



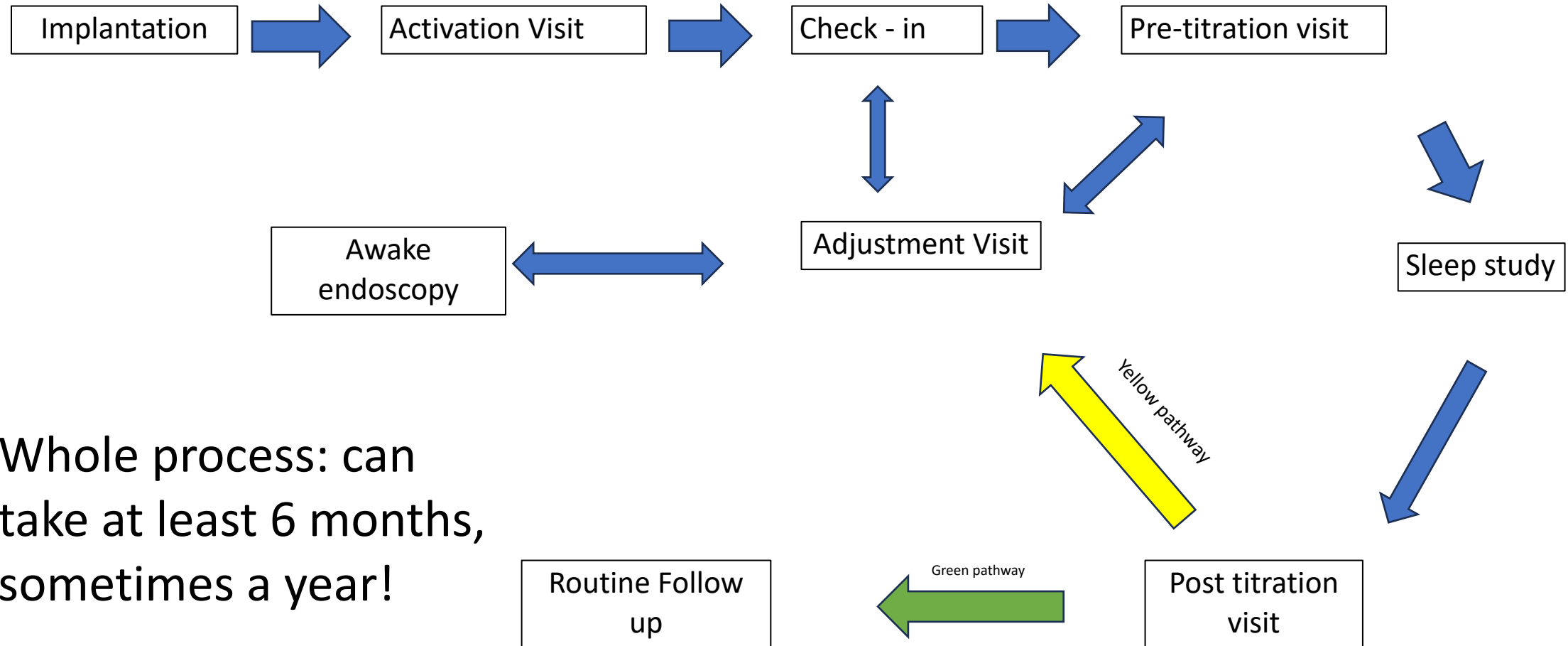
# Post Implantation Care

Stanley Thomas

Creighton University

Division of Pulmonary, Critical Care and Sleep Medicine

# Post Implantation Work Flow



Whole process: can take at least 6 months, sometimes a year!

# Activation Visit

Done ideally close to 6 weeks after implantation

- Better response due to better healing compared to 30 days

1 hour visit

- Address any post-operative concerns
- Discuss post implantation care pathway
- Physical Examination
- Activation
- Remote Operation Education
- Sleep Sync pairing
- Next step

# Post operative Concerns

Unusual to have major concerns

If unsure, can contact ENT to verify

Uncommon complaints:

- Tenderness along incision site
- Feeling a “wave” or “shooting sensation” around generator
  - Intercostal nerve irritation
  - Gabapentin
- Numbness around lips
- Drooling
- Dysphagia

# Physical Examination

- Uncommon adverse effects:
  - Tongue weakness
  - Loss of range of motion
  - Persistent numbness

- Neuropraxia



# INSPIRE settings

Electrode A

- Plus – Minus – Plus

Electrode B

- Off – Minus – Off

Electrode C

- Minus – Off – Minus

Electrode D

- Minus – Minus – Minus

Electrode E

- Minus – Plus – Minus

- Pulse Width/Rate

- Setting 1 – 90/33
- Setting 2 – 120/33
- Setting 3 – 120/40
- Setting 4 – 150/33
- Setting 5 - 60/40

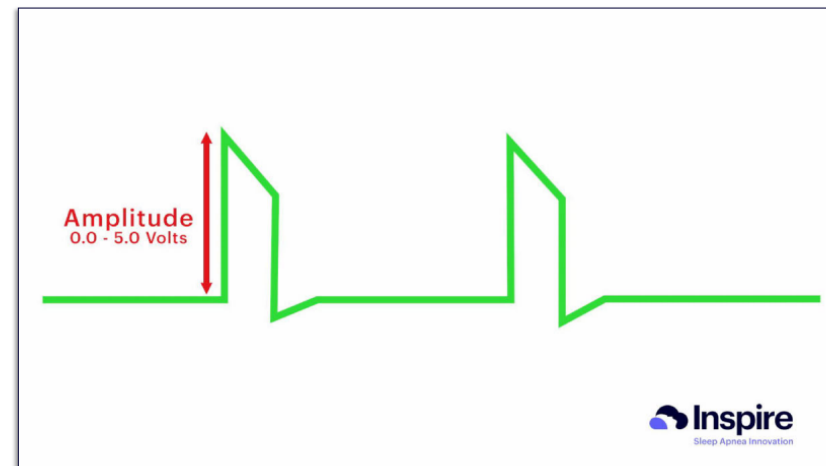
# Activation

- Start with 0.1 V on Electrode A settings, Pulse Width 90, Rate 33
    - Walk up until find sensing and function threshold
  - Sense lead waveform
- 
- Delay time
    - 0-75 minutes
  - Pause time
    - 0-30 minutes
  - Duration
    - 4-12 hours

# Programming



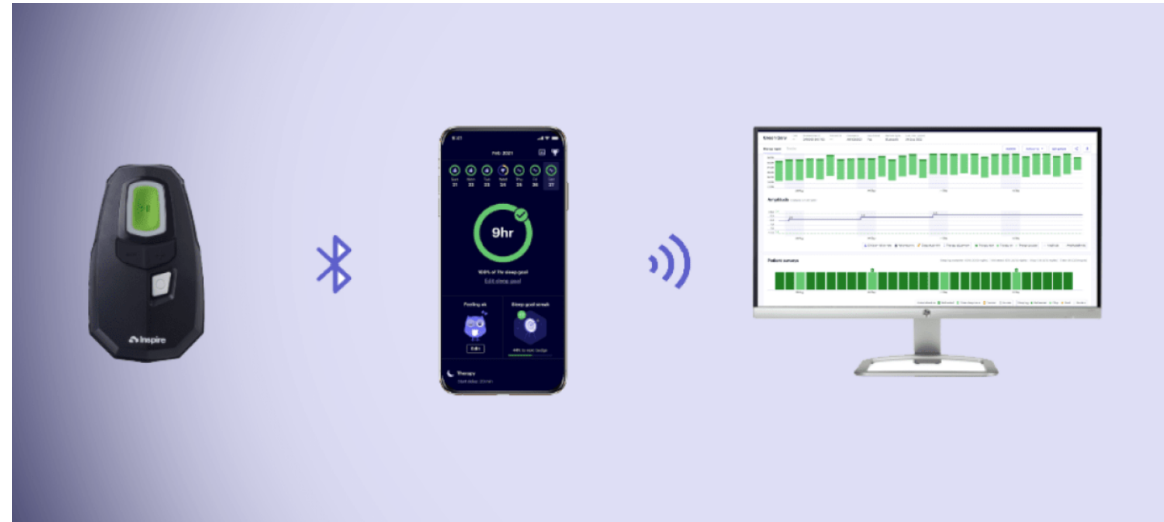
- **Amplitude (V)**  
0.0V-5.0V in 0.1V increments
- **Pulse Width ( $\mu$ s)**  
60,90, 120, 150, 180, 210
- **Rate (hz)**  
20, 25, 30, 33, 40
- **Electrode**  
Default = [+ - +]





# Sleep Sync

- In Bluetooth enabled remote can Sync with phone
  - Usage
  - Amplitude
- Can send questionnaire
- CANNOT CHANGE SETTINGS



Pictures courtesy  
of INSPIRE

# Adjustment Visits

- Sample Cases
  - “I feel like I am getting choked”
  - “I’m getting an ulcer under my tongue”
  - “I don’t feel anything”
  - “It doesn’t work with every breath”
  - “It’s stimulating every breath”

“I feel like I am  
getting  
choked”

- Patient tongue could be moving up and not out
  - Observe current tongue motion
  - Observe after alteration of pulse width and rate
  - Observe after alteration of electrode setting (i.e. Electrode A to B, etc.)

# “I’m getting an ulcer under my tongue”

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- Blister present under tongue, anterior or laterally
  - Adjust electrode
  - Mouthguard
  - File down teeth edge

Picture from  
decisionsindentistry.com



I don't feel anything...

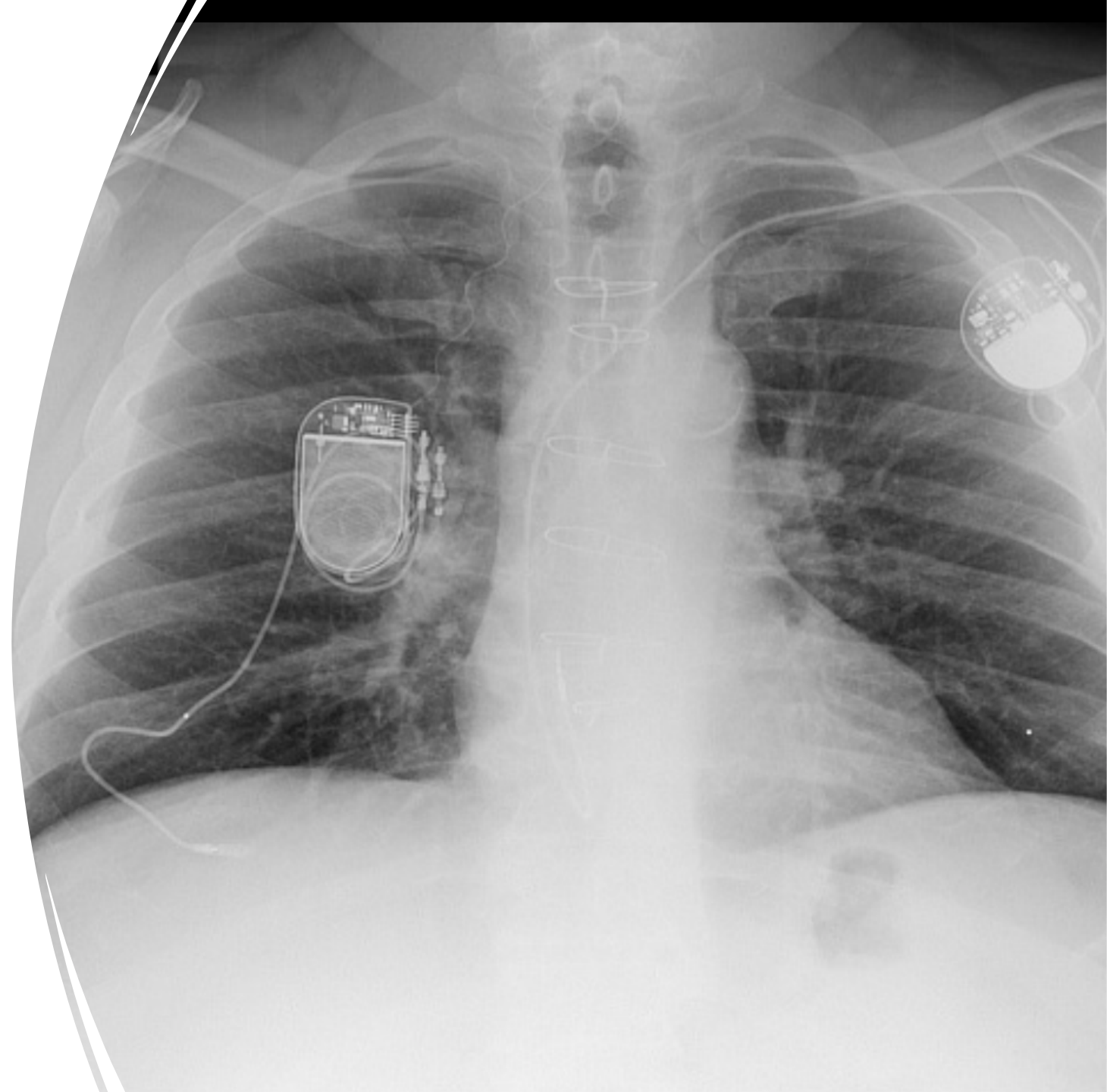
- Needs more strength of stimulation

- Sensor lead issue
- Non-functioning center electrode

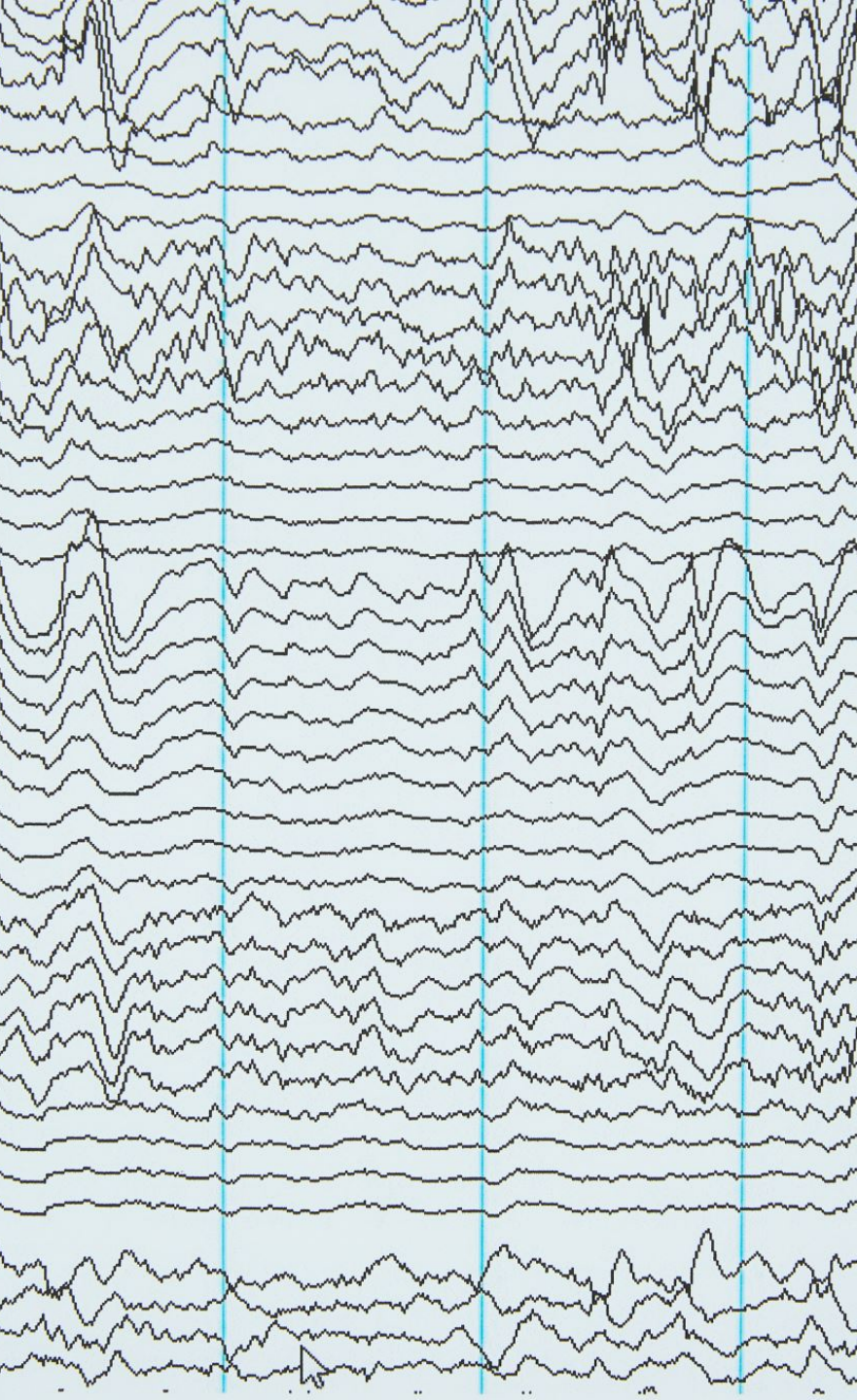
# Sense lead connection

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- Verify with system check
- Obtain Xray → refer to ENT







# Center Electrode Non-Function

- Patient with lack of movement
- System check with alert
- Reprogram to Electrode C

# Other concerns

- “It doesn’t work with every breath”
- “It’s stimulating every breath”



# Post – Implantation Pitfalls

- Getting stuck in an adjustment loop
  - Trouble shoot true reason for intolerance
    - Anxiety
    - Insomnia
    - Strength of stimulation
  - Trouble shoot reason for non adherence
    - Cognitive Ability



## Role for Telemedicine

- Can use Sleep Sync to gather usage data
- If adjustment needed, still need to come into office.

The background of the slide is a dark, textured surface covered with numerous question marks of varying sizes and shades of gray and brown. The question marks are scattered across the entire frame, creating a sense of depth and focus on the central text.

Questions?

[Stanley.Thomas@commonspirit.org](mailto:Stanley.Thomas@commonspirit.org)