Welcome to UVM ECHO: Treatment of Chronic Pain

Facilitators: Mark Pasanen MD, Liz Cote
May 3, 2019

www.vtahec.org
Introduction to ZOOM

• Mute microphone when not speaking
• Position webcam effectively
• Test both audio & video
• Use “chat” function for:
  • Attendance—type name and organization of each participant upon entry to each teleECHO session
  • Technical issues
• Communicate clearly:
  • Use “raise hand” feature; the ECHO team will call on you
  • Speak clearly
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**Interest Disclosures:**

- As an organization accredited by the ACCME to sponsor continuing medical education activities, UVMCMIE is required to disclose any real or apparent conflicts of interest (COI) that any speakers may have related to the content of their presentations.
No relevant disclosures

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• Charles Maclean, MD
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OBJECTIVES

- Review current recommendations for best practices for opiate prescribing and identify opportunities for improvement
- Discuss options for compassionate tapering opiates in patients who are
  - (a) no longer candidates for opiates
  - (b) not benefiting from treatment
- Incorporate function into assessment of patients with chronic pain
- Learn how to assess patients on chronic opiates for misuse
- Identify and treat psychological factors related to chronic pain

- Discuss the evidence for treating patients with interventional procedures
- Understand the role of urine drug testing in patients with chronic pain, and improve skills in interpreting these tests
- Understand the role of integrative therapies, including acupuncture
- Incorporate motivational interviewing into care of chronic pain patients
- Learn how to conduct group visits, including benefits and barriers
- Discuss the evidence for cannabinoids in the treatment of chronic pain
## 2019-2020 PROGRAM SCHEDULE

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<td>May 3, 2019</td>
<td>TeleECHO Session #1</td>
<td>• Orientation to Project ECHO&lt;br&gt;• Program Overview&lt;br&gt;• Anatomy of teleECHO Session&lt;br&gt;• Opiate-prescribing Best Practices</td>
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<tr>
<td>June 7, 2019</td>
<td>TeleECHO Session #2</td>
<td>• Compassionate Tapering</td>
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<td>July 5, 2019</td>
<td>TeleECHO Session #3</td>
<td>• Functional Assessment of Patients with Chronic Pain</td>
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<td>Aug 2, 2019</td>
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<td>TeleECHO Session #5</td>
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<td>Oct 4, 2019</td>
<td>TeleECHO Session #6</td>
<td>• Role of Interventional Pain</td>
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<td>Nov 1, 2019</td>
<td>TeleECHO Session #7</td>
<td>• Urine Drug Testing/Monitoring</td>
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<td>Dec 6, 2019</td>
<td>TeleECHO Session #8</td>
<td>• Acupuncture for Chronic Pain</td>
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<td>Jan 10, 2020</td>
<td>TeleECHO Session #9</td>
<td>• Use of Integrative Therapies for Chronic Pain</td>
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<td>Feb 7, 2020</td>
<td>TeleECHO Session #10</td>
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<td>March 6, 2020</td>
<td>TeleECHO Session #11</td>
<td>• Conducting Group Medical Visits</td>
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<td>April 3, 2020</td>
<td>TeleECHO Session #12</td>
<td>• Cannabinoids for Chronic Pain</td>
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Goals for Session 1

1. What is ECHO?
   a. Impact on care
   b. Impact on providers
   c. Format
2. Become familiar with case presentation format
3. Discuss first case – opiate continuation
4. Identify cases for subsequent sessions
5. Elicit feedback
Project ECHO

Project ECHO® is a lifelong learning and guided practice model that revolutionizes medical education and exponentially increases workforce capacity to provide best practice specialty care and reduce health disparities through its hub-and-spoke knowledge sharing networks.

- People need access to specialty care for complex conditions.
- Not enough specialists to treat everyone.
- ECHO® trains primary care clinicians to provide specialty care services.
- Patients get the right care, in the right place, at the right time.

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ECHO model is not ‘traditional telemedicine’.
Treating Physician retains responsibility for managing patient.
ECHO topics

• Common diseases

• Management is complex

• Evolving treatments and medicines

• High societal impact (health and economic)

• Serious outcomes of untreated disease

• Improved outcomes with disease management
What is Best Practice in Medicine

- Standardization
  - Algorithm
  - Check Lists
  - Process

- Wisdom Based on Experience
  - Case-based learning
  - Learn by doing
  - Volume of cases
ECHO Model

Amplification – Use Technology to leverage scarce resources

Case Based Learning to master complexity

Share Best Practices to reduce disparity

Web-based Database to Monitor Outcomes
Is ECHO effective? (Scale 1-5)

• My participation in Project ECHO benefits patients under my care whom I co-manage with ECHO specialists. 4.45

• The patients under my care whom I co-manage with ECHO specialists receive best-practice care. 4.43

• My participation in Project ECHO benefits the patients under my care whom I do not co-manage with ECHO specialists. 4.19

• Through the Project ECHO telehealth clinics, I am learning best-practice care in chronic disease. 4.68

• I am connected with peers in the ECHO telehealth clinic whose opinion I respect for professional advice and consultation 4.55

• I am developing clinical expertise through participation in Project ECHO 4.48
Other ECHO outcomes

• Enhances professional satisfaction
• Decreases professional isolation
• “Benefits my clinic”
• Expands access to treatment for patients
• Helps address limited access to specialists
What Makes ECHO Work?

- Technology
  - Force Multiplication
  - De-monopolizing Knowledge
  - Knowledge Expansion
- Team Based Care
- Task Shifting
- Interprofessional Consultation
- Guided Practice
- Mentor/Mentee Relationship
- Movement Building Vs. Organization Building
- Community of Practice (Social Network)
- Joy of Work
ECHO format

- Introductions
- Announcements
  - ZOOM etiquette
  - Review agenda
  - Follow-up
- Didactic (20-25 min)
- Case presentation
  - Spoke participant presents
  - Facilitator summarizes
- Clarifying questions
  - Participants – then hub
- Impression
- Recommendations
  - Participants – then hub
- Summary
  - Sent to presenter
- Closing Announcements
  - Submission of new cases
  - Completion of evaluations
ALL TEACH --- ALL LEARN

If a single teacher can’t teach all the subjects, then how can you expect a single student to learn all subjects?
CDC – Guideline for Prescribing Opioids for Chronic Pain

1. Opioids are not first-line
2. Establish goals for pain/function
   • Includes plan to stop if not helping
3. Discuss risks and “realistic” benefits
4. Start with immediate-release
5. Use lowest effective dosage
   • Reassess for ≥ 50 MME
   • Rare use ≥ 90 MME
6. Short duration for acute pain
7. Evaluate benefits/harm regularly
   • Never longer than 3 months
8. Use strategies to mitigate risk
9. Review PDMP (VPMS)
10. Urine drug testing before/during treatment
11. Avoid opioids/benzos together
12. Treat opioid use disorder

www.cdc.gov/drugoverdose/prescribing/guideline.html
CDC guidelines 2016

- Use alternatives to opioids if possible
- Explain the risks and benefits
  - Informed consent/treatment agreements
- Focus on function
- Start low and go slow
- Track progress carefully
  - Surveillance for misuse
- Avoid benzodiazepines
Vermont Guidelines – 2017

1. Recommend non-pharm/non-opioid treatment
   • NSAIDs, acupuncture, chiropractic, PT, osteopathic manipulation

2. Query VPMS
   • Prior to first opioid prescription (> 10 pills, includes tramadol)
   • At least annually (CDC every prescription, at least every 90 days)
   • Any replacement prescription

3. Provide patient education/informed consent
   • Includes acute pain

4. Prescribe naloxone
   • MME ≥ 90 mg or concomitant benzodiazepine

5. Two hours of CME every 2 yrs on “controlled substance prescribing”

6. Exemptions: Cancer pain, nursing home
Other VT Prescribing Rules

- **Acute pain limits**
- **VMPS annually**
  - Every 4 months for non-deterrent opioids
    - Oxycodone > 30 mg
    - Hydrocodone > 40 mg
- **Assessments of risk and function**
- **Lots of documentation**
- **Review treatment agreements Q year**
Nonpharmacologic Therapies for Low Back Pain: A Systematic Review for an American College of Physicians Clinical Practice Guideline

Roger Chou, MD; Richard Deyo, MD, MPH; Janna Friedly, MD; Andrea Skelly, PhD, MPH; Robin Hashimoto, PhD; Melissa Weimer, DO, MCR; Rochelle Fu, PhD; Tracy Dana, MLS; Paul Kraegel, MSW; Jessica Griffin, MS; Sara Grusing, BA; and Erika D. Brodt, BS

Background: A 2007 American College of Physicians guideline addressed nonpharmacologic treatment options for low back pain. New evidence is now available.

Purpose: To systematically review the current evidence on nonpharmacologic therapies for acute or chronic nonradicular or radicular low back pain.

Data Sources: Ovid MEDLINE (January 2008 through February 2016), Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, and reference lists.

Study Selection: Randomized trials of 9 nonpharmacologic options versus sham treatment, wait list, or usual care, or of 1 nonpharmacologic option versus another.

Data Extraction: One investigator abstracted data, and a second checked abstractions for accuracy; 2 investigators independently assessed study quality.

Data Synthesis: The number of trials evaluating nonpharmacologic therapies ranged from 2 (tai chi) to 121 (exercise). New evidence indicates that tai chi (strength of evidence [SOE], low) and mindfulness-based stress reduction (SOE, moderate) are effective for chronic low back pain and strengthens previous findings regarding the effectiveness of yoga (SOE, moderate). Evidence continues to support the effectiveness of exercise, psychological therapies, multidisciplinary rehabilitation, spinal manipulation, massage, and acupuncture for chronic low back pain (SOE, low to moderate). Limited evidence shows that acupuncture is modestly effective for acute low back pain (SOE, low). The magnitude of pain benefits was small to moderate and generally short term; effects on function generally were smaller than effects on pain.

Limitation: Qualitatively synthesized new trials with prior meta-analyses, restricted to English-language studies; heterogeneity in treatment techniques; and inability to exclude placebo effects.

Conclusion: Several nonpharmacologic therapies for primarily chronic low back pain are associated with small to moderate, usually short-term effects on pain; findings include new evidence on mind-body interventions.

Primary Funding Source: Agency for Healthcare Research and Quality. (PROSPERO: CRD42014014735)


For author affiliations, see end of text.
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Systemic Pharmacologic Therapies for Low Back Pain: A Systematic Review for an American College of Physicians Clinical Practice Guideline

Roger Chou, MD; Richard Deyo, MD, MPH; Janna Friedly, MD; Andrea Skelly, PhD, MPH; Melissa Weimer, DO, MCR; Rochelle Fu, PhD; Tracy Dana, MLS; Paul Kraegel, MSW; Jessica Griffin, MS; and Sara Grusing, BA

Background: A 2007 American College of Physicians guideline addressed pharmacologic options for low back pain. New evidence and medications have now become available.

Purpose: To review the current evidence on systemic pharmacologic therapies for acute or chronic nonradicular or radicular low back pain.

Data Sources: Ovid MEDLINE (January 2008 through November 2016), Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, and reference lists.

Study Selection: Randomized trials that reported pain, function, or harms of systemic medications versus placebo or another intervention.

Data Extraction: One investigator abstracted data, and a second verified accuracy; 2 investigators independently assessed study quality.

Data Synthesis: The number of trials ranged from 9 (benzodiazepines) to 70 (nonsteroidal anti-inflammatory drugs). New evidence found that acetaminophen was ineffective for acute low back pain, nonsteroidal anti-inflammatory drugs had smaller benefits for chronic low back pain than previously observed, duloxetine was effective for chronic low back pain, and benzodiazepines were ineffective for radiculopathy. For opioids, evidence remains limited to short-term trials showing modest effects for chronic low back pain; trials were not designed to assess serious harms. Skeletal muscle relaxants are effective for short-term pain relief in acute low back pain but caused sedation. Systemic corticosteroids do not seem to be effective. For effective interventions, pain relief was small to moderate and generally short-term; improvements in function were generally smaller. Evidence is insufficient to determine the effects of antiseizure medications.

Limitations: Qualitatively synthesized new trials with prior meta-analyses. Only English-language studies were included, many of which had methodological shortcomings. Medications injected for local effects were not addressed.

Conclusion: Several systemic medications for low back pain are associated with small to moderate, primarily short-term effects on pain. New evidence suggests that acetaminophen is ineffective for acute low back pain, and duloxetine is associated with modest effects for chronic low back pain.

Primary Funding Source: Agency for Healthcare Research and Quality. (PROSPERO: CRD42014014735)
Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain
The SPACE Randomized Clinical Trial

Erin E. Krebs, MD, MPH; Amy Gravely, MA; Sean Nugent, BA; Agnes C. Jensen, MPH; Beth DeRenne, PharmD; Elizabeth S. Goldsmith, MD, MS; Kurt Kroenke, MD; Matthew J. Baire; Siamak Noohaboochi, PhD

DESIGN, SETTING, AND PARTICIPANTS Pragmatic, 12-month, randomized trial with masked outcome assessment. Patients were recruited from Veterans Affairs primary care clinics from June 2013 through December 2015; follow-up was completed December 2016. Eligible patients had moderate to severe chronic back pain or hip or knee osteoarthritis pain despite analgesic use. Of 265 patients enrolled, 25 withdrew prior to randomization and 240 were randomized.

INTERVENTIONS Both interventions (opioid and nonopioid medication therapy) followed a treat-to-target strategy aiming for improved pain and function. Each intervention had its own prescribing strategy that included multiple medication options in 3 steps. In the opioid group, the first step was immediate-release morphine, oxycodone, or hydrocodone/acetaminophen. For the nonopioid group, the first step was acetaminophen (paracetamol) or a nonsteroidal anti-inflammatory drug. Medications were changed, added, or adjusted within the assigned treatment group according to individual patient response.

RESULTS Among 240 randomized patients (mean age, 58.3 years; women, 32 [13.0%]), 234 (97.5%) completed the trial. Groups did not significantly differ on pain-related function over 12 months (overall P = .58); mean 12-month BPI interference was 3.4 for the opioid group and 3.3 for the nonopioid group (difference, 0.1 [95% CI, −0.5 to 0.7]). Pain intensity was significantly better in the nonopioid group over 12 months (overall P = .03); mean 12-month BPI severity was 4.0 for the opioid group and 3.5 for the nonopioid group (difference, 0.5 [95% CI, 0.0 to 1.0]). Adverse medication-related symptoms were significantly more common in the opioid group over 12 months (overall P = .03); mean medication-related symptoms at 12 months were 1.8 in the opioid group and 0.9 in the nonopioid group (difference, 0.9 [95% CI, 0.3 to 1.5]).

CONCLUSIONS AND RELEVANCE Treatment with opioids was not superior to treatment with nonopioid medications for improving pain-related function over 12 months. Results do not support initiation of opioid therapy for moderate to severe chronic back pain or hip or knee osteoarthritis pain.
Managing Opioids Safely and within Vermont Rules

SUMMARY FOR MEDICAL AND DENTAL PRESCRIBERS

Recommend Non-Opioid and Non-Pharmacological Treatment
• Nonsteroidal anti-inflammatory drugs (NSAIDs) and/or acetaminophen
• Acupuncture
• Chiropractic
• Physical therapy
• Yoga

Only prescribe opioids if expected benefits for both pain and function are anticipated to outweigh risks to the patient. If opioids are used, combine with non-opioid alternatives.

Query the Vermont Prescription Monitoring System (VPMS)†
First-time Prescriptions:
• Prior to writing a first opioid prescription for greater than 10 pills (e.g., opioids, tramadol)
• Prior to writing a first prescription for a benzodiazepine, buprenorphine, or methadone
• Prior to starting a patient on a chronic opioid (90+ days) for non-palliative therapy
Re-evaluation: At least annually (at least twice annually for buprenorphine)
• Centers for Disease Control (CDC) recommendation: every prescription, or at least every 90 days
Replacement: Prior to writing a replacement (e.g., lost, stolen) of any scheduled II-IV controlled substance

Provide Patient Education and Obtain Informed Consent
Discuss Risks in person with the patient or legal representative regarding potential side effects, risks of dependence and overdose, alternative treatments, appropriate tapering, and safe storage and disposal of opioids
• CDC: Establish realistic treatment goals for pain and function and establish patient and clinician responsibilities for managing therapy, including when to discontinue therapy

Provide Written Patient Education: Use the Vermont Department of Health (VDH) Opioid Patient Information Sheet or a handout that contains all of the same information at a 5th grade reading level or lower.

Obtain a Signed Informed Consent document from the patient or legal representative that contains all of the required elements stated in the Opioid Prescribing Rule, section 4.3.3.1.

Use Available Resources: The Opioid Patient Information Sheet and an example informed consent document are available in multiple languages and may be found online at www.healthvermont.gov/news/information-resources/translated-information/language. Additional resources may be found at: www.healthvermont.gov/alcohol-drugs/professionals/help-me-stay-informed and www.cdc.gov/drugoverdose

Prescribe Nasal Naloxone when Indicated
High Dose: 90+ Morphine Milligram Equivalent (MME) per day
Contraindicated benzodiazepine Patients prescribed both an opioid and a benzodiazepine (CDC recommends avoiding these combination s)
• CDC: History of overdose, history of substance use disorder, 50+ MME per day prescriptions

Arrange for Evidence-based Treatment for Patients with Opioid Use Disorder
• CDC: Offer evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder

Morphine Milligram Equivalents

<table>
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<tr>
<th>OPIOID</th>
<th>CONVERSION FACTOR</th>
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<tbody>
<tr>
<td>Codeine</td>
<td>0.15</td>
</tr>
<tr>
<td>Fentanyl transdermal (in mcg/hr)</td>
<td>2.4</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>1</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>4</td>
</tr>
<tr>
<td>Methadone</td>
<td></td>
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<tr>
<td>1-20 mg/day</td>
<td>4</td>
</tr>
<tr>
<td>21-40 mg/day</td>
<td>8</td>
</tr>
<tr>
<td>41-60 mg/day</td>
<td>10</td>
</tr>
<tr>
<td>≥ 61-80 mg/day</td>
<td>12</td>
</tr>
<tr>
<td>Morphine</td>
<td>1</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>1.5</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>3</td>
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*These dose conversions are estimated and cannot account for all individual differences in genetics and pharmacokinetics.*

**HOW MUCH IS 50 OR 90 MME/DAY FOR COMMONLY PRESCRIBED OPIOIDS?**

**50 MME/day:**
- 50 mg of hydrocodone (10 tablets of hydrocodone/acetaminophen 5/300)
- 33 mg of oxycodone (~2 tablets of oxycodone sustained-release 15 mg)
- 12 mg of methadone (~3 tablets of methadone 5 mg)

**90 MME/day:**
- 90 mg of hydrocodone (9 tablets of hydrocodone/acetaminophen 10/325)
- 60 mg of oxycodone (~2 tablets of oxycodone sustained-release 30 mg)
- ~20 mg of methadone (~4 tablets of methadone 5 mg)
Cases/HIPAA

• Names
• Address
• DOB
• Phone/Fax #
• Email address
• Social Security #
• Medical Record #
Case # 1

See Case Presentation Form
Case # 1 Summary

37-year-old with chronic axial low back pain, depression
- MRI with disc herniation, foraminal narrowing
- S/P epidural steroids, medial branch block, RFA with some benefit
- Been on long-term MS IR 15-30 mg TID (MME 60 mg/day)

Questions:
- Continue opiates?
- If so, change to long-acting?
- Other interventions/meds that might help?
- What else do I need to be doing (UDT, VPMS, treatment agreements, screening for abuse)
Conclusion

• Volunteers to present cases (this is key to the Project ECHO model)
  • Use the case template form posted at www.vtahec.org
  • Return completed case forms to mark.pasanen@uvmhealth.org

• Please complete evaluation survey after each session

• Claim your CME at www.highmarksce.com/uvmmmed

• Please contact us with any questions/concerns/suggestions
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