MOBILE DECISION SUPPORT SYSTEM FOR NURSE MANAGEMENT OF NEUROMODULATION THERAPY

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Problem: Deep Brain Stimulation (DBS) therapy is not accessible to many patients because of the requirement of frequent programming visits and few places providing the service.

Standard Care

Patient and caregiver travel for programming, where the electrical waveforms are changed

Phase 1: Expert DBS programmers use the models to guide programming in the clinic

Phase 2 Goal: Show in home programming can be effective

Phase 1 Goal: Decrease time spent programming

Our Solution (currently under clinical trial)

What is DBS?

DBS is a therapy where electrodes are implanted deep in the brain to deliver electrical pulses. It is most commonly used to treat movement disorders, such as Parkinson’s Disease.

Our Solution

Using patient medical imaging, we create a model of how DBS interacts with the patient’s brain

The models are transferred to an iPad to be used by the DBS programmers to aid the programming process

Phase 2: Home health nurses take the app into patients’ homes and use it to guide DBS Programming

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