

Virtual House Calls in Multiple Sclerosis

A Proposed Pilot Study

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Abstract

Many multiple sclerosis (MS) patients lack access to neurologic care. Telemedicine, in particular, the virtual house call is a method of care delivery that may increase access to care for MS patients. The following describes the background and methods of a proposed pilot study that the University of Rochester MS Clinic will conduct. This pilot will evaluate the feasibility and patient satisfaction with the virtual house call.

Lack of Access to Neurology Care

- Nearly 30% of MS patients do not receive care from a neurology provider
- Factors that increase a patient's risk of lacking neurologic care include living in rural areas or being poor
- Ambulatory dysfunction also decreases a patient's ability to access neurologic care
- Access to neurologic care affects outcomes in MS patients. Patients who see neurology providers are more likely to be on a disease modifying therapies than those who do not

Telemedicine

- Providing healthcare or health education remotely using an audio-visual connection
- There are many applications including:
 - Virtual house calls when a patient at home has a visit with a remote provider via an AV connection. These visits can include a history, exam, assessment and plan
 - Specialists provide advice to other providers remotely
 - Health education via an AV connection, for example lectures given to neurology residents remotely

Virtual House Calls in Other Neurologic Disorders

- Providers conducted virtual house calls with Parkinson's disease patients at the University of Rochester
- A Canadian epilepsy clinic provided house calls to patients living in rural areas



Other Types of Telemedicine Applications Used with MS Patients

- Physical therapists supervised patient exercise program remotely
- MS specialists provided advice to other providers remotely about the care of particular MS patients

Proposed Methods

- 40 MS patients of the University of Rochester MS Clinic will be recruited from sequentially scheduled follow-up visits
- Patients will be seen twice over a 6 month period, 1st via the virtual house call, 2nd in a usual in-clinic visit
- Virtual house calls will occur using a HIPAA compliant audiovisual connection between a computer in the patient's home and in the MS clinic
- Virtual house call will include the usual discussion, exam, and plan for tests and treatments
- Feasibility will be measured using percentage of scheduled visits that are completed
- Patient satisfaction will be measured using online surveys
- Descriptive statistical analysis will be conducted

Summary and Next Steps

This pilot study will assess the feasibility and patient satisfaction with virtual house calls for MS patients. This will be a first step in applying telemedicine as a method of care delivery to possibly increase access to neurologic care for MS patients. Future studies may look at telemedicine for new patient consultations or interventions to titrate symptomatic meds.

Select References

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