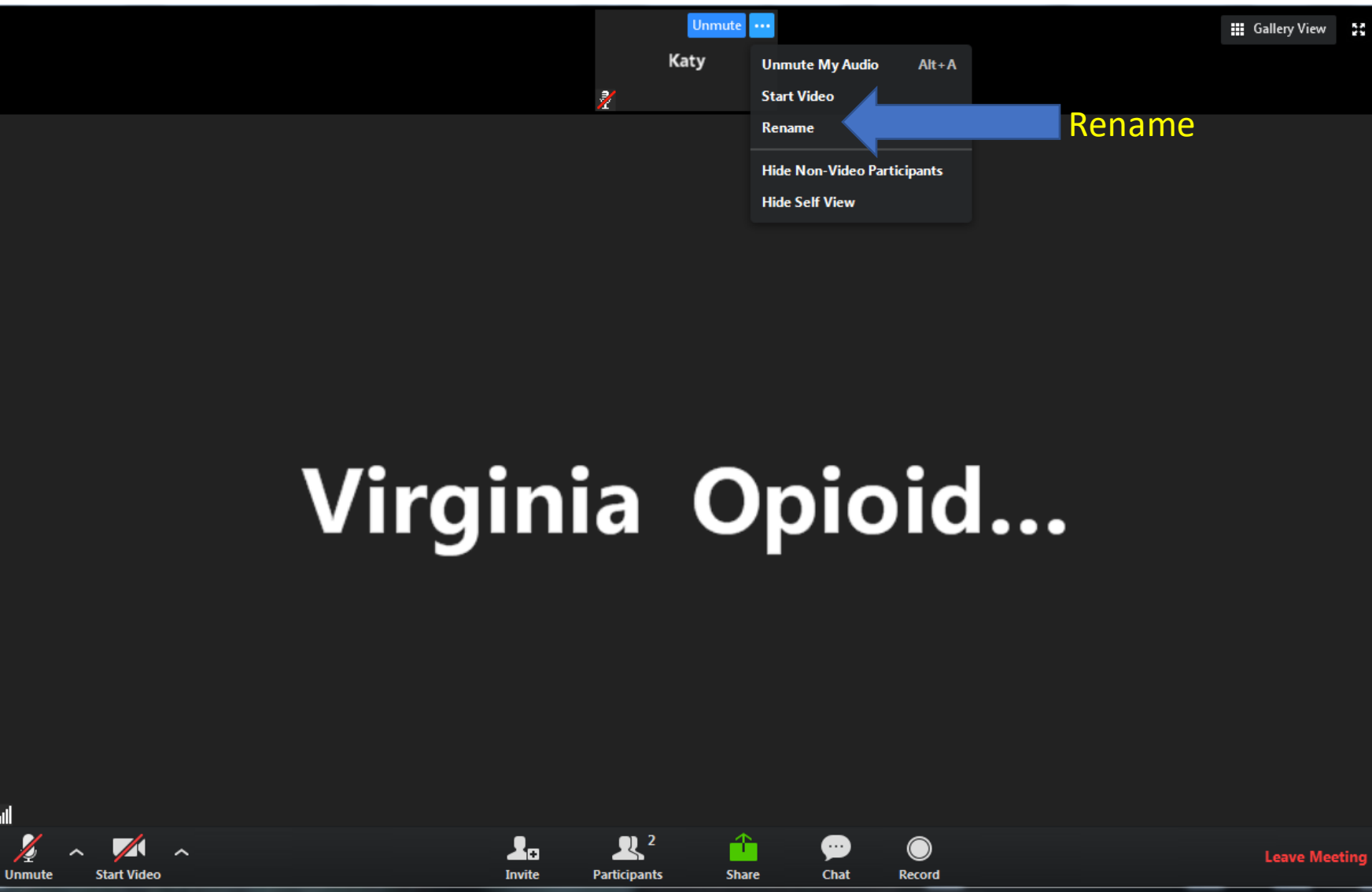


Virginia Opioid Addiction ECHO* Clinic

March 4, 2022

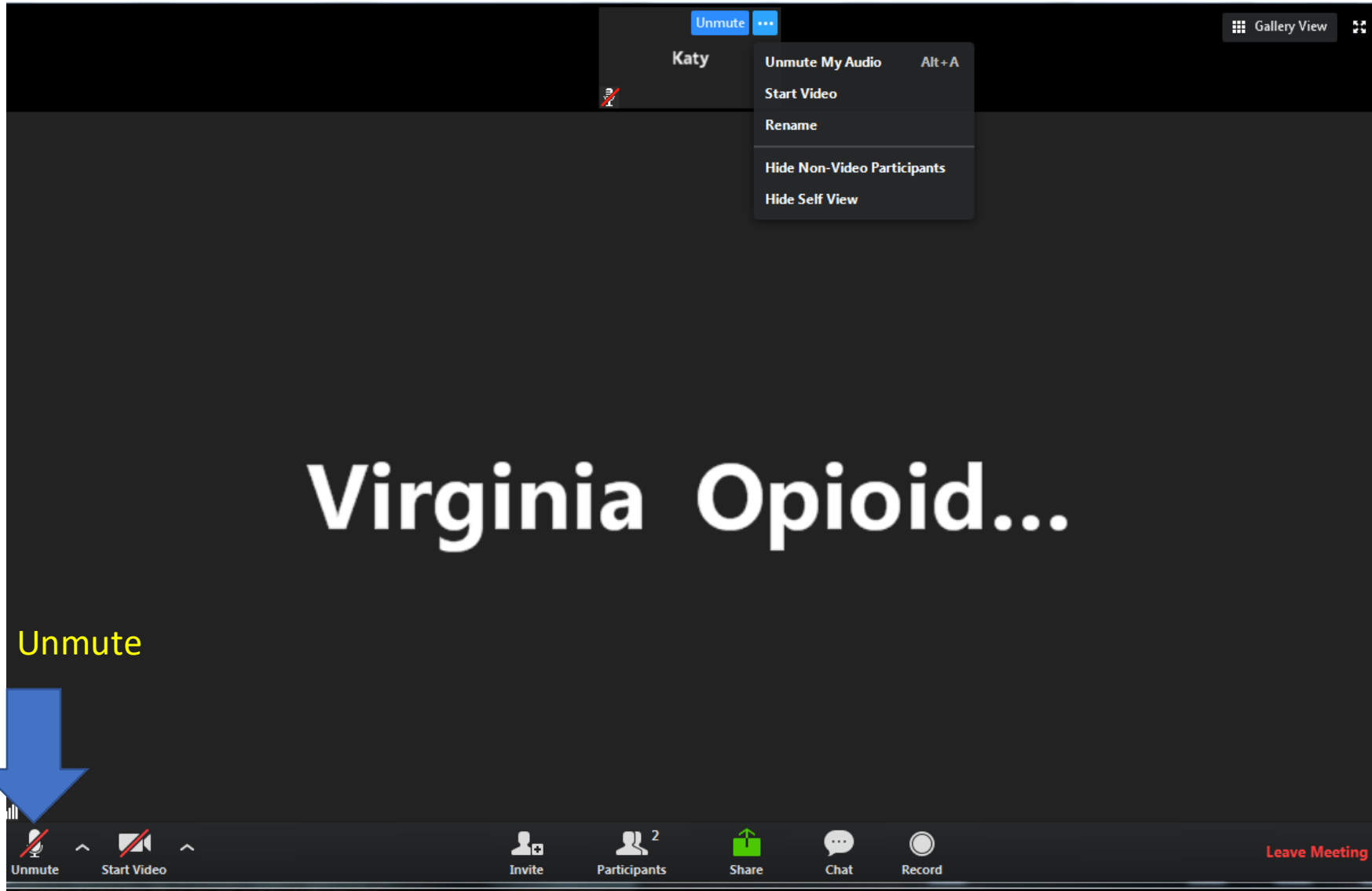
*ECHO: Extension of Community Healthcare Outcomes

Helpful Reminders



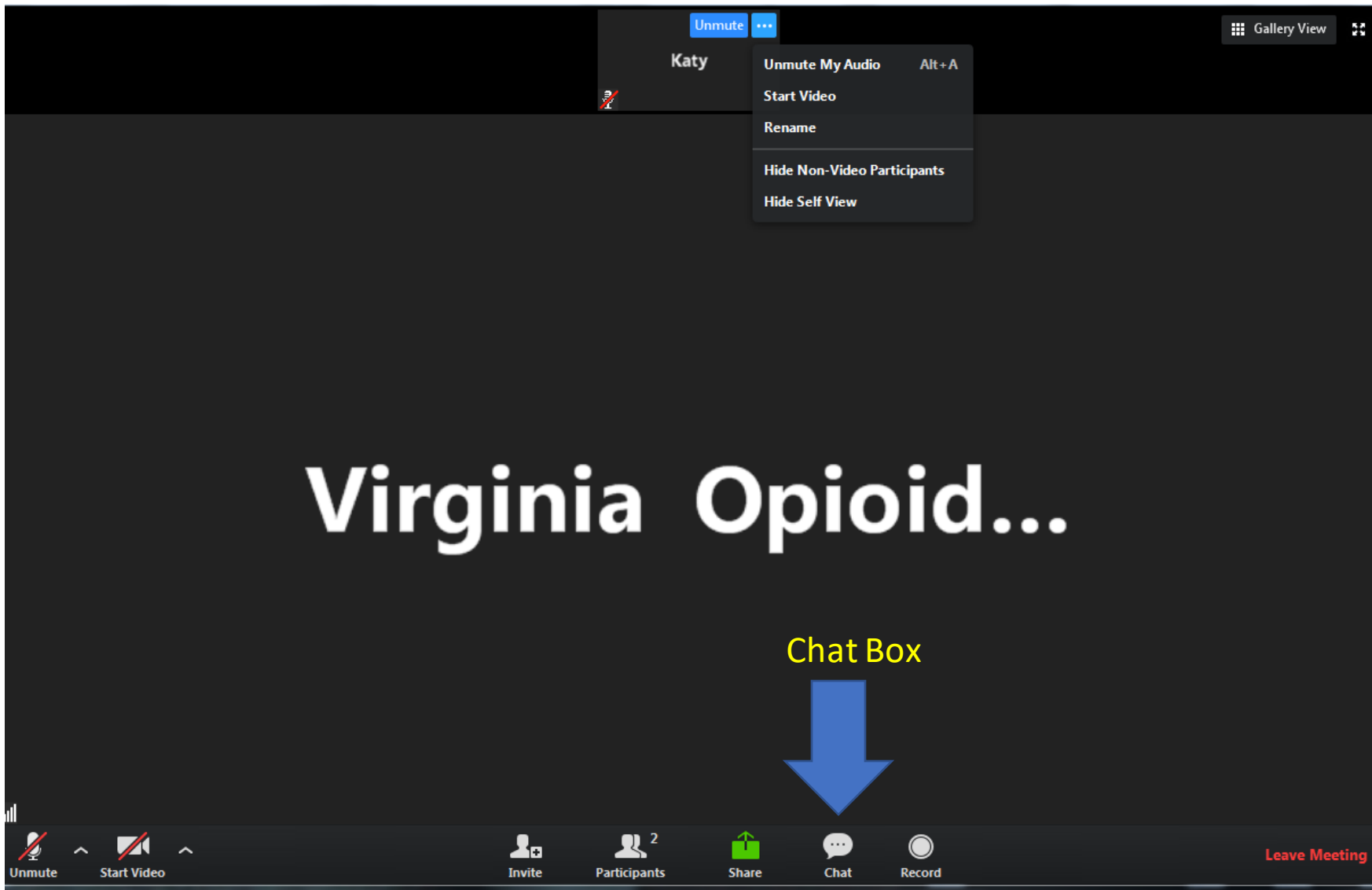
- Rename your Zoom screen, with your name and organization

Helpful Reminders



- You are all on **mute** please **unmute** to talk
- If joining by telephone audio only, ***6** to mute and unmute

Helpful Reminders



- Please type your full name and organization into the chat box
- Use the chat function to speak with IT or ask questions

VCU Opioid Addiction ECHO Clinics



- Bi-Weekly 1 hour tele-ECHO Clinics
- Every tele-ECHO clinic includes a 30 minute didactic presentation followed by case discussions
- Didactic presentations are developed and delivered by inter-professional experts
- Website Link: www.vcuhealth.org/echo

Hub and Participant Introductions



VCU Team

Clinical Director	Gerard Moeller, MD
Administrative Medical Director ECHO Hub	Vimal Mishra, MD, MMCI
Clinical Experts	Lori Keyser-Marcus, PhD Courtney Holmes, PhD Albert Arias, MD Megan Lemay, MD Katie Adams, PharmD
Didactic Presentation	Arthur Calloway, DO
Program Manager	Bhakti Dave, MPH
Acute Telehealth Manager	Tamera Barnes, MD
IT Support	Vladimir Lavrentyev, MBA

- Name
- Organization

Reminder: **Mute** and **Unmute** screen to talk

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Use **chat** function for Introduction

What to Expect

- I. Didactic Presentation
 - I. **Arthur Calloway, DO**
- II. Case presentations
 - I. Case 1
 - I. Case summary
 - II. Clarifying questions
 - III. Recommendations
- III. Closing and questions



Lets get started!

Didactic Presentation



Disclosures

Arthur Calloway, DO has no financial conflicts of interest to disclose.

There is no commercial or in-kind support for this activity.

PSYCHIATRIC RISKS OF CANNABIS ABUSE

ARTHUR CALLOWAY DO PGY4 VCUHS



OVERVIEW

- Discuss the implications of cannabis abuse in developing or worsening mood, anxiety, and psychotic disorders
- Summarize recommendations for using cannabinoids in various psychiatric disorders
- Discuss a case of presumed delta-8-THC induced psychosis

CANNABIS USE AND MAJOR DEPRESSIVE DISORDER (MDD)

- Most evidence suggests harmful effects of cannabis use in MDD
- 40-year study that analyzed > 400 individuals found that cannabis use was correlated with an increased risk of being diagnosed with MDD. Earlier onset of cannabis use was correlated with a shorter time to presentation with MDD (Schoeler et al, 2018)

CANNABIS USE AND MDD

- One study found an association between MDD and cannabis only in patients with CUD, whereas others found an association in weekly use
- Despite substantial evidence for cannabis having harmful effects on depressive outcomes, some studies found no correlation between cannabis use and MDD diagnosis or symptom severity after controlling for confounders

CANNABIS USE AND MDD- SUMMARY

- Literature suggests more evidence for harm than therapeutic benefit with cannabis use in MDD
- To better understand the association between cannabis use and MDD, may be beneficial to more carefully investigate extent of cannabis use (frequency, potency, CBD/THC ratio)

CANNABIS USE AND BIPOLAR DISORDER (BD)

- Like MDD most evidence suggests harmful effects of cannabis use in BD
- A nationally representative sample of 40,000 individuals (NESARC) found cannabis use to be associated with an increased risk of BD onset (Cougale et al, 2015)

CANNABIS USE AND BD CONTINUED

- Some studies show that higher frequency cannabis use potentiates the risk for developing BD and worsening symptomatology including suicide risk
- Other studies suggest cannabis use is predictive of longer affective episodes, more frequent rapid cycling, lower remission rates, and lower clinical and functional recovery
- There are few studies that suggest no significant relationship between cannabis use and BD outcomes

CANNABIS USE AND BD SUMMARY

- Literature indicates there are more harms than benefits associated with chronic cannabis use in BD symptomatology and disease progression
- Like MDD, more research is needed to understand the relationship between cannabis use and BD

CANNABIS USE AND ANXIETY DISORDERS

- Significant evidence for an association between cannabis use, agoraphobia, and social anxiety disorder (SAD)
- A significant association was observed between daily cannabis use and SAD in a nationally representative study (Feingold et al, 2016)

CANNABIS USE AND ANXIETY DISORDERS

- Mixed findings on the effects of cannabis use across all anxiety disorders
- Research regarding generalized anxiety disorder (GAD) ranges from no significant association with cannabis use to two-fold increased risk

CANNABIS USE AND ANXIETY DISORDERS- PTSD

- Research shows a strong positive association between PTSD symptom severity and daily cannabis use
- Most research supports the association of cannabis use and increased likelihood of presenting with PTSD symptoms, heightened negative affect, and improvement in symptoms upon cessation

CANNABIS USE AND ANXIETY DISORDERS- PTSD SUMMARY

- No association between cannabis use and PTSD development
- Some harmful effects from cannabis use on psychiatric outcomes in PTSD and non-significant associations between cannabis use and PTSD symptomatology

CANNABIS USE AND PSYCHOTIC DISORDERS

- Cannabis use is associated with increased vulnerability toward developing psychotic illness
- A longitudinal study with over 50,000 male participants found that those who smoked cannabis by age 18 had twice the risk of being diagnosed with schizophrenia, while those who used cannabis chronically had six times the risk compared with non-users (Andreasson et al, 1987)

CANNABIS USE AND PSYCHOTIC DISORDERS

SUMMARY

- Across multiple studies, cannabis use has been correlated with earlier onset of psychosis, increased symptom severity, higher rates of relapse, longer hospitalization time, poorer illness outcomes, and poorer quality of life outcomes

USE OF CANNABIS FOR PSYCHIATRIC DISORDERS

- No evidence for positive influence of cannabis in depression and no evidence of any therapeutic effect with cannabis use in BD, except for acute relief shortly after use
- No clear evidence for therapeutic benefit of cannabis across anxiety disorders despite self-reported claims

USE OF CANNABIS FOR PSYCHIATRIC DISORDERS

- There is some evidence supporting a therapeutic role for specifically cannabidiol (CBD) in schizophrenia.
- A recent trial suggests administering 1000mg CBD daily for six weeks alongside current antipsychotics potentially reduces positive symptoms as rated by the Positive and Negative Symptom Scale (PANSS), as well as improves self-reported and clinician-reported functional outcomes in schizophrenia compared to placebo (McGuire et al 2019)

USE OF CANNABIS FOR PSYCHIATRIC DISORDERS

- A systematic review of the therapeutic potential of CBD and higher CBD cannabis preparations for psychosis and schizophrenia describes a promising future with effective and tolerable results so far (Iseger and Bossong 2015)

CASE- DELTA-8-THC INDUCED PSYCHOSIS?

- 19-year-old woman with no past psychiatric history or past medical history presented to the emergency department for strange behavior for six days after consuming delta 8 THC gummies. Prior to consuming the delta 8 THC gummies she endorsed being her usual good state of health and notably she reported this was her first-time trying delta 8 THC

CASE- DELTA-8-THC INDUCED PSYCHOSIS?

- Upon presenting to the hospital her blood pressure was 111/78, heart rate 98, respiratory rate 22, temperature 98.6 degrees Fahrenheit, and oxygen saturation of 100%. Lab work was pertinent for mild anemia (hemoglobin 10.6), negative pregnancy test, and notably negative urine drug screen including cannabinoid screening

CASE- DELTA-8-THC INDUCED PSYCHOSIS?

- She reported smoking cannabis three times in the past as well as sporadic use of alcohol and nicotine but denied ever using any other illicit drugs. She denied taking any medications. She reported having a maternal uncle with alcoholism and cousin with depression. She reported remote, limited and previously unreported non-suicidal self-harm behaviors in her early teen. She denied having a personal or family history of attempted or completed suicide

CASE- DELTA-8-THC INDUCED PSYCHOSIS?

- During the six days after consuming the delta-8-THC gummy and prior to coming to the emergency department, she endorsed symptoms of derealization, intense fear, paranoia, insomnia, along with both auditory and visual hallucinations during the interim period. During the time prior to presentation to the hospital, the young woman wandered away from their friend group and began having thoughts of wanting to run into moving traffic, swerve and wreck her car, and followed a command from God instructing her to walk into a river

CASE- DELTA-8-THC INDUCED PSYCHOSIS?

- While in the emergency department she received 4mg of Ondansetron in the emergency department for nausea but was medically cleared and subsequently admitted voluntarily to an inpatient psychiatric facility
- Upon admission to the psychiatric facility, she was cooperative but reported ongoing confusion, derealization, and expressed that she had experienced panic for the past week. She reported having increased energy despite a decreased need for sleep since taking the delta-8-THC gummy. She endorsed a vague sense of feeling unsafe in the community and then suddenly became quiet and tearful. She was guarded and had an anxious affect at the time of admission. However, the first night after being admitted she was observed sleeping for eight hours without receiving any medication. Within one day of being admitted to the psychiatric facility and one week after consuming the delta-8-THC, she appeared significantly less anxious and paranoid. She requested discharge from the facility

QUESTIONS?

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Case Presentation #1



- 12:35-12:55 [20 min]
 - 5 min: Presentation
 - 2 min: Clarifying questions- Spokes
 - 2 min: Clarifying questions – Hub
 - 2 min: Recommendations – Spokes
 - 2 min: Recommendations – Hub
 - 5 min: Summary - Hub

Reminder: **Mute** and **Unmute** to talk

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Use **chat** function for questions

Case Studies

- Case studies
 - Submit: www.vcuhealth.org/echo
 - Receive feedback from participants and content experts
 - Earn **\$100** for presenting

Thank You

The success of our telehealth program depends on our participants and those who submit case studies to be discussed during clinics. We recognize the following providers for their contributions:



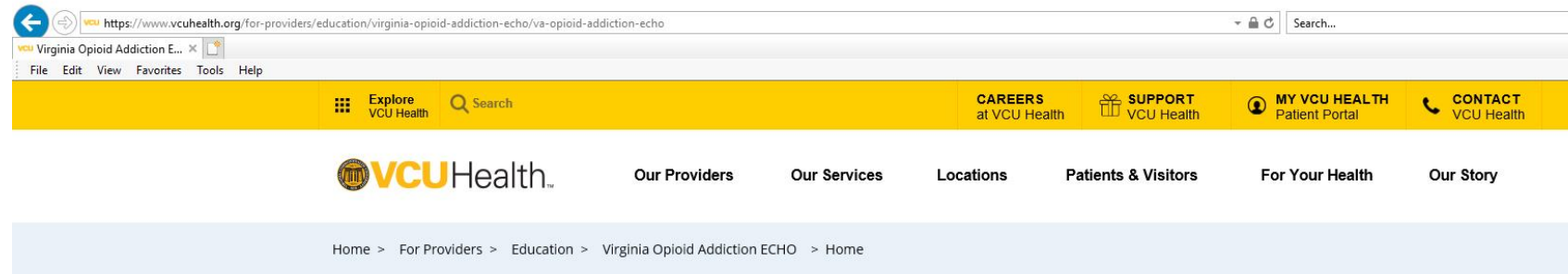
- **Ademola Adetunji, NP** from Fairfax County CSB
- **Tara Belfast-Hurd, MBA-PA** from Department of Behavioral Health and Developmental Services
- **Michael Bohan, MD** from Meridian Psychotherapy
- **Ramona Boyd, NP** from Health Wagon
- **Diane Boyer, DNP** from Region Ten CSB
- **Melissa Bradner, MD** from VCU Health
- **Kayla Brandt, B.S.** from Crossroads Community Service Board
- **Candace Fletcher, PharmD Candidate** from Hopkins Medical Association
- **Susan Cecere, LPN** from Hampton Newport News
- **Kimberly Dexter, DNP** from Hampton Newport News CSB
- **Shokoufeh Dianat, DO, MAS** from Virginia League from Planned Parenthood
- **Candace Fletcher, PharmD** from Hopkins Medical Association
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- **Shannon Garrett, FNP** from West Grace Health Center
- **LaShawna Giles, MSW** from Hampton Newport News CSB
- **Sharon Hardy, BSW, CSAC** from Hampton-Newport News CSB
- **Kara Howard, NP** from Southwest Montana Community Health Center
- **Sunny Kim, NP** from VCU Health
- **Heidi Kulberg, MD** from Meridian Health
- **Thokozeni Lipato, MD** from VCU Health
- **Caitlin Martin, MD** from VCU Health
- **Jennifer Melilo, FNP** from Chesapeake Integrated Behavioral Health
- **Dawn Merritt, QMHP** from Eastern Shore CSB
- **Maureen Murphy-Ryan, MD** from AppleGate Recovery
- **Faisal Mohsin, MD** from Hampton-Newport News CSB
- **Jeromy Mullins, PharmD Candidate** from Hopkins Medical Association
- **Stephanie Osler, LCSW** from Children's Hospital of the King's Daughters
- **Davina Pavia, QMHP** from Hanover County CSB
- **Winona Pearson, LMSW** from Middle Peninsula Northern Neck CSB
- **Jennifer Phelps, BS, LPN** from Horizons Behavioral Health
- **Crystal Phillips, PharmD** from Appalachian College of Pharmacy
- **Jashanda Poe, MA** from Rappahannock Area CSB
- **Tierra Ruffin, LPC** from Hampton-Newport News CSB
- **Manhal Saleeby, MD** from VCU Health Community Memorial Hospital
- **Jenny Sear-Cockram, NP** from Chesterfield County Mental Health Support Services
- **Elizabeth Signorelli-Moore, LPC** from Region 1 CSB
- **Amber Sission, QMHP** from Eastern Shore CSB
- **Daniel Spencer, MD** from Children's Hospital of the King's Daughters
- **Linda Southall, QMHP** from Alleghany Highlands CSB
- **Heather Stone, PhD, LCSW** from Central Virginia Health Services of Petersburg
- **Cynthia Straub, FNP-C, ACHPN** from Memorial Regional Medical Center
- **Saba Suhail, MD** from Ballad Health
- **Michelle Tanner, LPC** from Hanover County CSB
- **Barbara Trandel, MD** from Colonial Behavioral Health
- **Bill Trost, MD** from Danville-Pittsylvania Community Service
- **Art Van Zee, MD** from Stone Mountain Health Services
- **Ashley Wilson, MD** from VCU Health
- **Sarah Woodhouse, MD** from Chesterfield Mental Health
- **Susan Mayorga, BA, CBIS** from Community Health Center of the New River Valley
- **Jordan Siebert, Peer Recovery Specialist** from Daily Planet Health Services




Claim Your CME and Provide Feedback



- www.vcuhealth.org/echo
- To claim CME credit for today's session
- Feedback
 - Overall feedback related to session content and flow?
 - Ideas for guest speakers?


Access Your Evaluation and Claim Your CME





Virginia Opioid Addiction ECHO

Welcome to the Virginia Opioid Addiction Extension for Community Health Outcomes or ECHO, a virtual network of health care experts and providers tackling the opioid crisis across Virginia. [Register now for a TeleECHO Clinic!](#)



Network, Participate and Present

- Engage in a collaborative community with your peers.
- Listen, learn, and discuss didactic and case presentations in real-time.
- Take the opportunity to [submit your de-identified study](#) for feedback from a team of addiction specialists. We appreciate [those who have already provided case studies](#) for our clinics.
- Provide [valuable feedback & claim CME credit](#) if you participate in live clinic sessions.

Benefits

- Improved patient outcomes.
- **Continuing Medical Education Credits:** This activity has been approved for **AMA PRA Category 1 Credit™**.

Telehealth

- About Telehealth at VCU Health ▾
- For Patients ▾
- For Providers ▴
- Virginia Opioid Addiction ECHO ▴
 - Register Now!
 - Submit Your Case Study
 - Continuing Medical Education (CME)
 - Curriculum & Calendar
 - Previous Clinics (2018)
 - Previous Clinics (2019)
 - Resources
 - Our Team

Access Your Evaluation and Claim Your CME



https://redcap.vcu.edu/surveys/?s=KNLE8PX4LP Project ECHO Survey

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ECHO
Virginia Commonwealth University

Please help us serve you better and learn more about your needs and the value of the Virginia Opioid Addiction ECHO (Extension of Community Healthcare Outcomes).

First Name
* must provide value

Last Name
* must provide value

Email Address
* must provide value

I attest that I have successfully attended the ECHO Opioid Addiction Clinic.
* must provide value

Yes

No

reset

_____, learn more about Project ECHO

Watch video

How likely are you to recommend the Virginia Opioid Addiction ECHO by VCU to colleagues?

Very Likely

Likely

Neutral

Unlikely

Very Unlikely

reset

What opioid-related topics would you like addressed in the future?

What non-opioid related topics would you be interested in?

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- www.vcuhealth.org/echo
- To view previously recorded clinics and claim credit

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Education	
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Diabetes and Hypertension Project ECHO	+
Nursing Home ECHO	+
Palliative Care ECHO	+
Virginia Opioid Addiction ECHO	-
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Our Team	
Previous Clinics - 2021	
Previous Clinics - 2022	
Resources	
Thank You	
Virginia Opioid Addiction ECHO Continuing Medical Education	
Virginia Opioid Addiction ECHO Evaluation	
Virginia Sickle Cell Disease ECHO	+
Child Abuse Project ECHO	+
Early Intervention Project ECHO	+

Previous Clinics - 2021

Review topics we covered in previous Virginia Opioid Addiction ECHO clinics.

January 15, Buprenorphine Taper

Presented by Masaru Nishiaoki, MD

- [View Presentation](#)
- [View Video](#)

January 29, Panel Discussion: COVID and Chronic Conditions

Panelists: Albert Arias, MD, Alex Krist, MD and Katherine Rose, MD

- [View Presentation](#)
- [View Video](#)

February 12, Grief Impacting Recovery

Presented by Courtney Holmes, PhD

- [View Presentation](#)
- [View Video](#)

February 26, Virginia Drug Court System

Presented by Melanie Meadows

- [View Presentation](#)
- [View Video](#)

March 12, COVID and Recovery: Panel Discussion

Presented by Tom Bannard, MBA Omri Morris, CPRS Raymond Barnes, CPRS Erin Trinh, CPRS

- [View Presentation](#)
- [View Video](#)

March 26, Effects of Pharmacology on Cognitive Function

Presented by Gerry Moeller, MD

- [View Presentation](#)
- [View Video](#)
- [View Resource](#)

April 9, PropER Clinic and SUD Virtual Bridge Clinic: Linking Patients from ED to PCP and SUD Care

Presented by Taruna Aurora, MD and Brandon Wills, MD

- [View Presentation](#)
- [View Video](#)

VCU Virginia Opioid Addiction TeleECHO Clinics

Bi-Weekly Fridays - 12-1:00 pm

Mark Your Calendar --- Upcoming Sessions

March 18: Behavioral Health Treatment for SUD

Sarah Meshberg-Cohen, PhD

April 1: Macro dosing for Buprenorphine

Brandon Wills, MD

Please refer and register at vcuhealth.org/echo

THANK YOU!

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