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**Abstract: Late Breaking Abstract 24**

**Care at home: using telemedicine to provide specialty care to patients with Parkinson's disease**

V Venkataraman<sup>1</sup>, M Grana<sup>2</sup>, B Rajan<sup>3</sup>, A Seidmann<sup>3</sup>, ER Dorsey<sup>1</sup>, KM Biglan<sup>2</sup>

<sup>1</sup>Department of Neurology, Johns Hopkins University, Baltimore, MD, United States

<sup>2</sup>Department of Neurology, University of Rochester Medical Center, Rochester, NY, United States

<sup>3</sup> William E. Simon Graduate School of Business Administration, University of Rochester, Rochester, NY

**Objective:** To evaluate the feasibility, effectiveness, and economic benefits of using web-based videoconferencing to provide specialty care to patients with Parkinson disease in their homes.

**Background:** Access to specialty care for individuals with PD is frequently limited due to geography. Previous studies have demonstrated the feasibility of using telemedicine to provide care in controlled environments, such as nursing homes, but have not systematically assessed the feasibility and effectiveness of providing care directly in people's homes.

**Methods:** We are conducting a seven-month randomized comparative effectiveness study across two academic sites. Patients with PD were randomized to either continue their usual in-person care with a specialist or to receive care with their specialist via telemedicine in their homes. Patients had existing computer, high-speed internet, and web-camera capabilities and were provided links to download HIPAA-compliant videoconferencing software from Vido. After a baseline visit, patients completed three subsequent visits where they completed quality-of-life, as measured by the Parkinson Disease Questionnaire (PDQ-39), and economic surveys. Their specialist conducted the Unified Parkinson Disease Rating Scale (UPDRS).

**Results:** To date, 20 patients (average age 65.3) have been enrolled. Baseline scores on the UPDRS and PDQ-39 were comparable in both groups. To date, 20 in-person visits and 15 telemedicine visits have been conducted. Telemedicine visits have been feasible, as 13 of 15 (87%) of the telemedicine visits have been completed as scheduled, and the specialist completed the UPDRS remotely in every case. Patients who met their specialist in clinic devoted 170 minutes for their appointment, 24 minutes (14%) of which were spent with their specialist. By contrast, patients who met their specialist via telemedicine devoted 38 minutes for their appointment, 29 minutes (76%) of which were spent with their specialist. On average, patients live 50 miles from their specialists' clinic.

**Conclusions:** Web-based videoconferencing appears to be feasible in providing care to patients with PD in their homes. Its effectiveness and economic value are yet to be determined, but on average, telemedicine saved patients 100 minutes of time and 100 miles of transportation.

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