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’ feature 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

- 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](http://www.vcuhealth.org/echo)
# Hub Introductions

<table>
<thead>
<tr>
<th>VCU Team</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Director of Addiction Medicine at VCU</td>
<td>Mishka Terplan, MD, MPH, FACOG, FASAM</td>
</tr>
<tr>
<td>Administrative Medical Director ECHO Hub and Principal Investigator</td>
<td>Vimal Mishra, MD, MMCi</td>
</tr>
<tr>
<td>Clinical Expert</td>
<td>Lori Keyser-Marcus, PhD</td>
</tr>
<tr>
<td></td>
<td>Courtney Holmes, PhD</td>
</tr>
<tr>
<td>Didactic Presentation</td>
<td>Megan Lemay, MD</td>
</tr>
<tr>
<td>Program Manager</td>
<td>Bhakti Dave, MPH</td>
</tr>
<tr>
<td>Practice Administrator</td>
<td>David Collins, MHA</td>
</tr>
<tr>
<td>IT Support</td>
<td>Vladimir Lavrentyev, MBA</td>
</tr>
</tbody>
</table>
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)
### DSM 5 Diagnosis Alcohol Use Disorder.

**In the past year have you...**

<table>
<thead>
<tr>
<th>Question</th>
<th>Mild: 2-3</th>
<th>Moderate 4-5</th>
<th>Severe 6+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had times when you ended up drinking more, or longer than you intended?</td>
<td></td>
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<tr>
<td>More than once wanted to cut down or stop drinking, or tried to, but couldn’t?</td>
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<tr>
<td>Spent a lot of time drinking? Or being sick or getting over the aftereffects?</td>
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</tr>
<tr>
<td>Experienced craving — a strong need, or urge, to drink?</td>
<td></td>
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</tr>
<tr>
<td>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?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continued to drink even though it was causing trouble with your family or friends?</td>
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<td></td>
</tr>
<tr>
<td>Given up or cut back on activities that were important or interesting to you, or gave you pleasure, in order to drink?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Found that when the effects of alcohol were wearing off, you had withdrawal symptoms?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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
Mechanism of action:

- Opioid antagonist
- Decreases cravings and pleasurable effects of alcohol by decreasing opioidergic 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
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
Acamprosate

**Efficacy**

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

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

<table>
<thead>
<tr>
<th>Medication</th>
<th>Outcome</th>
<th>N Studies</th>
<th>N Subjects</th>
<th>Finding</th>
<th>SOE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acamprosate vs. naltrexone</td>
<td>Return to any drinking</td>
<td>3</td>
<td>800</td>
<td>Not significant^a</td>
<td>⬤⬤⬤</td>
</tr>
<tr>
<td></td>
<td>Return to heavy drinking</td>
<td>4</td>
<td>1,141</td>
<td>Not significant^a</td>
<td>⬤⬤⬤</td>
</tr>
<tr>
<td></td>
<td>Percentage of drinking days</td>
<td>2</td>
<td>720</td>
<td>Not significant^a</td>
<td>⬤⬤⬤</td>
</tr>
</tbody>
</table>

^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
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
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
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


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
- [x] Medications
- [x] 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
- [x] 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

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any comorbidities?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☑ Yes  ☐ No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If Yes please explain:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-traumatic Stress Disorder</td>
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<tr>
<td>Major depressive disorder, recurrent, severe</td>
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<tr>
<td>Any Medications Tried for Relapse Prevention?</td>
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<td></td>
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<tr>
<td>☑ Yes  ☐ No</td>
<td></td>
<td></td>
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<tr>
<td>If Yes please explain (Specify):</td>
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</tr>
<tr>
<td>Buprenorphine (See above)</td>
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<tr>
<td>Any Labs (including urine)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☑ Yes  ☐ No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If Yes please explain (as indicated):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDS performed at least once per month (usually twice monthly) for the past 3 years have been positive only for buprenorphine.</td>
<td></td>
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</tbody>
</table>
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

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.
- 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™.
- Virtual networking opportunities using two-way video conferencing.
- No cost to participate.
- If unable to attend a live clinic session, learn how to access the CME website to view the recording and claim credit.

Telehealth

About Telehealth at VCU Health

For Patients

For Providers
Access Your Evaluation and Claim Your CME
Access Your Evaluation and Claim Your CME

- [www.vcuhealth.org/echo](http://www.vcuhealth.org/echo)

- To view previously recorded clinics and claim credit
Access Your Evaluation and Claim Your CME

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Access Your Evaluation and Claim Your CME

How to Receive CME Credit

- Watch video under Curriculum & Calendar.
- While in CME website, under Content and Tests tab, click "Test" to sign in and take quiz.
- Once signed in, click the "My CME" or "My CE" button.
- Click on the appropriate option to view that information.
- Evaluations and Certificates – This option allows you to view evaluations that need to be completed for existing activities you have attended and also allows you to view, print or email certificates for activities you have already completed an evaluation for in CloudME. This is where you will claim credit, fill out evaluations, and download your certificates.

Please contact VCU Health CME directly with any problems or questions at (804) 828-3640 or cmeinfo@vcuhealth.org.

From this screen you can access the following additional options:
- Profile – allows you to view, edit and update your CloudME profile. Your profile in CloudME determines your credit eligibility and ensures your institution has the correct information for reporting and accreditation purposes.
- Transcript – allows you to view, print and email the transcript. You can also append certificates and/or transcript from a different organization to your CloudME transcript.
- Registrations and Receipts – allows you to view, print or download your personal registration or receipt.
VCU Virginia Opioid Addiction TeleECHO Clinics

Bi-Weekly Fridays - 12-1:30 pm

Mark Your Calendar --- Upcoming Sessions

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/04</td>
<td>Trauma Informed Care and Treating Those Experiencing Opioid Addiction</td>
<td>Courtney Holmes, PhD</td>
</tr>
<tr>
<td>01/18</td>
<td>Syringe Exchange</td>
<td>Mishka Terplan, MD</td>
</tr>
</tbody>
</table>

Please refer and register at vcuhealth.org/echo
THANK YOU!