Sharing IS Caring: How De-monopolizing Knowledge Improves Mental Healthcare

Oregon Adult Mental Health ECHO

Ruth Tadesse Ph.D., M.S., R.N., Assistant Professor
OHSU School of Nursing

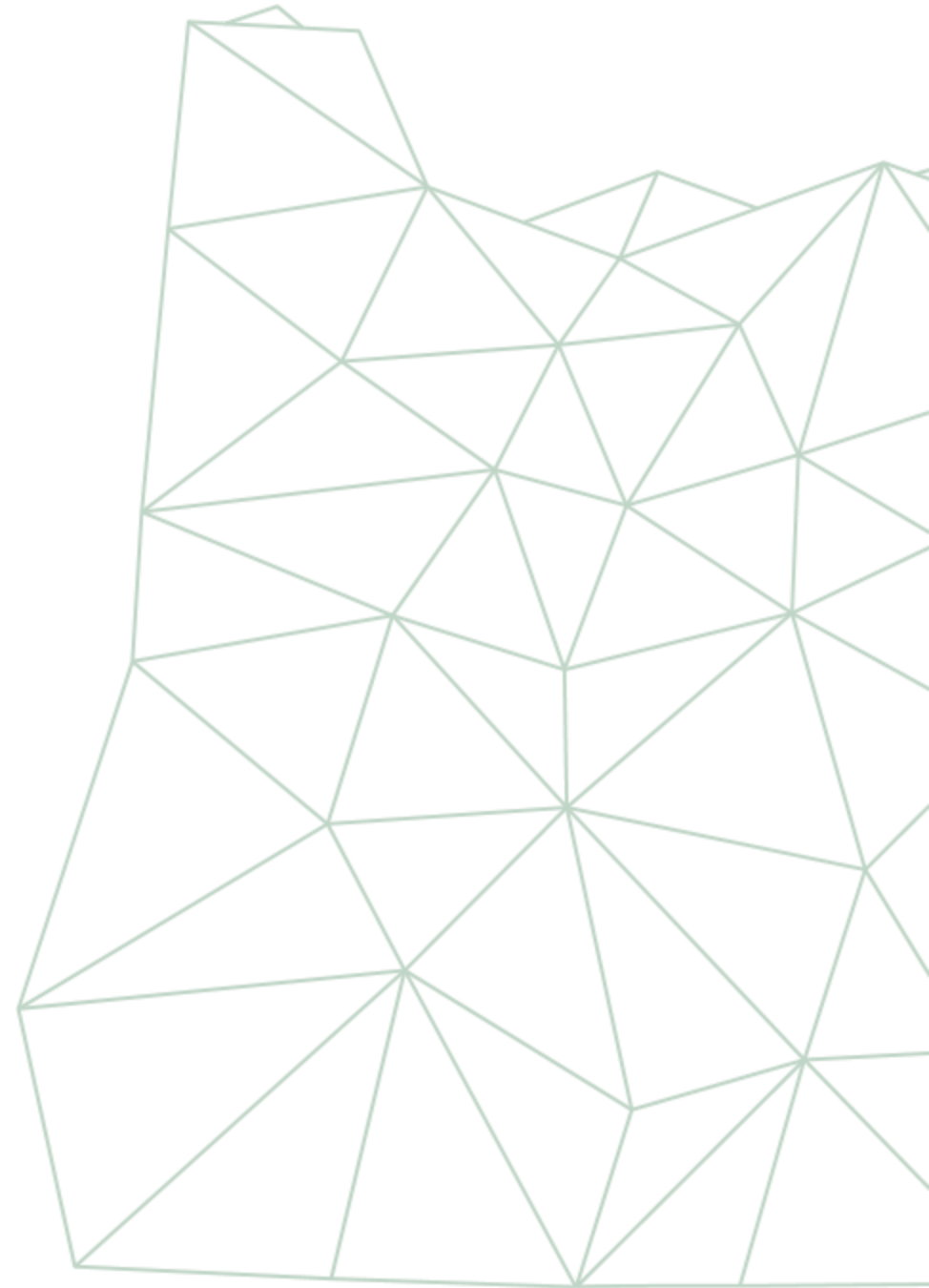Alana Ames PharmD, BCPS, Clinical Pharmacist
OHSU Department of Pharmacy

Jonathan Betlinski M.D., Professor
OHSU School of Medicine

**Drs. Tadesse, Ames and Betlinski have no relevant financial disclosures**

Learning Objectives

1. Describe how the ECHO model enhances participant knowledge, confidence and competence when screening, diagnosing and treating mental health disorders in adults

2. Understand how structure and health equity collaborative agreements foster participant engagement during Adult Mental Health ECHO case presentations

3. Be conversant in the strengths and challenges of the ECHO model when used in Adult Mental Health

Average Share of Adults Reporting Symptoms of Anxiety Disorder and/or Depressive Disorder, January-June 2019 vs. January 2021

41.1%

11.0%

Jan - Jun, 2019 (NHIS)

January 2021 (Household Pulse Survey)
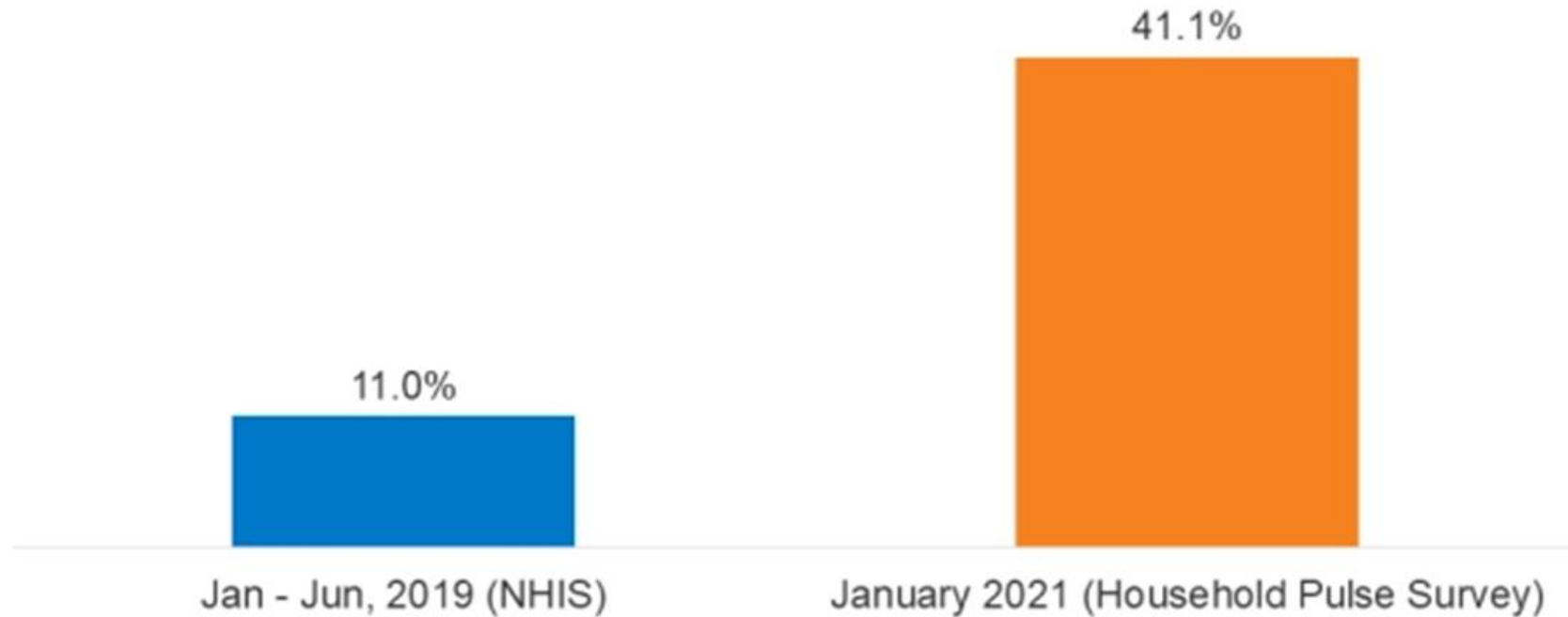
NOTES: Percentages are based on responses to the GAD-2 and PHQ-2 scales. Pulse findings (shown here for January 6 – 18, 2021) have been stable overall since data collection began in April 2020.
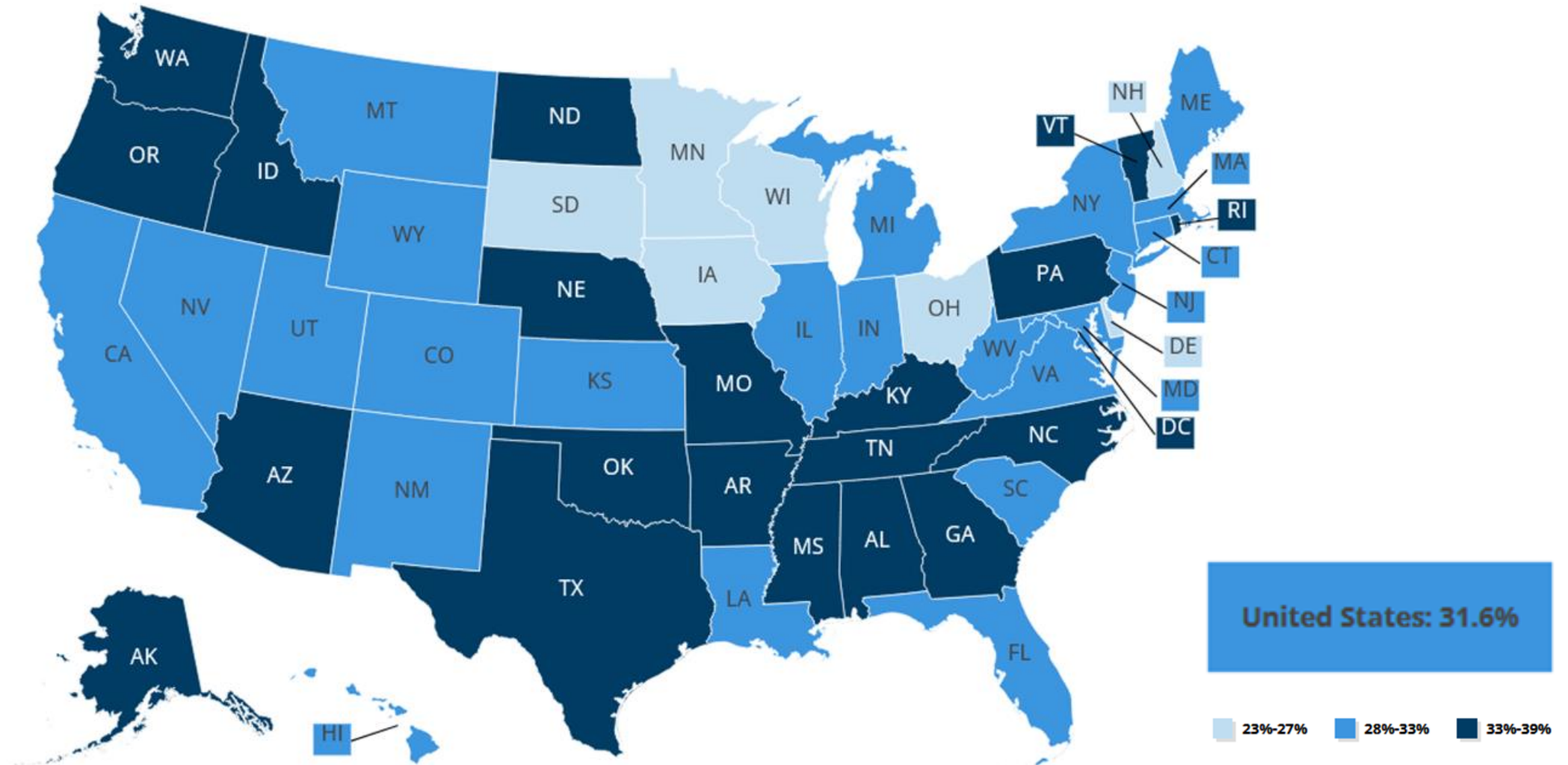SOURCE: NHIS Early Release Program and U.S. Census Bureau Household Pulse Survey. For more detail on methods, see: https://www.cdc.gov/nchs/data/nhis/earlyrelease/ERmentalhealth-508.pdf

The Share of Adults Reporting Symptoms of Anxiety and/or Depressive Disorder During, the COVID-19 Pandemic

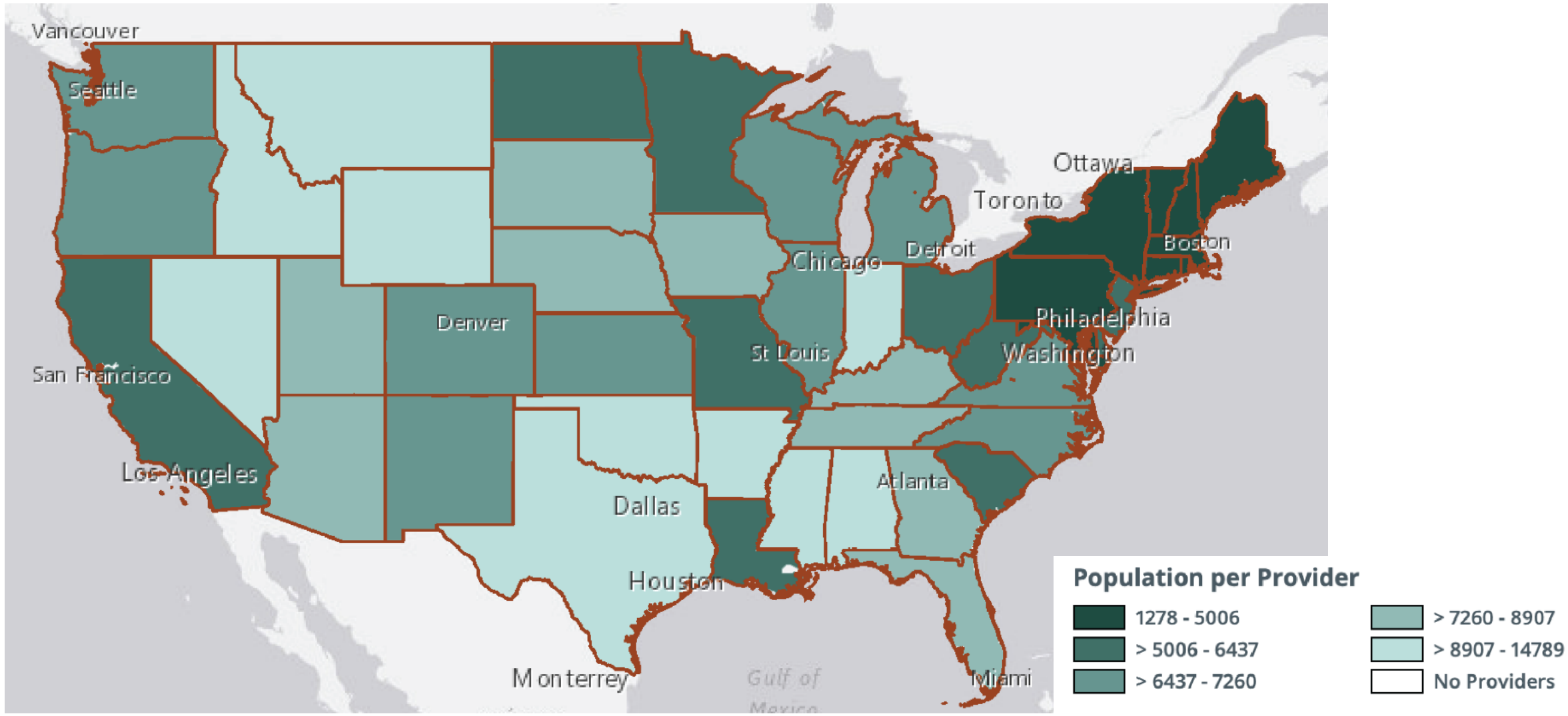| April 2020	February 2021	February 2022	February 2023
35.9%	39.3%	31.5%	32.3%
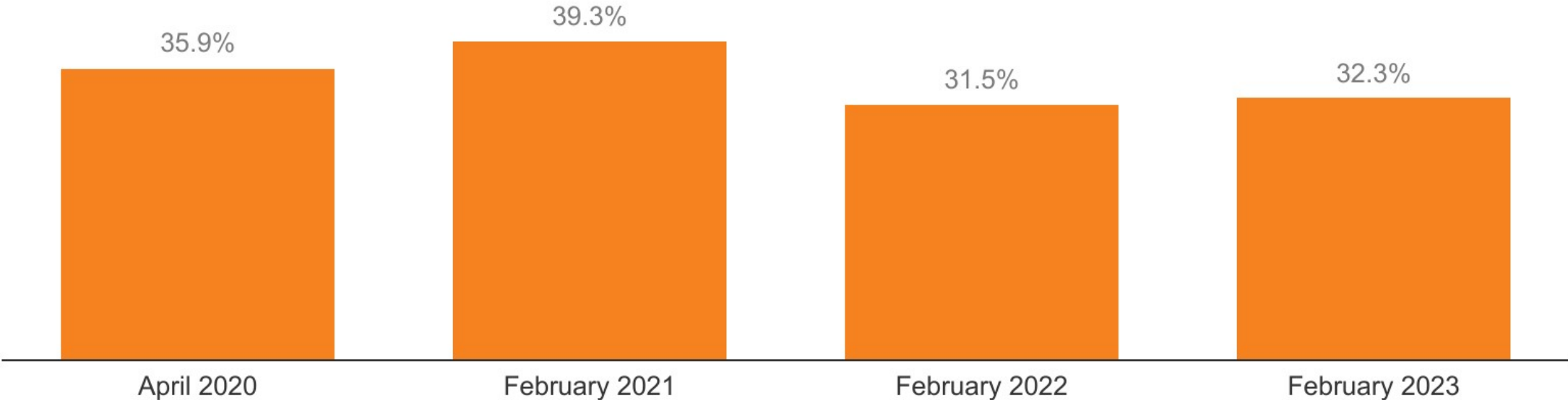
NOTE: April 2020 is the earliest data available. Adults having symptoms of depressive or anxiety disorder were determined based on having a score of 3 or more on the Patient Health Questionnaire (PHQ-2) and/or Generalized Anxiety Disorder (GAD-2) scale. The reference period for the GAD-2 and PHQ-2 questions changed from the "past 7 days" to the "past 2 weeks" beginning in August 2021; however, trends remained stable.

SOURCE: KFF analysis of U.S. Census Bureau, Household Pulse Survey, 2020-2023.

KFF

Adults with Anxiety and/or Depression Late 2021

United States: 31.6%

Legend: 23%-27% | 28%-33% | 33%-39%

Supply of Psychiatrists and Addiction Medicine Specialists, 2020

Population per Provider

- 1278 - 5006
- > 5006 - 6437
- > 6437 - 7260
- > 7260 - 8907
- > 8907 - 14789
- No Providers

Oregon's Urban Rural and Frontier Areas

ORH DEFINED URBAN, RURAL, AND FRONTIER AREAS

ORH Rural (>10 miles from center of 40,000 or more)
Frontier (counties with 6 or fewer people per square mile)
ORH Urban Areas (<10 miles from center of 40,000 or more)
Centroids of cities w/40,000 or more people
Interstate/Primary Roads

2/16/2022

www.ohsu.edu/ruraldata

OREGON OFFICE ORH of RURAL HEALTH

https://www.ohsu.edu/media/881
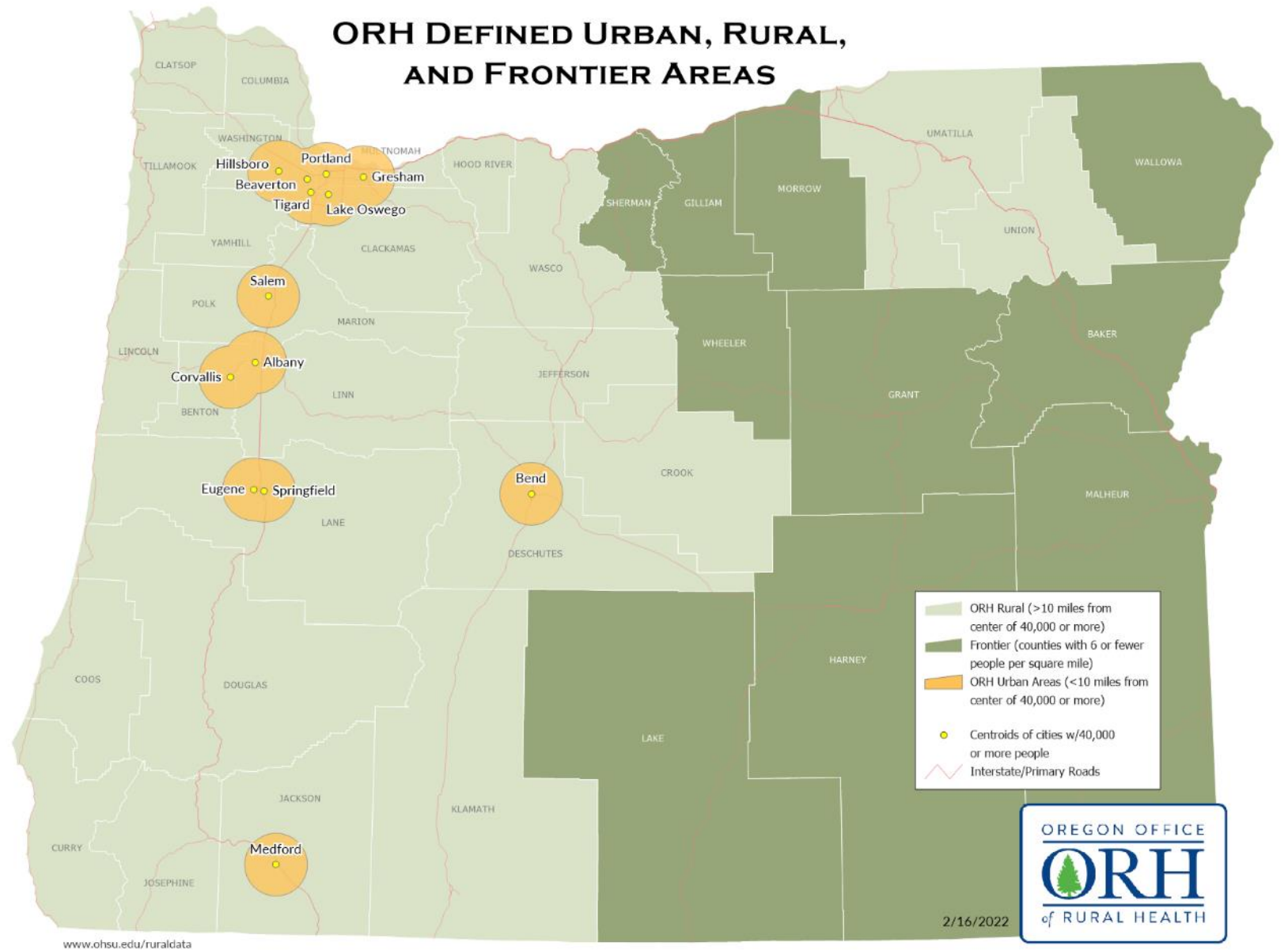
OREGON MEDICALLY UNDERSERVED AREAS/ POPULATIONS (MUA/MUP)
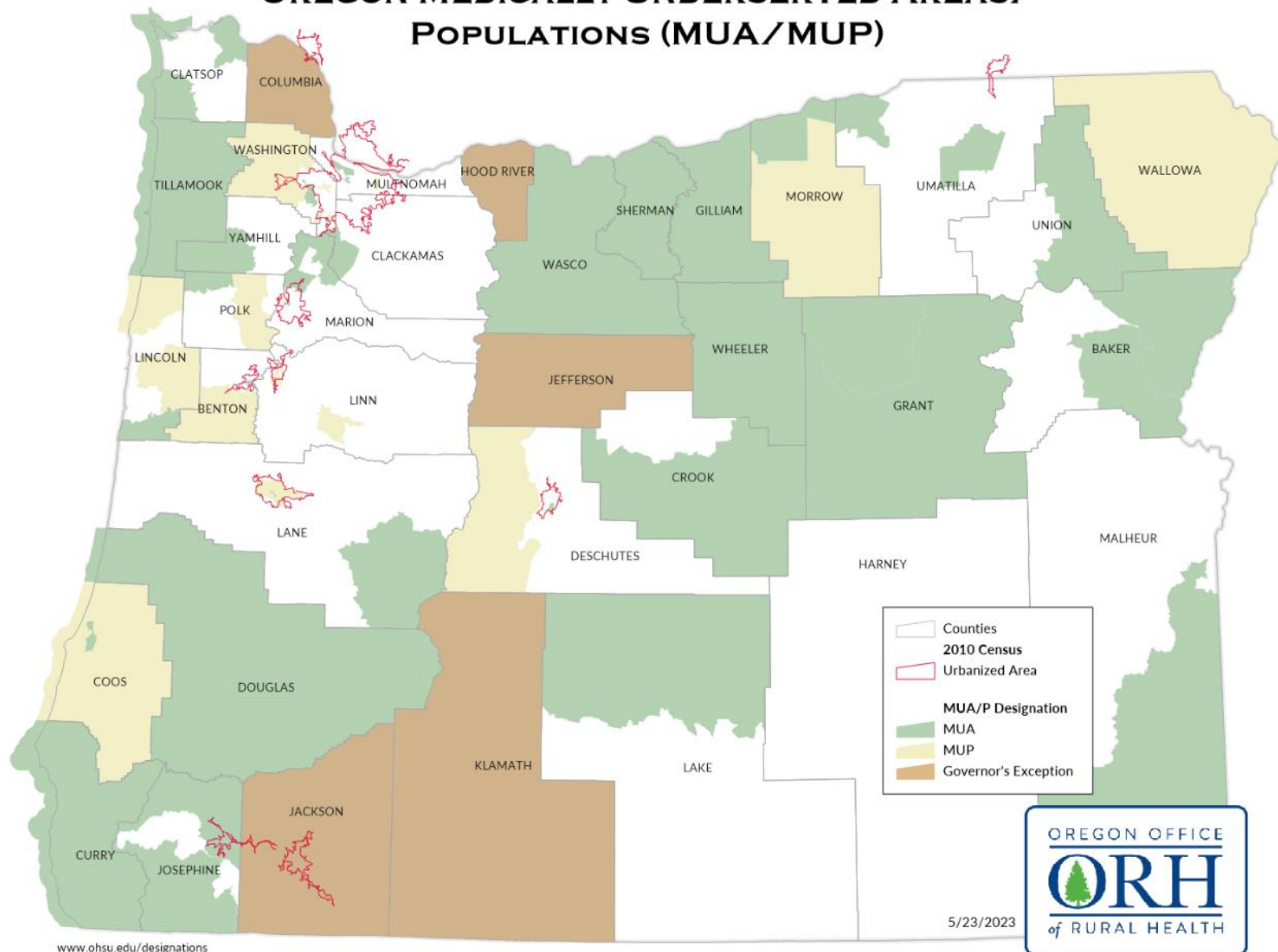
Oregon's Medically Underserved Areas and Populations
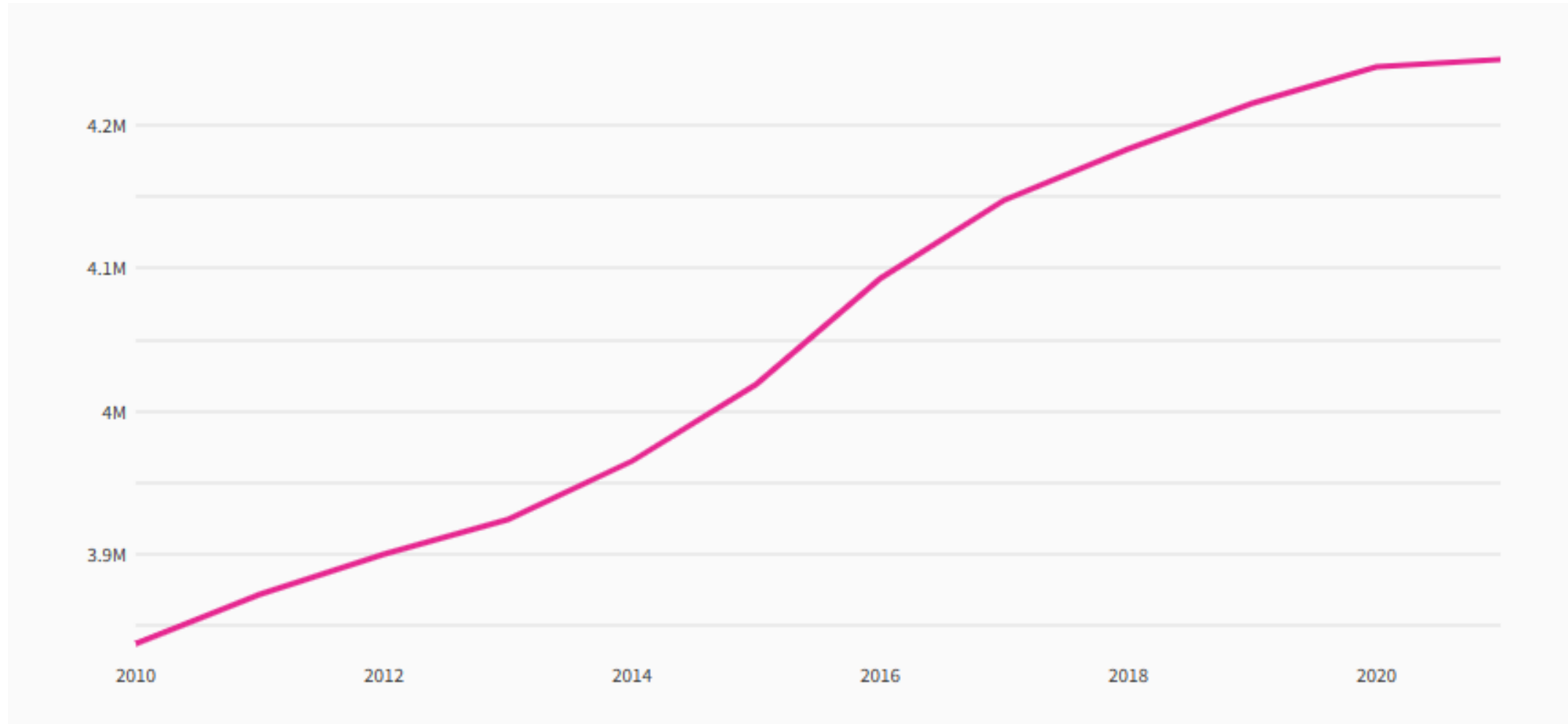
https://www.ohsu.edu/media/921

Population Growth in Oregon

12

Oregon Workforce

Licensed
191,786
Practicing (est)
150,285
FTE Patient Care
95,043

2016   2018   2020   2022

Counselors & therapists	13.5%
Clinical social work associates	9.4%
Nurse practitioners	8.1%
Physician assistants	8.1%
Pharmacists	-2.5%
Certified registered nurse ane..	-2.7%
Licensed massage therapists	-4.4%
Clinical nurse specialists	-6.7%

Oregon Workforce

|		Actively Practicing Professionals	Direct Patient Care Full-Time Equivalency					
			1	10	100	1,000	10,000	100,000
Primary care professionals	All primary care professionals					6,779 / 8,905		
	Physicians					4,638 / 6,041		
	Nurse practitioners					1,241 / 1,642		
	Physician assistants					694 / 889		
	Naturopathic physicians					206 / 333		
Behavioral health professionals	All behavioral health professionals					7,677 / 13,919		
	Counselors & therapists					2,460 / 4,669		
	Licensed clinical social workers					2,327 / 4,418		
	Psychologists					1,018 / 1,928		
	Clinical social work associates					727 / 1,137		
	Physicians					511 / 829		
	Nurse practitioners					564 / 809		
	Naturopathic physicians				54 / 104			
	Physician assistants				17 / 25			

Primary care professionals

Statewide ratio: 16.2 per 10,000
County ratios: 6.1 to 30.9 per 10,000
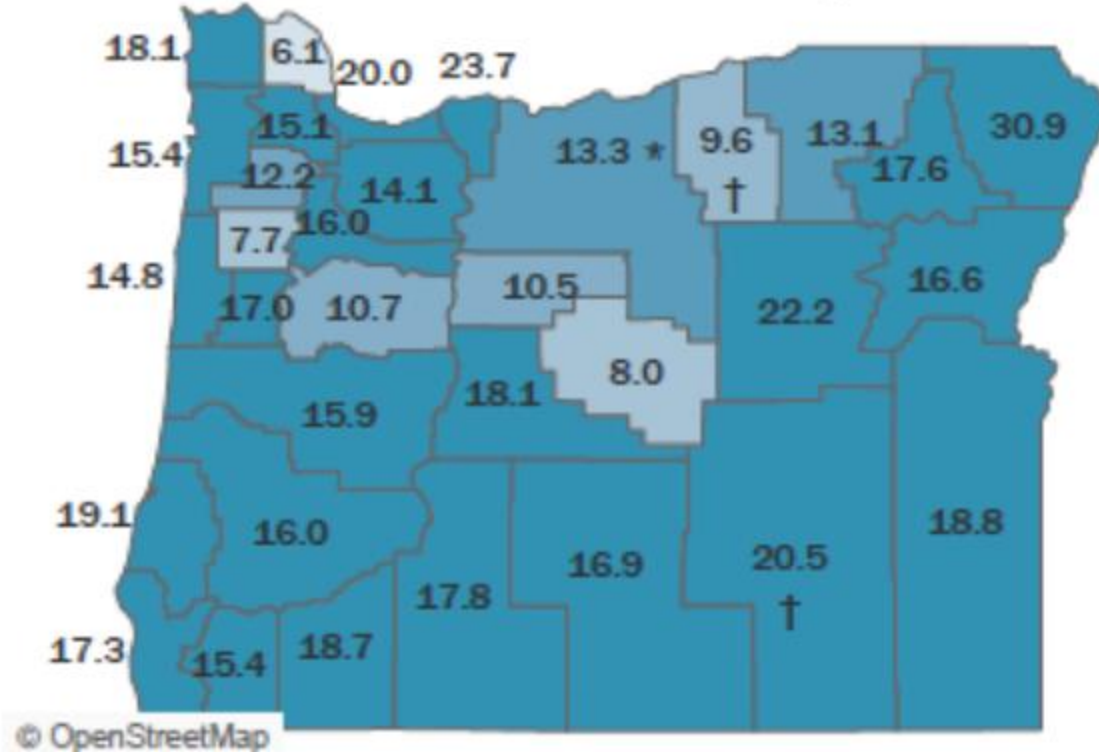
Behavioral health professionals

Statewide ratio: 17.1 per 10,000
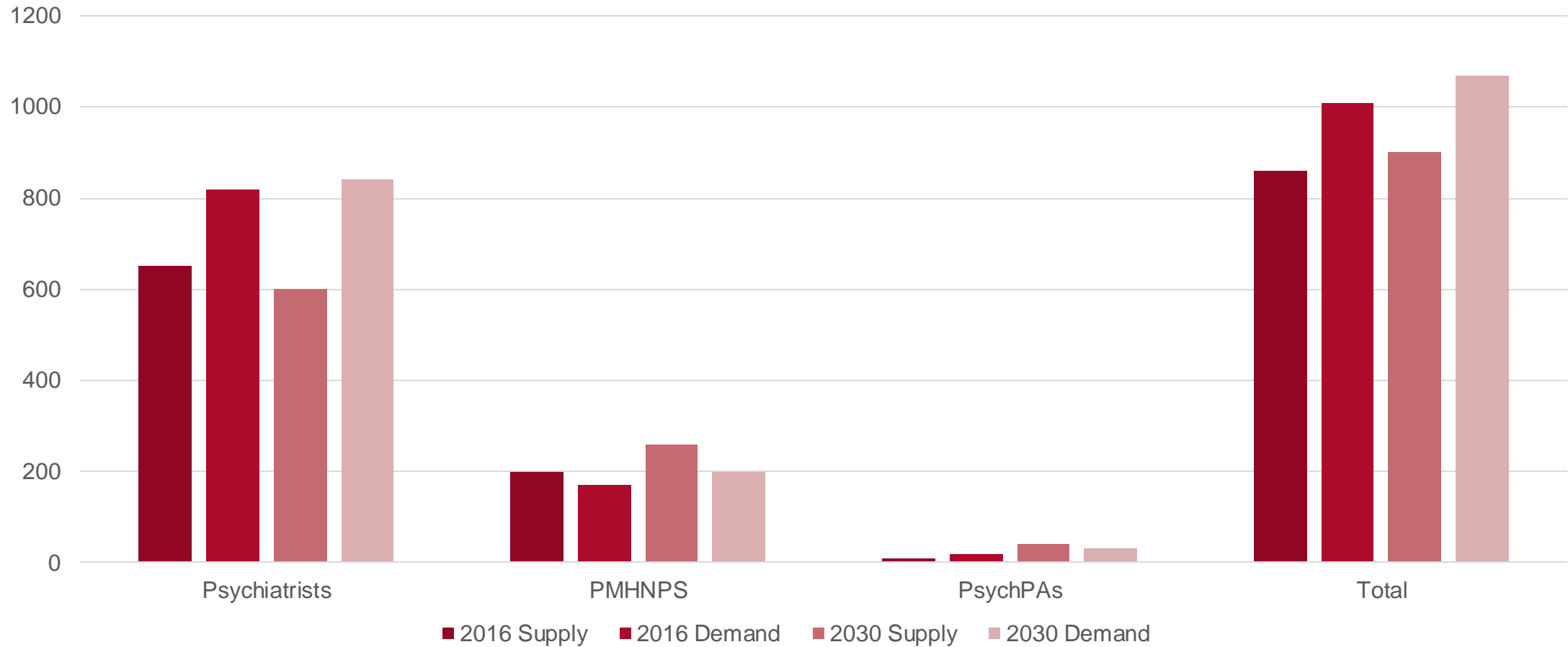County ratios: 2.3 to 31.9 per 10,000
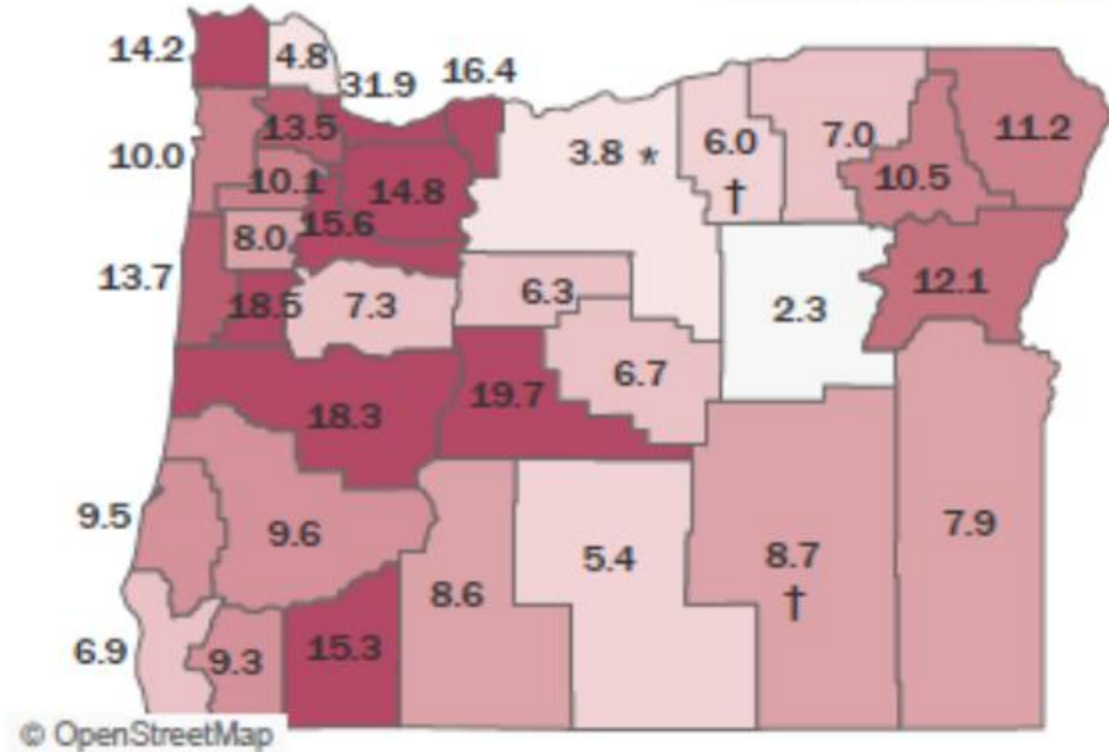
Population estimates sourced from 2021 Portland State University Population Research Center.

* Gilliam, Sherman, Wasco and Wheeler aggregated due to small numbers

† May be statistically unreliable due to small numbers, interpret with caution

Oregon Workforce

Behavioral Health Prescriber Needs, 2016-2030

Legend: 2016 Supply, 2016 Demand, 2030 Supply, 2030 Demand

Categories: Psychiatrists, PMHNPS, PsychPAs, Total

2023 Mental Health America Rankings

Prevalence of Mental Illness	Access to Care	Adult Ranking	Youth Ranking	Overall Ranking
51	30	48	51	50

Moving Knowledge Instead of Patients and Providers

Evidence for Project ECHO

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers

Sanjeev Arora, M.D., Karla Thornton, M.D., Glen Murata, M.D.,
Paulina Deming, Pharm.D., Summers Kalishman, Ph.D., Denise Dion, Ph.D.,
Brooke Parish, M.D., Thomas Burke, B.S., Wesley Pak, M.B.A.,
Jeffrey Dunkelberg, M.D., Martin Kistin, M.D., John Brown, M.A.,
Steven Jenkusky, M.D., Miriam Komaromy, M.D., and Clifford Qualls, Ph.D.

Original Article

Telementoring Primary Care Clinicians to Improve Geriatric Mental Health Care

Elisa Fisher, MPH, MSW,[1] Michael Hasselberg, PhD, RN, PMHNP-BC,[2,3] Yeates Conwell, MD[2]
Linda Weiss, PhD,[1] Norma A. Padrón, PhD, MPH,[4,5] Erin Tiernan, BS,[2] Jurgis Karuza, PhD, MA,[6,7]
Jeremy Donath,[8] and José A. Pagán, PhD[1,9,10]

Review

The Impact of Project ECHO on Participant and Patient Outcomes: A Systematic Review

Carrol Zhou, MD, Allison Crawford, MD, Eva Serhal, MBA, Paul Kurdyak, MD, PhD,
and Sanjeev Sockalingam, MD, MHPE

The ECHO Model Principles

A — **Amplification** - Use *Technology* to leverage scarce resources

B — Share **Best Practices** to reduce disparity

C — **Case Based Learning** to master complexity

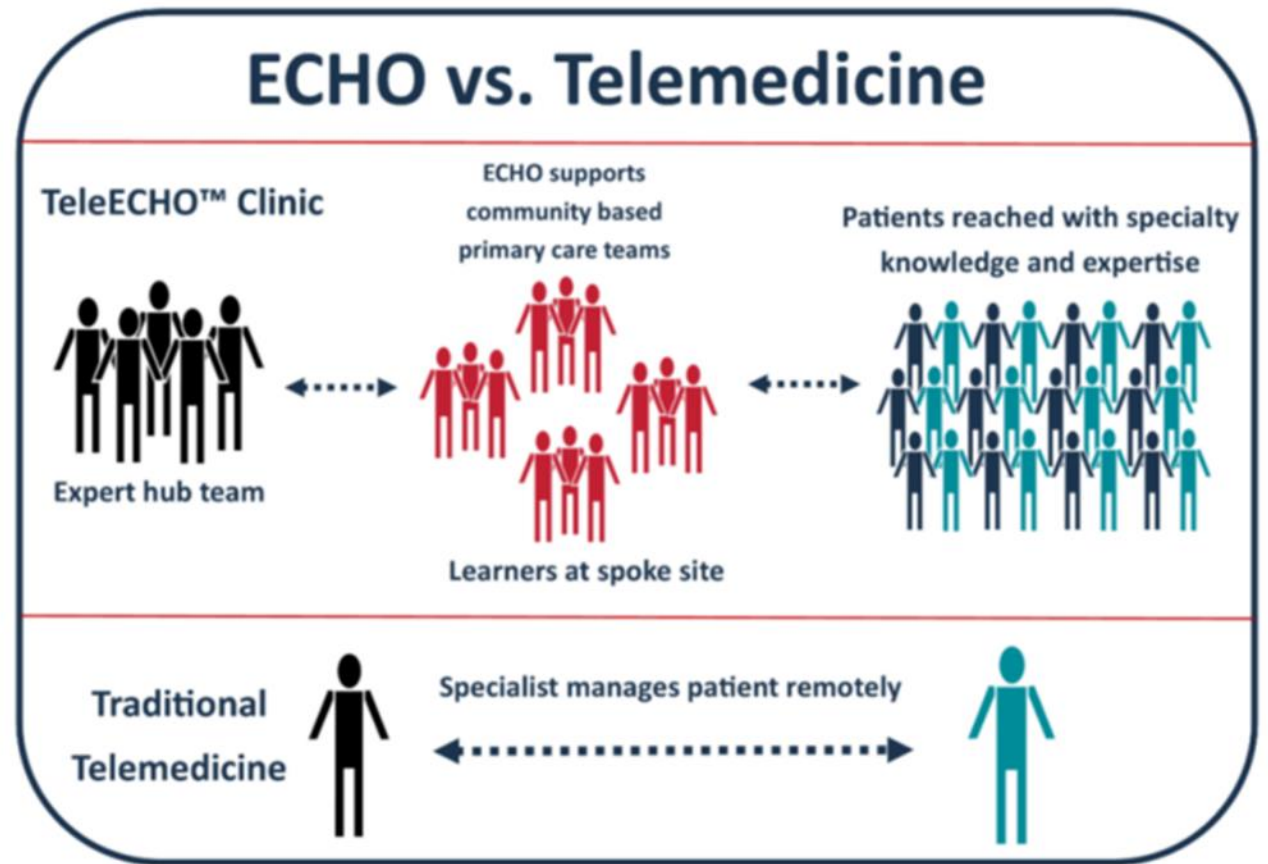**D** — Web-based **Database** to *Monitor Outcomes*

All Teach, All Learn

- Clinicians learn from specialists
- Clinicians learn from each other
- Specialists learn from practicing clinicians

De-monopolize knowledge

Tele-Mentoring

Force **Multiplier**

Structure for Engagement

- Have one person type in your organization's name and then all members of the team so we can keep track of attendance

- Please mute your mic when you are not speaking

- Please keep your video on if you can

Structure for Engagement

- No private health information (PHI) or identifiable information - **privacy is important!**

- **All teach, All learn - please contribute. Share your ideas and feedback.**

- Please fill out the post session surveys.

Health Equity Collaborative Agreements

Speak from the "I" perspective

Accept one another's reality

Listen deeply to understand

Take space / Give space

Uphold confidentiality

Lean into discomfort

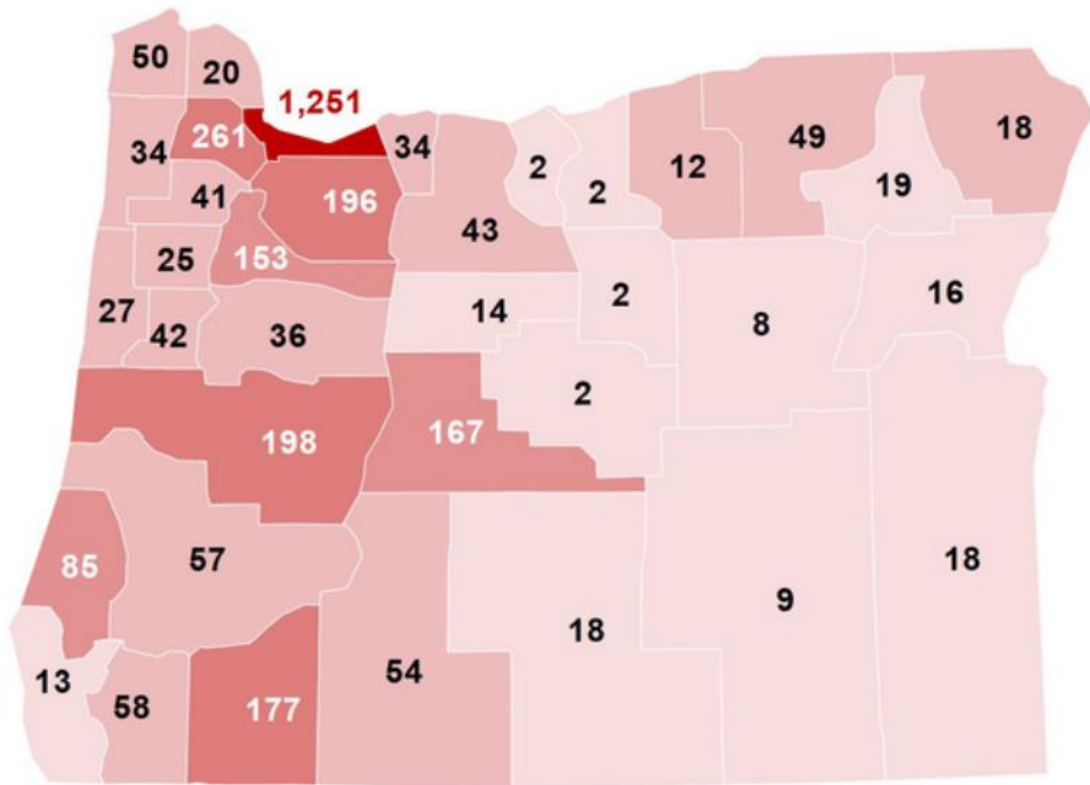We all make mistakes

Take care of yourself
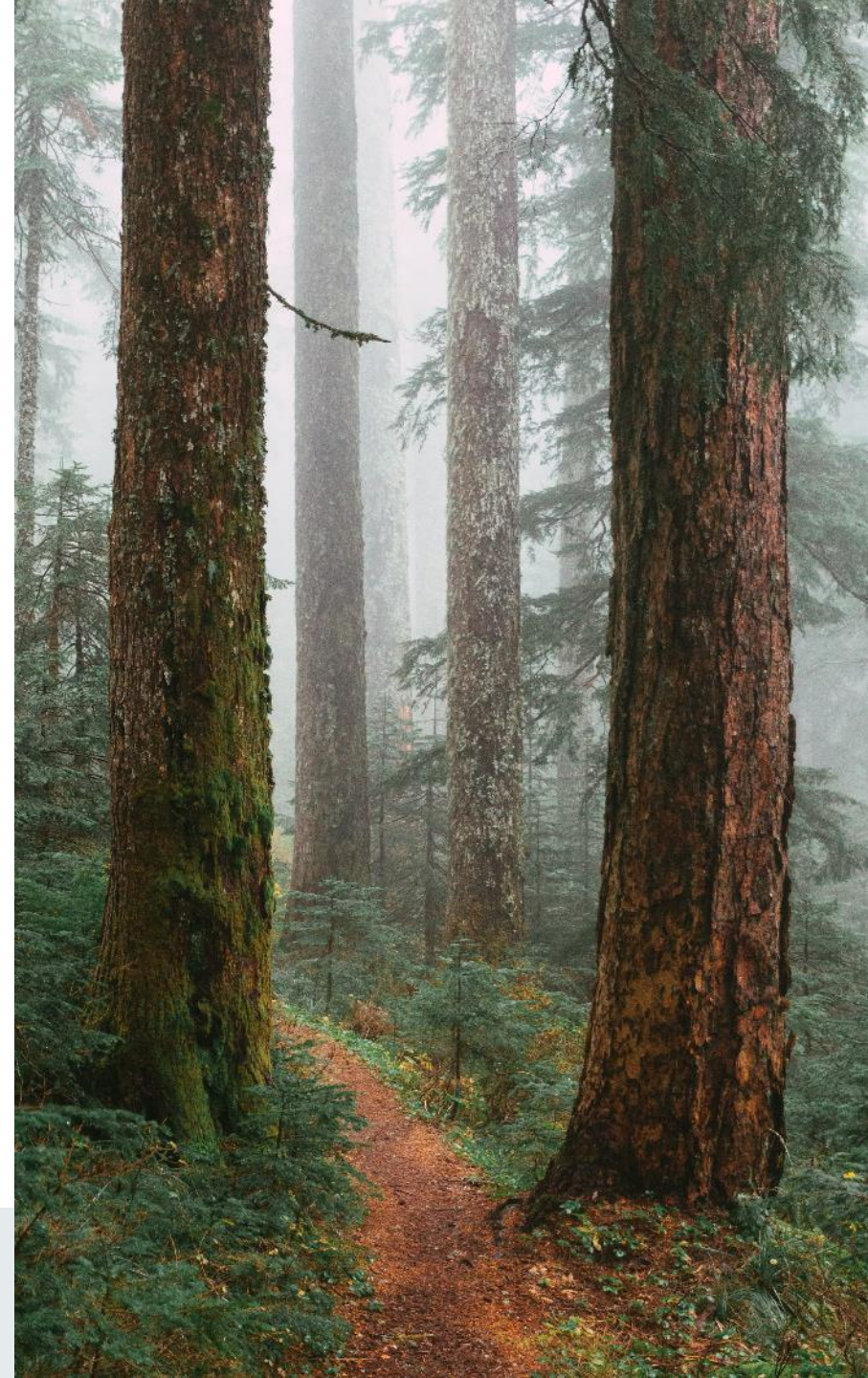
Adult Mental Health

- First ECHO program in Oregon
- Offered every year since 2014
- Originally funded with grants from two CCOs
- Team includes Psychiatrist, PMHNP, Pharmacist, Coordinator, IT guru
- Started as a 40-week lunchtime curriculum covering Adult Psychiatry in Primary Care
- Evolved in 2017 to two 12-week cohorts that meet at 7:30 a.m.
- Evolved again in 2022 as a part of the HEAL-OR grant

"I really valued the multidisciplinary approach and the quick didactic brimming with clinical pearls" - ECHO participant

Adult Mental Health I

- Offered each Fall
- 12-session program that covers the diagnosis, pharmacological and non-pharmacological treatment of the following conditions:
  - Major Depressive Disorder
  - Bipolar Disorders
  - Anxiety Disorders
  - Obsessive-Compulsive Disorder
  - Posttraumatic Stress Disorder
  - Assessing for Risk of Suicide

"I loved learning about this. I am really excited to have more to offer to patients struggling with depression because sometimes it can feel hopeless for both the patient and provider" - Fall 2022 AMH I

Adult Mental Health II

- **Offered each Winter**

- **12-session program that covers the diagnosis, pharmacological and non-pharmacological treatment of the following conditions:**
  - Personality Disorders
  - Borderline Personality Disorder
  - Somatic Symptom Disorder
  - Psychosis and Schizophrenia
  - Dementia and Depression in the Elderly
  - Agitation in Dementia
  - Behavioral Health Concerns in Pregnant and Nursing Women
  - Adult Attention Deficit/Hyperactivity Disorder

"The best aspect of this was the broad range of disorders covered. Many of these conditions are not seen in my practice on a regular basis. The update on research and treatments was really nice" - Winter 2022 AMH II

What Does An ECHO Session Look Like?

|	
7:30 – 7:31	Allow people time to sign on
7:31 – 7:35	Welcome
	Introductions
	Announcements
7:35 – 7:57	Didactic Presentation
7:57 – 8:04	Didactic Questions
8:05 – 8:28	Case Discussion and Questions
8:28 – 8:30	Wrap up

- **Next ECHO session** and date, time, and topic
- Identify **next Case presenter**
- Contact us ECHO staff if you are needing IT support or any other assistance.
- Please complete the pre-program and individual session surveys.

Participants in AMH I & II

Credentials	%	2018	2019	2020	2021	2022	2023
MD/DO	**45%**	10	18	26	45	20	16
NP	**27%**	9	14	18	23	10	6
PA-C	**12%**	4	6	10	11	1	3
ND	**10%**	--	4	8	12	3	2
PhD	**5%**	2	3	1	6	2	1
Other	**1%**	--	1	--	1	4	1

How Comfortable are you ASSESSING?
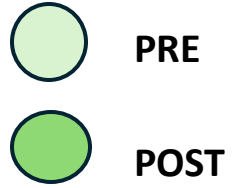
PRE

POST

Averaged from 6 separate cohorts spanning Fall 2020– Winter 2023

3.3 3.6 ADHD

3.2 3.5 Peripartum Depression

2.9 3.4 Somatization Disorder

2.5 2.9 Psychotic Disorders

0 1 2 3 4 5

Very Uncomfortable
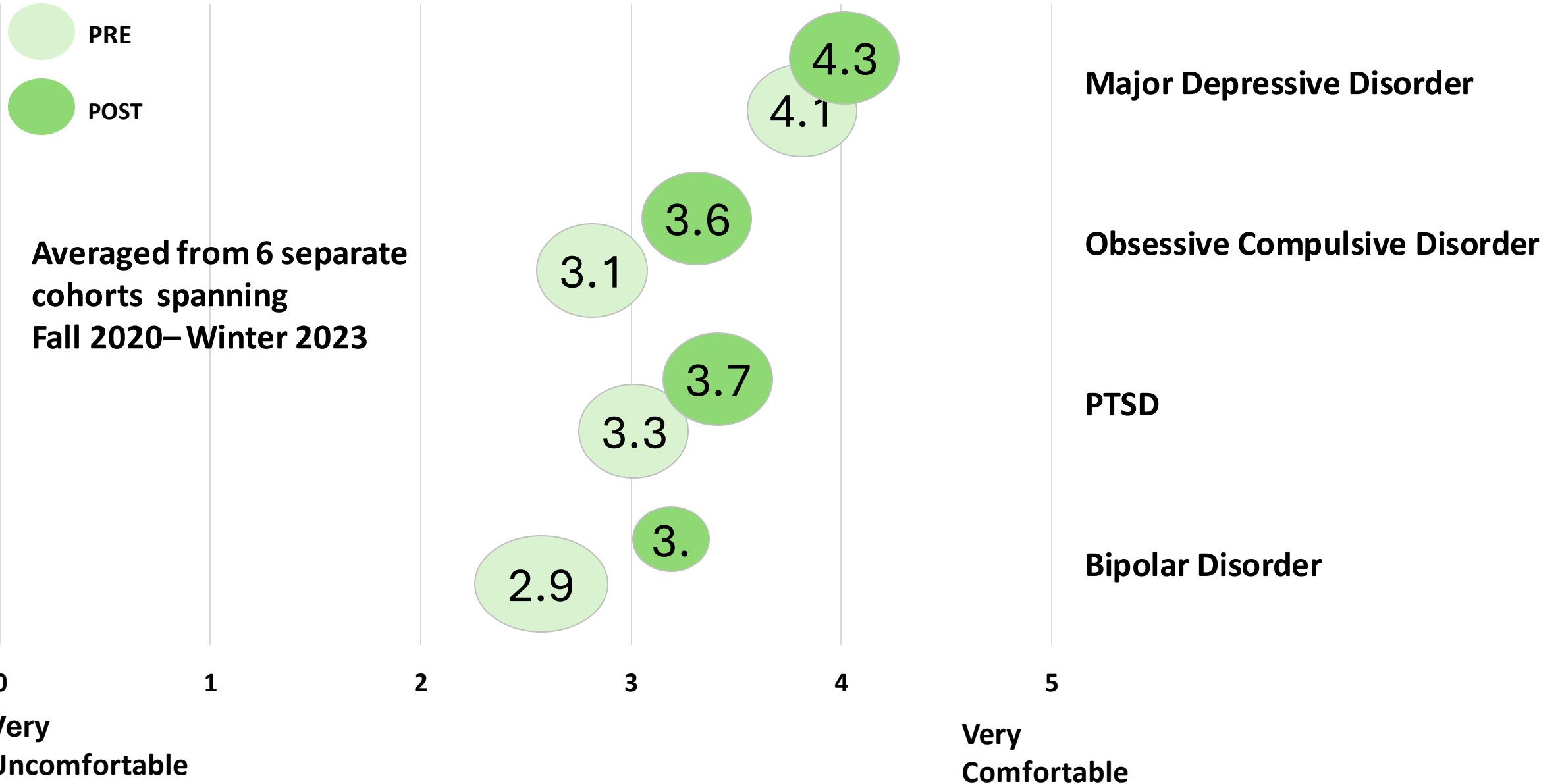
Very Comfortable

How Comfortable Are you PRESCRIBING?
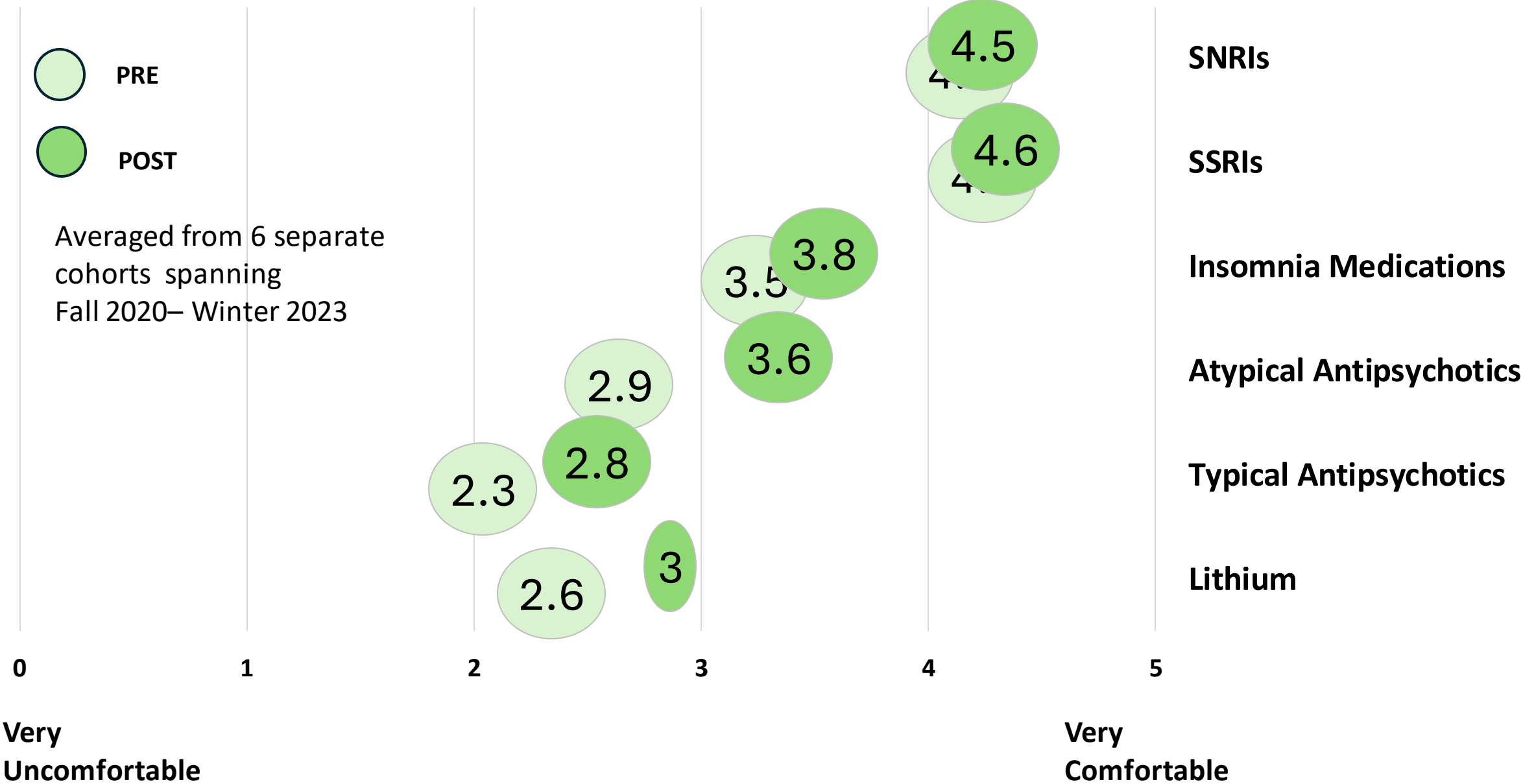
○ PRE

● POST

Averaged from 6 separate
cohorts spanning
Fall 2020– Winter 2023
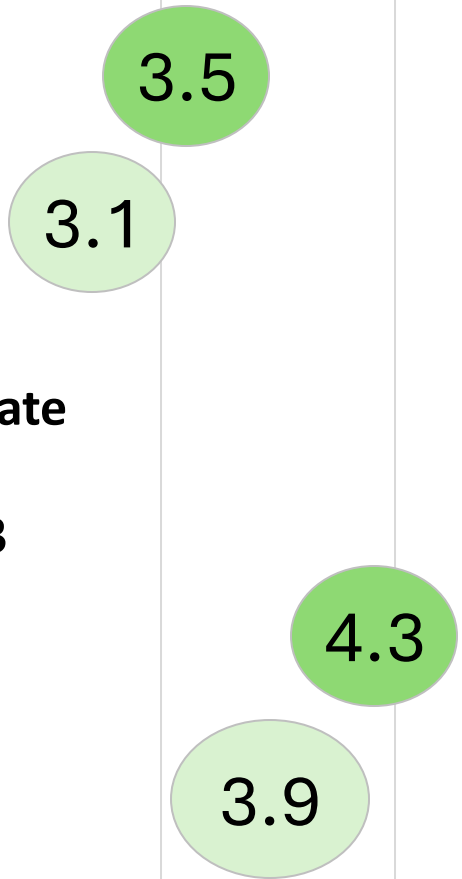
4.5 — SNRIs

4.6 — SSRIs

3.5 · 3.8 — Insomnia Medications

3.6 — Atypical Antipsychotics

2.9 · 2.8 — Typical Antipsychotics

2.3

2.6 · 3 — Lithium

0 1 2 3 4 5

Very Uncomfortable

Very Comfortable

Provider Feedback

"I am SO GRATEFUL for a pharmacist's perspective! Pharmacodynamics was not my best subject in school and after a decade or so of practice, I feel like I can finally start to understand the specifics of drug receptors and mechanisms of action"

"Very helpful to be in a group of clinicians who share many of same challenges and questions, not so isolating. I really appreciate the model of everyone involved can be a teacher and a learner"

"Gave a systematic approach to the often chaotic/diffuse presentations in primary care related to personality disorders, somatization, and complex/overlapping mental health and addiction disorders"

ECHO Benefits

- Professional development
- Community creation
- Low barriers to participation
- No-cost CME and Maintenance of Certification credits
- Increased patient satisfaction
- Increased provider satisfaction
- Improved quality of care

Strengths: Increasing Health Equity

- Project ECHO Adult Mental Health reduces disparities by leaning on the innovative model and driving collaborative solutions

- Most of the cases we discuss and provide recommendations for are patients with moderate to serious mental health conditions

- Many patients are enrolled in Medicaid or uninsured

- Those who present cases get to consult with many areas of expertise in one discussion

- Presentation at ECHO is often easier and faster than referral

ECHO Challenges

- There's never enough time!
  - The schedule is packed full and tight
  - Attendees want more time dedicated to each topic
- ECHO's model doesn't work for everyone
- ECHO's schedule doesn't work for everyone
- Case presentations take effort!
- Space can be a challenge
- Some ECHOs are funded by grants

Strengths: Increasing Health Equity

"There's got to be a way to think about health care as a human right that is connected to a mechanism that works. Project ECHO is that. It's a tremendously powerful way to extend the best care to everyone, to absolutely everyone, to leave nobody out. It makes health care as a human right be real."

Dr. Don Berwick

Former Administrator, Centers for Medicare and Medicaid Improvement
Co-founder and Former President/CEO, Institute for Healthcare Improvement

Case Presentation Overview

- Cases submitted by participants and posted prior to each session for review by panel and other participants

- Participant presents case, open question period with other participants and panel, recommendations/insights provided by panel

- Formal case recommendations summarized and sent to presenter

- Additional education materials, journal articles, screening tools posted to session website

Adult Psychiatry II
Case Presentation Form

Please send completed form to **wolfmi@ohsu.edu**

Date: 10/22/19 **Presenter:** **Clinical Site:** Click here to enter text.

Check One: ☒ New Case or ☐ Follow-Up

De-identified Patient Information. Remember, no PHI.

Age: 62   **Gender:** ☐ Male or ☒ Female   **Occupation: Disabled**

What is your main question about this patient? Next step medication options for bipolar I patient with severe, persistent depression but history of hospitalization for mania in past

Chief complaint / HPI / MSE: 62 y/o female with long history of Bipolar 1 disorder with several episodes of full mania resulting in extended hospital stay. Has been estranged from family for past 2+ years since last Manic episode and is just starting to reconnect again. (Both because of their fear of her impact on their families and her "respecting their choices"). She remains actively engaged in therapy and is compliant with meds and f/us.

Screening Tools: **PHQ-9:** 20-24 **GAD-7:** 11-12 **MDQ:** n/a **SAFE-T:** n/a

Proposed Treatment Plan: Continue therapy and maximize benefit with meds while minimizing risk of any manic destabilization. She reports that her greatest fear is another manic period and thus hesitates to take any meds that MIGHT push her manic. I have considered trying to push her Lithium up again and see if she can tolerate it (if she is willing – she does have a mild tremor now that may be Lithium induced)

Medical Problems/PMH: Urge incontinence

Current Medications (please include *all* medications currently prescribed along with dosage and directions): Lithium 600mg qhs, Lamotrigine 200mg qd, Abilify 10mg qd, Cymbalta 30mg qd (recent d/c of Wellbutrin XL 150mg qd.

Past Psychiatric Medications: very poor tolerance of Seroquel, and higher dose Lithium. No benefit with Mirtazipine, Zoloft in the past.

Labs:

Na/K: 141/4.4	Cl/CO2: 106/26	BUN/Cr: 17/.91	Glu/Ca: 104/10
AST/ALT: 17/22	AP/Bili: 138/.7	Prot/Alb: 6.8/4.5	TSH: 1.46
HbA1C: 5.6	Pregnancy: neg		
Cholesterol: 182	TG: 2.3	LDL: 87	HDL: 74
Hgb/Hct: 14.8/44.1	MCV: 95.3	WBC: 7.3	ANC: 4.7
Therapeutic Drug Levels: Click here to enter text.		**Other:** Click here to enter text.	

Physical Exam: Depressed appearing 62 y/o female with some mood reactivity noted. Appearance is well dressed and groomed. Speech clear with regular cadence, behavior WNL and non-agitated and fully cooperative and engaged in visit, thought content stable and non tangential. Demonstrates good insight and understanding of disease and medications.

Psychiatric history (diagnoses, treatment, hospitalization, suicidality: Previous Dx of Bipolar 1 with at least 2 hospital stays. Does report previous suicidal ideation with intent not to act.

Past psychiatric medications: See above

History of trauma: No Sig Hx of trauma

Social history: (legal/social issues, employment, housing, education, relationships): Has significant financial and housing issues since last manic episode a few years ago. Estranged from family, living on disability income in rented room where she feels uncomfortable leaving her room, so just sits on her bed all day. Has college level education but unable to work at this point.

Current/past drug use and treatment history: No SUD hx

Family history (substance use and/or psychiatric illness): Father with Bipolar 1

- Clarifying Questions from Participants
- Clarifying Questions from ECHO Panel
- Recommendations from Participants
- Recommendations from ECHO Panel
- Summary of Recommendations

For ECHO Clinic: *Adult Psychiatry II*

After review of current lab values and discussion of this patient's case, the following recommendations have been made:

Initial Presentation X   **Follow-up Presentation** _____

1. Given the patient's history and symptoms of bipolar disorder type I, agree with your choice to treat her mood symptoms with Lithium. If the patient is willing to consider dose increase, could consider increasing dose to 900 mg in the evening. Closely monitor lithium level (draw another level ~ 5 days after dose change). If patients tremor worsens or experiences more side effects fine to keep the dose at 600 mg every evening.

2. Manic episodes can be induced with the use of SNRIs, therefore, recommend tapering patient off from Cymbalta. Next step in medication therapy would be to increase Lamotrigine in increments of 50 mg every two weeks up to a max of 200 mg twice daily. Continue to monitor for side effects of rash, headache, nausea/vomiting. Ok for patient to be on both Lamotrigine and Lithium, combination therapy is often required for longstanding symptoms of bipolar disorder.

3. Agree with your recommendation for patient to stay in therapy. If it is feasible, patient may want to invite her family members to therapy sessions so they can learn about her disease process. Recommend patient to learn about diaphragmatic breathing and progressive muscle relaxation techniques in therapy sessions to help her manage her anxiety symptoms.

4. Encourage patient to keep a sleep and mood journal. Educating patient about the importance of sleep and exercise would also be beneficial. Sleep hygiene handout link is below.
www.cci.health.wa.gov.au/docs/Info-sleep%20hygiene.pdf

5. Screening for vit. d, b12, and folate deficiency and treating accordingly may help in managing her mood symptoms.

6. Patient will likely benefit from a referral to social worker to evaluate her housing situation.

Encouraging patient to start volunteering work will likely benefit patient and may give her something meaningful to do during the day.

You can also refer patient to Peer Support Specialist or Peer Wellness Specialist through Oregon Health Authority:
https://traditionalhealthworkerregistry.oregon.gov/Search
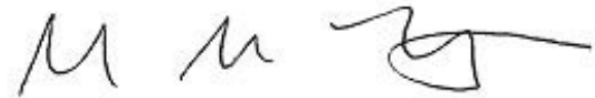
Considerations/Additional Feedback

If it hasn't made a noticeable difference, consider tapering Aripiprazole.

Provider Signature/Role Jonathan Betlinski, MD

Provider Signature/Role: Ruth Tadesse, RN, MS

Provider Signature/Role: Rebecca M. Castner, PharmD, BCACP, AAHIVP

Provider Signature/Role: Alana Willman, PharmD

Date of Case Presentation 10/24/2019

Case ID# APII_102419

Home   About Project ECHO   Programs   Addiction Med   HEAL-OR   Accessibility and Technology   About Oregon ECHO Network   Partners   Contact Us   Log In to CONNECT

WELCOME TO THE OREGON ECHO NETWORK

Connect and Learn

ECHO is an interactive educational and community-building experience that allows healthcare professionals throughout the state of Oregon to create a case-based learning environment through the convenience of video connection.

- Adult Mental Health I
- Child Psychiatry
- Dementia Curbsides and Conversations
- Nursing Facility Behavioral Health & Pandemic Impact
- Integrated Behavioral Health for Peds
- Long COVID
- Cannabis
- Substance Use Disorders in
  - Adolescents
  - Ambulatory Care
  - Hospital Care
  - Jails
- Substance Use Disorders Leadership
- Public Health Preceptor
- Health Equity for Public Health Agencies
- Colorectal Cancer Screening & Outreach

Conclusions

-   The need for quality mental health care continues to grow in Oregon

-   Oregon remains underserved in many areas of mental health, and continues to rely heavily on primary care to treat mental health conditions

-   Through its emphasis on equity, collaboration, and adult models of learning, ECHO helps fill the gap in Oregon's mental health care

Oregon ECHO Network Partners

Oregon ECHO Network Team

Briana Arnold - Program Management

Ferrik Cope - Program Coordination, Reporting

Jonathan Betlinski - Advising, Faculty Engagement, and Strategic Planning

Jean Hiebert Larson - Quantitative and Qualitative Analysis, Reporting

Julia Heinlein - Quantitative Analysis

Kylie Lanman - Program Coordination, Reporting

Leah Brandis - Program Development and Management

Maggie McLain McDonnell - Program Development, Stakeholder Engagement, and Operations

Maryan Carbuccia - Quantitative Analyst

Miriam Wolf - Coordination Lead, CME, Participant Communication, and Logistics

NithyaPriya Ramalingam - Quantitative Analysis

Stephanie Hyde - Program Coordination, Reporting

Tiffany Weekley - Program Coordination, Reporting

Tuesday Graham - Program Development and Management

Questions/Comments for ECHO Panel