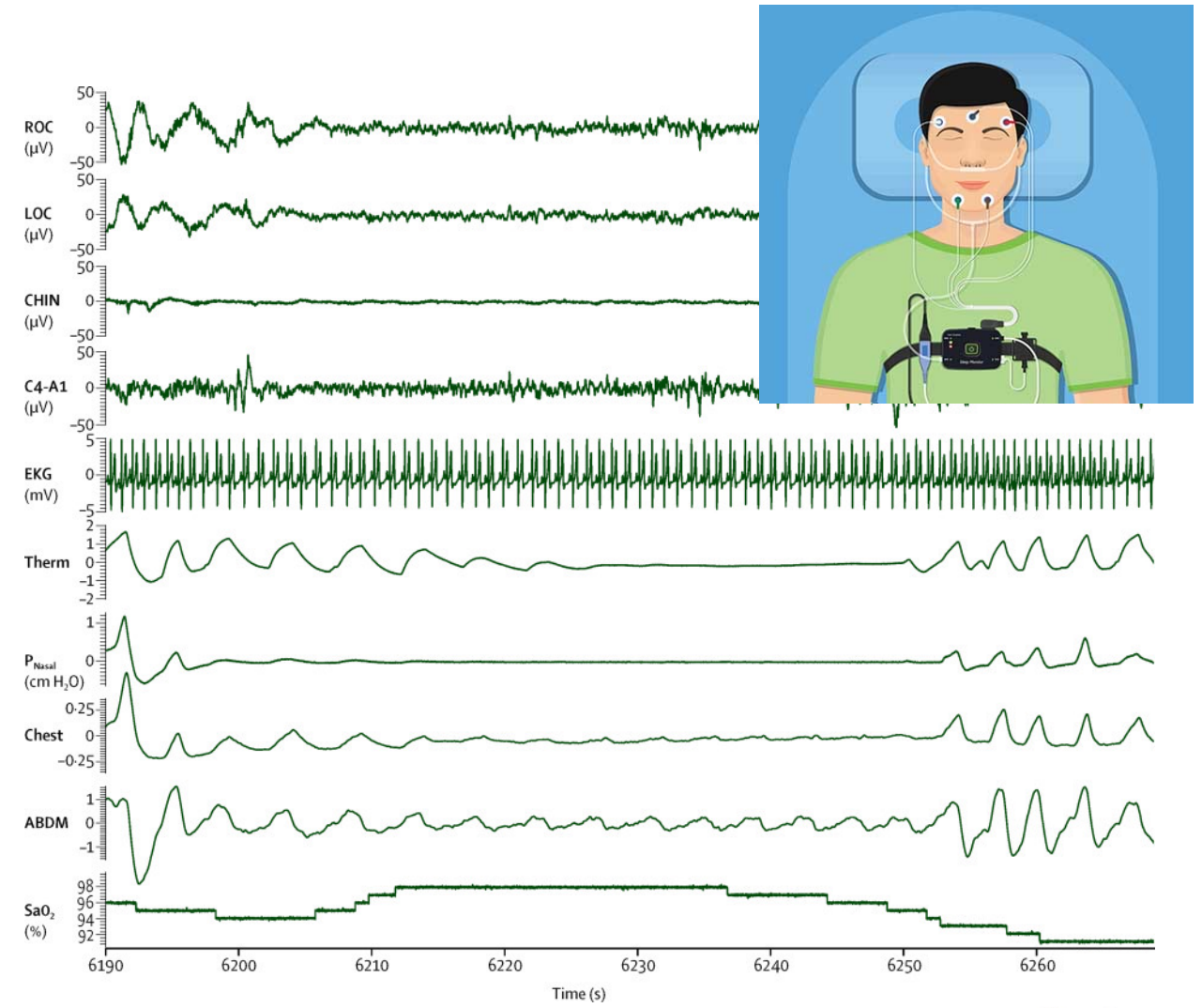
# Tonight's Agenda

- Diagnosis of Sleep Apnea
- Types of Sleep Apnea
- Typical Treatments
- Beyond the Typical -  
Hypoglossal Nerve Stimulation

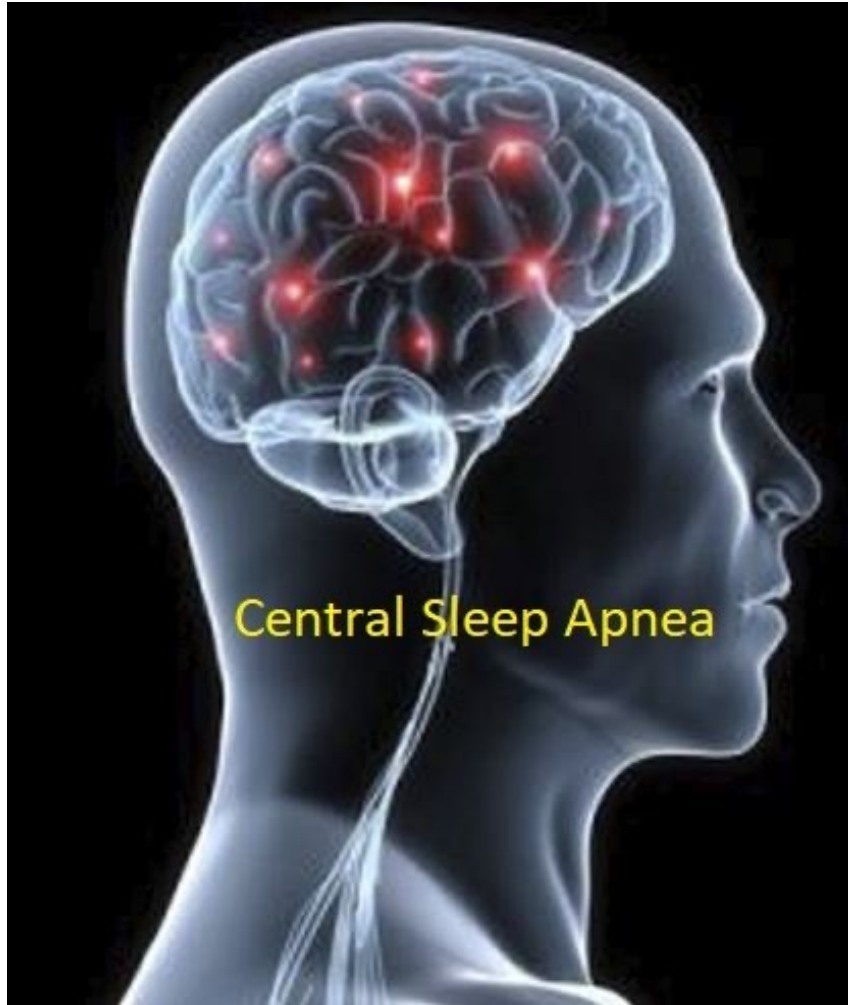


# Diagnosis of Sleep Apnea

- Signs and Symptoms
- Sleep History
- Home Sleep Test
- Nocturnal Polysomnography

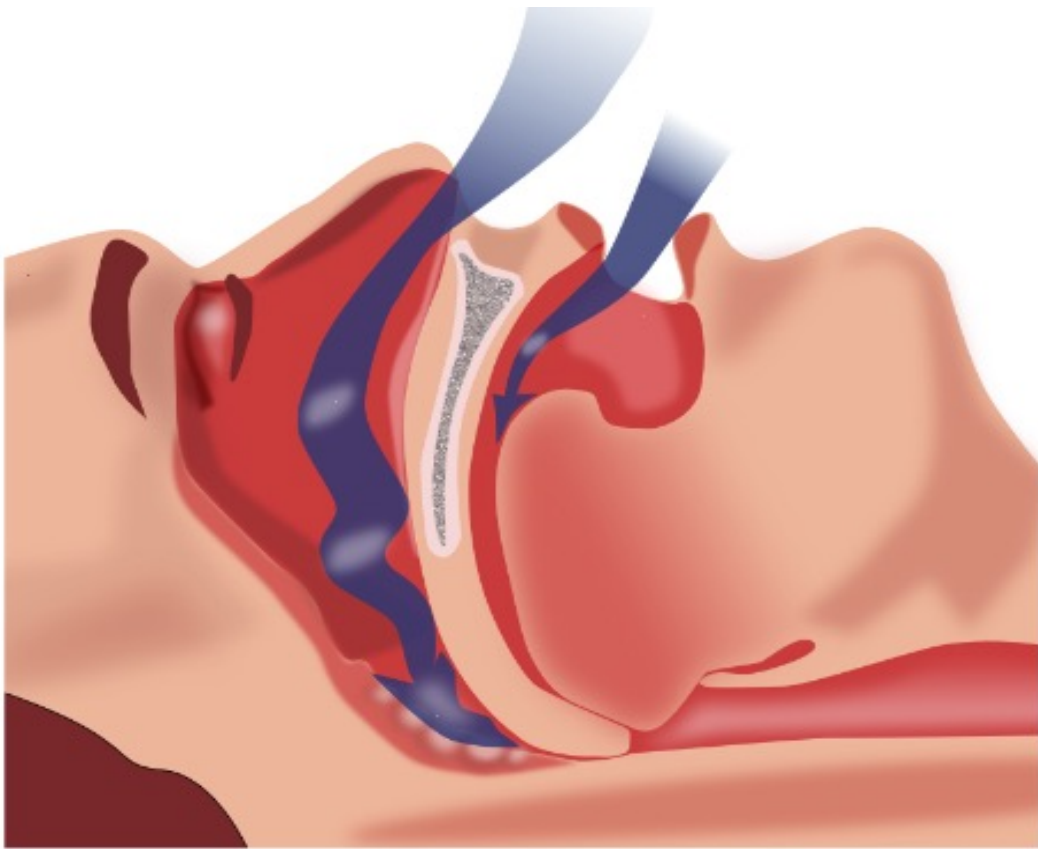


# Central Sleep Apnea (CSA)

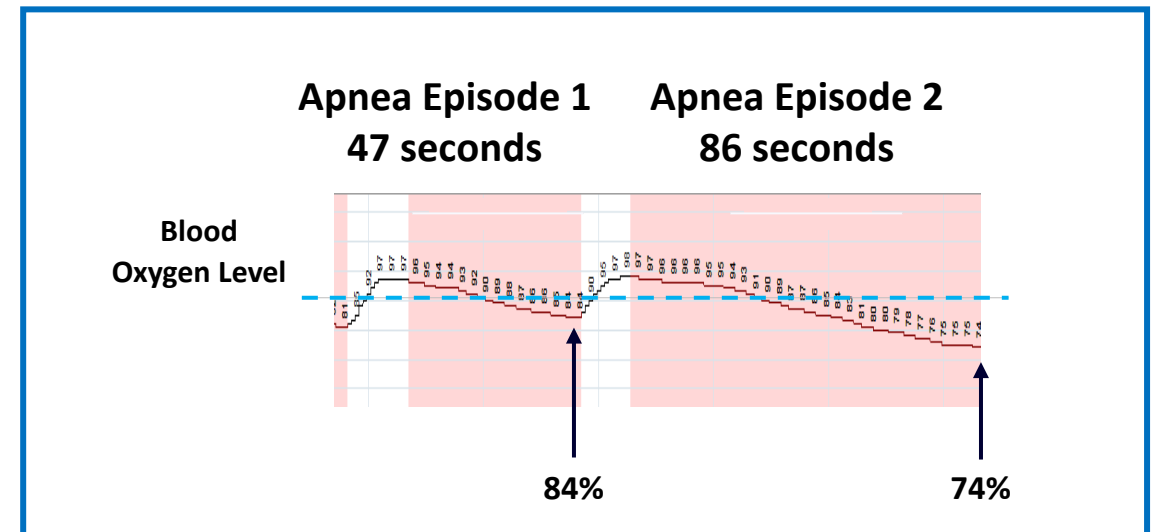


- Brain fails to send signal to muscles to breathe
- ~1% of adults over 40
- More common with high altitude

# Obstructive Sleep Apnea (OSA)



- Tongue and soft palate relax during sleep and block airflow
- Over 20 million Americans have moderate to severe (OSA)



# Consequences Untreated Sleep Apnea

## Fatigue, Diminished Productivity



## Snoring – Bed Partner



## Heart and Brain Health



## Accident Risk – Community Safety



## Great results when used regularly

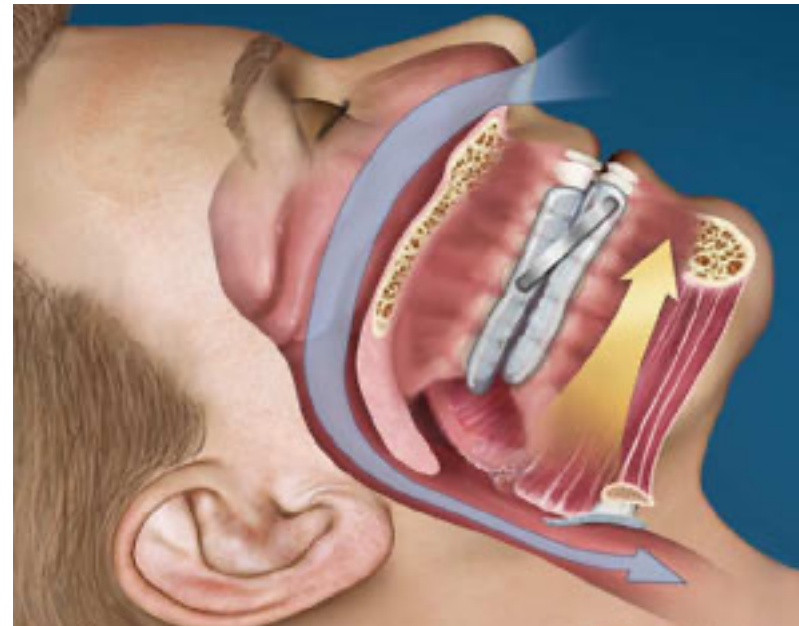


## Intolerance a significant problem





- Oral Appliances are custom mouthpieces intended to pull the jaw forward during sleep.
- Indications
- Limitations



- Positional Therapy is designed to keep the sleeper in a position that minimizes their obstruction.
- Indications
- Limitations

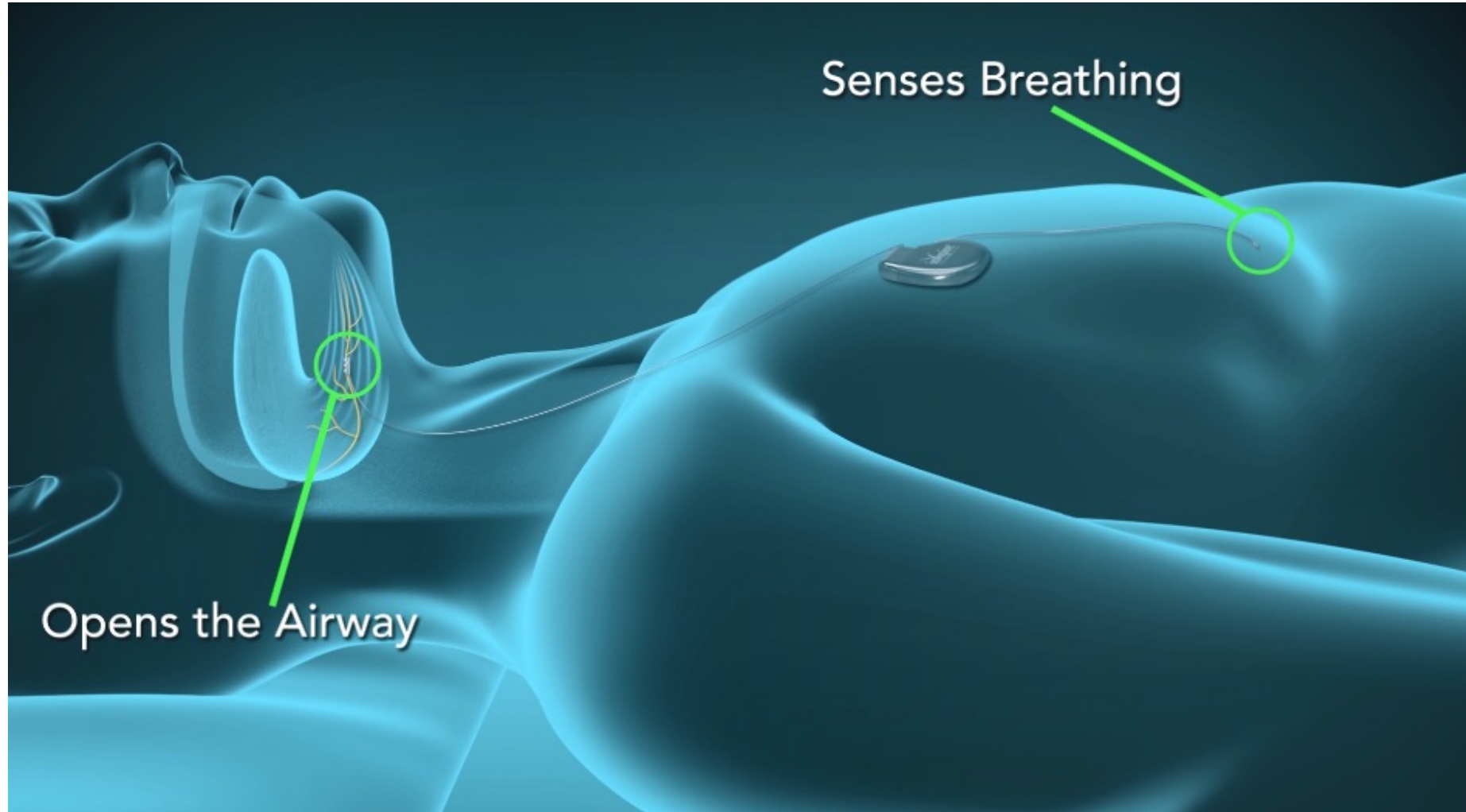


# Surgical Treatment Options

- **Anatomy Altering Surgery** is surgery to change or remove parts of the nose, jaw, tongue, or throat to improve the airway.
- Types
- Indications
- Limitations



# Hypoglossal Nerve Stimulation - Inspire



- Moderate to severe obstructive sleep apnea
  - $AHI < 100$
- Unable to get consistent benefit from CPAP
- Not significantly overweight
  - $BMI < 40$
- Pass an airway anatomy exam
- Drug Induced Sleep Endoscopy (DISE)
- Age 18+



***If you have not had a recent sleep study, you may need a new one.***

## Outpatient procedure



## Press a button – Go to sleep





- Inserted through 2 incisions
- Fast recovery
  - Typically, OTC meds for post-op pain
  - Return to non-strenuous activities within a few days
- ~11 year battery
- NEW: Inspire now approved for full-body MRI

# Office Visit After the Procedure

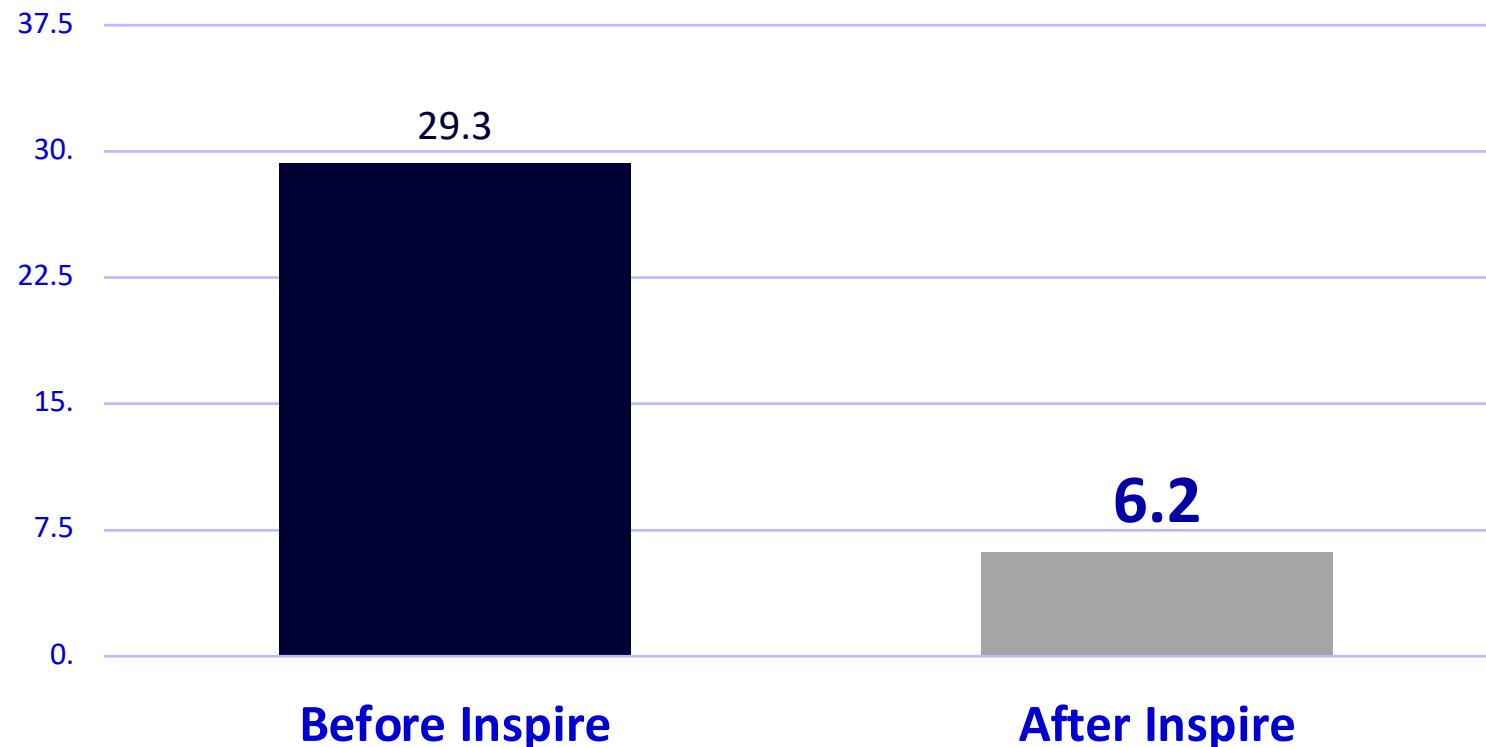


- Turn on Inspire therapy for the first time
- Establish initial settings
  - Comfortable
  - Effective
- Learn how to use the Inspire sleep remote



- Significant and sustained reduction in sleep apnea events

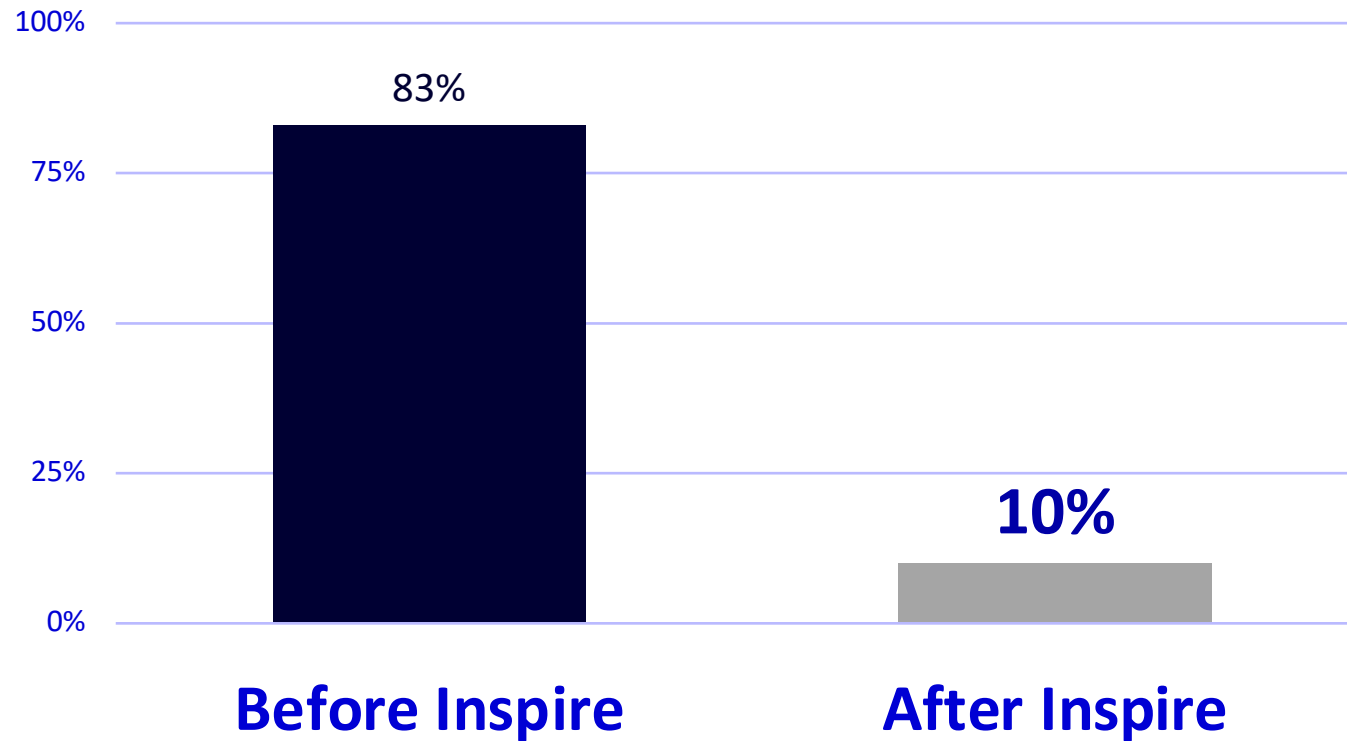
## Average Sleep Apnea Events per Hour (Apnea-Hypopnea Index)



79%  
Reduction

- Significantly decreased bed-partner reported snoring

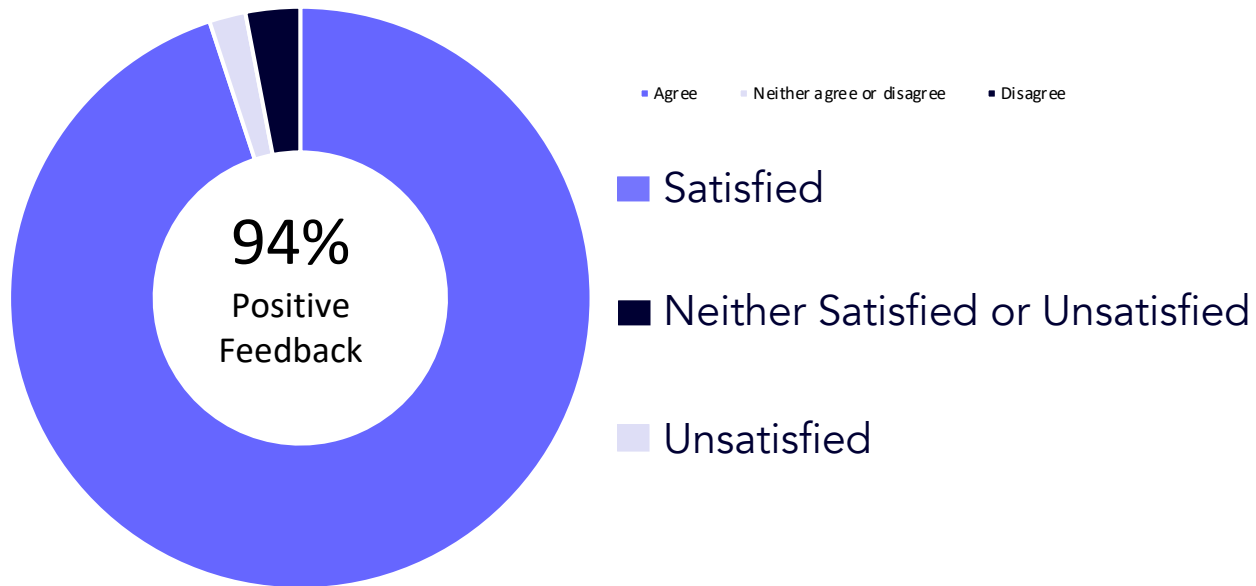
## Bed Partner Reported Snoring



88%  
Reduction

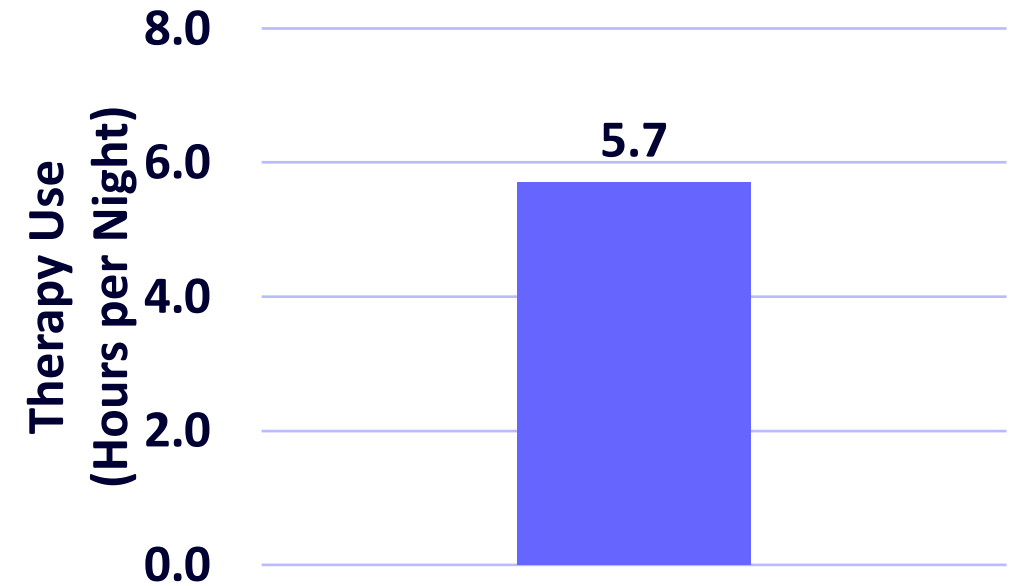
## Patients Like It

### Patient Satisfaction At Final Visit

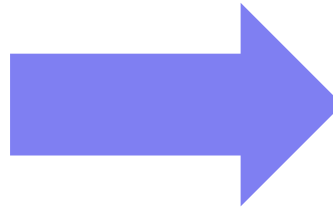
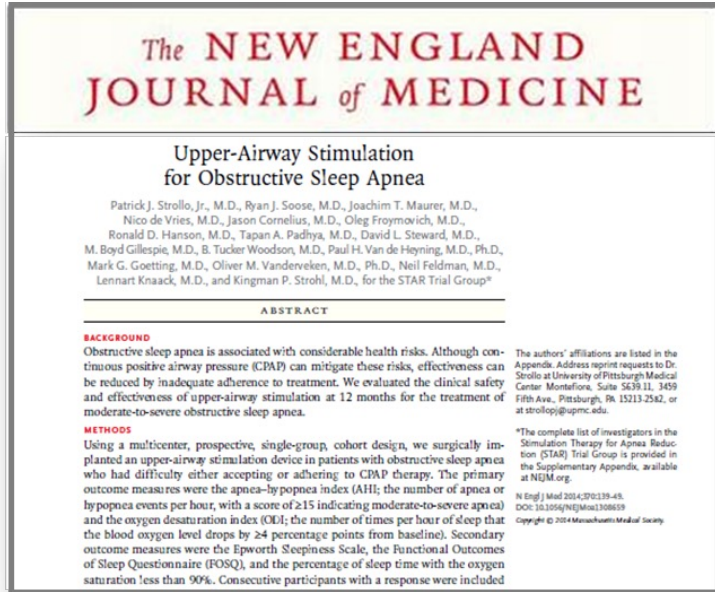


## Patients Use It

### Patient Adherence At Final Visit



## Sustained Clinical Results



## Most US Insurance Covers Inspire



- Over 100 Peer-Reviewed Publications
- 5-Year Follow-Up Data; STAR Trial
- Enrollment goal of 5,000 pts in ADHERE Registry

- Broad private insurance coverage
- Medicare coverage across the US
- Many VA and military hospitals

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## Dr. Angela Paddack

Call: **303-309-9376**

### Office Locations:

- **Boulder:**
  - 4745 Arapahoe Ave
  - Suite 200
  - Boulder, CO 80303
- **Longmont:**
  - 1551 Professional Lane
  - Suite 270
  - Longmont, CO 80501

## Dr. Thomas Minor

Call: **303-872-9930**

### Office Location:

- **Boulder:**
  - 4820 Riverbend Drive
  - Suite 100
  - Boulder, CO 80301

- **For detailed insurance questions, call 844-515-6182.**
- **For VA questions, call 1-800-739-6805.**



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