OSA TREATMENT
A TECH'S PERSPECTIVE

PRESENTED BY
JAMES LAMBERT, RPSGT
BON SECOURS MERCY HEALTH

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CONFLICTS OF INTEREST

- **NO CONFLICTS**

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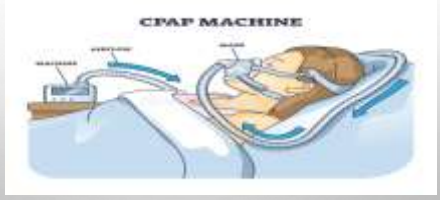
CPAP GOLD STANDARD



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CPAP THERAPY INTOLERANCE

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ORAL APPLIANCE

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ORAL APPLIANCE

- **SLEEP STUDY:** AN OVERNIGHT SLEEP STUDY (POLYSOMNOGRAM) OR A HOME-BASED SLEEP TEST IS NECESSARY TO DIAGNOSE OBSTRUCTIVE SLEEP APNEA AND DETERMINE ITS SEVERITY.
- **PHYSICIAN'S PRESCRIPTION:** AFTER EVALUATING THE SLEEP STUDY, A SLEEP PHYSICIAN WILL PRESCRIBE AN ORAL APPLIANCE AND SEND THE REFERRAL TO A DENTIST.
- **CONDITION SEVERITY:** ORAL APPLIANCES ARE GENERALLY RECOMMENDED AS A FIRST-LINE TREATMENT FOR MILD TO MODERATE OSA. FOR SEVERE OSA, THEY ARE AN OPTION FOR PATIENTS WHO CANNOT TOLERATE OR HAVE FAILED CPAP THERAPY.
- **EVALUATION BY A DENTIST:** A QUALIFIED DENTIST SPECIALIZING IN DENTAL SLEEP MEDICINE MUST CONDUCT AN EXAM TO DETERMINE IF YOU ARE A CANDIDATE FOR THE APPLIANCE. THIS INCLUDES ASSESSING YOUR JAW, TEETH, AND ORAL ANATOMY.
- **CUSTOM-FIT APPLIANCE:** MOST INSURANCE COMPANIES REQUIRE THAT THE DEVICE IS CUSTOM-FABRICATED AND FITTED BY A QUALIFIED DENTIST, AS OPPOSED TO A LESS-EFFECTIVE "BOIL-AND-BITE" VERSION.
- **FOLLOW-UP SLEEP STUDY:** A FOLLOW-UP SLEEP STUDY MAY BE REQUIRED TO CONFIRM THE EFFECTIVENESS OF THE ORAL APPLIANCE ONCE THE PATIENT HAS ACCLIMATED TO WEARING IT.

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POSITIONAL SLEEP THERAPY

- POSITIONAL THERAPY AIMS TO KEEP THE PATIENT SLEEPING ON THEIR SIDE BY USING VARIOUS DEVICES AND TECHNIQUES, INCLUDING:
- **PILLOWS:** SPECIALLY DESIGNED PILLOWS THAT ELEVATE THE HEAD AND SHOULDERS.
- **WEDGES:** TRIANGULAR WEDGES PLACED UNDER THE MATTRESS TO TILT THE BED SLIGHTLY.
- **VIBRATING DEVICES:** WORN AROUND THE WAIST OR CHEST THAT VIBRATE WHEN THE PATIENT ROLLS ONTO THEIR BACK.
- **TENNIS BALL TECHNIQUE:** SEWING A TENNIS BALL INTO THE BACK OF THE PATIENT'S PAJAMAS TO CREATE DISCOMFORT WHEN THEY LIE ON THEIR BACK.
- **ALARMS:** AUDIBLE ALARMS THAT GO OFF WHEN THE PATIENT IS DETECTED IN THE SUPINE POSITION.
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INSPIRE

My journey:

- STARTED WITH INSPIRE IN 2008 WITH INSPIRE FINE-TUNE STUDIES.
- STARTED TRAINING ON ACTIVATIONS.
- CONDUCT 90 % OF INSPIRE ACTIVATIONS.
- DEVELOPED A FOLLOW-UP PROGRAM TO ENSURE ADHERENCE AND COMPLIANCE FOR INSPIRE PATIENTS.

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INSPIRE

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INSPIRE PROCESS

- THE INSPIRE PROCEDURE IS A MINIMALLY INVASIVE OUTPATIENT SURGICAL PROCEDURE.
- TWO SMALL INCISIONS ARE MADE.
- ONE INCISION IN THE CHEST, NEAR THE COLLARBONE, TO PLACE THE BATTERY DEVICE (GENERATOR).
- SECOND INCISION UNDER THE CHIN TO PLACE A WIRE THAT CONNECTS WITH THE HYPOGLOSSAL NERVE (STIMULATION CUFF).
- ONCE THE DEVICE IS IMPLANTED AND CONNECTED TO THE STIMULATION WIRE, THE INCISIONS ARE CLOSED. PATIENTS CAN NORMALLY GO HOME THE SAME DAY.

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HOW DOES IT WORK?

- BASED ON YOUR UNIQUE BREATHING PATTERNS, THE INSPIRE SYSTEM DELIVERS MILD STIMULATIONS TO THE HYPOGLOSSAL NERVE, WHICH CONTROLS THE MOVEMENT OF YOUR TONGUE AND OTHER KEY AIRWAY MUSCLES.
- BY STIMULATING THESE MUSCLES, THE AIRWAY REMAINS OPEN DURING SLEEP.
- THE PATIENT HAS A SMALL HANDHELD REMOTE THAT CONTROLS INSPIRE THE INSPIRE DEVICE.

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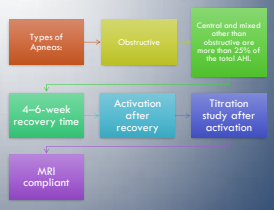
INSPIRE PROCEDURAL TIMELINE



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INSPIRE:
ELIGIBILITY REQUIREMENTS

- ELIGIBILITY REQUIREMENTS:
- MODERATE TO SEVERE OSA (AHI 15-65/100 - DEPENDING ON INSURANCE)
- INABILITY TO ACHIEVE CONSISTENT BENEFIT FROM CPAP (CPAP FAILURE)
- NOT SIGNIFICANTLY OVERWEIGHT
- AT LEAST 18 YEARS OLD
- SLEEP STUDY CONDUCTED WITHIN THE LAST TWO YEARS

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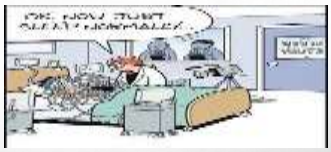
INSPIRE & THE PATIENT.



- BASED ON THE PATIENT'S UNIQUE BREATHING PATTERNS, THE INSPIRE SYSTEM GENTLY STIMULATES THE HYPOGLOSSAL NERVE, WHICH CONTROLS THE MOVEMENT OF YOUR TONGUE AND OTHER IMPORTANT AIRWAY MUSCLES.
- BY ACTIVATING THESE MUSCLES, THE AIRWAY STAYS OPEN DURING SLEEP.

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INSPIRE

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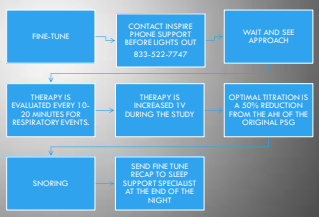
INSPIRE AND THE NIGHT TECHNICIAN



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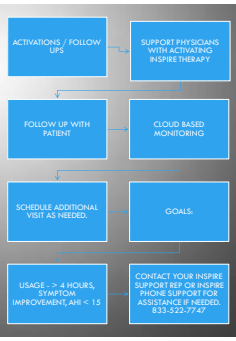
INSPIRE AND THE DAY TECHNICIAN



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INSPIRE SUPPORT

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INSPIRE CARE PATHWAY

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THANK YOU

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