

BACKGROUND

Parkinson's Disease (PD), Multiple Sclerosis (MS), Amyotrophic Lateral Sclerosis (ALS), and Huntington's Disease (HD) are progressive neurological diagnoses that typically present with movement related limitations that impact participation in daily activities. Many of these individuals require rehabilitation therapies to maintain their functioning. Prevalence for these diagnoses in the United States can be seen below in Figure 1.

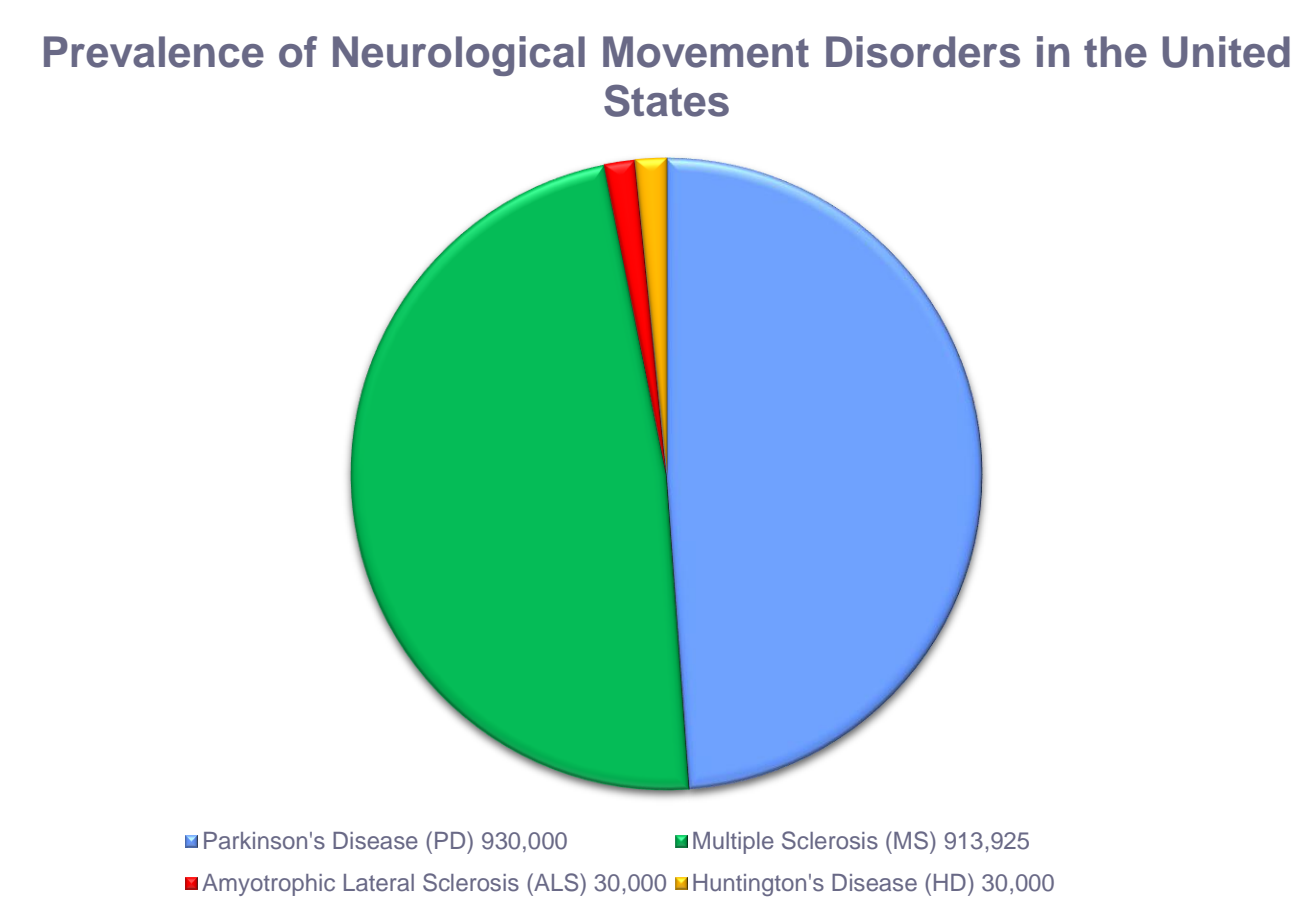


Figure 1. Prevalence of Movement Disorders in the U. S

PROGRAM DETAILS

Program Description: The Neurological Institute at CHI Health Immanuel in Omaha Nebraska offers the Movement Disorder Clinic the first Monday of each month to help patients diagnosed with PD, MS, ALS, or HD. This program offers an interdisciplinary approach where patients will have a consultation once or twice a year to create an individualized care plan by the neurology, social work, nursing, nutrition, occupational, physical and speech therapy staff. The dedicated team will work with patients one-on-one to meet their individual goals.

Mission: To create a holistically driven movement disorder clinic dedicated to serving individuals with neurological conditions in the Omaha area to provide consultation, rehabilitation, community reintegration, and increased independence in daily activities.

Vision: Maximizing functionality, well-being, inclusion, confidence and independence.

FOCUSED QUESTION

What is the effectiveness of exercise rehabilitation focusing on motor and non-motor symptoms for those diagnosed with progressive neurological conditions (PD, MS, ALS, and HD)?

METHODS

Primary Target Market: Individuals diagnosed with PD, MS, ALS, or HD and their family members. There are currently 8 patients that the neurologist has deemed appropriate for the program.

Needs Assessment: A needs assessment was completed to identify the prevalence of individuals diagnosed with movement disorders in the area. The needs assessment also identified how these diagnoses impact quality of life and participation in daily activities and how a multidisciplinary team can assist in maintaining function for these individuals.

It has been shown that motor and non-motor symptoms of these diagnoses can impact one's quality of life (QOL) (Barone et al., 2004; Wynia, Middel, van Dijk, De Keyser, & Reijneveld, 2008).

Program Structure: The CHI Health Movement Disorder Clinic will be held the first Monday of the month to allow patients to come and receive consultative services. Patients will be seen one to two times a year. Each Monday, two patients will be seen by the neurologist, occupational and physical therapists, speech therapist, social worker, and nutritionist, the schedule can be seen in Figure 2.

	Neurologist Consult (30 minutes)	OT/PT Evaluation	Speech Therapy Evaluation (60 minutes)	Social Work/Nutritionist (optional; up to 45 minutes)
Patient 1	9:00-9:30	9:30-10:30	10:30-11:15	11:15-12:00
Patient 2	9:15-10:00	10:00-10:30	10:30-11:30	11:30-12:15

Figure 2. Schedule for Movement Disorder Clinic

Marketing: A flyer and brochure were created to market the Movement Disorder Clinic. The local associations for each diagnosis were contacted to discuss the clinic.

Financial Plan: The Neurological Institute at CHI Health Immanuel already has the needed supplies for the clinic to operate. This means that there will be no start-up funds required for this clinic. OT, PT, and SLP services will be billed with CPT Codes. Each code unit has an associated price. There will not be any therapists hired specifically for the program, select therapists already employed through Immanuel's Rehabilitation Institute will provide services at the clinic.

RESULTS

Quality Assessment Goals:

- 85% of patients and families will state that they recommend our services on a year post program survey.
- 2 years post clinic implementation, the enrollment number of clients in the clinic will increase by 15%.

Data Analysis and Evaluation:

- Patient Satisfaction:** This will be evaluated through surveys. Participants will be asked how satisfied they are with our services and if they would recommend the Movement Disorder Clinic.
- Patient Outcomes:** Level of function, well-being, and community reintegration will be gathered through surveys and pre-post assessments and evaluations. Functional performance involving the fine and gross motor tasks included in ADLs and IADLs will be analyzed by the therapy team (PT, OT, and SLP).

Program Growth: The enrollment numbers will be collected each year to determine changes in program productivity and effectiveness. The CHI Health Neurological Institute currently has 8 patients who are willing to participate in the program. After the clinic has been established, patient numbers will increase. With this increase in patient numbers, more days each month will be added and will be dedicated to a specific diagnosis to accommodate patient needs (example: one day is only Parkinson's Disease, the other day is only for patients with MS).

As the clinic continues to grow, having these specific "diagnosis days" would allow for involvement of local associations for each diagnosis.

- Parkinson's Nebraska and Parkinson's Foundation Heartland
- MS Society Mid-America Chapter
- ALS Association Mid-America Chapter
- Huntington's Disease Society of America Omaha Affiliate

A representative will be present to provide patients with community resources and additional educational information.



CHI Health Clinic Neurological Institute

BOTTOM LINE FOR OT

Individuals diagnosed with movement disorders benefit from individualized treatment plans through a multidisciplinary approach. Occupational therapists are a part of care-planning and can address a variety of limitations.

For the CHI Health Movement Disorder Clinic, the occupational and physical therapist conduct a co-evaluation to determine the needs of the patient. As an occupational therapist, the focus for evaluation for these patients are their ability to complete functional activities during their daily routine.

Research studies suggest that individuals diagnosed with these conditions can benefit from occupational therapy practices focusing on physical performance skills, fatigue management, environmental context, and group therapy (Bilney, 2016; Foster, Bedeker, & Tickle-Degnen, 2014; Gage & Storey, 2004; Gauthier & Dalziel, 1987; Yu & Mathiowetz, 2014).

REFERENCES

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For a full list of references please see handout.