

A paved walkway in a park-like setting with trees and a large circular seal on the ground. The seal features a central emblem with a leaf and a building, surrounded by the text "THE OHIO STATE UNIVERSITY" and "DISCIPLINA".

# Neurology Specialty Clinics

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# Disclosures

- I am a board member of My Epilepsy Story.



# Learning Objectives

1

Discuss the concept and benefits of multidisciplinary and subspecialty clinics

2

Review the specialty clinics offered at The Ohio State Wexner Medical Center

3

Understand the roles of other departments and ancillary services within the Neurology Specialty Clinics





# Benefits of Multidisciplinary and Subspecialty Clinics



THE OHIO STATE UNIVERSITY



# Review of the Literature

- The multidisciplinary team approach has been used for decades both in the states and internationally
- The goal is to bring collaborative decision-making, concentrate clinical experience from multiple specialties, and aid in patient access to many services in a single visit
- Collaboration between team members in order to deliver integrated patient centered care is considered “crucial” and has been found to improve outcomes in anxiety, depression, transition of care, and chronic illnesses





# Review of the Literature

- ALS Clinics
  - Multidisciplinary care is more effective than general neurology care at improving survival of patients with ALS
- Epilepsy Transition Clinics
  - This population has higher rates of unemployment, unplanned pregnancies, and tend to be socially isolated
  - Adults that have failed to transition to independence often feel unsatisfied with their friendships, do not like living at home, and feel socially lonely.
  - A successful transition clinic can mitigate these poor social outcomes by intervening earlier
- Neurosarcoidosis Clinic
  - Sarcoidosis is a multiorgan disorder with 5-10% of patients with sarcoidosis diagnosed with Neurosarcoidosis
  - A multidisc approach is recommended for these patients to focus on all the somatic and psychosocial aspects of this disorder



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# Specialty Clinics Offered at OSUWMC

# Center for Parkinson's Disease and Other Movement Disorders

- Ataxia Clinic
- Functional Movement Disorder Clinic
- Movement Disorder Neuromodulation Clinic
- Parkinson's Disease Multidisciplinary Clinic





# Ataxia Clinic

- Multidisciplinary team: Physicians, genetic counselors, and physical, speech and occupational therapists
- Goals:
  - Further defining underlying causes of ataxia and managing a range of challenging symptoms associated with ataxia, including gait/balance difficulties, loss of dexterity, tremors, speech/swallowing difficulties.
  - Investigating the genetic causes of ataxia through comprehensive pre- and post-test genetic counseling with genetic (DNA) test submission.

# Functional Movement Disorder Clinic

- Neurologists and nurse practitioners provide accurate assessment and diagnosis of functional movement disorders
- Clinical Psychologist or licensed social worker work together to provide evidence based psychotherapy to treat movement symptoms.
  - Cognitive-behavioral therapy (CBT) to assist patients with understanding their movements
  - Identifying symptom triggers and learning cognitive and behavioral strategies that have been proven to reduce and/or eliminate symptoms.

# Movement Disorder Neuromodulation Clinic

- Team of movement disorders neurologists, advanced practice providers nurse and medical assistants work closely to evaluate patients that have a diagnosis of Parkinson's disease or other movement disorder that are candidates for DBS or have underwent neuromodulation therapy.

# Parkinson's Disease Multidisciplinary Clinic

- Multidisciplinary team: Advanced practice provider (APP), nurse and medical assistants work closely with physical, occupational and speech therapists, psychologists and a social worker to best meet the various needs of Parkinson's disease patients.
  - Makes it easy for patients to receive the care they need, in a timely fashion, all in one location.
- There is an extensive discussion regarding motor and non-motor features of Parkinson's disease with a focus on individualizing patient care.

# Cognitive Division

- Huntington's Disease Center Multidisciplinary Clinic
- Young Onset Dementia Clinic

# Huntington's Disease Center Multidisciplinary Clinic

- Multidisciplinary team: Neurologist, genetics counselor, nurse coordinator, social worker, physical, occupational and speech therapists, dietician and neuropsychologists.
- Offers coordinated care and support to those affected by HD and their families.
- Ohio State is a Huntington Study Group accredited research site and the clinic team is supported by an active clinical trial group effort offering opportunities to participate in observational and interventional research trials.

# Young Onset Dementia Clinic

- Multidisciplinary clinic: Our Young Onset Dementia clinic treats patients with dementia who happen to be younger than the typical dementia population. For these individuals, they may require extra care and attention that may help with quality of life.
- Multidisciplinary Clinic: Speech therapist, genetic counselor, nurse practitioner, social worker and cognitive physician.
  - Speech therapist assesses cognition and function
  - Genetic counselor explores genetic components of disease.
  - Nurse practitioners help with caregiver needs and our social worker helps with advanced care planning needs.
  - Cognitive physician helps to evaluate the patient and explain the diagnosis.

# Epilepsy Division

- Epilepsy Pregnancy Clinic
- Epilepsy Transition Clinic
- Psychogenic Non-Epileptic Events (PNEE) Clinic



# Epilepsy Pregnancy Clinic

- Epilepsy team works closely with the Maternal Fetal Medicine group to monitor epilepsy patients who are pregnant.
- Goals: Anti-seizure medication serum levels are monitored on a monthly basis and counselling is given to the patient during each trimester of pregnancy. There is extensive discussion on postpartum safety, breastfeeding, and postpartum anxiety/depression.
- After the final visit (at 3 months postpartum), the patient goes back to their original epilepsy provider for their long-term care.

# Epilepsy Transition Clinic

- Multidisciplinary clinic that works in collaboration with Nationwide Children's Hospital (NCH).
- Adolescents and young adults are assessed for transition "readiness" and once felt appropriate, they are referred to the adult epileptologist in this clinic. Both the pediatric and adult epileptologist are present during this appointment, which takes place at NCH, to ensure a smooth transition.
- This team includes an epileptologist, social worker, pharmacist, neuropsychologist and nutritionist  
(NCH referrals only)

# Psychogenic Non-Epileptic Events (PNEE) Clinic

- Patients diagnosed with PNEE meet with both an epilepsy provider and psychologist to go over their diagnosis.
- Once established with the psychologist, they are enrolled in a 6- to 8-week therapy process to help identify symptom triggers and learn both cognitive and behavioral strategies to help decrease and eliminate spells.
- If the patient requires more targeted therapy after this period of time, then they will be referred for further individual counselling.
- Monthly support groups are held by an APP for those enrolled in this clinic.

# MS and Neuroimmunology Division

- Aging with MS Clinic (coming in Feb 2023)
- MS Psychotherapy Clinic
- Neuro-Rheumatology Clinic
- Neurosarcoidosis Clinic
- QOL MS Clinic
- MS Symptom Management Multidisciplinary Clinic
- MS Sleep/Fatigue Clinic

# Aging with MS Clinic

- Provides comprehensive care for older adults with MS who are uniquely affected by overlapping symptoms of aging and MS.
- Multidisciplinary team of specialists manages issues related to functional capacity, gait and balance, bladder function, nutrition, cognition, mood, social support and medications.
- Goals: improve quality of life and prevent disability in older adults with MS through multidisciplinary care in geriatric neurology

# MS Psychotherapy Clinic

- Patients with MS will receive evidence-based psychotherapy with a clinical psychologist to address a wide range of issues, including adjustment to chronic illness/disability, depression/anxiety symptoms and fatigue.
- Treatment will be individualized to fit each patient's unique needs, but will broadly focus on learning new coping strategies for addressing symptoms and enhancing quality of life.
- Evidence-based treatment approaches used include cognitive-behavioral therapy (CBT), acceptance and commitment therapy (ACT), and behavioral activation (BA).

# Neuro-rheumatology Clinic

- Multidisciplinary clinic between Neuroimmunology and Rheumatology to provide care for patients with neurological manifestations of systemic inflammatory/rheumatologic disorders.
- Disorders seen include neuro-psychiatric lupus, neurologic manifestation of Sjogren's syndrome, vasculitis, connective tissue disorder, etc.

# Neurosarcoidosis Clinic

- Multidisciplinary clinic between Neuroimmunology and the Sarcoidosis specialists within Pulmonary Medicine in the management and care of patients with Neurosarcoidosis.
  - Patients will be seen by specialist from both teams and a unified plan of care will be discussed between specialists.
- Provides clinical care and innovative research to better understand and treat this rare disorder.



# QOL MS Clinic

- Patients can address concurrent issues including Disease Education, Disease Modifying Therapy education, Diet, Exercise and Supplement education, and are provided referrals to visits with specialists to address associated symptomatic conditions.

# MS Symptom Management Multidisciplinary Clinic

- Patients have the opportunity to see multiple providers in the same clinic space in order to address concurrent issues including: disease education; disease modifying therapy education; diet; exercise and supplement education; and visits with specialists to address associated symptomatic conditions.
- Patients will see embedded specialists during this visit including clinical pharmacy, neuropsychology and physical therapy, among others. Testing can be included within this clinic day to include magnetic resonance imaging (MRI), OCT, bladder scanning and blood tests.
- This multidisciplinary clinic will address symptom management and education about lifestyle changes that can positively affect quality of life.

# MS Sleep/Fatigue Clinic

- MS and sleep disorders are more prevalent in MS patients than the general population.
- This clinic will identify patients who need a polysomnography or further investigation and create a customized treatment plan for these patients.

# Neuromuscular Division

- ALS Clinic
- Myotonic Dystrophy Association Clinic
- Myasthenia Gravis Clinic
- Myositis Clinic
- SMA Clinic (coming May 2023)

# ALS Clinic

- Multidisciplinary care team is led by a physician-scientist and includes neuromuscular neurologists, nurse practitioners, a registered nurse, physical therapist, respiratory therapist, genetic counselor, social worker, dietitian, speech and language pathologist and clinical research coordinator.
- Patients receive the highly specialized care they need on the same visit day.
- A major focus of the program is to connect patients to critical research efforts that are happening in our laboratories and those throughout the world.

# Myasthenia Gravis Clinic

- Multidisciplinary team that includes neurologists, a nurse, a respiratory therapist, a dietitian and a pharmacist and work closely with a social worker, physical and speech therapists, and a genetics counselor.
- Offers coordinated care and support to those affected by MG and other diseases affecting the neuromuscular junction (NMJ) such as Lambert-Eaton syndrome (LEMS) and hereditary myasthenic syndromes.
- Active participants in national and international research trials in an effort to develop new and innovative approaches to the treatment of MG, LEMS and other disorders of the NMJ.

# Myotonic Dystrophy Association Clinic

- Multidisciplinary care team includes neuromuscular neurologists, nurse practitioners, a registered nurse, physical therapist, respiratory therapist, genetic counselor, social worker, dietitian, speech and language pathologist.
- This allows patients to receive the highly specialized care they need on the same visit day.
- Provides patients opportunities to access newly approved therapies and take part in cutting-edge research studies.

# Myositis Clinic

- Multidisciplinary clinic focused on the evaluation and treatment of patients with autoimmune inflammatory muscle diseases including dermatomyositis, polymyositis, inclusion body myositis and immune mediated necrotizing myopathies.
- Team includes a neuromuscular neurologist, rheumatologist, physical therapist, respiratory therapist, dietitian, and clinical pharmacist. We collaborate with a dermatologist and pulmonologist.
- The clinic provides patients with comprehensive care and access to the latest treatment as well as opportunities to participate in clinical trials.



# SMA Clinic

- OSU's Spinal Muscular Atrophy (SMA) Multidisciplinary Clinic offers comprehensive care to individuals with SMA by bringing together specialists from various medical fields.
- The clinic team includes a neuromuscular neurologist, nurse practitioner, registered nurse, physical therapist, respiratory therapist, genetic counselor, dietitian, social worker and clinical pharmacist.
- The clinic offers high-level comprehensive care as well as the latest gene-modifying therapies to our patients.
- Additionally, our patients have the chance to participate in cutting-edge advancements in the field through clinical trials and research.

# Neuro-oncology Division

- Neurocutaneous Syndrome Clinic

# Neurocutaneous Syndrome Clinic

- Serves patients and their families with neurocutaneous/neurofibromatosis syndromes
- Coordinated care with multiple fields and specialties such as neurosurgery, ENT, audiology, neuropsychology and social work to develop comprehensive treatment approaches that best suit the goals of the patient.

# Roles and Services of Other Departments and Ancillary Services



# Pharmacy

- In-depth patient education on current DMT or discusses DMT options if a patient is newly starting DMT or provider is considering a change in DMT
- Assess safety and appropriateness of DMT therapy including ordering baseline and monitoring labs
- Review vaccine history and make recommendations for immunocompromised patients
- Assess need for vitamin D supplementation
- Address any issues related to DMT including barriers to adherence, managing side effects, assisting with cost or other access barriers
- Screen medications for possible drug interactions
- Answer any medication-related questions

- Margaret Hansen, PharmD

# Social Worker



Assessing home/life/personal supports and safety



Educating on advance directives, community service providers, exercise groups, and support groups



Providing caregiver resource information and offering gentle reassurance to patient/family while in clinic



Coordinating follow up plans for home health, DME, counseling resources

# Rehab Services

Team of expert physical, occupational, and speech-language therapists provides comprehensive screening and assessment of patient needs, including:

- Movement and mobility analysis (walking speed, transfers)
- Fall risk assessment (5x sit to stand, timed up and go, environmental factors)
- Activities of Daily Living – current level of independence and risk factors for evolving needs
- Fine and gross motor performance (9 hole PEG test, dynamometry)
- Speech production (articulation and volume)
- Swallow function screening

During multidisciplinary clinic, patients receive education regarding:

- Introduction to role of rehabilitation professionals in the management of Parkinson's Disease related impairments
- Community-based resources for exercise and expressive communication participation
- Assessment scores and relationship to functional independence
- Options for continued skilled rehabilitation, both through OSUWMC and options closer to home

# Genetics

- Interpretation of family & medical histories to assess chance of disease occurrence
- Education to patients and other medical professionals on inheritance, testing, management, resources, and research of genetic disease
- Selection and analysis of genetic testing & reports
- Provide genetic diagnoses
- Psychosocial counseling to promote informed choices for genetic testing
- Aid in adaptation to genetic risk or diagnosis
- Triage of patients appropriate for genetic testing
- The genetic characterization of these patient populations supports translational research efforts within OSU and in our various collaborative research missions





# Neuropsychology



- Conducting diagnostic assessment to determine if cognitive or psychiatric problems are contributing to the patient's presentation
- If patient does have cognitive concerns, then conducting brief cognitive screening tests or refer them for a formal neuropsychological evaluation
- If patient has significant depression, anxiety, or other psychiatric symptoms, then working to connect them with psychotherapy, psychiatry for medication management, or other appropriate mental health services
- Providing education around how cognition and mental health can be impacted in both conditions and offer brief cognitive rehabilitation or behavioral health strategies as needed

# Patient Feedback Comments

- The best part of the clinic was “the time spent explaining the program the treatment” plan
- “Everyone was friendly”
- Best part of the clinic was “2 modalities of care”
- Staff was “compassionate and professional” and “listened to me”
- The best part of the clinic was the “friendliness”



# Referring to a Clinic

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## Refer a patient

If you'd like to refer a patient over the phone, please call **614-293-4969**

To refer a patient to one of our clinics, visit **[wexnermedical.osu.edu/healthcare-professionals](http://wexnermedical.osu.edu/healthcare-professionals)** to download a referral form. Please make sure to type in the specific name of the specialty clinic in the "Reason for Referral" box.

If you have a specific question about one of our neurology specialty clinics, please email **[NeuroSpecialtyClinics@osumc.edu](mailto:NeuroSpecialtyClinics@osumc.edu)**.



# Physician Referral Form



Is this referral urgent? Yes  No

Is this referral for? Specialist/Consultation  Procedure/Testing only

Fax the referral form and clinical documentation to 614-293-1456. If urgent, after faxing call 614-293-5123 to expedite order entry.

Is this referral for? Oncology

Fax the referral form and clinical documentation to 614-293-9449. If urgent, call The James Line at 1-800-293-5066 to expedite.

Please fill out this form completely, include any relevant clinical documentation, and fax all documents to 614-293-1456. Missing information may result in a processing delay. A scheduling representative will work with your patient to coordinate the appointment. Your office will receive notification per your preference on file (fax, U.S. Mail or OSU DocLink), once the appointment has been scheduled. To check on the status of the referral, please call 614-293-5123 to speak with a representative.

Clinical documentation included? Yes  No

Examples include: insurance cards, imaging, lab work, office procedures, office notes, etc.

## Patient Information:

First name:	Middle name:	Last name:	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Primary phone:	Date of birth (mm/dd/yyyy):	Gender:	Last 4 digits of SSN:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Street address:		City:	
<input type="text"/>		<input type="text"/>	
State:	ZIP code:	Country:	If non-English speaking, language:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

## Referral to:

Department or specialty area:	Reasons for referral:	
<input type="text"/>	<input type="text" value="Myositis Clinic"/>	
Preferred physician (if known):	Diagnosis:	ICD-10:
<input type="text"/>	<input type="text"/>	<input type="text"/>

## Referring from:

Provider first name:	Provider last name:	Provider medical title (MD, RN, etc.):
<input type="text"/>	<input type="text"/>	<input type="text"/>

# Many Thanks to Our Team!



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For a full list of our multidisciplinary and sub-specialty clinics, visit [wexnermedical.osu.edu/neuroclinics](http://wexnermedical.osu.edu/neuroclinics).



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