UVM Project ECHO: Adult Complex Mental Health

Course Co-Directors:  Mark Pasanen, MD
                      Sara Pawlowski, MD

ECHO Director:       Elizabeth Cote

Series Faculty:      Evan Eyler, MD,MPH
                    Suzanne Kennedy, MD
                    Jess Oehlke, MD
                    Kathy Mariani, MD
                    Jennifer Hall, DO
                    Jessica O’Neil, DO
“Introduction” to ZOOM

- Please mute microphone when not speaking
- Please use camera as much as possible
- Test both audio & video before joining
- Communicate clearly during session:
  - Can use “raise hand” feature to comment
  - Use chat function for questions, comments or technical issues
RECORDING OF SESSION TO BEGIN
Series Objectives

Learning objectives for this ECHO series include the ability to:

• Enhance diagnostic skills in patients with complex mental health issues

• Incorporate new treatment strategies into management of common but challenging mental health disorders

• Improve the care that patients with mental health issues receive in the primary care setting
Session Agenda

• Welcome
• Objectives
• Didactic Presentation (30-35 min)
• Case presentation(s)
  • Clarifying questions
  • Participants – then faculty panel
• Discussion
• Recommendations
• Closing Announcements
  • Submission of new cases
  • Completion of evaluations
CMIE Disclosures

University of Vermont (UVM) Office of Continuing Medical and Interprofessional Education (CMIE) is approved as a provider of Continuing Medical Education (CME) by the ACCME. UVM designates this internet live activity for a maximum of 1.5 AMA PRA Category 1 Credits.

UVM CMIE is accredited by the American Nurses Credentialing Center (ANCC) to provide CE for the healthcare team. This program has been reviewed and is acceptable for up to 1.5 Nursing Contact Hours.

As a Jointly Accredited Organization, The Robert Larner College of Medicine at the University of Vermont is approved to offer social work continuing education by the Association of Social Work Boards (ASWB) Approved Continuing Education (ACE) program. Organizations, not individual courses, are approved under this program. State and provincial regulatory boards have the final authority to determine whether an individual course may be accepted for continuing education credit. The University of Vermont maintains responsibility for this course. Social workers completing this course receive 1.5 continuing education credits.

This activity was planned by and for the healthcare team, and learners will receive 1.5 Interprofessional Continuing Education (IPCE) credit for learning and change.

Participants should claim only the credit commensurate with the extent of their participation in the activity.
CMIE Disclosures

**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.

**Meeting Disclaimer:** Regarding materials and information received during this educational event, the views, statements, and recommendations expressed during this activity represent those of the authors and speakers and do not necessarily represent the views of the University of Vermont.
Bipolar Disorders treatment

Suzanne Kennedy, MD
C/L Psychiatrist Dept. of Neurology
June 8, 2022
Overview of Treatment

• What phase?
• Level of care required
• Hospitalization - involuntary vs voluntary
• Psychosocial Interventions
• Psychopharmacology
• Monitoring
• Relapse prevention
Latest Guidelines for BD treatment

• Limitations of studies on Bipolar Disorder
  • Patient selection, exclusions, RCT vs placebo, duration of trials
• CANMAT (2018) in conjunction with ISBD
• University of South Florida - Best Practice Guidelines
• Beyond evidence-based treatment of bipolar disorder:
  • Rational pragmatic approaches to management (Robert M. Post et al)
## Psychosocial Interventions (CANMAT)

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Maintenance</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychoeducation</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; line</td>
<td>insuff</td>
</tr>
<tr>
<td>CBT</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; line</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; line</td>
</tr>
<tr>
<td>Family focused (FFT)</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; line</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; line</td>
</tr>
<tr>
<td>IPSRT</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt; line</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt; line</td>
</tr>
<tr>
<td>Peer support</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt; line</td>
<td>insuff</td>
</tr>
<tr>
<td>DBTMBCT</td>
<td>insuff</td>
<td>insuff</td>
</tr>
<tr>
<td>Cognitive and functional remediation</td>
<td>insuff</td>
<td>insuff</td>
</tr>
<tr>
<td>Family/caregiver interventions</td>
<td>insuff</td>
<td>insuff</td>
</tr>
</tbody>
</table>
Table 1  FDA-approved medications for bipolar disorder

<table>
<thead>
<tr>
<th>Drug Type</th>
<th>Generic Name First Date Approved</th>
<th>FDA–Listed Trade Name (Pharmaceutical Co.)</th>
<th>Manic</th>
<th>Mixed (Mania/Depression)</th>
<th>Mainte-nance</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salts</td>
<td>Lithium 1970</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Atypical Antipsychotics</td>
<td>Aripiprazole 2004</td>
<td>Abilify (Otsuka)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Asenapine 2015</td>
<td>Saphris (Organon Sub Merck)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cariprazine 2015</td>
<td>Vraylar (Forest)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lurasidone 2013</td>
<td>Latuda (Sunovion Pharm)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Olanzapine* 2000</td>
<td>Zyprexa (Lilly)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Olanzapine/fluoxetine combination* 2012</td>
<td>Symbyax (Lilly)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quetiapine 2004</td>
<td>Seroquel (AstraZeneca)</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Risperidone 2003</td>
<td>Risperdal (Janssen Pharm)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ziprasidone 2004</td>
<td>Geodon (Pfizer)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anticonvulsants</td>
<td>Carbamazepine* 2004</td>
<td>Carbretol (Shire), Epitol (TEVA), Equetro (Validus Pharm), Tegretol (Novartis), Teril (Taro)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lamotrigine* 2003</td>
<td>Lamictal (GlaxoSmithKline)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Divalproex sodium* or valproate 1995</td>
<td>Depakote (ABBVIE)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lamotrigine* 2003</td>
<td>Lamictal (GlaxoSmithKline)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

* Generic forms are available. FDA=Food and Drug Administration
1st and 2nd line treatment for acute mania

• Treatments FDA approved:
  • Lithium (1970) - 1st line
  • Divalproex sodium/Valproate (1995) - 1st line
  • Olanzapine (2000)* - 2nd line
  • Risperidone (2003)* - 2nd line
  • Carbamazepine (2004)* - 2nd line
  • Aripiprazole (2004)* - 1st line
  • Quetiapine (2004) -1st line
  • Ziprasidone (2004)* - 2nd line
  • Asenapine (2015)* - 1st line
  • Cariprazine (2015)

• Additional options:
  • Li + Val
  • Paliperidone - 1st line
  • Li/Val +antipsychotic - 1st line
  • CBZ - 2nd line
1\textsuperscript{st} and 2\textsuperscript{nd} line treatment of BDI depression

- Treatments with FDA approval:
  - Quetiapine (2004)- 300mg/d - 1\textsuperscript{st} line
  - Olanzapine/fluoxetine (2012) - 2\textsuperscript{nd} line
  - Lurasidone (2013) mono or with Val/Li - 1\textsuperscript{st} line
  - Cariprazine (2019)

- Others:
  - Valproate - 2\textsuperscript{nd} line
  - Val/Li + lurasidone - 2\textsuperscript{nd} line
  - Lamotrigine (as add on to Li/Val) - 1\textsuperscript{st} line
  - Lithium - 1\textsuperscript{st} line

- \textit{NO antidepressants (unless Li /Val already in place)}
1\textsuperscript{st} and 2\textsuperscript{nd} line treatment for maintenance

- Treatments with FDA approval:
  - Lithium (1970) - 1\textsuperscript{st} line GOLD STANDARD
  - Olanzapine (2000) - 2\textsuperscript{nd} line
  - Lamotrigine (2003) - 1\textsuperscript{st} line (esp if more depressive episodes vs mania)
  - Lurasidone (2013)
- Additional considerations:
  - Quetiapine - 1\textsuperscript{st} line
  - Valproate - 1\textsuperscript{st} line
  - Aripiprazole - 1\textsuperscript{st} line
  - Asenapine - 1\textsuperscript{st} line
  - Combination: Li/Val + antipsychotic
  - Carbamazepine
  - Medication that led to stability of acute phase
  - Long acting medications
  - Lifestyle/age/family planning/FHx
<table>
<thead>
<tr>
<th>Level of evidence by phase of treatment</th>
<th>Considerations for treatment selection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>First-line treatments</td>
<td></td>
</tr>
<tr>
<td>Lithium</td>
<td></td>
</tr>
<tr>
<td>Quetiapine</td>
<td></td>
</tr>
<tr>
<td>Divalproex</td>
<td></td>
</tr>
<tr>
<td>Lamotrigine</td>
<td></td>
</tr>
<tr>
<td>Asenapine</td>
<td></td>
</tr>
<tr>
<td>Quetiapine + Li/DVP</td>
<td></td>
</tr>
<tr>
<td>Aripiprazole + Li/DVP</td>
<td></td>
</tr>
<tr>
<td>Aripiprazole</td>
<td></td>
</tr>
<tr>
<td>Aripiprazole OM</td>
<td></td>
</tr>
<tr>
<td>Second-line treatments</td>
<td></td>
</tr>
<tr>
<td>Olanzapine</td>
<td></td>
</tr>
<tr>
<td>Risperidone LAI</td>
<td></td>
</tr>
<tr>
<td>Risperidone LAI (adj)</td>
<td></td>
</tr>
<tr>
<td>Carbamazepine</td>
<td></td>
</tr>
<tr>
<td>Paliperidone (&gt;6 mg)</td>
<td></td>
</tr>
<tr>
<td>Lurasidone + Li/DVP</td>
<td></td>
</tr>
<tr>
<td>Ziprasidone + Li/DVP</td>
<td></td>
</tr>
</tbody>
</table>

DVP, divalproex; LAI, long-acting injectable; Li, lithium; OM, once monthly.
- ●, level 1 evidence; ○, level 2 evidence; □, level 3 evidence; △, level 4 evidence; ■, level 1 negative evidence; □, level 2 negative evidence; △, level 3 negative evidence; ○, level 4 negative evidence; n.d., no data; - limited impact on treatment selection; +, minor impact on treatment selection; ++, moderate impact on treatment selection; ++++, significant impact on treatment selection.

Did not separate from placebo in those with index mania; no studies available in index depression.

Did not separate on core symptoms of depression.

Divalproex and carbamazepine should be used with caution in women of child bearing age.

Trend for superiority on the primary efficacy measure, hence the lower rating.

Effective in those with an index episode of depression.
Risk factors for reduced adherence

• Male, younger age, lower education, single
• Reduced insight, negative view of meds, fear of s/e, lower cog functioning
• Comorbid cannabis, alcohol, OCD
• No social activities, work impairment
• Younger age of onset, recent hospitalizations, suicide attempts
• Mixed episode, rapid cycling, more severe symptoms
• Side effects
Lithium

- **Gold Standard** (esp if “classic” mania, distinct cycles, FHx of response)
- Found in all rocks - gradual into soil, vegetables, grains, drinking water
- 1949 - Dr. John Cade (Australia)
- 1960s - use in US
- 1970 - FDA approval in US
- 1977 - kidney damage on autopsy
- Gradual decline in prescribing in US in favor of anticonvulsants and antipsychotics
Lithium

• Proposed mechanism of action:
  • Reduction in intracellular conc of Na, Ca
  • Decreases Na dependent intracellular 2\textsuperscript{nd} messenger systems
  • Decreases activity of protein kinase C
  • Modulation of DA and 5HT pathways
  • Reduces turnover of arachidonic acid
  • Neuroprotective effects through NMDA

• Protective against suicide

• Dosage: 900-1200mg/d (acute) 400-1200mg/d (maintenance)

• Serum levels (TROUGH- 12h post dose)
  • 0.6-1.0 mmol/L (min effective plasma level: 0.4)
  • Maintenance: 0.5-0.8 mmol/L
Lithium side effects/risks

- Most are dose related
- GI - nausea
- Tremor (up to 25%)
- Polyuria/polydipsia - may be worse if BID dosing (up to 60%)
- Cognitive dulling
- Weight gain/edema (up to 50%)
- Acne/psoriasis exacerbation
- Hypothyroidism (up to 30%)
- Renal damage (esp if prior toxicity, higher levels, age, other meds)
- EKG changes (T-wave flattening/inversion)
- Narrow therapeutic window (toxicity: N/V, diarrhea, confusion, slurred speech, ataxia, seizures)
- Drug interactions (ACEI, diuretics, NSAIDs, CBZ)
Valproate/Divalproex sodium

• Mechanism of action:
  • Inhibits catabolism of GABA
  • Reduces turnover of arachidonic acid
  • Activates extracellular signal regulated kinase
  • Promotes BDNF expression
• Best for: mixed features, concurrent substance use, risk of non-adherence, impulsivity, BD due to gen medical condition
• Plasma level: 50-100mg/L
• Dosing: +/- loading dose (range:750-1500mg/d)
  • ER prep 25% lower availability
• S/E - sedation, GI, elevated ammonia, wt gain, tremor (1/4), hair loss, thrombocytopenia, hepatotoxicity, pancreatitis, ?PCOS
2\textsuperscript{nd} and 3\textsuperscript{rd} generation antipsychotics

• “Atypical” because less EPS; bind targets \textit{other} than D2 receptors
• Most are once daily
• Several have long acting preparations
• Risks:
  • Cardiac
    • QTc prolongation(ziprasidone); hypotension/sinus and reflex tachycardia (risperidone,quetiapine)
  • Metabolic syndrome
  • Cognitive dulling
  • TD, EPS
• Increased prescribing. Est prevalence of TD: 20%
Carbamazepine

• Approved for mania, rapid cycling, maintenance

• Mechanism of action:
  • anti-kindling, GABA-nergic activity, blocks voltage dep Na channels (possibly Ca, K channels)

• Dosage: 200-1600mg/d

• Plasma level: 4-12 mg/L

• Drug interactions: induces own metabolism (1A3, 3A4)

• Side effects:
  • Sedation(11%), tremor (up to 50%), LFT elevation (10%), leukopenia (10%)
<table>
<thead>
<tr>
<th>Medication</th>
<th>Dosing Information</th>
<th>Common adverse effects</th>
<th>Monitoring recommendations</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antipsychotics, atypical Antipsychotics (Abilify)</td>
<td>Varies</td>
<td>Somnia, dry mouth, extrathyroidal effects, akathisia, tardive dyskinesia, weight gain, hyperpyrexia, leukopenia, manic episode, sexual dysfunction</td>
<td>Lipid profile, fasting blood glucose level, waist circumference, body weight, and CBC in patients with prior clinically significant leukopenia; measure at baseline, monthly in the first three months of therapy, then every three months thereafter</td>
<td>Quetiapine, risperidone, and ziprasidone increase risk of extrapyramidal effects. Antipsychotics is the only atypical antipsychotic not associated with dyslipidemia, but it is associated with akathisia. Caution should be used when decreasing dosages because rebound anxiety and psychosis are possible. Increase risk of death in older patients with dementia*</td>
</tr>
<tr>
<td>Antipsychotics, typical</td>
<td>2 to 5 mg intramuscularly for acute episode; may repeat every hour as needed until symptoms are controlled; switch to oral form as soon if feasible. Initial dose is based on patient's age and severity of symptoms; dosage rarely should exceed 100 mg in 24 hours. No recommendation for use after acute episode</td>
<td>Insomnia, restlessness, anxiety, sedation, headache, seizures, weight gain, psychosis, hypotension, tardive dyskinesia, extrapyramidal effects, depression, QT prolongation, leukopenic malignant syndrome, pneumonia, blood dyscrasia, hyperprolactinemia</td>
<td>CBC (in patients with prior clinically significant leukopenia) at baseline and monthly in the first three months of therapy</td>
<td>Torsades de pointes possible, particularly with higher than recommended dosages</td>
</tr>
<tr>
<td>Haloperidol lactate (Haldol)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzodiazepines Lorazepam (Ativan)</td>
<td>0.5 to 2 mg orally or intramuscularly, up to 4 mg per day. Reduce dose by 50 percent in patients who are older and ill-frail, patients taking valproate, and patients with hepatic or renal disease.</td>
<td>Sedation, nausea, blood dyscrasia, extrapyramidal effects, agitation, anorexia, agitation, anxiety, cognitive impairment, respiratory depression, hypotension, syndrome of inappropriate antidiuretic hormone</td>
<td>Periodic CBC and liver function testing for patients on long-term therapy</td>
<td>Contraindicated in patients with myasthenia gravis or acute narcolepsy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Avoid in patients with history of substance abuse</td>
</tr>
<tr>
<td>Carbamazepine (Tegretol)</td>
<td>200 to 1,600 mg orally per day. Begin with 200 mg twice per day, adjusting every day by 200 mg as tolerated. Titrates to serum level of 4 to 12 mcg per mL.</td>
<td>Headache, fatigue, renal insufficiency, ataxia, rash, including Stevens-Johnson syndrome and toxic epidermal necrolysis; leukopenia, hypotension, hyperuricemia</td>
<td>Serum carbamazepine levels every one to two weeks initially, then every three to six months or before and after dosage changes</td>
<td>Continuous long-term use not recommended</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Paradoxical reactions are more likely in children and older persons; risk of suicide after discontinuation is greater in patients with preexisting seizure disorder and in those taking antidepressants</td>
</tr>
<tr>
<td>Divalproex (Depakote), valproic acid (Depakene)</td>
<td>Target dose: 1,000 to 3,000 mg orally per day. 15 to 20 mg/kg per day in patients with acute mania, may also start with 500 to 750 mg per day in divided doses and adjust every two to three days as tolerated. Titrates to serum level of 50 to 125 mcg per mL.</td>
<td>Tremor, sedation, weight gain, nausea, diarrhea, hair loss, blood dyscrasia, thrombocytopenia, elevated liver transaminase levels, hepatic failure,* pancreatitis,* polycystic ovary syndrome</td>
<td>Serum valproate levels every one to two weeks initially, then every three to six months or before and after dosage changes</td>
<td>Slower titration mitigates adverse effects. Hypotension occurs in up to 40 percent of patients</td>
</tr>
<tr>
<td>Lamotrigine (Lamictal)</td>
<td>200 mg orally per day. Begin with 25 mg per day, and titrate over six weeks; titration and dosage adjustments differ for those taking valproic acid, carbamazepine, phenytoin (Dilantin), phenobarbital, primidone (Mysoline), rifampin, and oral contraceptives.</td>
<td>Dizziness, tremor, somnolence, headache, dry mouth, nausea, rash, including Stevens-Johnson syndrome and toxic epidermal necrolysis; leukopenia, thrombocytopenia, pancreatitis, aseptic meningitis</td>
<td>CBC and liver function testing monthly for the first two months, then every three to 12 months thereafter</td>
<td>The incidence of skin rash is reduced with slow titration and by not exceeding the recommended dosage. Incidence of serious rash in adults is 0.08 percent with monotherapy</td>
</tr>
<tr>
<td>Lithium</td>
<td>900 to 1,800 mg orally per day. Begin with up to 300 mg twice per day, and adjust dosage every two or three days as tolerated; titrate to serum level of 0.6 to 1.5 mg per L.</td>
<td>Thirst, polyuria, cognitive effects, sedation, tremor, weight gain, diarrhea, nausea, hypothyroidism, diabetes insipidus</td>
<td>Serum lithium levels every one to two weeks initially, then every three to six months thereafter or before and after dosage changes. Thyroid function testing! and renal indices every two or three months in the first six months of therapy, then every six to 12 months thereafter</td>
<td>Toxicity is dose dependent; overdose can be fatal*. Incidence of hypothyroidism is higher in women and increases with age. High rates of withdrawal compared with valproate and lamotrigine in maintenance therapy</td>
</tr>
</tbody>
</table>

CBC = complete blood count.

*—U.S. Food and Drug Administration boxed warning.

†—Thyroid-stimulating hormone, total thyroid, thyroid uptake.

Information from references 6, and 48 through 54.
Insight

• Debriefing, counseling post episode (esp mania)
• Insight development (reflection on videos/journals)
• Prevention of relapse
• Planning for next time
• Advanced directives (Ulysses clause)
• Financial safeguards
• Role of spouse/family in follow up appointments/access to providers
• Job limitations
• Self monitoring (mood/sleep/stress)
• Family planning
Resources

• Depression and Bipolar Alliance
  • Dbsalliance.org

• CANMAT guidelines

• International Bipolar Foundation
  • Ibpf.org

• APA guidelines

• University of South Florida - Best Practice Guidelines

• Bipolar care givers - U of Melbourne (bipolarcaregivers.org)
RECORDING OF SESSION TO END
CASES

DO NOT INCLUDE:

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

The discussion and materials included in this conference are confidential and privileged pursuant to 26VSA Section 1441-1443. This material is intended for use in improving patient care. It is privileged and strictly confidential and is to be used only for the evaluation and improvement of patient care.
Case Slides
**SESSIONS ARE ON WEDNESDAYS FROM 12:00PM TO 1:30PM**

<table>
<thead>
<tr>
<th>Dates</th>
<th>Session</th>
<th>Didactic Topics (in addition to case review)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 19</td>
<td>TeleECHO Session 1</td>
<td>Attention Deficit Disorder – Diagnosis (Sara Pawlowski, MD)</td>
</tr>
<tr>
<td>Feb 2</td>
<td>TeleECHO Session 2</td>
<td>Attention Deficit Disorder – Management (Sara Pawlowski, MD)</td>
</tr>
<tr>
<td>Feb 16</td>
<td>TeleECHO Session 3</td>
<td>Resistant Depression (Evan Eyler, MD)</td>
</tr>
<tr>
<td>Mar 2</td>
<td>TeleECHO Session 4</td>
<td>Management of Sleep Disruption (including menopause) and Impact on Mental Health (Jess Oehlke, MD)</td>
</tr>
<tr>
<td>Mar 16</td>
<td>TeleECHO Session 5</td>
<td>Role of Electroconvulsive Therapy (Evan Eyler, MD)</td>
</tr>
<tr>
<td>Mar 30</td>
<td>TeleECHO Session 6</td>
<td>Mental Health in Patients with Substance Use Disorders (Speaker TBD)</td>
</tr>
<tr>
<td>Apr 13</td>
<td>TeleECHO Session 7</td>
<td>Eating Disorders (Kathy Mariani, MD)</td>
</tr>
<tr>
<td>Apr 27</td>
<td>TeleECHO Session 8</td>
<td>Chronic Pain and Mood Disorders (Mark Pasanen, MD)</td>
</tr>
<tr>
<td>May 11</td>
<td>TeleECHO Session 9</td>
<td>Mental Health in the Elderly (Jennifer Hall, DO)</td>
</tr>
<tr>
<td>May 25</td>
<td>TeleECHO Session 10</td>
<td>Bipolar Disease – Diagnosis (Suzanne Kennedy, MD)</td>
</tr>
<tr>
<td>June 8</td>
<td>TeleECHO Session 11</td>
<td>Bipolar Disease – Management (Suzanne Kennedy, MD)</td>
</tr>
<tr>
<td>June 22</td>
<td>TeleECHO Session 12</td>
<td>Resistant Anxiety (Jessica O’Neil, DO)</td>
</tr>
</tbody>
</table>
CONCLUSIONS

• Slides are posted at www.vtahec.org
• Volunteers to present cases (this is key to the Project ECHO model)
  • Please submit cases to Mark.Pasanen@uvm.edu
• Please complete evaluation survey after each session
• Once your completed evaluation is submitted, CE information will be emailed.
• Please contact us with any questions, concerns, or suggestions:
  • Mark. Pasanen@uvm.edu
  • Elizabeth.Cote@uvm.edu