

# Development of a Telehealth Platform for Treatment with the SpeechVive Device

<https://neurodegenerationresearch.eu/survey/development-of-a-telehealth-platform-for-treatment-with-the-speechvive-device/>

## Principal Investigators

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## Institution

SPEECHVIVE, INC.

## Contact information of lead PI Country

USA

## Title of project or programme

Development of a Telehealth Platform for Treatment with the SpeechVive Device

## Source of funding information

NIH (NINDS)

## Total sum awarded (Euro)

€ 1,148,715.60

## Start date of award

01/05/2016

## Total duration of award in years

2

## The project/programme is most relevant to:

Parkinson's disease & PD-related disorders

## Keywords

telehealth, Speech, Speech Therapy, Pathologist, Parkinson Disease

## Research Abstract

? DESCRIPTION (provided by applicant): The majority of people with Parkinson's disease (PD) experience communication impairments, which impact all aspects of daily life, leading to social

isolation and reduced quality of life. Because of difficulties in accessing speech therapy, only a very small percentage of people with PD participate in these treatments during their disease. An easily accessible and cost-effective communication treatment for individuals with PD is needed. The SpeechVive device, developed by SpeechVive, Inc., provides a solution that meets the criteria for ease of use and effectiveness. In an NIH funded study, the SpeechVive device improved communication in 90% of individuals with PD by improved speech volume, articulation, and/or speech rate. The SpeechVive device is set for the patient in person, reducing the potential for wide adoption due to the difficulties patients face accessing healthcare. The overall goal of this Direct to Phase II SBIR project is to develop a tele-health platform for the SpeechVive device to improve accessibility for people with PD. To accomplish this goal, the following aims will be accomplished: (Aim 1) Develop a web-based portal, coupled with a HIPAA-compliant database, to facilitate use in medical facilities, (Aim 2) Develop a tele-health platform providing video capabilities and functionality for remote programming of the SpeechVive device for each patient, and (Aim 3) Examine the patient and caregiver satisfaction with and responsiveness to tele-practice using the SpeechVive device. The web portal will be the first step in developing the tele-health platform. Beta-tests will demonstrate functionality and obtain feedback from speech-language pathologists (SLPs). Successful implementation of this aim will result in a complete web-based portal, available on the internet. During Aim 2, SpeechVive, Inc. will develop an iPad application to facilitate speech tele-practice. The application will interface with the web portal developed in Aim 1. Beta-tests will demonstrate functionality and obtain feedback from people with PD and SLPs. Successful implementation of this aim will result in a complete and functioning application. During Aim 3, SpeechVive, Inc. will conduct a study of satisfaction (quality of life; financial, travel, and caregiver burden) and responsiveness (perceived competence; speech change) in patients receiving SpeechVive treatment face-to-face as compared to SpeechVive treatment via tele-practice. Successfully completing these Aims will lead to commercialization of a tele-health platform for use with the SpeechVive device. This SBIR grant will allow SpeechVive, Inc. to address a critical need for an easily accessible and cost-effective communication treatment for people with PD, allowing over 118,000 SLPs in the U.S. to connect regularly with this growing population.

### **Lay Summary**

**PUBLIC HEALTH RELEVANCE:** Individuals with Parkinson's disease (PD) suffer from communication impairments that impact all aspects of daily life, leading to social isolation and reduced quality of life. Due to limited access to speech therapy, only a very small percentage of people with PD receive treatment. SpeechVive, Inc. will develop a tele-health platform including an iPad application to interface with its SpeechVive device to facilitate speech tele-practice. This will help to increase the number of people with PD that receive speech therapy and in turn improve their quality of life.

### **Further information available at:**

#### **Types:**

Investments > €500k

#### **Member States:**

United States of America

#### **Diseases:**

Parkinson's disease & PD-related disorders

**Years:**

2016

**Database Categories:**

N/A

**Database Tags:**

N/A