



For Immediate Release

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Hartford HealthCare Pioneers New Technology For Patients with Parkinson's Disease and Essential Tremor

HARTFORD—Hartford HealthCare's Ayer Neuroscience Institute has pioneered the most advanced Deep Brain Stimulation technology for patients with Parkinson's disease and essential tremor, becoming the first in Connecticut and among the first in New England to offer the Infinity Deep Brain Stimulation (DBS) System.

On February 8, Dr. Patrick Senatus, Neurosurgery Director at the Chase Family Movement Disorders Center at the Hartford HealthCare Ayer Neuroscience Institute, implanted the Abbott Infinity Deep Brain Stimulation (DBS) System. The new technology allows for even more targeted treatment and reduces potential side effects.

Deep Brain Stimulation is a surgical procedure in which wires are connected from the brain to a pacemaker-like battery pack implanted in the chest. DBS is not a cure for movement disorders, but it can dramatically decrease symptoms, restore mobility and improve patients' quality of life.

According to Abbott, the Infinity system is the first in the U.S. to feature a directional lead designed to precisely customize therapy that may maximize patient outcomes and reduce side effects. The lead offers eight independent electrode segments through which physicians can precisely steer electrical current toward structures of the brain that control movement.

"The technology we've used in the past can be limited in that it stimulates an entire contiguous field within the brain including areas we sometimes may not want to stimulate. This can cause unwanted effects such as slurred speech, tingling in the hands, twitching of muscles or double vision," said Chase Family Movement Disorders Medical Director Dr. Joy Antonelle de Marcaida. "The new system potentially decreases the likelihood of that because we can direct stimulation in a more focused manner."

The system is also the world's only DBS system operating on a Bluetooth iOS software platform. Clinicians can streamline the programming process by using the



software platform on an iPad Mini mobile device. Patients can manage their symptoms with their Abbott Infinity DBS System iPod Touch mobile digital device controller.

“With the original system the physician was always knee to knee with the patient during programming because there was a wire attached. The new system is more in line with modern technology. Patients are more comfortable with it. They can change some of the parameters discretely on their own with the provided iPod Touch device, such as increasing or decreasing voltage or turning the stimulator on or off if need be,” de Marcaida said.

The Chase Family Movement Disorders Center has locations in Vernon, Cheshire and Meriden.

“Being first in Connecticut and surrounding states to utilize the Abbott system is another example that the Chase Family Movement Disorders Center is truly a leading edge destination program with its early adoption of new technologies, interventions, medications and involvement in clinical research that improve outcomes for our patients,” said de Marcaida.

Video: <https://youtu.be/Snmq0z0nYUI>

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