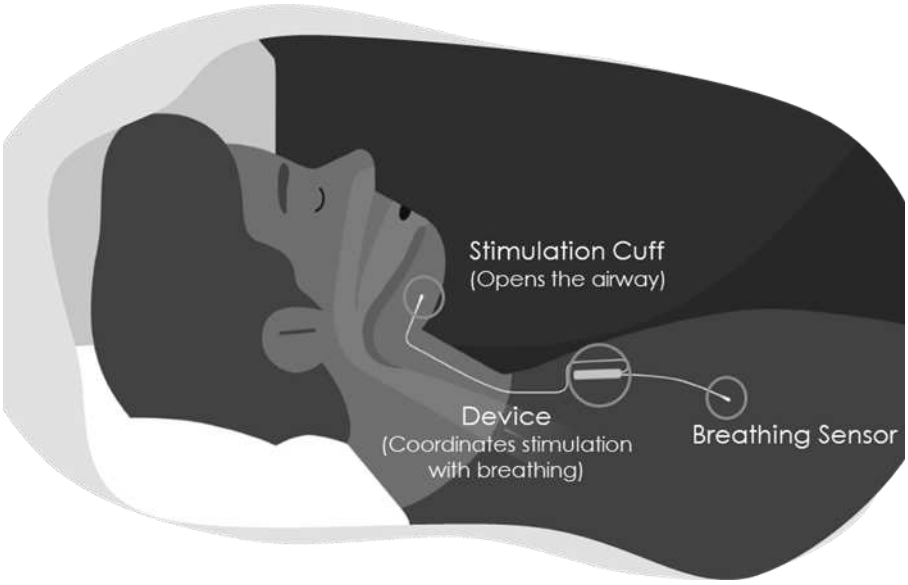
Introduction to Hypoglossal Nerve Stimulation

For patients with sleep apnea, the airway is floppy and can collapse when you are sleeping. This causes the oxygen levels to fall and the carbon dioxide levels to rise. This can cause your brain to wake up briefly in order to open up the airway and normalize those levels. Once you fall asleep again, the cycle continues. This can lead to poor sleep (from the awakenings) and high blood pressure or stroke (from the low oxygen levels and the adrenaline surge that happens when you wake up repeatedly).



https://professionals.inspiresleep.com/medical-education/ Accessed 1.21.2021

Hypoglossal Nerve Stimulation: This is an implantable device that treats OSA. It consists of a small generator that is placed under the skin on the chest wall. It can sense when you breathe and also has a wire that feeds into the nerve that stimulates your tongue. This allows the airway to open up as you sleep. It is operated by a remote control. Once you turn it on, it will move your tongue out once to let you know it has been activated. It will then allow you 20-30 minutes to fall asleep naturally before turning on to take care of your sleep apnea all night.

It isn't meant for everyone. Before having this device implanted, an ear, nose and throat surgeon will take a look in your airway. They give you medicine to allow you to sleep. They look at your airway to see why you have sleep apnea – is it because your tongue flops backwards OR is it because your whole airway narrows? If it is because your tongue flops backwards, you may be a good candidate for this device. This will also depend upon the severity and type of sleep apnea you have. Your local sleep specialist can help you decide if this is a good option for you.

The overall objective is to find a treatment option that is effective and well-tolerated. This involves having an open discussion with your sleep health care practitioner about any concerns you may have about treatment options. Everyone is different.