Virginia Opioid Addiction ECHO* Clinic

December 7th, 2018

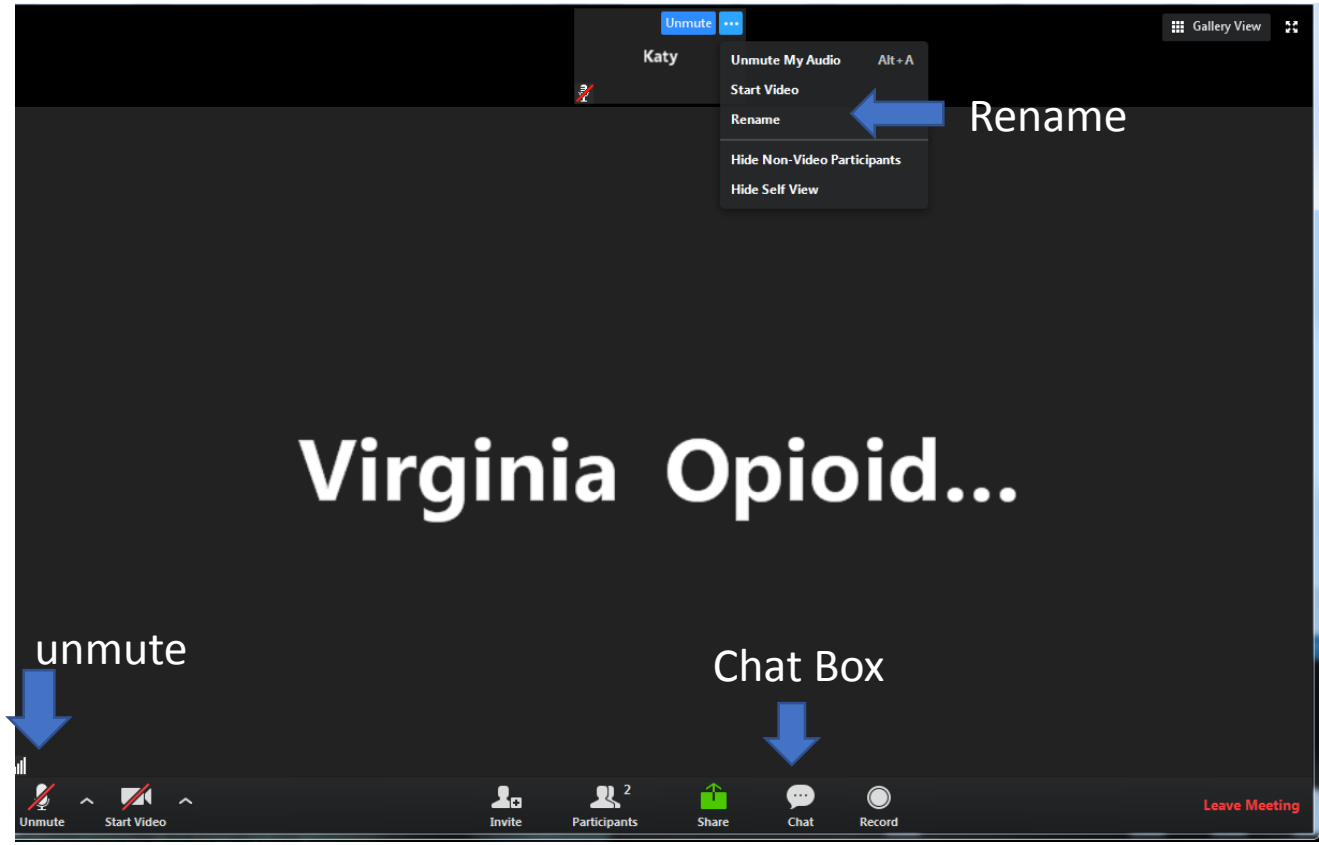
*ECHO: Extension of Community Healthcare Outcomes

Helpful Reminders

- Rename your ZOOM screen: Please rename your screen with your full name
  - For attendance, please type your full name and organization into the chat box

- All participants are Muted during the call, Please Unmute yourself before speaking. If you have a question, use the 'hand-raised' future in ZOOM or type your question in the Chat box.

- Speak to the Camera, avoid distractions and for ZOOM issues (such as echoing, audio level etc.), use the chat function to speak with the clinic IT team (Vlad)



VCU Opioid Addiction ECHO Clinics

VCU Health
VCU School of Medicine

VDH Virginia Department of Health | VDHLiveWell.com | Virginia Department of Behavioral Health & Developmental Services

- Bi-Weekly 1.5 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 in substance use disorder
- Website Link: www.vcuhealth.org/echo

VCU

Hub Introductions

VCU Team	
Clinical Director of Addiction Medicine at VCU	Mishka Terplan, MD, MPH, FACOG, FASAM
Administrative Medical Director ECHO Hub and Principal Investigator	Vimal Mishra, MD, MMCi
Clinical Expert	Lori Keyser-Marcus, PhD Courtney Holmes, PhD
Didactic Presentation	Megan Lemay, MD
Program Manager	Bhakti Dave, MPH
Practice Administrator	David Collins, MHA
IT Support	Vladimir Lavrentyev, MBA

Spokes/ Participant Introduction

- Name
- Organization

What to Expect

I. Didactic Presentation
   I. Pharmacotherapy for AUD
   II. Megan Lemay, MD

II. Case presentations
   I. Case 1
      I. Case summary
      II. Clarifying questions
      III. Recommendations

   II. Case 2
      I. Case summary
      II. Clarifying questions
      III. Recommendations

III. Closing and questions

Lets get started!

Didactic Presentation

Pharmacotherapy for Alcohol Use Disorder

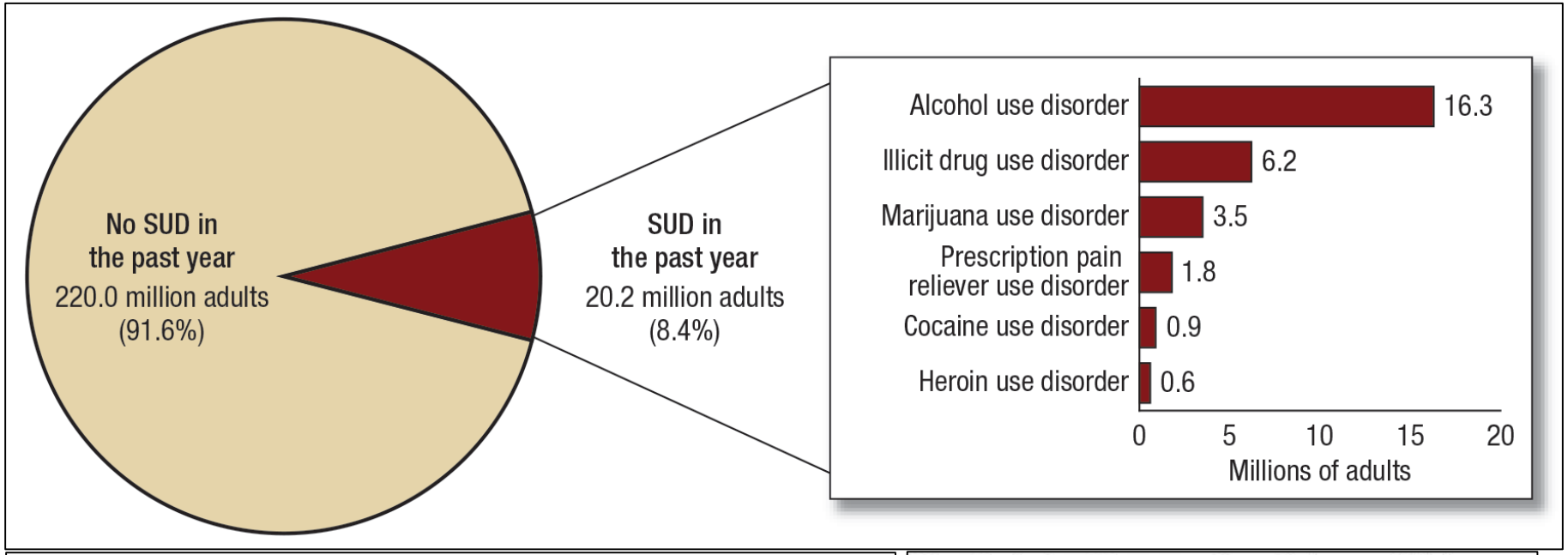
Megan Lemay, MD

12/7/2018

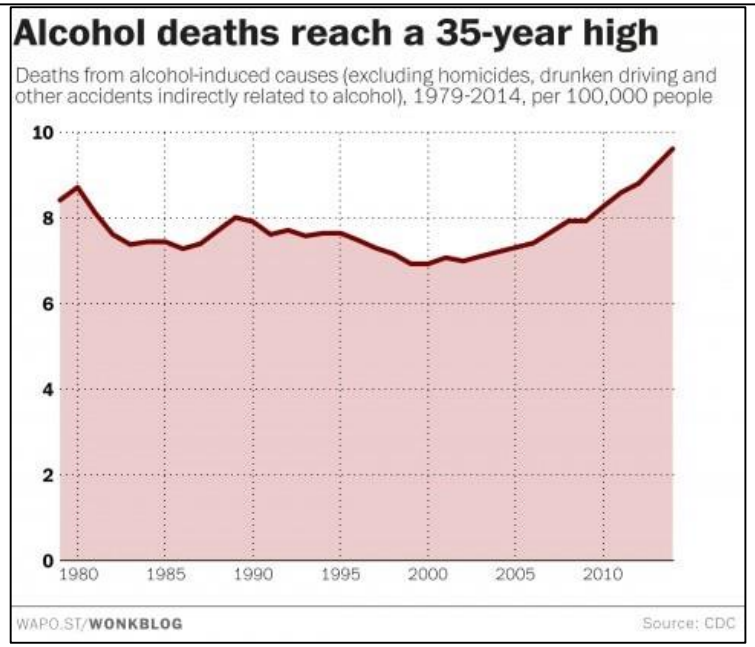
Pharmacotherapy for Alcohol Use Disorder

1. Identify patients who are candidates for pharmacotherapy for alcohol use disorder

2. Discuss the benefits, risks, and use of medications for alcohol use disorder



- 25% of patients with alcohol use disorder receive treatment
- 10% of patients with alcohol use disorder receive medication-assisted therapy (MAT)



SAMHSA, CDC, Hasin 2018

DSM 5 Diagnosis Alcohol Use Disorder.

In the past year have you…

- Had times when you ended up drinking more, or longer than you intended?
- More than once wanted to cut down or stop drinking, or tried to, but couldn't?
- Spent a lot of time drinking? Or being sick or getting over the aftereffects?
- Experienced craving — a strong need, or urge, to drink?
- Found that drinking — or being sick from drinking — often interfered with taking care of your home or family? Or caused job troubles? Or school problems?
- Continued to drink even though it was causing trouble with your family or friends?
- Given up or cut back on activities that were important or interesting to you, or gave you pleasure, in order to drink?
- More than once gotten into situations while or after drinking that increased your chances of getting hurt (such as driving, swimming, using machinery, walking in a dangerous area, or having unsafe sex)?
- Continued to drink even though it was making you feel depressed or anxious or adding to another health problem? Or after having had a memory blackout?
- Had to drink much more than you once did to get the effect you want? Or found that your usual number of drinks had much less effect than before?
- Found that when the effects of alcohol were wearing off, you had withdrawal symptoms?

Mild: 2-3 **Moderate 4-5** **Severe 6+**

DSM V, NIAAA

Candidates for Pharmacotherapy

- Any patient with moderate to severe alcohol use disorder
- Any patient at risk for significant consequences of alcohol use (medical or legal ramifications of drinking)
- Patients who are not drinking, but who continue to experience significant craving for alcohol

Before Starting Therapy

- Comprehensive history and physical exam including lab work with assessment of kidney and liver function
- Mutual goal-setting
- Assessment of risk for withdrawal and consideration for medically-supervised withdrawal
- Recommend psychosocial treatment

Medications for Alcohol Use Disorder

FDA-approved Medications

- Naltrexone
- Acamprosate
- Disulfiram

Other Medications

- Gabapentin
- Topiramate

Naltrexone

Mechanism of action:

- Opioid antagonist
- Decreases cravings and pleasurable effects of alcohol by decreasing opiodergic dopamine release and beta endorphins

Formulations and Administration

- Oral tablet: 50 mg once daily (doses up to 100 mg have been used)
- Long-Acting Injectable
  - (Vivitrol ®)
  - 360 mg intragluteal every 30 days

Naltrexone

Efficacy

- Oral naltrexone:
  - Efficacy established in multiple meta analyses and systematic reviews
  - NNT return to any drinking: 20
  - NNT reduction of heavy drinking 12

- Long-acting injectable
  - Associated with a decrease in heavy drinking, but less evidence for return to any drinking

Jonas 2014

Naltrexone

Safety

- Generally safe and well-tolerated
- Most common: adverse effects include headaches, nausea, vomiting, fatigue, dizziness.
- Rare but serious: hepatotoxicity. Avoid in decompensated cirrhosis or when transaminases are >5 times the upper limit of normal. Monitor liver enzymes.
- Contraindications: current or planned opioid use

Acamprosate

Mechanism of Action

Poorly understood
Inhibition of neuronal hyperexcitability, particularly with glutamate at the NMDA receptor

Formulations and Administration

- 333 mg tablets
- Standard dose 666 mg three times daily
- GFR 30-50: 333 mg three times daily
- GFR <30: do not administer

Heyser 2018

Acamprosate

Efficacy

- Found to be effective in multiple meta analyses and systematic reviews
- NNT return to any drinking = 12
- NNT reduce heavy drinking = 9

Jonas, 2014 Rosner 2010

Acamprosate vs Naltrexone

Table 2: Comparative Effectiveness and Strength of Evidence for Acamprosate and Naltrexone as Treatment for AUD

Medication	Outcome	N Studies[a]	N Subjects	Finding	SOE
Acamprosate vs. naltrexone	Return to any drinking	3	800	Not significant[a]	●●○
	Return to heavy drinking	4	1,141	Not significant[a]	●●○
	Percentage of drinking days	2	720	Not significant[a]	●○○

[a]The 95-percent confidence interval was not statistically significant.

Acamprosate

Safety

- Generally safe, well-tolerated, and no drug-drug interactions
- Rare diarrhea
- Caution with renal failure

Disulfiram

Mechanism of Action

- Inhibits aldehyde dehydrogenase → build up of acetaldehyde and the disulfiram reaction
- Does not affect the desire to drink alcohol

Formulations and Administration

- **Considered second line**

- 250 and 500 mg tablets
- Initial dose 500 mg daily for 2 weeks then 125 to 500 mg daily

Disulfiram

Efficacy

- Efficacy limited by tolerability and adherence (adherence in unsupervised settings as low as 20%)
- Mixed results in meta analyses
- May be more effective in directly supervised settings

Fuller 1986, Jonas 2014, Laaksonen 2008

Disulfiram

Safety

- No alcohol consumption for 24 hours prior to administration
- Warn patients about expected reaction and avoidance of alcohol-containing items such as mouthwash and cooking with alcohol
- Avoid in patients with heart disease

- Common side effects: rash, headache, fatigue, and metallic or garlic taste

- Rare but serious side effects: optic neuritis, peripheral neuropathy, and hepatitis (including cholestatic and fulminant hepatitis and hepatic failure).

- Drug interactions
  - Always perform a comprehensive assessment of interactions prior to prescribing. Benzodiazepines, rifampin, metronidazole, warfarin, oral hypoglycemics, phenytoin, and more

Gabapentin

- Mechanism of Action: inhibits neuroexcitatory state present after cessation of alcohol
- Dosage and administration: 1800 mg daily (separated into three divided doses)
- Efficacy: Limited data of efficacy:
  - One RCT of 150 men
  - NNT abstinence 16
  - Decreased heavy drinking days by 14%
- Safety: sedation, dizziness, concern for misuse

Topiramate

- Mechanism of action: anticonvulsant, reduces neuronal excitability
- Dosage and administration: Dosages ranging from 75 to 300 mg per day (titrated up from 25 mg in 25 mg increments)
- Efficacy:
  - One meta analysis found an association with fewer drinking days and fewer heavy drinking days
- Safety: Limited tolerability- cognitive, paresthesias, weight loss, headache, fatigue, dizziness, and depression

Guglielmo 2015, Jonas 2014

Choosing a Medication

- Naltrexone and Acamprosate are first line FDA- approved medications
  - Naltrexone may be especially effective in patients with significant craving
  - Acamprosate may be especially effective in patients in the immediate post-withdrawal period (and gabapentin is sometimes used as an adjunct in withdrawal)
- Consider the patients' other medical conditions and medications
  - Can one medication serve two purposes?
- Cost/Insurance issues
- Ease of administration
  - Naltrexone is once daily

Duration of Treatment

- Ideal duration not established
- Generally 6-12 months or until risks outweigh benefits of continuing treatment
- A decision to discontinue therapy may be appropriate in patients who have maintained abstinence, have diminished cravings, and who are engaged in ongoing recovery activities

NIH 2009

Special Populations

- Pregnant patients
  - Naltrexone, acamprosate, gabapentin pregnancy category C
    - Some experts may consider use of naltrexone
  - Disulfiram and Topiramate should not be used
- Nursing Mothers
  - National Institutes of Health LACTMED toxicology database suggests that if a nursing mother requires naltrexone, it is not a reason to discontinue breastfeeding
- Elderly patients
  - Same pharmacotherapy as younger adults with caution to choose therapy based on existing conditions and monitor for side effects
- Adolescents
  - No FDA approved medications

Take Away Points

- Alcohol use disorder is common and deadly.
- Pharmacotherapy is effective in the treatment of alcohol use disorder
- Naltrexone and Acamprosate are the first line FDA-approved medications and are equally effective
- Choice of medication is guided by a patients' other medical conditions, ease of administration, and cost/insurance coverage

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Questions?

megan.lemay@vcuhealth.org

Case Presentation #1
Dr. Bill Trost

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

Case Presentation #1

Dr. Bill Trost

Requesting assistance with (check all that apply):

☐ Diagnosis ☒ Medications ☒ Non-medication treatments ☐ Other

Please state your MAIN QUESTION for this patient case:

What is the best way to address chronic pain in patients enrolled in MAT?

Patient Case - Demographic Information

Sex:

◯ Male ⊗ Female

Age:

50

Current Living Situation

Case Presentation #1

Dr. Bill Trost

Education/Literacy:

◯ Less than high school diploma ◯ High School Degree/GED ⊗ Some College ◯ Associate Degree
◯ Bachelor's Degree ◯ Grad School or Higher

Employed

◯ Yes ⊗ No

Behavioral History

Does patient have social support or any significant social history?

⊗ Yes ◯ No

If Yes please explain:

Daughter is supportive.

Patient Strengths/Protective Factors

High pain tolerance, bright, able to navigate medical system, highly engaged with therapy.

Potential Barriers to Patient Care (i.e. disability, family history of substance abuse, etc.)

See above

Any cultural factors that may have an impact on this patient's situation?

◯ Yes ⊗ No

Case Presentation #1

Dr. Bill Trost

Current Substance Use

Any substance use history?

⊗ Yes ○ No

If Yes please explain:

In MAT program for the past several years.

Have any Behavioral Interventions been tried?

⊗ Yes ○ No

If Yes please explain:

Ongoing group therapy with intermittent individual therapy during most difficult months of the year (November through January).

Case Presentation #1

Dr. Bill Trost

Any comorbidities?

⊗ Yes ○ No

If Yes please explain:

Post-traumatic Stress Disorder
Major depressive disorder, recurrent, severe

Any Medications Tried for Relapse Prevention?

⊗ Yes ○ No

If Yes please explain (Specify):

Buprenorphine (See above)

Any Labs (including urine) ?

⊗ Yes ○ No

If Yes please explain (as indicated):

UDS performed at least once per month (usually twice monthly) for the past 3 years have been positive only for buprenorphine.

Case Presentation #1

Dr. Bill Trost

Is the patient involved in any Prescription Monitoring Program?

⊗ Yes ○ No

If Yes please explain pertinent findings:

Filling buprenorphine prescriptions on time and no other controls or doctor shopping.

Proposed Diagnoses

Opioid Use disorder
Chronic pain

REMINDER: Please ensure that NO patient specific identifiable information (PHI) is included in this submission. Please read, sign, and click SUBMIT when completed.

Case Presentation #2
Dr. Courtney Holmes

- 12:55pm-1:25pm [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

Case Presentation #2
Dr. Courtney Holmes

- Demographics
  - Female, 58 years old
  - Married, living with husband
  - Masters- works in dental school
- Medical History
  - Cancer survivor
  - Referred from primary care clinic for opioid misuse
  - Had been on taper but has been running out of medication early and occasionally taking more than prescribed
- Social History
  - strong social support- at home and work
  - Engaged in survivorship meeting

Case Presentation #2
Dr. Courtney Holmes

- Question
  - Start Buprenorphine? Refer for addiction treatment?
- Current Substance Use
  - Oxycontin 10 mg BID and oxycodone 5 and 10mg QID prn
- Prescription Monitoring Program Findings
  - Multiple prescriptions from 2 providers (including PCP)
- Barriers to Treatment
  - She doesn't think she has addiction
- Proposed Diagnoses
  - Does she have an OUD? Start her on buprenorphine?

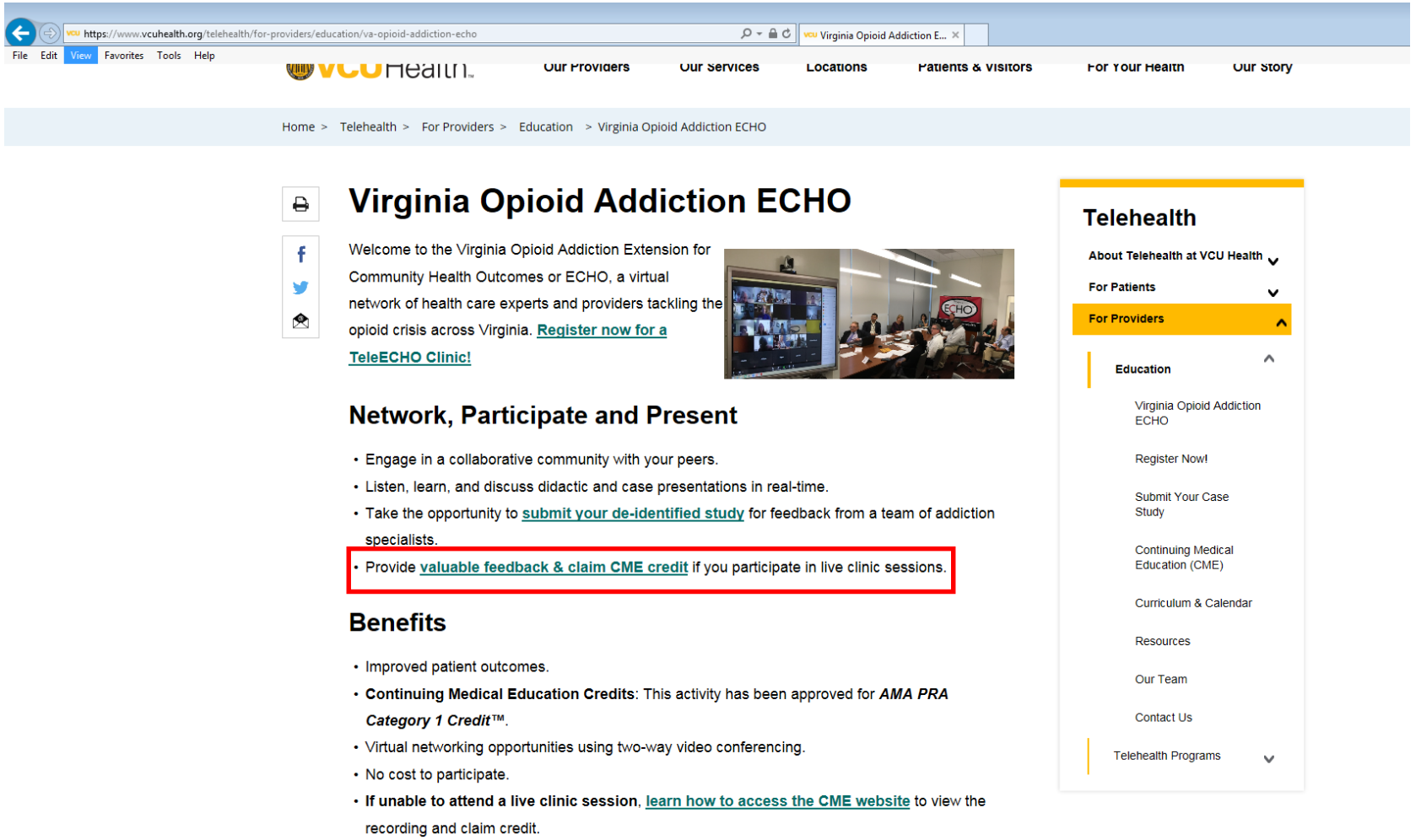
Case Studies and Feedback

- Case studies
  - Submit: www.vcuhealth.org/echo
  - Receive feedback from participants and content experts
- Opportunity to formally submit feedback
  - Survey: www.vcuhealth.org/echo
  - Overall feedback related to session content and flow?
  - Ideas for guest speakers?

Access Your Evaluation and Claim Your CME

- www.vcuhealth.org/echo
  - To claim CME credit for today's session

Access Your Evaluation and Claim Your CME



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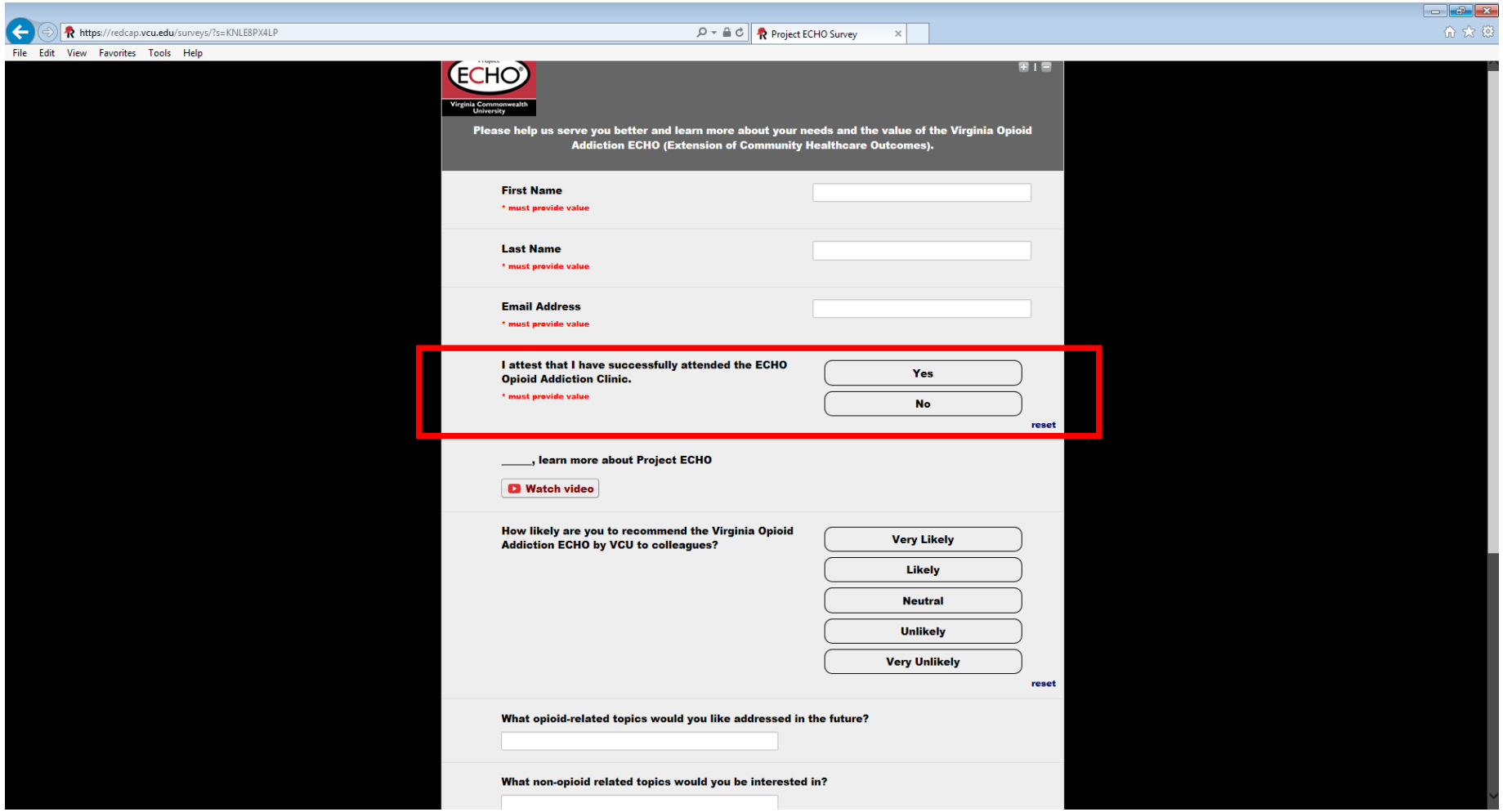
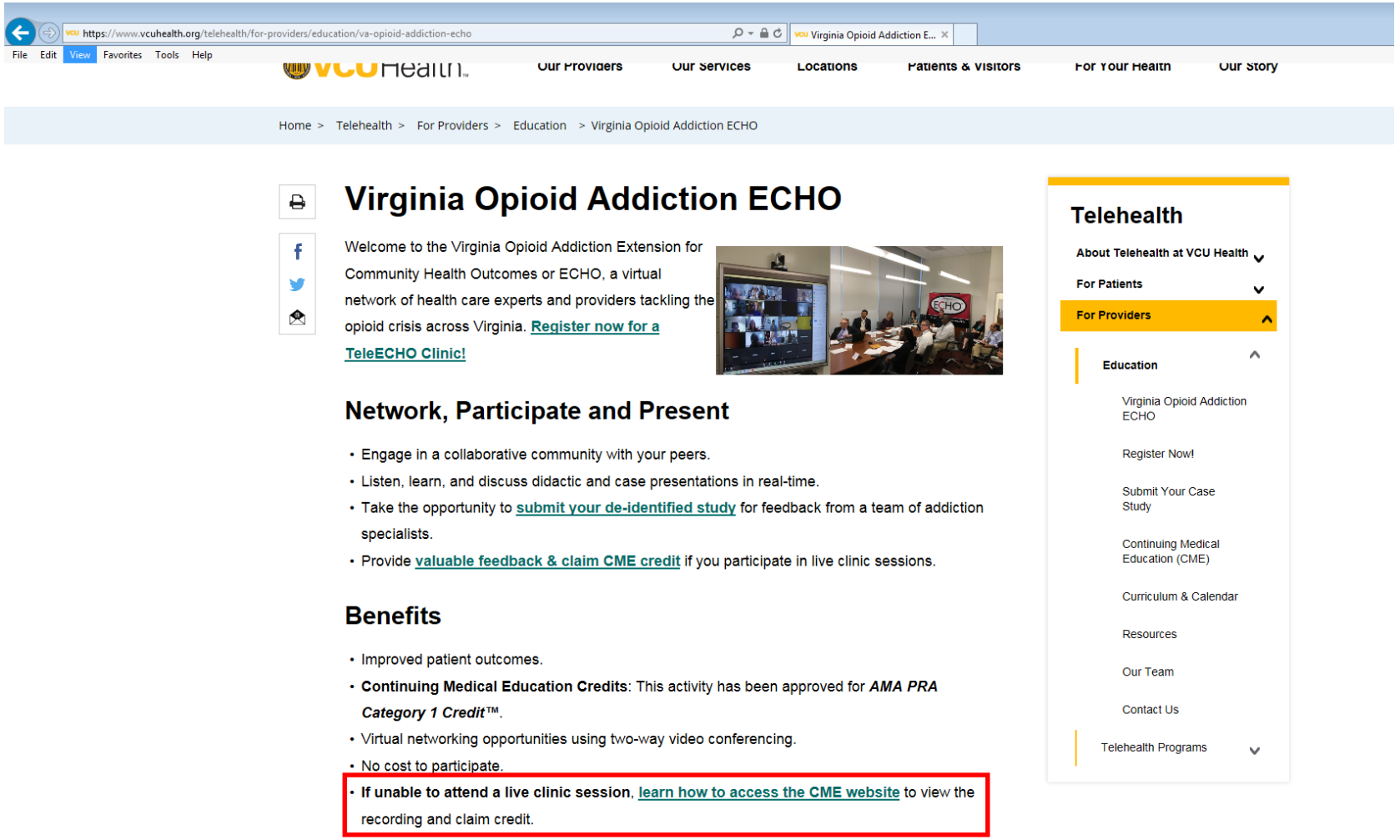


Access Your Evaluation and Claim Your CME

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

Access Your Evaluation and Claim Your CME



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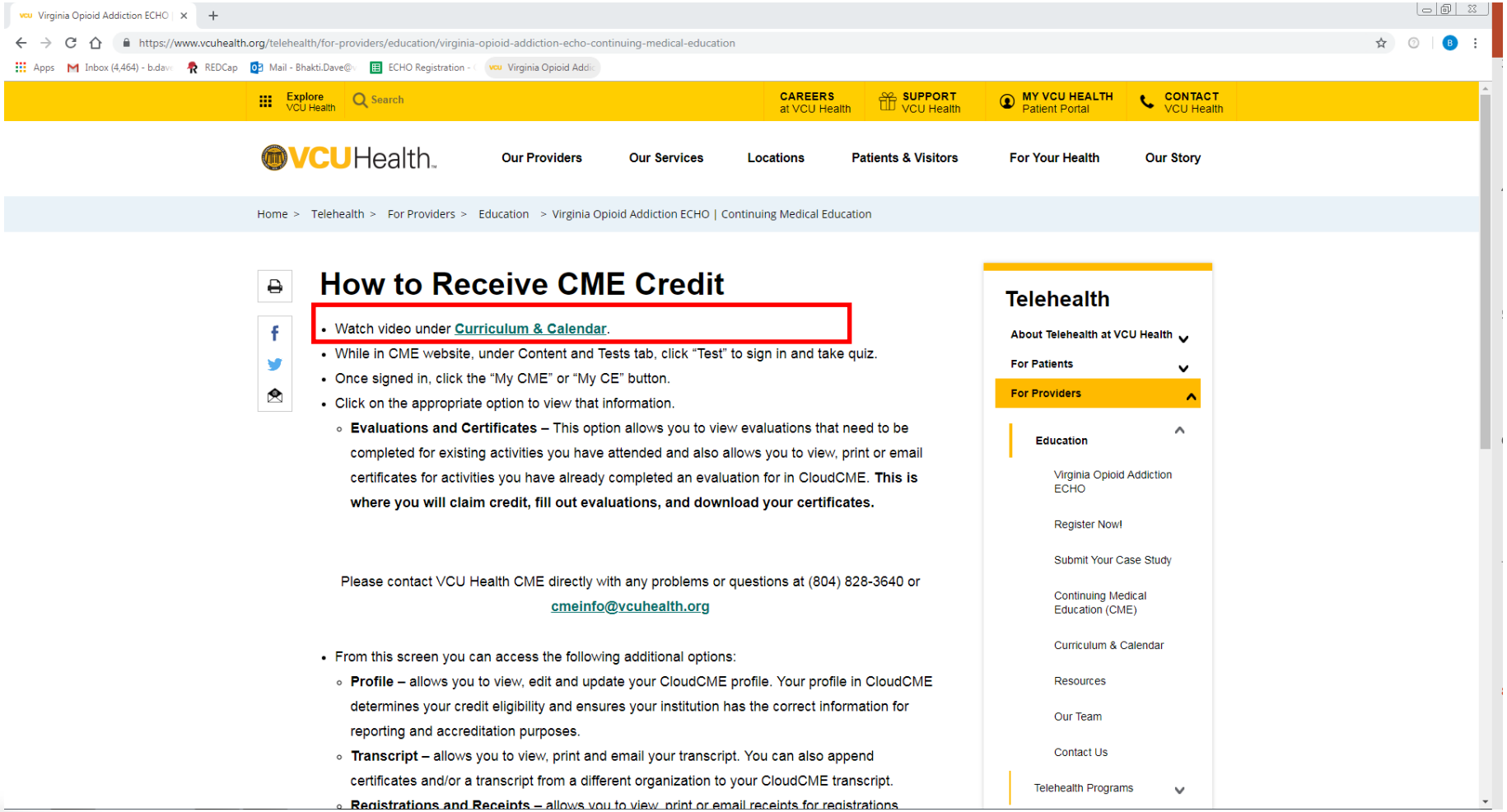

VCU Virginia Opioid Addiction TeleECHO Clinics

Bi-Weekly Fridays - 12-1:30 pm

Mark Your Calendar --- Upcoming Sessions

01/04	Trauma Informed Care and Treating Those Experiencing Opioid Addiction	Courtney Holmes, PhD
01/18	Syringe Exchange	Mishka Terplan, MD

Please refer and register at vcuhealth.org/echo

Project ECHO®
Virginia Commonwealth University

THANK YOU!

VCU