Current perspectives on the role of telemedicine in the management of Parkinson’s disease

Joel L. Eisenberg BS  
USF MCOM- LVHN Campus, Joel.Eisenberg@lvhn.org

Jyhgong Gabriel Hou MD, PhD  
Lehigh Valley Health Network, Jyh-Gong_G.Hou@lvhn.org

Peter J. Barbour MD  
Lehigh Valley Health Network, Peter.Barbour@lvhn.org

Follow this and additional works at: https://scholarlyworks.lvhn.org/select-program

Part of the Medical Education Commons

Published In/Presented At

Current perspectives on the role of telemedicine in the management of Parkinson’s disease

Joel L. Eisenberg, B.S., Jyhgong Gabriel Hou, M.D., and Peter J. Barbour, M.D.
Lehigh Valley Health Network, Allentown, Pennsylvania

Background

- Parkinson’s disease (PD) is a progressive neurological disorder
- The number of patients who receive specialty care continues to be limited
- The benefits of seeing a movement disorder specialist for management of PD have been well established
- Telemedicine has been suggested as a useful tool in addressing the problem of access to specialty care
- The literature suggests that using telemedicine to treat PD is
  - Feasible and economically advantageous
  - Associated with high satisfaction
  - Comparable in quality to in-person care

Problem Statement

This project will evaluate the advantages and disadvantages of telemedicine visits to patients with Parkinson’s disease and to their medical providers.

Methods

- The literature search strategy is illustrated by Figure 1
- Evidence was evaluated using the Joanna Briggs Institute Checklist1 for the randomized controlled trials, case series, and case reports
- The survey studies were evaluated using the Center for Evidence-Based Medicine checklist2

Results

- The strength of evidence for each criterion was color-coded
- Green = the study satisfied the criterion
- Yellow = the study was ambiguous
- Red = the study did not satisfy the criterion

Advantages of Telemedicine

- Treating PD with telemedicine is feasible and economically advantageous
- High levels of interest and satisfaction exist with patients and providers
- Quality of care is comparable to in-person care based on objective measures
- May increase access to care

Limitations of Telemedicine

- Current research is limited by sample size, demographics, and risk of bias
- Current video technology may not be sufficient to detect necessary details
- Reimbursement for telemedicine visits remains limited
- Physicians are required to be licensed in the state where the patient is physically located

Conclusions

Ideal Practice Design

- Patients seen in person first
- Remote clinic with adequate technology, large, well-lit room
- Staff present to take history, vitals, and perform certain physical exam maneuvers

Relevance to SELECT

- VBPCC – telemedicine provides comfort, convenience, and savings for patients
- Health Systems – importance of understanding how reimbursement, licensing, and practice design influence patient access to care

REFERENCES

1. Joanna Briggs Institute Checklist for the randomized controlled trials, case series, and case reports
2. Center for Evidence-Based Medicine checklist

© 2018 Lehigh Valley Health Network