





#### Expanding Parkinson's Education to Rural Primary Care Practices Through Project ECHO

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#### **Financial Disclosures**

Dr. Neukam has no financial disclosures

#### **Session Objectives**

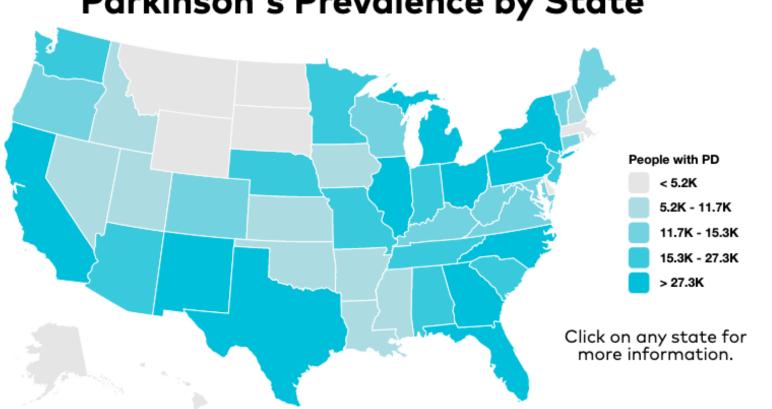
Understand what the Oregon ECHO network is

Demonstrate the benefits of participating in the Parkinson's Echo

Identify opportunities for rural practice sites (you!) to participate future Parkinson's ECHOs

#### The Dilemma

- ~1 million people are living with Parkinson's
- 2<sup>nd</sup> most common neurodegenerative disorder (after Alzheimer's)

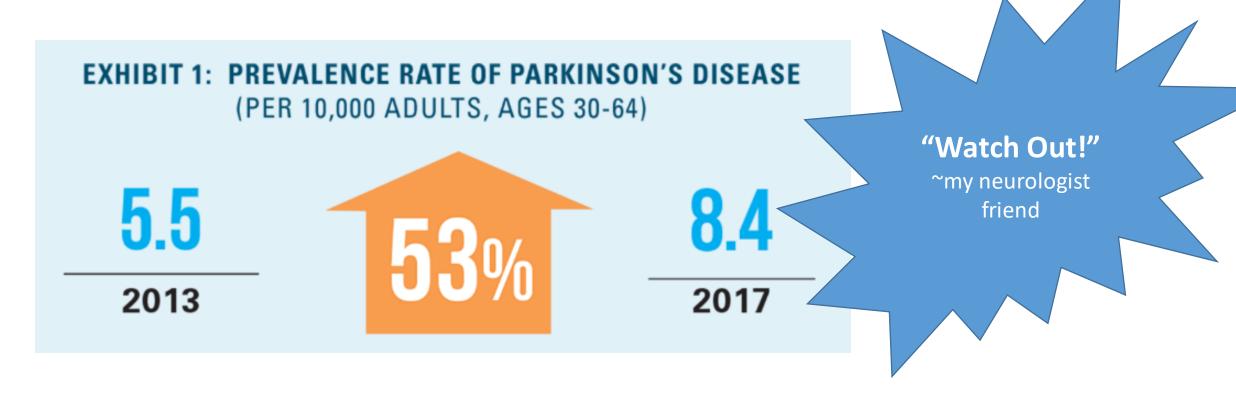


#### **Parkinson's Prevalence by State**

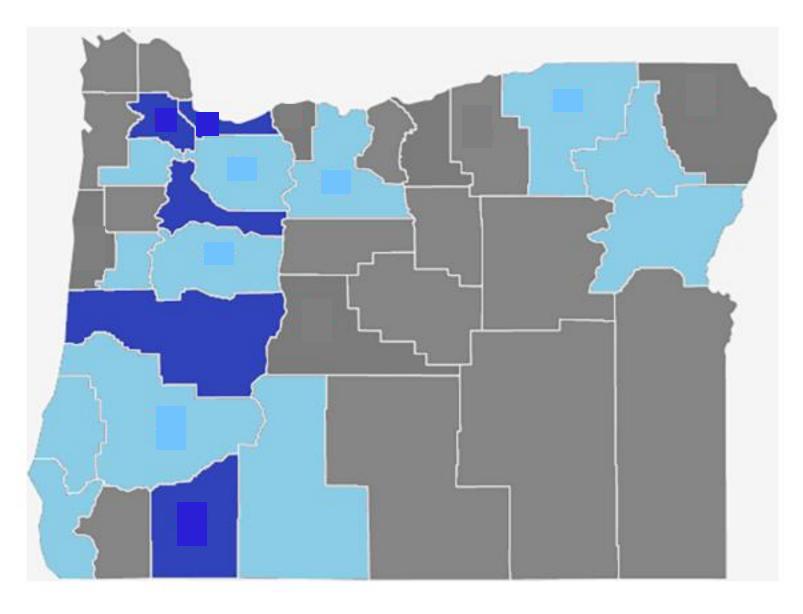
In Oregon: 13,350 people with dx of Parkinson's



- The prevalence rate of Parkinson's Disease has grown more than 50% in the span of five years
- 1.2 Million people will be living with Parkinson's by 2030 and 2 million by 2060



#### Set up for Success?



#### Neurologists in Oregon:

- Portland Metro Area
- The Dalles
- Pendleton
- Bend-Redmon
- Salem/Corvallis
- Eugene
- Medford-Ashland-Grants Pass
- Klamath Falls

#### PD Specialists in Oregon:

- Portland Metro Area (13)
  - Providence, Legacy, Kaiser, OHSU/VA
- Salem (1)
- Eugene (2)
- Bend (1)

#### How to fill the void...



Create more neurologists

Train the existing work force

Already rural

More generalists

...and then convince them to move rural

More opportunities for rural training

#### Objective 1: Understand what the Oregon ECHO Network is

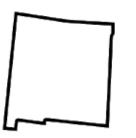


Moving Knowledge Instead of Patients and Providers

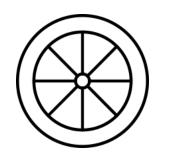


#### What is Project ECHO?

(Extension of Community Healthcare Outcomes)



Founded: University of Mexico 2003



Specialist team **"Hubs"** & Practice team **"Spokes"** 



Tele-mentoring program



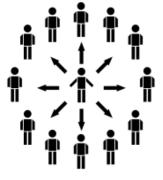
Confidence and skill building to **manage common conditions** frequently referred to specialists



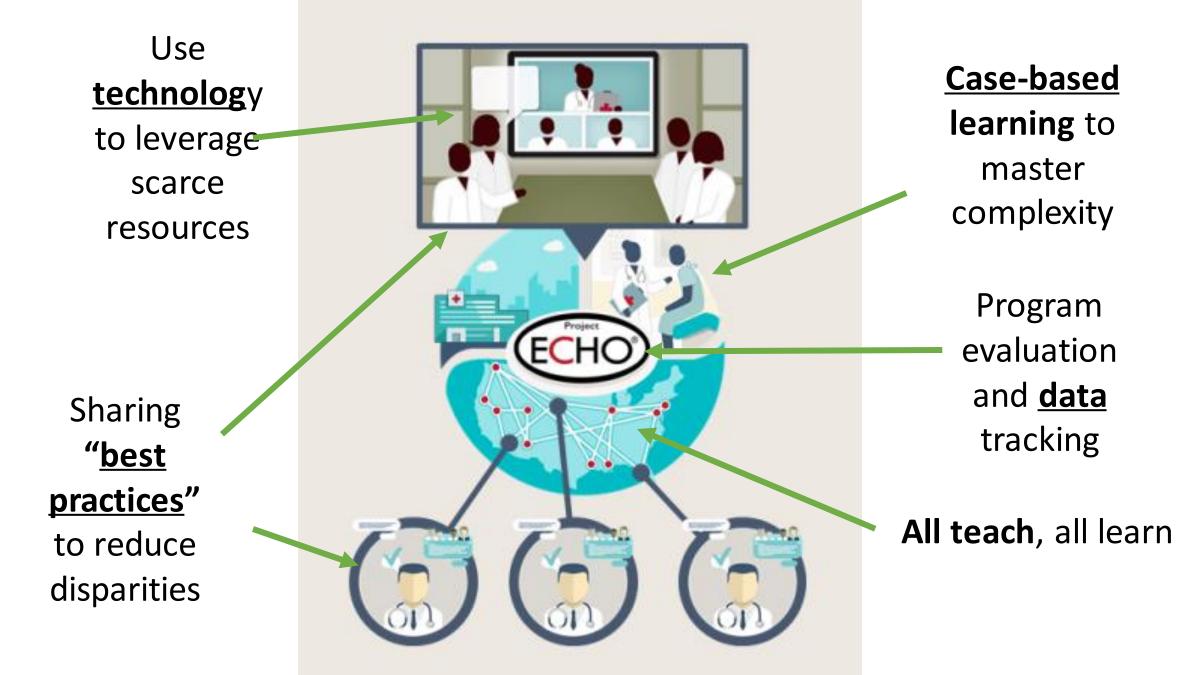
15-20 minute didactic presentations with **case-based** learning



"Move knowledge rather than patients"

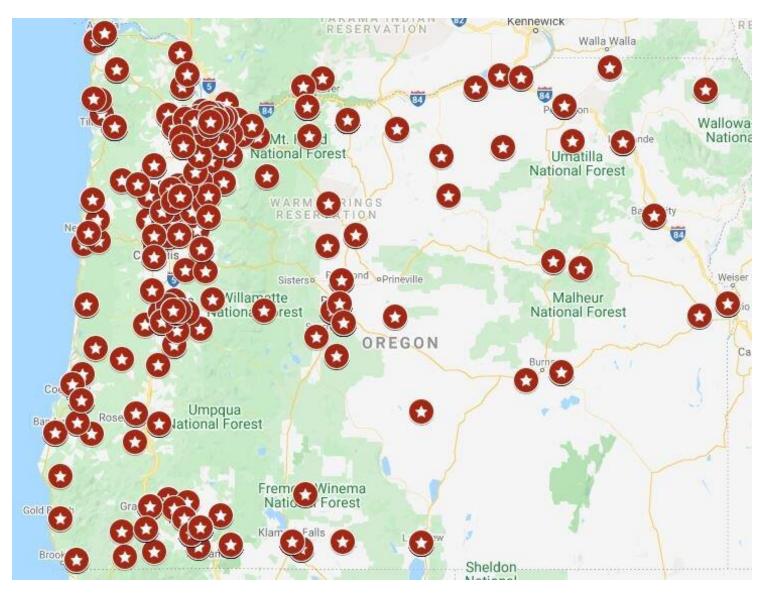


Builds on "Force Multiplier" effect



Arora (2013); Supported by N.M. Dept. of Health, Agency for Health Research and Quality HIT Grant 1 UC1 HS015135-04, New Mexico Legislature, and the Robert Wood Johnson Foundation.

#### Who is participating?



#### Sample Existing and Past ECHO Topics:

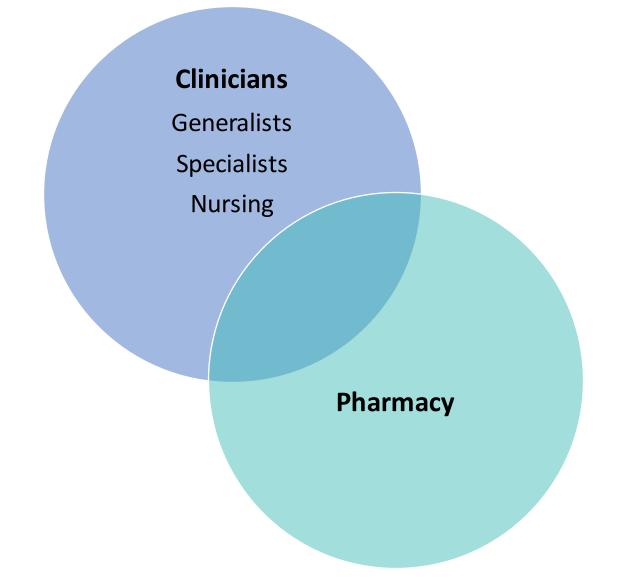
Substance Abuse Whole Person Diabetes Care Nursing Facility Behavioral Health Gender Affirming Care **Employee Well being** Colorectal Cancer Screening Outreach Chronic Pain and Opioids Hepatitis C Dementia Age Friendly Health Care **COVID** in Nursing Facilities And more! ECHO Network:

www.oregonechonetwork.org

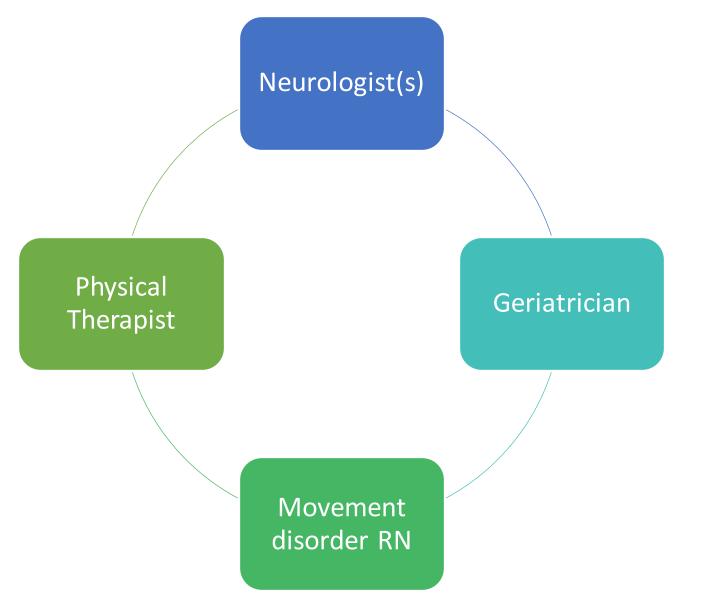
# So you want to run an ECHO...

...then you're going to need a team

#### Interprofessional Team for Interprofessional Care



#### Parkinson's ECHO



#### Recruitment

- Oregon ECHO Network List-serve
  - Prior participants
  - Rural practice sites
- Word of mouth!
- Peer referrals
- Professional Society Websites
- AHEC Rural Scholars Program
- CME opportunities
  - Forum on Rural Aging  $\bigcirc$



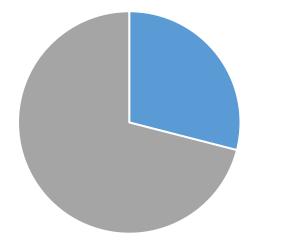
#### Participants

Number: 28 individuals (15-19 per session)

**Practice Locations:** primary care, inpatient, nursing facilities

**Counties:** Clackamas, Clatsop, Deschutes, Hood River, Jackson, Josephine, Klamath, Lane, Multnomah, Umatilla, and Washington

And Beyond! Nevada, Texas, Idaho



**71%** in Primary Care



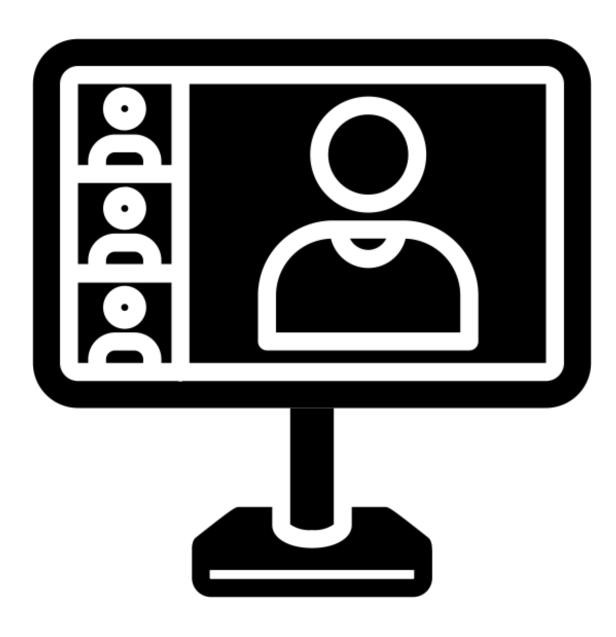
**33%** in Rural Health Clinic





#### Sessions

- 10 sessions
- Weekly, Wednesdays
  - Round 1: 12:00 pm
  - Round 2: 7:30-8:30 am
  - Similar attendance in both
- Project ECHO format
  - Didactic
  - Case Presentation



#### Didactics

DDx of Parkinson's and Related Conditions Part I DDx of Parkinson's and Related Conditions Part II

#### Treating Motor Symptoms

#### Treating Non-Motor Symptoms

Mood, Cognitive Impairment, Psychosis Management Part I Mood, Cognitive Impairment, Psychosis Management Part II

Safety Concerns: Falls, Safety at Home, Driving

Exercise and Team Care

Hospitalization

Advanced and Palliative Care

#### **Case Examples**

Late 60s veteran with notable history of bifrontal meningiomas s/p resection complicated by right ACA territory stroke and focal epilepsy controlled on lamotrigine, idiopathic peripheral polyneuropathy on 2700mg gabapentin, and an akinetic-rigid form of Parkinson disease diagnosed in 2020. His motor symptoms are treated with pramipexole 1.5mg TID. His PD-related complications include cognitive impairment (on rivastigmine 3mg BID), anxiety (on sertraline 150mg), recurrent falls, psychosis, constipation, and speech and swallow dysfunction.

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70s man with hypothyroidism and BPH diagnosed with PD in 2018 (with motor symptoms since ~2014) presently on amantadine 100mg BID (recently added), carbidopa-levodopa 10/100 100mg TID (reducing dose does compromise motor function). His course has been complicated by dementia (10/30 SLUMS; on donepezil 10mg, memantine 20mg), orthostasis (on midodrine 10mg BID), psychosis, and REM behavior disorder associated with insomnia. For the latter, he was just started on melatonin 3mg which helps but causes morning grogginess.

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80s woman with HTN, COPD, fibromyalgia, GAD who was previously relatively healthy and independent (living alone and driving to appointments) but developed several symptoms over the course of 4-6 months: parkinsonism, hallucinations, dysphagia, and gait/balance changes

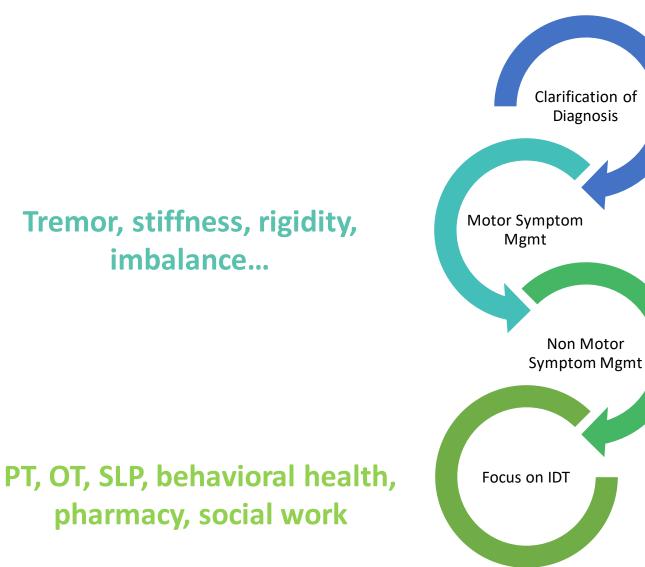
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80s woman in a nursing home with HTN, HLD, PD diagnosed ~2018 currently on carbidopa-levodopa 25-100 QID. ~2020 diagnosed with schizophrenia based on visual hallucinations and paranoia for which she takes risperidone 1mg.

#### **Real-World Guidance**



iPD vs Parkinsons+ vs ET vs Delirium vs Med Side Effect vs Non-Neurologic?

Cognition, psychotic symptoms, mood, RBD, autonomic dysfunction (orthostatic bp, constipation, urinary retention)







#### Parkinson ECHO: Case Recommendation Form

**Case Summary**: 70s man with hypothyroidism and BPH diagnosed with PD in 2018 (with motor symptoms since ~2014) presently on amantadine 100mg BID (recently added), carbidopa-levodopa 10/100 100mg TID (reducing dose does compromise motor function). His course has been complicated by dementia (10/30 SLUMS; on donepezil 10mg, memantine 20mg), orthostasis (on midodrine 10mg BID), psychosis, and REM behavior disorder associated with insomnia. For the latter, he was just started on melatonin 3mg which helps but causes morning grogginess.

Clarifying diagnosis

 In this case, it is like PD, but Dementia with Lewy Bodies (DLB) could be considered given parkinsonism, RBD, dementia, and prominent visual hallucinations. The most helpful clue is motor symptoms likely preceded diagnosis by 7 years.

Motor Symptom Management

- Is amantadine appropriate?
  - $_{\rm O}$   $\,$  This is typically used for dyskinesias. First step may be to eliminate this.
  - If it proves necessary, be sure to time the medication appropriately as it can be stimulating and worsen insomnia. One should time it for first thing in the morning, and they take BID, the second dose should be taken around 1PM
- C/L adjustments?
  - o He is on relatively small dose and seems effective, so should use this as backbone of therapy.
  - Side note, he seems to tolerate the 10/100 tablet of C/L but in those with nausea can try the more standard 25/100. The 25 represents a higher dose of carbidopa which helps to counteract the peripheral side effects of levodopa (i.e. nausea)
  - Zonisamide can be considered as an adjunct. There is convincing data in DLB (and some emerging data in PD) for use in improving motor function. It works in a non-dopaminergic manner so it could help prevent worsening of psychosis. Typical doses are 25-100mg at bedtime.

Non-motor Symptom Management

- Insomnia
  - It is important to maintain routines. Maintain a de-cluttered environment, appropriate lighting, calendars and clocks to orient to right time/date.
  - $\circ$   $\;$  Try to incorporate exercise, tai chi, dance, etc. into the routine
- RBD
  - o Memantine has minimal evidence (a single study) to support its use
  - Melatonin. Worthwhile trying as it can maintain circadian rhythm. Try reducing the dose to just 1 or 2mg
  - Clonazepam can be used for this reason only in the geriatric population. Try a low dose (0.25mg or 0.5mg) at bedtime
  - The approach here is best described as de-prescribing. But if all prior adjustments are made and daytime sleepiness persists and interferes with normal social engagement, one could consider

#### Case Recommendations

#### Objective 2:

# Demonstrate the benefits of participating in the Parkinson's Echo

#### Comments: "I liked most..."

# Your faculty team composition.

ECHO is my preferred learning format and I've participated in many. Your team excels. You have dialed in the team-based/casebased learning. Didactics are all great. I would change nothing.

The didactic. Just like last week, it was a standout for good organization, realistic goals, thoughtful pedagogy. I also found having the case translated from 'family physician' to 'movement disorders specialist' really useful in teaching what movement disorders specialists find relevant. The slides on which meds help which symptoms and what type of patient (age, etc)

The **practicality** and **applicability** of [the] information presented

The feeling of ease and welcome to comment

That it was very motivating

#### They said they liked it but....

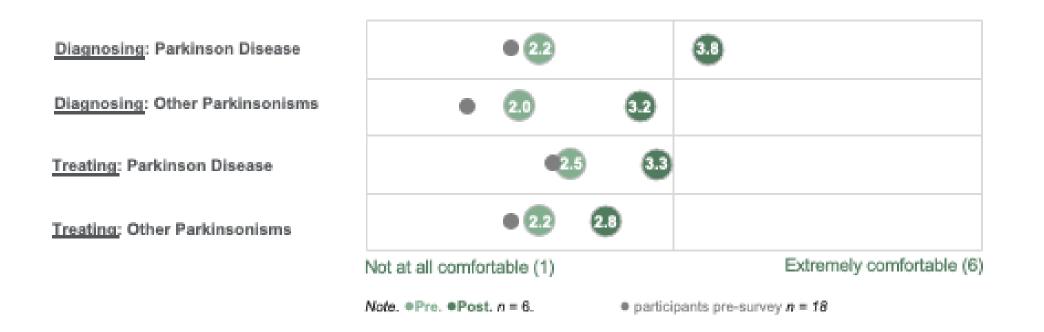
.... Where's the data?

#### I feel that...

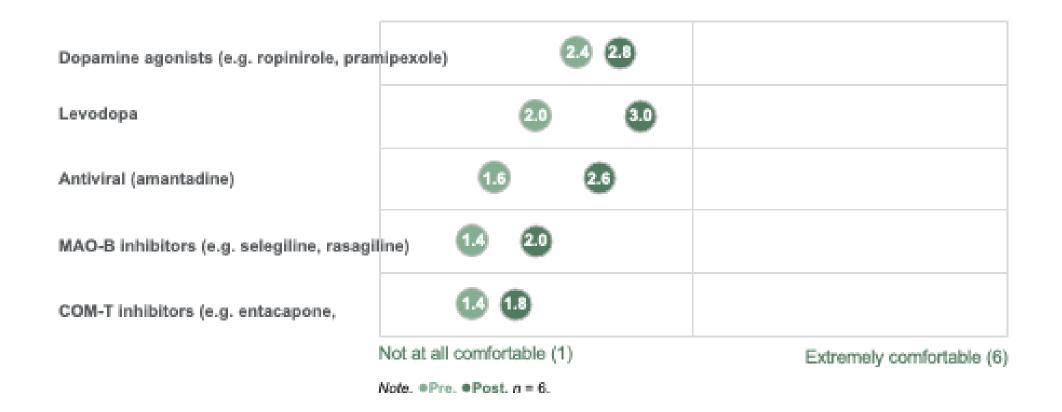
Delivered balanced and objective content	5.5
Delivered evidence-based content	5.5
Was <b>well-organized</b>	5.5
Ample opportunities to ask questions	5.5
Didactic was relevant in the context of my practice setting	5.3
Case presentation was <b>relevant</b> in the context of my pract	ice setting 53
Atmosphere felt <b>welcoming</b>	5.6
Stated <b>objectives</b> were <b>met</b>	5.6
Strongly Disagree (1)	Strongly Agree (8)

Strongly Agree (6)

#### I am comfortable with DIAGNOSING and TREATING patients with ...



#### I am comfortable PRESCRIBING the following medications to patients with a Parkinsons diagnosis ...



#### Please indicate the degree of confidence:

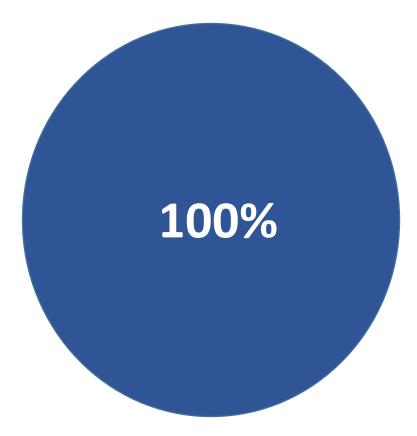
I am knowledgeable about the diagnosis mood and cognitive impairment of PD.	and treatment of	3.6 5.2
Knowing when to refer to a neurologist.		3.6 4.4
Conveying the diagnosis of PD.	3.2	40
Extending my role if no neurologist is re for my PD patients	adily available 2.8	3.6
Treating non-motor symptoms of PD.	2.6	40
	Not at all confident (1)	Extremely Confident (6)

Note. 
Pre. 
Post. n = 6.

#### Please choose the extent to which you disagree or agree with the below statements:

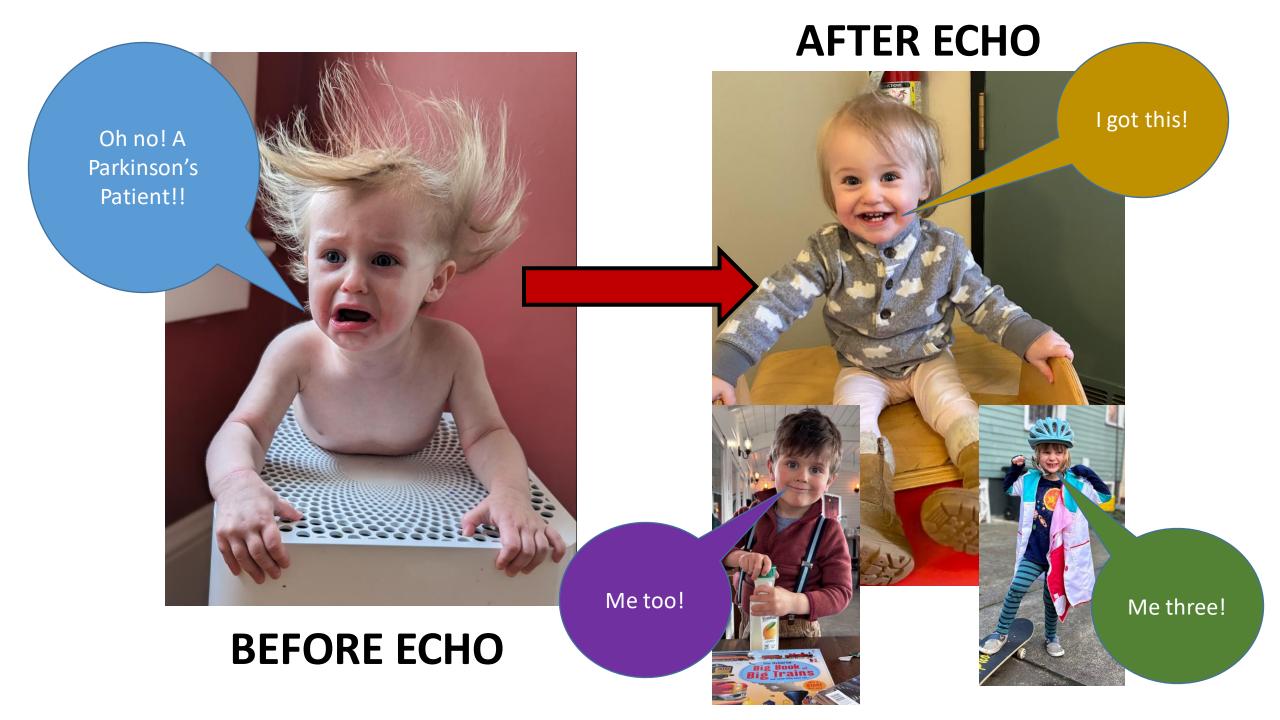
PCPs are well-positioned to help care pa organize care for a patient with PD	artners	4.6	4.8
A lot can be done to improve the quality patients.	of life of PD	4.7	5.7
I am comfortable making recommendati safety in the home for patients with PD.	ons for improving	3.8	5.3
I am comfortable providing support to a been hospitalized due to PD.	patient who has	3.8	5.2
I am knowledgeable about the diagnosis mood and cognitive impairment of PD.	s and treatment of	3.6	5.2
I am comfortable providing palliative ca	re to a patient with PD.	.5 4.3	
I am comfortable providing pharmacolo patients with advanced stage PD.	gical treatment to 2.8	4.4	
I am familiar with Parkinson resources	in my community. 27	4.7	
Managing PD and its symptoms is more rewarding.	frustrating than 2.5		
I see myself as a local consultant within organization regarding Parkinson Disea		.5	
I am comfortable with contraindications precautions with managing patients with brain stimulation.	4.0	4.0	
	Completely disagree (1)		Completely agre

#### Recommendations received about their case were helpful ...



#### How would you rate the following benefits of participating in ECHO

Increased confidence in my ability to tre with Parkinson Disease.	at patients	4.0
Learning about prescribing and managing medications for patients with Parkinson		4.0
Improved satisfaction in treating patient Parkinson Disease.	s with	4.0
Learning about the experiences of other practices/health care providers regardin		4.0
Enhanced skills in communication with families about Parkinson Disease.	patients or their	3.9
	Little benefit (1)	Very high benefit (5)



- Will my clinic allow it?
  - 86% COMPLETELY AGREED their clinic was supportive of ECHO participation

- Will my clinic allow it?
  - 86% COMPLETELY AGREED their clinic was supportive of ECHO participation
- Will it help my clinic?
  - **100%** MOSTLY or COMPLETELY AGREED that participating in and learning through ECHO was an effective way for their clinic to enhance expertise
  - Force Multiplier Effect  $\rightarrow$  Intra-clinic learning

# Force Multiplier $\rightarrow$

I conducted a didactic teaching session for my colleagues on Parkinson disease \_\_\_\_\_ times.

I convened a multi-disciplinary group within my practice to discuss improving care for patients with Parkinson disease \_\_\_\_\_\_times.

I provided a case consultation for a colleague on a patient with Parkinson disease \_\_\_\_\_\_ times.

My practice changed a policy or procedure to improve care for patients with Parkinson disease \_\_\_\_\_ times.

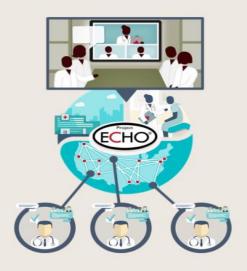
29%	71%
29%	71%
14%	86%
14%	86%
■3 or more	■ 1 to 2 ■ 0 Note. n = 7.

#### SUMMARY OF EACH SESSION

SESSION/TITLE	DATE/TIME	PRESENTER	RELATED RESOURCES
1 - Differential diagnosis of Parkinson's disease and related movement disorders, Part I	1/12/2022 7:30:00 AM	Lee Neilson	<ul> <li>Intro to ECHO Slides</li> <li>Parkinson's Foundation Website (view notes)</li> <li>Parkinson's ECHO Blank Case Form</li> <li>Advances in dementia with Lewy bodies</li> <li>MDS Clinical Dx Criteria PD-Executive Summary</li> <li>Parkinson's Disease - Clinical Features and DX (view notes)</li> <li>MDS Clinical Dx Criteria - Parkinson's Disease</li> <li>UK Parkinson's Brain Bank Clinical Dx Criteria</li> <li>NeuroLogic Exam - An Anatomical Approach</li> <li>PSP Management Guidelines 2021</li> <li>S1 Case Recommendations</li> <li>S1 Case C-Roberto</li> <li>S1 Differential Diagnosis Part 1 Slides (view notes)</li> <li>PF - Ed Resource Fact Sheet (view notes)</li> <li>Parkinson's Disease Educational Resources (view notes)</li> <li>PF Spanish Language Website - Resources (view notes)</li> </ul>
2 - Differential diagnosis, Part II	1/19/2022 7:30:00 AM	Lee Neilson	<ul> <li>Parkinson's Foundation Website (view notes)</li> <li>Cure PSP Website</li> <li>Advances in dementia with Lewy bodies</li> <li>MDS Clinical Dx Criteria PD-Executive</li> <li>Summary</li> <li>Parkinson's Disease - Clinical Features and Dx (view notes)</li> <li>MDS Clinical Dx Criteria - Parkinson's Disease</li> <li>UK Parkinson's Brain Bank Clinical Dx Criteria</li> <li>VeuroLogic Exam - An Anatomical Approach</li> <li>PSP Management Guidelines 2021</li> <li>S2 Case S-Wells</li> <li>DaTscan Drug Interaction Flash Card</li> <li>MDS - UPDRS</li> <li>S2 Case Recommendations</li> <li>S2 Differential Diagnosis Part II Slides</li> <li>OHSU Parkinson Center Events Page (view notes)</li> </ul>

#### We're here to help!

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  - 86% COMPLETELY AGREED their clinic was supportive of ECHO participation
- Will it help my clinic?
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  - Force Multiplier Effect  $\rightarrow$  Intra-clinic learning
- So how do I sign up?



### ECHO is all teach, all learn



Interactive

Co-management



of cases

Peer-to-peer learning



Collaborative problem solving



One hour per week, 10 weeks Free CME, MOC

- Diagnosis
- Treatment: Motor & Non-Motor Symptoms
- Cognitive Effects of PD
- Navigating Psychosis
- Safety Concerns & Team Based Care
- Hospitalization Challenges
- Advanced Stage Care

Extensive Provider, Family Caregiver, and Patient Resource Library



NEXT SESSION: JAN-MAR 2024

If interested, contact Oregon ECHO Network or <u>mannli@ohsu.edu</u>



www.oregonechonetwork.org

#### **Summary:** The Joy of Telementoring!

Decentralizes Parkinson's knowledge—without leaving home!

Bi-directional relationship building

Creation of local experts

#### Local Expertise $\rightarrow$ Increased Patient Access $\rightarrow$ Better Parkinson's Care

#### Acknowledgements

Oregon ECHO Network



#### 2023 Forum on Aging in Rural Oregon



## Thank you!



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Part of the CareOregon Family





Building healthier communities together





