Primary Care Providers and Psychiatric Care: The Next Level

Tuesday, May 31, 2016
Welcome

This workshop is brought to you by

Health Care & Housing Are Human Rights
Housekeeping

- Breaks and Lunch
- Q&A
- Sign-in sheet & Evaluations
- Restrooms
- Raffle
- Our speakers!!

Health Care & Housing Are Human Rights
Objectives and Goals for Today

- Assessing for mental health and substance use conditions.
- Brief interventions within a primary care setting.
- Understand Pharmacological prescribing and Medication-Assisted Treatments.
- Discuss Behavioral health emergencies

*Co-occurring disorders will be woven throughout.*
Essential Psychopharmacology: Primary Care Providers

Susan Marie, PMHNP, PhD, CARN-AP
Disclosure Statement

- Susan Marie, PMHNP, PhD, BC is not employed by or financially affiliated with any pharmaceutical companies which research, produce, sell, or market any of the medications mentioned in this continuing educational program.

- Dr. Marie does not and has not receive(d) financial or other reimbursement from any pharmaceutical companies.
Goals:

- Assessment Pearls for Primary Care
- Very Brief Interventions that work
- Psychopharmacology
- Crisis intervention & Suicide prevention

Across Major Diagnostic Categories:
Mood Disorders, Psychosis, Trauma & Anxiety

- And special tips for managing benzos
A DEVELOPMENTAL BRAIN MODEL FOR SCHIZOPHRENIA

- Normal Development
- Path to Schizophrenia
- Psychosis Threshold

Number of Cortical Synapses vs. Age

Schizophrenia

Hoffman and McGlashan, 2001
Psychiatric Medications

Antidepressants
Antipsychotics
Mood stabilizers
Anxiolytics
Meds for adverse effects
“The pain grew and I began to experience suicidal thoughts. I realized that life for me was at a desperate impasse. I thought of the garage as a place where I might sit in the car and inhale carbon monoxide. I’d look at the rafters in the attic and think of them as places where I might hang myself. I looked at sharp objects as being implements for my wrist.”
Depression 2016

- Stigma continues
- Early onset the norm
  \( \frac{1}{3} < \text{age} \leq 18; \frac{2}{3} < \text{age} \leq 30 \)
- #1 cause of disability – world-wide (WHO)
- Medical problems increase incidence
  DMII: 71% co-morbid depression
- Greater impairment in functioning, decreased adherence & increased mortality

**Provider of Treatment**

- Primary Care: 57%
- Mental Health: 38%
- Other: 5%
Phases of treatment of major depressive disorder

- Acute (6–12 weeks)
- Continuation (4–9 months)
- Maintenance (1 or more years)

Time

- Remission
- Recovery
- Relapse
- Recurrence

Severity

Symptoms

"Normalcy"

Progression to Disorder

Syndrome

Treatment Phases
"Depression" - not the endpoint, but the starting point for investigation
What does depression look like?

**Adolescents:**
- #1 Irritability
- Fatigue,
- Loss of Interest,
- Change in Academics

**Elderly:**
- *Cognitive changes*
- *Delusions*
- Impoverishment
- Paranoia (taking my stuff)
- Jealousy
- *Increased somatic complaints*
- *50% do not feel sad*
- *Irritability*
Diagnosing Depression

- **Differentials**
  - Medical rule outs - B12, Folate, UTI, Thyroid, Testosterone
  - Medical illnesses - Diabetes, Cancers
  - Sleep apnea
  - Chronic pain not adequately treated
  - Delirium/Mild Neurocognitive Disorder
  - Substance Use Disorder

- **PHQ, CES or Geriatric Depression Scale**
  - Useful identifying & monitoring progress
**PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)**

Over the last 2 weeks, how often have you been bothered by any of the following problems? Use “X” to indicate your answer.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td></td>
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<tr>
<td>2. Feeling down, depressed, or hopeless</td>
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<td>3. Trouble falling or staying asleep, or sleeping too much</td>
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<td>4. Feeling tired or having little energy</td>
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<tr>
<td>5. Poor appetite or overeating</td>
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<tr>
<td>6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down</td>
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<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
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<tr>
<td>8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual</td>
<td></td>
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<tr>
<td>9. Thoughts that you would be better off dead or of hurting yourself in some way</td>
<td></td>
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</tbody>
</table>

For office coding:  

\[ \text{Total score: } \]

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>Not difficult at all</th>
<th>Somewhat difficult</th>
<th>Very difficult</th>
<th>Extremely difficult</th>
</tr>
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Developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc. No permission required to reproduce, translate, display or distribute.
Geriatric Depression Scale

Choose the best answer for how you have felt over the past week:

1. Are you basically satisfied with your life? YES / NO
2. Have you dropped many of your activities and interests? YES / NO
3. Do you feel that your life is empty? YES / NO
4. Do you often get bored? YES / NO
5. Are you in good spirits most of the time? YES / NO
6. Are you afraid that something bad is going to happen to you? YES / NO
7. Do you feel happy most of the time? YES / NO
8. Do you often feel helpless? YES / NO
9. Do you prefer to stay at home, rather than going out and doing new things? YES / NO
10. Do you feel you have more problems with memory than most? YES / NO
11. Do you think it is wonderful to be alive now? YES / NO
12. Do you feel pretty worthless the way you are now? YES / NO
13. Do you feel full of energy? YES / NO
14. Do you feel that your situation is hopeless? YES / NO
15. Do you think that most people are better off than you are? YES / NO
PMDD

- Can be confused with Premenstrual Dysphoric Disorder
  - Daily Rating of Severity for Premenstrual Mood Symptoms – 2 months
- PMDD - ? hypersensitivity to drop in progesterone and consequent drop in allopregnanolone (GABA A receptor)
- SSRIs accelerate the conversion of progesterone to allopregnanolone
- Dose only during symptomatic time

- Supplements: Ca+ 1200 mg/day; Vit B6 50-100 mg
- Comp/Alt: chasteberry, gingko biloba
Affective Presentation in Bipolar I Disorder Patients

NIMH Collaborative Depression Study:
146 patients followed every 6 months over 12–20 years

THE MOOD DISORDER QUESTIONNAIRE

Instructions: Please answer each question to the best of your ability.

1. Has there ever been a period of time when you were not your usual self and...
   ...you felt so good or so hyper that other people thought you were not your normal self or you were so hyper that you got into trouble? [ ] [ ]
   ...you were so irritable that you shouted at people or started fights or arguments? [ ] [ ]
   ...you felt much more self-confident than usual? [ ] [ ]
   ...you got much less sleep than usual and found you didn’t really miss it? [ ] [ ]
   ...you were much more talkative or spoke much faster than usual? [ ] [ ]
   ...thoughts raced through your head or you couldn’t slow your mind down? [ ] [ ]
   ...you were so easily distracted by things around you that you had trouble concentrating or staying on track? [ ] [ ]
   ...you had much more energy than usual? [ ] [ ]
   ...you were much more active or did many more things than usual? [ ] [ ]
   ...you were much more social or outgoing than usual, for example, you telephoned friends in the middle of the night? [ ] [ ]
   ...you were much more interested in sex than usual? [ ] [ ]
   ...you did things that were unusual for you or that other people might have thought were excessive, foolish, or risky? [ ] [ ]
   ...spending money got you or your family into trouble? [ ] [ ]

2. If you checked YES to more than one of the above, have several of these ever happened during the same period of time? [ ] [ ]

3. How much of a problem did any of these cause you – like being unable to work, having family, money or legal troubles, getting into arguments or fights? Please circle one response only.
   No Problem  Minor Problem  Moderate Problem  Serious Problem

4. Have any of your blood relatives (i.e., children, siblings, parents, grandparents, aunts, uncles) had manic-depressive illness or bipolar disorder? [ ] [ ]

5. Has a health professional ever told you that you have manic-depressive illness or bipolar disorder? [ ] [ ]

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Interventions

- Cognitive behavioral treatment
  - Recovery, International
    - www.recoveryinternational.org

- Other resources
  - www.dbsalliance.org  Wellness Tracker
  - www.mengetdepression.com
One in ten older adults visiting a physician suffers from depression

IMPACT Team Care doubles the effectiveness of depression treatment
Alternative treatments...

- Exercise
- Alternative & Complementary agents
- Chronotherapy

- Professional talk therapies
  - Interpersonal therapy
  - Cognitive behavioral therapy
  - Problem solving therapy
Antidepressant Classes (mechanism & target)

Reuptake Inhibitors

- **SSRI**
  - Fluoxetine (Prozac), paroxetine (Paxil), sertraline (Zoloft), citalopram (Celexa), escitalopram (Lexapro), fluvoxamine (Luvox)

- **SNRI**
  - Venlafaxine (Effexor), desvenlafaxine (Pristiq), duloxetine (Cymbalta), levomilnacipran (Fetzima)
- Post-synaptic action; multiple actions
  - Bupropion (Wellbutrin), Nefazodone (was Serzone),
  - Trazodone (desyrel), Vilazidone (Viibryd), Mirtazapine (Remeron); vortioxetine (Trintellix)

- Tricyclic Antidepressants
  - Amitriptyline, imipramine, nortriptyline, doxepin

- MonoAmine Oxidase Inhibitors
  - Phenelzine, selegiline
Choosing agents...

- **SSRIs**
  - Ease, relative lack of cardiotoxicity, single mechanism of action
  - Sexual dysfunction, akathisia
  - CYP450, discontinuation syndrome w/paroxetine
  - w/NSAIDs- GI bleed
  - headaches, nausea,
  - hyperhidrosis
  - “flattening” of emotions
SNRIs

Venlafaxine (Effexor) & desvenlafaxine (Pristiq)

- Minimal P450 interaction, good w/ tx resistance, some evidence better getting to full remission
- BP increase
- sexual dysfunction, akathisia
- wide dose variability
- discontinuation syndrome
SNRI- Duloxetine

- Also treats fibromyalgia, neuropathic & structural pain, stress urinary incontinence, generalized anxiety disorder;
- Well tolerated- no akathisia
- Elevate hepatic enzymes, worsen narrow angle glaucoma,
- GI- nausea, constipation, sexual dysfunction

Discontinuation syndrome
Other mechanisms

- **Bupropion** - NO serotonin
  - Unique pharmacology, no sexual dysfunction,
  - useful with ADD, smoking cessation
  - Risk of seizures, contraindication with bulimia
  - increased risk for suicidality w/younger pts

- **Mirtazipine**
  - Sedation, safe on overdose,
  - low anticholinergic,
  - no akathisia
  - +++sedation, weight/appetite,
  - neutropenia
Tricyclics

- Effective for chronic pain, migraines, insomnia;
- Can monitor plasma level
- Treatment resistance

- Secondary amines (amitriptyline, imipramine, doxepin, clomipramine) NE and 5HT
- Tertiary amines (desipramine, nortriptyline) more selective NE, with less side effects

- Lethal on overdose, highly anticholinergic, lower seizure threshold, hypotension, cardiac arrhythmias
Newer antidepressants

- **Vilazodone** (Viibryd) Serotonin X2
  - Nausea, dosing challenges

- **Levomilnacipran** (Fetzima) SNRI
  - Relative of Savella- tx fibromyalgia

- **Vortioxetine** (Trintellix) Serotonin X2
<table>
<thead>
<tr>
<th>Generic</th>
<th>BRAND</th>
<th>Class</th>
<th>Indications</th>
<th>Dosage</th>
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</thead>
<tbody>
<tr>
<td>fluoxetine</td>
<td>Prozac</td>
<td>SSRI</td>
<td>Depression, OCD</td>
<td>20-80 mg</td>
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<tr>
<td>sertraline</td>
<td>Zoloft</td>
<td>SSRI</td>
<td>Depression, panic disorder, OCD</td>
<td>50-200 mg</td>
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<tr>
<td>paroxetine</td>
<td>Paxil CR</td>
<td>SSRI</td>
<td>Depression, panic disorder</td>
<td>20-50 mg</td>
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<tr>
<td>citalopram/escitalopram</td>
<td>Celexa/Lexapro</td>
<td>SSRI</td>
<td>Depression, anxiety disorder</td>
<td>20-40 mg, 10-20 mg</td>
</tr>
<tr>
<td>venlafaxine/desvenlafaxine</td>
<td>Effexor / Pristiq</td>
<td>SNRI</td>
<td>Depression, panic disorder</td>
<td>75-350 mg, 50 mg</td>
</tr>
<tr>
<td>nefazadone</td>
<td>Serzone</td>
<td>SARI</td>
<td>Depression, panic disorder</td>
<td>100-500 mg</td>
</tr>
<tr>
<td>fluvoxamine</td>
<td>Luvox</td>
<td>SSRI</td>
<td>panic disorder, OCD</td>
<td>50-300 mg</td>
</tr>
<tr>
<td>bupropion</td>
<td>Wellbutrin</td>
<td>NDRI</td>
<td>Depression Smoking cessation</td>
<td>150-400 mg</td>
</tr>
<tr>
<td>mirtazapine</td>
<td>Remeron</td>
<td>NaSSA</td>
<td>Depression, panic disorder</td>
<td>15-45 mg+</td>
</tr>
<tr>
<td>duloxetine</td>
<td>Cymbalta</td>
<td>SNRI</td>
<td>Depression, pain, GAD</td>
<td>30-120 mg</td>
</tr>
<tr>
<td>vilazodone</td>
<td>Viibryd</td>
<td>SSRI/SA</td>
<td>Depression</td>
<td>10-40 mg</td>
</tr>
<tr>
<td>levomilnacipran</td>
<td>Fetzima</td>
<td>SNRI</td>
<td>Depression</td>
<td>40-120 mg</td>
</tr>
<tr>
<td>vortioxetine</td>
<td>Trintellix</td>
<td>SSRI/SA</td>
<td>Depression</td>
<td>5-20 mg</td>
</tr>
<tr>
<td>Generic</td>
<td>Brand</td>
<td>Class</td>
<td>Indications</td>
<td>Dosage</td>
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</tr>
<tr>
<td>amitriptyline</td>
<td>Elavil</td>
<td>TCA</td>
<td>Depression, anxiety, migraines, insomnia, (ADHD)</td>
<td>50-300mg</td>
</tr>
<tr>
<td>clomipramine</td>
<td>Anafranil</td>
<td>TCA</td>
<td>Depression, anxiety, panic disorder OCD</td>
<td>150-250 mg</td>
</tr>
<tr>
<td>desipramine</td>
<td>Norpramin</td>
<td>TCA</td>
<td></td>
<td>150-300 mg</td>
</tr>
<tr>
<td>Doxepin</td>
<td>Sinequan</td>
<td>TCA</td>
<td>Depression, anxiety, insomnia</td>
<td>150-300 mg</td>
</tr>
<tr>
<td>imipramine</td>
<td>Tofranil</td>
<td>TCA</td>
<td>Depression, agitation, anxiety</td>
<td>150-300 mg</td>
</tr>
<tr>
<td>Nortriptiline</td>
<td>Pamelor</td>
<td>TCA</td>
<td>Depression, anxiety</td>
<td>75-150 mg</td>
</tr>
<tr>
<td>Protriptyline</td>
<td>Vivactil</td>
<td>TCA</td>
<td>Depression, anxiety, OCD, eating disorders</td>
<td>15-60 mg</td>
</tr>
<tr>
<td>phenelzine</td>
<td>Nardil</td>
<td>MAOI</td>
<td>Depression (refractory)</td>
<td>45-60 mg</td>
</tr>
<tr>
<td>tranylcypromine</td>
<td>Parnate</td>
<td>MAOI</td>
<td>Depression (refractory)</td>
<td>20-60 mg</td>
</tr>
</tbody>
</table>
Medication Treatment

Initial

• Diagnosis
• Discuss treatment options
• First antidepressant
• With antipsychotic if psychosis

2-3 weeks

• Ask if obtained
• Adjust for side effects
• Increase dosage if tolerated & no improvement

4–6 weeks

• Assess for efficacy (PHQ)
• Tolerability
• No response: Change
• Some response: Increase
• >50% response: Continue
Managing Adverse Effects

- **Akathisia** “too much coffee feeling”
  - Switch unless stellar response
  - Add propranolol, benzodiazepines
  - Decrease/slow rate of increase of dose

- **Sexual dysfunctions**
  - Skip a dose
  - Buproprion, buspirone, Viagra, Cialis,

- **Anticholinergic**
  - Slow titration/decrease dose/change agent
  - Comfort measures

- **Drowsiness**
  - Change time of day, slow down titration
Managing Adverse Effects

- **Suicidality!** Black box warning
- **Weight gain**
  - Paroxetine, mirtazapine
- **SSRI Withdrawal Syndrome**
  - (flu, restlessness, headache, sensory disturb)
  - Take medication, slow down taper
- **Priapism**
  - Trazodone
- **Dizziness, Unexplained fatigue - w SSRI**
  - Check Na+
TCA toxicity concerns

- CNS toxicity
  - Seizures, delirium
- Cardiovascular toxicity
  - Conduction disturbances, sudden death
  - Check EKG if over 50 or arrhythmias
- Check blood level (of the TCA)
- Watch for CYP450 interactions (2D6)
- Sluggish BP reflex
Interactions

- **P450 2D6 competition**
  - Arrhythmia & anticholinergic symptoms, delirium
  - Strongest: paroxetine, fluoxetine, TCAs
  - Least: escitalopram

- **SSRIs** w/ NSAIDs: increased risk of GI bleed

- SSRIs with tramadol: seizure risk

- Trazodone has anxiogenic 2D6 metabolite

- Bupropion CONTRAINDICATED with history of seizures, bulimia

- Duloxetine: hx of alcohol- risk of liver failure
Interactions: Serotonin Syndrome

- Extremely rare but potentially fatal
- Thermal dysregulation—symptoms include:
  - confusion, agitation, hyperreflexia, diaphoresis, shivering, tremor, fever
- Presumed to occur because of excessive serotonergic stimulation
Pearls of effective depression treatment....

1. Keep adjusting dosage “gently” q 2wks
   - Side effects OR
   - Remission OR
   - Reach maximum dosage for medication
     - Fluoxetine, paroxetine & mirtazapine 60
     - Sertraline 200
     - Venlafaxine 375
     - Duloxetine 120
     - Citalopram 40
     - TCA blood level

2. Measure change

3. Watch for SSRI/SNRI “poop out”
How often? Then what?

- Reevaluate every 2 weeks until response (50% better)
  - Monthly until in full remission

- If doesn’t work?
  - Change agent
  - Augment current medication
  - Reassess- Missed SUD or anxiety??

- Consult w/or refer to specialist if 2 agents fail, sooner w/ diagnostic concern, comorbidities
Augmentation

- **Lithium/Lamotrigine**
  - Suicidality, rapid mood fluctuations, multiple episodes of depression

- **Thyroid**
  - Thyroid function is below the top quartile of normal range or TSH high, T4 normal

- **Atypical**
  - More fearful, has “odd” thoughts, melancholia, difficulty sleeping

- **Stimulant**
  - Extremely low energy, exhausted
Treatment Considerations: Elderly

- Can be difficult to treat

- **SSRIs** treatment of choice
  - Aricept additive effect in treating depression, esp to SSRIs
    - 5 mg for 2 wks, then to 10 mg daily

- **Nonpharmacological interventions**
  - Physical activation
  - Cognitive exercise
  - Eliminate frustrations
Depression in older adults

http://www.youtube.com/watch?v=6WM4l-RV7NQ

University of California San Diego lecture on geriatric depression
Depression in Pregnancy

1. Treat or not treat: no "no risk" option
2. Optimize dose of one > multiple agents
3. www.womensmentalhealth.org
4. NO Paroxetine, TCAs well documented

Adverse: Preterm delivery, low birthweight - BOTH
Lethargy/irritability, PPHN, respiratory distress – SSRIs
Slight increased rate of spontaneous abortion – SSRIs
JAMA Psych 2013; 70(4)436-443; AmJPsych 2000; 165(5)557-566
Postpartum Conditions

- Women with moderate to severe PMS/PMDD-
twice as likely to develop postpartum depression

- Family hx of bipolar-
  - 25-30% risk of postpartum depression w/psychosis

- Mood lability, confusion, restlessness

- Postpartum psychosis- delusions, hallucinations

- Postpartum OCD/Anxiety
How Long?? Maintenance

- Consider ongoing treatment for patients:
  - 2 depressive episodes within 5 years
  - 3 or more depressive episodes in lifetime
- When episode included psychosis, resulted in hospitalization or suicide attempt
- Discontinuation
  - After 9 months of full remission, taper slowly over several months
  - See regularly, assess for worsening
In Summary

- Follow up, Follow up, Follow up!
- Use measurement based treatment
  - PHQ9
  - Geriatric Depression Scale
  - Edinburgh Postpartum Scale
  - Child Depression Evaluation Scale
- Go for full remission
- Treat as any other chronic disease with active management
## Suicidality: Zero Suicide

<table>
<thead>
<tr>
<th>Yesterday</th>
<th>Today</th>
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</thead>
<tbody>
<tr>
<td>It’s inevitable</td>
<td>It’s preventable</td>
</tr>
<tr>
<td>Determining risk</td>
<td>Creating safety plan</td>
</tr>
<tr>
<td>Focus of MH</td>
<td>Focus of all health care</td>
</tr>
<tr>
<td>Protect- Containment</td>
<td>Work WITH- strategies</td>
</tr>
</tbody>
</table>
Suicidality

- USE PHQ- Written format
- Weave
- ASK directly- Be Explicit
- Normalize
  - How much would you say…/not “are you”
  - How would you do that?

THE PLAN

- Safety Planning zerosuicide.org
- Emergency psychopharmacology
  - Sleep
  - Mania/psychosis
  - MAT hope
Bipolar Disorder
Manic Episode
Mania (abnormally elevated, expansive, or irritable mood) plus 3 or 4 other symptoms

Major Depressive Episode
Depressed mood or loss of interest coupled with four other symptoms

Hypomanic Episode
Hypomania (elevated, expansive, or irritable mood, less severe and shorter duration than mania) plus 3 or 4 other symptoms

Mixed Episode
Meets criteria for both a manic episode and a major depressive episode
Increasing Diagnostic Accuracy

- A small study of 54 adult women
- Arterial spin labeling (ASL) measured blood flow in subdivisions of the anterior cingulate cortex (ACC)
- 81% accuracy rate in distinguishing unipolar from bipolar depression
Upstream Bipolar Disorder

- Structural Changes
  - Decreased hippocampal volume
  - Decreased amygdala volume
  - Decreased total gray matter

- Severity of structural change is associated with frequency of mood episodes
Cytokine pro-inflammatory proteins

1. Involved in both regulation and orchestration of immune response
2. ALSO directly affect neuronal excitability
3. And divert tryptophan from use as precursor for serotonin
4. And interfere with metabolism of neurotransmitters
5. And influence HPA via feedback mechanism
BD is a multi-systemic condition which impairs
- Neurological (function and structure)
- Endocrine
- Autonomic
- Circadian rhythm systems
- Mood episode frequency → neuroprogression
Evidenced Based Treatment

- Lithium

- Anticonvulsants
  - Lamotrigine
  - Valproic Acid/Divalproex sodium
  - Carbamazepine/oxcarbazepine

- Atypical antipsychotics
New Advances: Lithium

- **Clearly neuroprotective**
  - 10 year prospective study, 5 manic episodes
  - Non-lithium group- smaller hippocampal volumes
  - Lithium-treated group- hippocampal volumes comparable to healthy control
  - Very few patients on long term lithium develop Alzheimer’s

- **Clearly suicide protective**
  - Meta analysis of 48 RCT, 6684 patients
  - Unipolar
  - Bipolar
  - Long term maintenance with risk
Lithium: Adverse & Monitoring

- Renal function, thyroid - baseline & every 6 months
- Cardiotoxicity - EKG if cardiac history, elderly
- Lithium toxicity - Level 12 hours post dose
  - 1-2 weeks, 1-2 months, then 6 months and dose change

Check if change in use NSAIDs, diuretics, caffeine, extreme heat
Lithium Adverse Effects

- Nausea/Vomiting/GI distress
  - Take with food, use long acting formulations
- Tremor
  - Fine tremor
  - Propranolol 10-20 mg bid to tid
- Polyuria
  - Reassure, Vary dosing
- Weight Gain
- Cognitive Fuzziness

NOT for LACTATING WOMEN
Best Candidates
  - Many depressive episodes, substance abuse, rapid cycling, obesity, DM, clients worried about weight gain

No lab monitoring

Adverse Side Effects
  - Generally well tolerated
  - Lengthy titration, not suitable for acute mania
  - Risk of Stevens Johnson syndrome - rash

Excellent “anti-depressant” for bipolar disorder
Lamotrigine

Should NOT stop other agent when starting the lamotrigine- takes month(s) to get therapeutic level.

Regular Titration: 25 mg for 2 weeks, then 50 for 2 weeks, then 100 mg. for 2 weeks, then 200 mg. Generally effective at 100-200 mg. up to 400 mg. (slower titration if on Depakote).

(Watch for rash)
Depakote (Valproic acid or VPA)

- **Best Candidates**
  - Patients with rapid cycling, substance abuse, can use loading dose (20mg/kg), less $$

- **Monitoring**
  - CBC, CMP, blood level q dose change 12 hr draw

- **Adverse Effects**
  - Weight gain
  - Hematological, hepatic impairment
  - Contraindicated with hx of pancreatitis
  - Alopecia, plasma ammonia
Valproic Acid Pearls

- Useful in aggression, intermittent explosive disorder
  - Multivitamin w/B complex, selenium & zinc helps prevent & decrease hair loss
  - If mood continues unstable, increase dose to blood level above 80 at 12 hour draw

- Bioavailability of ER formulation is approximately 75% of regular formulation

Contraindicated with women of childbearing capacity

Different usage for bipolar v. seizure disorders....
With regard to women of childbearing age who are not pregnant, valproate should not be taken for any condition unless the drug is essential to the management of the woman's medical condition. All non-pregnant women of childbearing age taking valproate products should use effective birth control.

FDA 2014
Carbamazepine/Oxcarbazepine

- Second line (third line?)
- Similar to valproic acid with less weight gain
- Check labs
  - More concerns with WBC suppression/platelets
  - No labs needed with oxcarbazepine

- CLONAZEPAM
- Augmentation role for mood stability
Special Treatment Issues for Women

- Menstrual dysfunction higher with women with bipolar disorder
- Polycystic Ovary Syndrome
  - 10%; 1st year of VPA use
  - 6X risk for DMII
- Carbamazepine/oxy decrease efficacy of estrogens (OCP)
- Estrogens (OCP) decrease blood level of lamotrigine
Atypical Agents

- Best candidates
  - Need rapid treatment, with psychosis, is a treatment of choice for pregnancy and lactation (esp if already exposed during pregnancy)

- Monitoring
  - Metabolics (lipids, glu, weight, waist circum)

- Adverse Effects
  - Weight gain, dizziness, EPS, dry mouth, sedation & activation, differential metabolic impact
So what about depression in patients with bipolar disorder??

my head is currently a horrible place to be.
Bipolar patients, on mood stabilizers, now depressed:

antidepressants versus placebo

1. Antidepressants NEVER as monotherapy

2. May be used ONLY in patients with bipolar disorder in a depressive episode IF Has shown to be effective in the past AND Has not caused rapid switch to mania/hypomania

3. Use as maintenance ONLY if patient becomes depressed when agent is discontinued
Effective Strategies: Bipolar Depression

1. Optimize dosage of the mood stabilizer
   - VPA > 80; Lithium > .8 at 12 hour draw
   - Lamotrigine up to 400 mg - Check Level
2. Add psychosocial interventions
3. Address specific symptoms (sleep, anxiety)
4. Add an atypical agent
5. Add second mood stabilizer
6. Consider antidepressant
## Dosing Mood Stabilizers

<table>
<thead>
<tr>
<th>Generic</th>
<th>BRAND</th>
<th>Class</th>
<th>Indications</th>
<th>Dosage</th>
<th>Half-life</th>
<th>Serum Blood Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>lithium</td>
<td>Lithobid, Eskalith</td>
<td>mood stabilizer</td>
<td>Bipolar, augmentation for MDD</td>
<td>300-1800 mg/day</td>
<td>18-39 hr</td>
<td>.5-1.2</td>
</tr>
<tr>
<td>carbamazapine</td>
<td>Tegretol</td>
<td>anti-convulsant</td>
<td>Bipolar, Neuralgia pain</td>
<td>800-1200 mg/day</td>
<td>34 hr</td>
<td>8-12</td>
</tr>
<tr>
<td>valproic acid</td>
<td>Depakote (ER)</td>
<td>anti-convulsant</td>
<td>Bipolar, augment for schizophrenia/MDD</td>
<td>500-2000 mg/day</td>
<td>9-16 hr</td>
<td>50-100 (+)</td>
</tr>
<tr>
<td>Fluoxetine/</td>
<td>Symbyax</td>
<td>SSRI</td>
<td>Bipolar, schizophrenia, &amp; psychotic disorders</td>
<td>6/25-12/50 mg/day</td>
<td>13 hr</td>
<td>N/A</td>
</tr>
<tr>
<td>Olanzapine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lamotrigine</td>
<td>Lamictal (ODT)</td>
<td>anti-convulsant</td>
<td>Bipolar (depression in particular)</td>
<td>100-400 mg/day</td>
<td>33 hr</td>
<td>N/A</td>
</tr>
</tbody>
</table>

“Ceiling” agents: Lithium, Depakote, Atypicals
“Floor” agents: Lamotrigine, Depakote, Lithium, Atypicals
Effective Interventions

- Mood diary charting
- Rhythym treatments
- Social support
- Interpersonal and CBT psychotherapy!!
- Good sleep
- Adrenaline activities
- www.dbsalliance.org
- Assess for suicidality- every visit
Antipsychotic & Atypical Agents

Which, when, how much and how long??
Antipsychotic Adverse Effects

EPS (extra pyramidal symptoms):

- akathesia
  - Propranolol, benzodiazepines
- dystonia, akinesia and pseudoparkinson-like symptoms
  - Use benztropine, amantadine

Hyperprolactinemia

Stop agent (typicals and risperidone)
Antipsychotic Adverse Effects

- Tardive dyskinesia
  - Abnormal involuntary movements of nonpurposeful nature
  - May be permanent - Vit E may decrease further worsening
  - The “look” of schizophrenia
- Neuroleptic Malignant Syndrome
- Weight gain
- Cognitive/affective flattening
- QTc prolongation
- Decreased seizure threshold
- Body Temperature Dysregulation
# Dosing of Typical Antipsychotics

<table>
<thead>
<tr>
<th>Generic</th>
<th>BRAND</th>
<th>Class</th>
<th>Indications</th>
<th>Dosage</th>
<th>Half-life</th>
</tr>
</thead>
<tbody>
<tr>
<td>trifluoperazine</td>
<td>Stelazine</td>
<td>phenothiazine</td>
<td>Thought disorder, schizophrenia</td>
<td>10-40mg</td>
<td>125 hr</td>
</tr>
<tr>
<td>fluphenazine</td>
<td>Prolixin (Depo)</td>
<td>Antipsychotic</td>
<td>Thought disorder, schizophrenia</td>
<td>3-45 mg</td>
<td>15 hr Depo 3 wks</td>
</tr>
<tr>
<td>Halperidol</td>
<td>Haldol (Depo)</td>
<td>Phenothiazine</td>
<td>Thought disorder, schizophrenia</td>
<td>1-40 mg</td>
<td>12-38 hr Depo 3 wks</td>
</tr>
<tr>
<td>Lozapine</td>
<td>Loxitane</td>
<td>Antipsychotic</td>
<td>Thought disorder, schizophrenia</td>
<td>50-100 mg</td>
<td>4 hr</td>
</tr>
<tr>
<td>chlorpromazine</td>
<td>Thorazine</td>
<td>phenothiazine</td>
<td>Thought disorder, schizophrenia</td>
<td>60-800 mg</td>
<td>10-20 hr</td>
</tr>
<tr>
<td>perphenazine</td>
<td>Trilafon</td>
<td>phenothiazine</td>
<td>Thought disorder, schizophrenia</td>
<td>4-40 mg</td>
<td>10-20 hr</td>
</tr>
<tr>
<td>thioridazine</td>
<td>Mellaril</td>
<td>phenothiazine</td>
<td>Thought disorder, schizophrenia</td>
<td>200-800 mg</td>
<td>10-20 hr</td>
</tr>
<tr>
<td>thiothixene</td>
<td>Navane</td>
<td>Antipsychotic</td>
<td>Thought disorder, schizophrenia</td>
<td>2-60 mg</td>
<td>19-20 hr</td>
</tr>
</tbody>
</table>
What makes a drug “atypical”?

- Degree of dopamine binding
  - Typical- over 80% binding - EPS
  - Atypical- generally under 80% binding
Uses of Atypical Agents

- Schizophrenia and psychotic spectrum illnesses
- Differential for first episode patients
- Bipolar Disorder, depressed, mania
- Behavioral disruptions connected to dementia
- Irritability with autism
- Tourette’s Disorder
- Anorexia Nervosa (LBW)
- Borderline Personality Disorder
- Psychotic “flavor” of anxiety disorders, MDD
## Dosing of Atypical Antipsychotics

<table>
<thead>
<tr>
<th>Generic</th>
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<th>Class</th>
<th>Indications</th>
<th>Dosage</th>
<th>Half-life</th>
</tr>
</thead>
<tbody>
<tr>
<td>clozapine</td>
<td>Clozaril, FazaClo wafer</td>
<td>atypical</td>
<td>schizophrenia</td>
<td>300-900 mg</td>
<td>5-16 hr</td>
</tr>
<tr>
<td>quetiapine</td>
<td>Seroquel</td>
<td>atypical</td>
<td>Schizophrenia, bipolar disorder, psychosis</td>
<td>25-800 mg</td>
<td>6-7 hr (XR 9-12 hr)</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>Zyprexa (zydis) Zyprexa Relprevv</td>
<td>atypical</td>
<td>Schizophrenia, bipolar disorder, severe anorexia, psychosis</td>
<td>5-20+ mg Monthly injection</td>
<td>21-54 hr 30 days</td>
</tr>
<tr>
<td></td>
<td>Risperdal (M-tab) Consta</td>
<td>atypical</td>
<td>Schizophrenia, bipolar disorder, Autism spectrum disorder</td>
<td>4-16 mg 37,5 mg+ 3-6 mg</td>
<td>20-24 hr Consta 2 wks 23 hr 13 days</td>
</tr>
<tr>
<td></td>
<td>Invega Invega Sustenna</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ziprasidone</td>
<td>Geodon</td>
<td>atypical</td>
<td>Schizophrenia, Bipolar disorder</td>
<td>60-200 mg</td>
<td>6 hr</td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>Abilify (Dismelt)</td>
<td>atypical</td>
<td>Schizophrenia. Bipolar disorder</td>
<td>10-30 mg</td>
<td>75-94 hr</td>
</tr>
<tr>
<td>asenapine</td>
<td>Saphris</td>
<td>atypical</td>
<td>Schizophrenia, bipolar disorder</td>
<td>5-20 mg sl hs</td>
<td>24 hr</td>
</tr>
<tr>
<td>iloperidone</td>
<td>Fanapt</td>
<td>atypical</td>
<td>Schizophrenia</td>
<td>6-12 mg</td>
<td>24 hr</td>
</tr>
<tr>
<td>luraisdone</td>
<td>Latuda</td>
<td>atypical</td>
<td>Schizophrenia, bipolar disorder</td>
<td>20-160 mg+</td>
<td>18 hr</td>
</tr>
</tbody>
</table>
Individual agents: Pearls & Pitfalls

- Clozapine
  - Gold Standard
- Quetiapine (Seroquel)
  - Least amount of EPS, most sedating
- Olanzapine (Zyprexa)
  - Well tolerated, heavy metabolic, “rescue med”
- Risperidone/ Paliperidone (Risperdal, Invega)
  - Unique D2 binding
  - Medium sedation
Individual agents

- **Ziprasidone (Geodon)**
  - Take with 500 kcal
- **Aripiprizole (Abilify)**
  - Impulsive behaviors
  - Decreases QTc
- **Asenapine (Saphris)**
  - Sedating without metabolic
  - Sublingual
- **Lurasidone (Latuda)**
  - 350 kcal
  - Differential for bipolar depression, stability
Metabolic Monitoring Guidelines ADA

- Weight
- Blood pressure
- Waist circumference
- Fasting plasma glucose (or HgbA1c)
  - Baseline, 12 weeks, then annually
    - If weight gain or using high incidence agent, do more frequently - q6mos
- Fasting lipid profile
  - Baseline, 12 weeks, then q 5 years
    - If weight gain or using high incidence agents, do annually
## Differential Impact of Agents

<table>
<thead>
<tr>
<th>None?</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asenapine (Saphris)</td>
<td>Ziprasidone (Geodon)</td>
<td>Risperidone (Risperdal)</td>
<td>Olanzapine (Zyprexa)</td>
</tr>
<tr>
<td>Lurasidone (Latuda)</td>
<td>Aripiprazole (Abilify)</td>
<td>Quetiapine (Seroquel)</td>
<td>Clozapine (Clozaril)</td>
</tr>
</tbody>
</table>
Atypical Long Acting Agents

- **Risperidone LA (Consta)**
  - Every 2 weeks
    - Takes 3 weeks for steady state

- **Paliperidone LA (Invega)**
  - 4 weeks

- **Ablify (Maintena)**
  - 4 weeks

- **Haldol Decanoate, Prolixin Dec**
APA on Antipsychotics 2013

- Appropriate evaluation and ongoing monitoring
- Don’t routinely prescribe 2+ antipsychotics
- Don’t prescribe antipsychotics as first-line treatment for behavioral symptoms of dementia
- Don’t routinely prescribe antipsychotics as treatment of insomnia
- Don’t prescribe antipsychotics as first-line treatment in children and adolescents except in psychosis.
Assessing your Patient

- Treat psychosis as vulnerable material
- Use their language

Auditory Hallucinations
  - What level?
  - Command?
  - Is method available?

Delusions
  - Bizarre v. nonbizarre

Progress:
  - Ask directly re: hallucinations
  - Listen, watch for progress re: delusions
Lunch

We will resume promptly at 1 pm.
Anxiety Disorders & Benzodiazepines

- Monoamine Hypothesis
  - serotonin and norepinephrine key to regulating amygdala
- Malfunction in the hippocampus & amygdala
  - reduced volume and atrophy of dendrites
- Cortisol and Stress Response
- GABA /Glutamate abnormalities
- Cognitive factors
  - perceptions of stressful events
Benzodiazepines

- Short term anxiety
- Insomnia
- Agitation
- Severe acute grief
- Severe panic attacks
Long Term Indications

1. Panic Disorder

2. Abnormal Movement Disorders particularly akathisia

3. Mood Disorder adjunctive treatment augmentation of mood stabilizer
Benzodiazepines are highly effective for short term and long term use
  - With the right person
  - For the right conditions

Relatively few side effects

Used by 1 in 10 in general population
  - most without tolerance or problems
The “bad edge”

- Psychological dependence “addiction”
  - Feeling overwhelmed, incapable
  - Focus on drug as source of competence
  - Use drug to eliminate feelings
  - Frequent requests to increase dosage
  - Trigger relapse to other substances

- Physiological adverse interactions & effects
Physiological Adverse Effects

- Cognitive
  - Memory
  - Anterograde Amnesia (learning new)
  - Retrograde Amnesia (old information)
- Psychomotor performance
  - Significant impairment driving (even AM)
- Falls
- Drug Interactions (P450 system)
So how do we optimize the benefits and minimize the dangers?
Who? Contraindications

- Previous abuse of benzodiazepines
- Current substance use disorder (any)
- Elderly
- On methadone or opiates
- Sleep Apnea
- Severe hepatic disease
Who? Caution

- Pregnancy
  - Should not be withdrawn abruptly
- Recent Trauma
- Organicity (TBI, MR/DD)
- Parental substance use disorder
- On anticholinergics
Severe Anxiety in Patients w/ hx of SUD

- 1. Full sustained recovery >1 year
- 2. Diagnosed with anxiety disorder >6 months
- 3. Tried alternative medications & CBT
- 4. Willing to commit to frequent contact
- 5. Continue only if shows clear benefit

THEN BZ to treat decreased relapse vs. no BZ

Posternak, MA & Mueller TI Assessing the risks and benefits of BZ for anxiety disorders in patients with a history of substance abuse or dependence. Am J on Addictions 2001;10(1) 48-68
Understanding the agents

- **Equivalency:** 1 mg lorazepam =
  - 0.5 mg Alprazolam
  - 0.25 mg Clonazepam
  - 5 mg Diazepam

- **Dosing:** Half Life Issues
  - Diazepam daily to twice daily
  - Clonazepam twice daily
  - Lorazepam twice to three times daily
  - Alprazolam four times daily
<table>
<thead>
<tr>
<th>Drug</th>
<th>Green Light</th>
<th>Yellow Light</th>
<th>Red Light</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lorazepam</td>
<td>&lt;6 mg</td>
<td>6-10 mg</td>
<td>&gt;10 mg</td>
</tr>
<tr>
<td>Clonazepam</td>
<td>&lt;2 mg</td>
<td>2-4 mg</td>
<td>&gt;4 mg</td>
</tr>
<tr>
<td>Diazepam</td>
<td>&lt;20 mg</td>
<td>20-40 mg</td>
<td>&gt;40 mg</td>
</tr>
<tr>
<td>Alprazolam</td>
<td>&lt;2 mg</td>
<td>2—4 mg</td>
<td>&gt;4 mg</td>
</tr>
<tr>
<td>Alprazolam XR</td>
<td>&lt;3 mg</td>
<td>3-6 mg</td>
<td>&gt;6 mg</td>
</tr>
</tbody>
</table>
Preparation

1. **The golden key: MI & Collaboration**
   - Show you “get it”
   - The “fingerprint” of anxiety
   - Connect the dots to labs, sxs

2. **Reframe expectations**

3. **Start Depakote, carbamazepine**
   - Some evidence trazodone
4. Begin treatment of underlying disorder
   Cognitive behavioral therapy!!
   85% BZ free after 12 months vs. 48% GDR alone
   Group CBT OR 5.5 vs. GDR alone

   Recovery International

5. Increase support
   Pharmacy “direct empowerment” program
   27% after 6 mos vs. 5% TAU
Rapid Taper Protocol

For Therapeutic Dosages:
  Diazepam 2 mg BID for 2 days, then 2 mg daily for 2 days,
  then stop

For Supra-therapeutic Dosages:
  Diazepam 5 mg BID for 2 days, then 2 mg BID for 2 days, then 2 mg daily for 2 days, then stop

Treat withdrawal and rebound anxiety and insomnia clonidine, hydroxyzine, pregabalin (anxiety);
mirtazipine, perphenazine, carbamazepine.
1. Change to lorazepam equivalent
2. Decrease dosage by 10% q week or 25% q 2 weeks
3. The first half generally takes about 1-2 months
4. Slow the taper for the second 50%- go ultra slow for last 10% of original dosage
5. Total taper takes 3-6 months to even a year
6. Use adjunctive alpha-blockers and anti-psychotics for symptom relief if needed.
In Process

- Watch for collaboration breakdown
- Assume using from the street
- Provide ongoing hope
- Consider dose reduction as goal if unable to attain discontinuation
- Differentiate rebound from withdrawal and relapse
Discontinuation

Longer treatment,
Higher dosage,
Shorter half-life,
Faster taper

Likelihood of withdrawal symptoms
BZ Alternatives: Anxiety Disorders

- Hydroxyzine
- Buspirone - GAD
- Gabapentin
  - Novel to many patients - has some appeal and gives hope
  - Can potentiate the anti-panic effect of clonazepam
- Valproate
  - Some anti-panic effect through GABA mechanism
- Pregabalin
  Effective treatment of generalized anxiety and social anxiety
  Augments benzodiazepine (300-600 mg)
Alternatives continued

- SSRIs
- Venlafaxine (effexor) / Duloxetine (cymbalta)
- Tricyclic Antidepressants
- Atypical Agents
- Trazodone
Alternatives: Akathisia

- Propranolol
- Clonidine
- Amantadine
- Diphenhydramine
- Gabapentin
Alternatives: PTSD

› SSRIs

› Alpha-blocker: prazosin

› Beta-blocker: propranolol
  • Used immediately after traumatic event
Alternatives for Insomnia

- Alternative Medications:
  - Melatonin
  - Clonidine
  - Trazodone/ Mirtazipine
  - TCAs
  - 200 mg Zen, etc  Valerian, GABA
  - Sedating antihistamines
Effective Sleep Assistance

“Say Goodnight to Insomnia”
Harvard University

Combination of behavioral & cognitive strategies
Moving from Fight/Flight to Resonance

- Reactive Self: Cortisol Driven
  - Fear
  - Resentment
  - Worry

- True Self
  - Love
  - Forgiveness- heart action letting go of bitterness
  - Mindfulness

What keeps us in fight/flight mode in our lives??
Depression vs. SUD??

- History of suicide attempts
- Comorbid anxiety disorders
- Family history of mood disorders
- Hx of positive response to treatment
- Respond better to adrenergic agents
  - Data poorer with SSRIs
ADHD vs. SUD

- 10%-25% adults SUD comorbid ADHD
- Assessing for ADHD w/SUD
  - Timelines for ADHD, then SUD
  - ADHD sxs vary?
  - Occur in clean/sober time?
- Use adrenergic agents- atomoxetine, bupropriion
- Long acting agents less abuse potential
- 60% college students share stimulant
Anxiety Disorders

- Increases rate of “first use to disorder”
- Very high comorbidity with alcohol
- Assess by using longitudinal “time line”
  - Check UDS/breathalyzer
- “SSRIs first line”
  - Avoid benzos in general
Complementary & Alternative Medications

- SAMe 200-800 mg bid (titrate)- mild-mod depression
  - Promotes amino acid develop, antioxidants
  - Synergistic with folate

- Rhodiola Rosea 300-900 mg daily
  - Adaptogen, mild-moderate depression, GAD, trauma
  - Anti-inflammatory, antioxidant

- Valerian 450 mg 1 hour pre HS; 200-300 am
  - Increases GABA
  - Sleep, anxiety

- St John’s Wort 300 mg tid
  - Mild to moderate depression
  - SSRI adverse & interactions
Antioxidants

- N-acetyl cysteine  600 mg bid to 3600 mg daily
  - Trichotillomania,  OCD,  Bipolar Depression
  - Cocaine Use Disorder

- L-theanine  200-400 mg daily
  - Derivative of green tea
  - Competes with glutamate
  - Anxiety-  Increases BDNF.  Cognition in psychosis.
Susan Marie PMHNP, PhD
Medical Director for Behavioral Health, Primary Care
Central City Concern
Portland, Oregon

susan.marie@ccconcern.org
SBIRT

Marianne Savarese, RN, BSN
Program Director/COO
HCH program of Manchester, NH
• Screening, Brief Intervention & Referral to Treatment (SBIRT) is an evidenced based practice used to identify, reduce, prevent problematic use, abuse and dependence on Alcohol and Drugs.

• Conducted in Medical, ER, Hospital and EAP settings.
• Enables Systematic Screening and Assistance for all... even those not seeking help, but whose substance use may be problematic.
• Aims to prevent unhealthy consequences of Alcohol & Drug use and improve access to SUD care
Medical model w/SUD Care at its Core

- NYC ’69 - SVH Men’s Shelter Clinic & Bowery Detox
- Boston ’69 - NURSE Clinic at Pine Street Inn

Outreach Medicine...Medical Model / Shelter Clinics

- where SUD Care was central to the practice

The Question: “Do you Drink?” got us NO-where ...
So we learned to ask: “How much?” & “How Often?”

To Measure & Describe the Elephant in the Room !!
HCH Clinics - Integrated BH from the Start

- ’87 HRSA - mandate Addiction Services at 330h sites
- ’99 SAMHSA - GBHI - Addiction Care for Homeless

- **Tri-Morbid** comprehensive assessments:
  - Medical / Mental Health / SUD Disorders

- Motivational Interviewing / Stages of Change
- Harm Reduction/ Wet Housing / Housing First
- Medical Detox at Respite Care
- Long term partnerships w/ SUD Treatment Centers
We know what to do.

So, Why SBIRT?

What’s different?
ireta -
Institute for Research, Education & Training in Addictions

What is SBIRT ?? VIDEO ... 5 min

SBIRT - evidenced based best practice

- **S - Screening:** uniformly applied with a validated tool gathering facts to quantify use / determine level risk

- **BI - Brief Intervention:** non-judgmental assessment and feedback about consequences with advice for patients based upon patient’s own goals & readiness to change

- **RT - Referral to Treatment:** recommended and negotiated plan of care based upon patient’s level of risk and readiness for change
SBIRT - places **SUD care** into Medical Model

- **SUD** on **Primary Care** agenda as a **Chronic Disease**
- **Public Health Model** - to detect SUD Risk in all patients
- **Universal Screen** w/validated tools
- **Brief / Thorough / Matter of Fact** - a **Vital Sign**
- **Quantify Use / Level of Risk**
- **Patient Centered** - identify unique risks, health issues, & recovery goals of each patient
- Screening by any **Team Member** or by **Patient Self Report**
SBIRT - Benefit to Patients and Staff

- **Patients:**
  - *Safe space* for *Non-Judgmental Change Talk*
  - *Prevention of SUD* w/Early Detection & Intervention
  - *Reduced Morbidity & Mortality* related to SUD
  - *Positive Outcomes* w/family/job/safety / housing/homelessness

- **Clinicians:**
  - *Safe space* ... System/Framework for *Change Talk*
  - *Thorough & Structured & Time efficient*
  - *Team Based Approach* -promotes warm hand off referrals
  - *Fact based* - Data Driven - *Quantify Use / Measure Progress*
Screening

To Quantify Use

& Determine Level of Risk

via

Quick Screen or In-Depth Assessment
DSM-5-SUD criteria = > 2 any category

Criteria

A.) Impaired Control:
   • 1.) Taking more or for longer than intended
   • 2.) Not able to cut down or stop (failed attempts)
   • 3.) Spending a lot of time obtaining, using or recovering from use
   • 4.) Craving for Substance

B.) Social Impairment:
   • 5.) Role Failure (home/work/school)
   • 6.) Kept using despite relationship problems
   • 7.) Give up / reduce important activities due to use
C.) Risky Use:
   • 8.) Recurrent Use in Hazardous Situations
   • 9.) Kept Using Despite Physical or Psych problems

D.) Pharmacologic Dependence:
   • 10.) Tolerance to effects of the substance*
   • 11.) Withdrawal symptoms when not using or using less* (*Those on Rx Opioids may exhibit and not have SUD)

SCORE for: SUD Diagnosis:
Mild = 2-3 / Moderate = 4-5 / Severe = > 6
Single Screen - Quick Screen

- **NIAAA - Single Question - Alcohol:**
  - How many times in the past year have you had (MEN = x5 or more / WOMEN / x4 or more) Drinks in 1 day?

- **NIDA - Single Question - Drugs:**
  - How many times in the past year have you used an Illegal Drug or a Prescription Medication for non-medical reasons? (EVER USED)

- **NIDA Quick Screen:**
  - Alcohol - Drugs - Tobacco - Rx Drugs
**NIDA Quick Screen:**

**Responses beyond Never = Risky Zone**

<table>
<thead>
<tr>
<th>In the past year, how many times have you used the following?</th>
<th>Never</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Men &gt; 5 drinks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Women &gt; 4 drinks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco Products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prescription Drugs for Non-Medical Reasons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illegal Drugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Safe Use

- **Alcohol**
  - Men: < 4 Drinks per day / < 14 per wk
  - Women: < 3 Drinks per day / < 7 per wk
  - Older > 65y: < 3 Drinks per day / < 7 per wk
  - Pregnant Women: NEVER

- **Illegal Drugs**: NEVER
- **Tobacco**: NEVER

- **Prescription Meds for Non-Medical reason**: NEVER
One “Drink”

- Beer - 12 oz
- Wine - 5 oz
- Liquor - 1.5 oz (one shot)
HCH Manchester - SBIRT spread / adopted

- Federal **BHI grant (2014)** and State **SBIRT grant (2015)**

- SBIRT at Clinic/Outreach/Health Ed: **No Wrong Door**
  - **NIDA Quick Screen** Paper Tool - by Patient Self Report
  - Any **HCH Team Member** can assist & quick screen
  - at **Annual Intake** and **Random Re-Visits**

- **Neg/Low Risk** > **Positive Reinforcement / Feedback**
- **Pos/High Risk** > **Feedback w/Warm Hand Off** for in depth assessment

**AUDIT/DAST** - **Billable** by licensed BH or Med when > 15 min
**Substance Use Survey:** Please check all boxes that apply.

We want to hear about your experiences. We want to help you cut back or quit.

<table>
<thead>
<tr>
<th>In the past year, how many times did you use/drink/take the following?</th>
<th>NEVER</th>
<th>Once or Twice</th>
<th>Every Month</th>
<th>Every Week</th>
<th>Daily Almost Every Day</th>
<th>Quit within the PAST YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol / Wine / Beer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(men) more than 5 Drinks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(women) more than 4 Drinks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prescription Drugs for Non-Medical Reasons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SBIRT screenshots

Screen:

This EHR template was adapted from the Alcohol and Substance use Screening, Brief Intervention and Referral to Treatment (SBIRT) Guideline (September 2011) developed by HealthTeamWorks

**Obacco use:** former smoker (07/08/2015 11:48:15 AM)

**Use Tobacco:**
- current every day smoker
- current some day smoker
- former smoker
- never smoker
- unknown if ever smoked
- smoker - current status unknown

**Cigarettes # per day:**
**Pack Years:**

**Previous NIDA Score:** 6 (07/08/2015 11:48:15 AM)

**In the PAST YEAR how often have you used the following?**

- **Alcohol:**
  - never
  - quit within the year
  - once or twice
  - monthly
  - weekly
  - daily or almost daily

- **Tobacco products:**
  - never
  - quit within the year
  - once or twice
  - monthly
  - weekly
  - daily or almost daily

- **Prescription drugs - for medical reasons:**
  - never
  - quit within the year
  - once or twice
  - monthly
  - weekly
  - daily or almost daily

- **Illegal drugs:**
  - never
  - quit within the year
  - once or twice
  - monthly
  - weekly
  - daily or almost daily

- **Nonmedical reasons:**
  - never
  - quit within the year
  - once or twice
  - monthly
  - weekly
  - daily or almost daily

**Comments:**

**Total NIDA Score:**
<table>
<thead>
<tr>
<th>Tool</th>
<th>Target</th>
<th># Questions</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSIST</td>
<td>Adults</td>
<td>8</td>
<td>Alcohol &amp; Drugs</td>
</tr>
<tr>
<td>AUDIT -10</td>
<td>Adults</td>
<td>10</td>
<td>Alcohol only</td>
</tr>
<tr>
<td>DAST -10</td>
<td>Adults</td>
<td>10</td>
<td>Drug Use only</td>
</tr>
<tr>
<td>CRAFFT</td>
<td>Adol</td>
<td>6</td>
<td>Alcohol &amp; Drugs</td>
</tr>
<tr>
<td>CAGE</td>
<td>Adults / Youth &gt; 16yr</td>
<td>4</td>
<td>Alcohol only Signs of Dependence</td>
</tr>
<tr>
<td>TWEAK</td>
<td>Pregnant Women</td>
<td>5</td>
<td>Risky Drinking based on CAGE</td>
</tr>
</tbody>
</table>
### AUDIT SCREEN

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you have a drink containing alcohol?</td>
<td>never, monthly or less, 2-4 times a month, 2-3 times a week, 4 or more times a week</td>
</tr>
<tr>
<td>How many standard drinks containing alcohol do you have on a typical day when drinking?</td>
<td>1 or 2, 3 or 4, 5 or 6, 7 to 9, 10 or more</td>
</tr>
<tr>
<td>How often do you have five or more drinks on one occasion?</td>
<td>never, less than monthly, monthly, weekly, daily or almost daily</td>
</tr>
<tr>
<td>During the PAST YEAR, how often have you found that you were not able to stop drinking once you had started?</td>
<td>never, less than monthly, monthly, weekly, daily or almost daily</td>
</tr>
<tr>
<td>During the PAST YEAR, how often have you failed to do what was normally expected of you because of drinking?</td>
<td>never, less than monthly, monthly, weekly, daily or almost daily</td>
</tr>
</tbody>
</table>

### AUDIT

- During the PAST YEAR, how often have you needed a drink in the morning to get yourself going after a heavy drinking session? | never, less than monthly, monthly, weekly, daily or almost daily |
- During the PAST YEAR, how often have you had a feeling of guilt or remorse after drinking? | never, less than monthly, monthly, weekly, daily or almost daily |
- During the PAST YEAR, have you been unable to remember what happened the night before because you had been drinking? | never, less than monthly, monthly, weekly, daily or almost daily |
- Have you or someone else been injured as a result of your drinking? | yes but not in the past year, yes during the past year |
- Has a relative or friend doctor or other health worker been concerned about your drinking or suggested you cut down? | no, yes but not in the past year, yes during the past year |

### Total AUDIT Score: 34

**Patient willing to make a change:** yes or no

**Status of Change:** Preparation
### DAST-10

**In the past 12 months....**

1. Have you used drugs other than those required for medical reasons?  
   - [ ] yes  
   - [ ] no

2. Do you use more than one drug at a time?  
   - [ ] yes  
   - [ ] no

3. Are you always able to stop using drugs when you want to?  
   - [ ] yes  
   - [ ] no

4. Have you had blackouts as a result of your drug use?  
   - [ ] yes  
   - [ ] no

5. Do you ever feel bad or guilty about your drug use?  
   - [ ] yes  
   - [ ] no

6. Does your spouse (or parents) ever complain about your involvement with drugs?  
   - [ ] yes  
   - [ ] no

7. Have you neglected your family because of your use of drugs?  
   - [ ] yes  
   - [ ] no

8. Have you engaged in illegal activities in order to obtain drugs?  
   - [ ] yes  
   - [ ] no

9. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?  
   - [ ] yes  
   - [ ] no

10. Have you had medical problems as a result of your drug use?  
    - [ ] yes  
    - [ ] no

   (eg memory loss, hepatitis, convulsions, bleeding, etc)

**Total DAST Score:** 9

**Patient willing to make a change:**  
- [ ] yes  
- [ ] no

**Status of Change:** Preparation

---

**Resource:** Alcohol and Substance Use Screening, Brief Intervention and Referral to Treatment (SBIRT) Guidelines (September 2011) developed by HealthTeamWorks [www.healthteamworks.org](http://www.healthteamworks.org)
### Score & Level of Risk - Suggests Approach

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>I Low Risk Abstention</th>
<th>II Risky</th>
<th>III Abuse</th>
<th>IV Dependent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen Pop</td>
<td>78%</td>
<td>9%</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>AUDIT:</td>
<td>0-7</td>
<td>8-15</td>
<td>16-19</td>
<td>&gt; 20</td>
</tr>
<tr>
<td>DAST:</td>
<td>0</td>
<td>1-2</td>
<td>3-5</td>
<td>&gt; 6</td>
</tr>
<tr>
<td>SBIRT Action</td>
<td>Safety Education &amp; Monitor</td>
<td>BI Consequences Change Talk Readiness</td>
<td>BI Change Talk Readiness Referral</td>
<td>RT Refer to Specialized Treatment</td>
</tr>
</tbody>
</table>

*DRUGS = NO Low Risk or SAFE USE * Intervene w/ BI & RT
SUD at HCH Manchester 2015 (n = 1261)

- Tobacco = 68%
- Active SUD on Problem List = 54%
- Self Report 1st Drink / Drug < Age 14yr = 47%
- Self Report IVDU = 27%

- Most HCH Manchester Patients are **RISKY** users !!
  - .... and yet, we screen

- SBIRT screen as a **Vital Sign** ... it Starts Change Talk
- Tobacco question makes it **less threatening**
- It enhances **Comfort Level** w/Change Talk
  - for Staff and Patients alike

- SBIRT screen is the **prompt** for Brief Intervention
  and a Warm Hand Off referral
Brief Intervention

- **BI** is the “Teachable Moment”
- **BI** models: FLO / FRAMES / BNI (Brief Negotiated Interview)

- **FLO:** (one BI framework)
  - Provide **Feedback**
  - **Listen** for Change Talk & Readiness
  - Explore Options & Goals

- **BI** = *any* F or L or O talk during encounter
- **BI** - best in Multiple Sessions

- **BI** is Billable - if performed by licensed BH &/or Med provider and in >15 min sessions
FLO

- **Feedback** - Quantity of Use / Level of Risk / Audit & DAST Scores / Health Consequences / Harmful Effects

- **Listening** - Reflection / Empathy / Motivational Interviewing / Readiness Ruler / Decision Balance

- **Options** - Explore Steps to Cut Back / Goals / Resources / Discover action steps that worked in past
F = Feedback

● **Ask Permission** to Raise the Subject
● Share Screen **Score** / Level of Risk / Safe Use definitions
● Supportive Tone and **Acknowledge the Struggle**
● **Non-Judgemental** / Non-Confrontational

● Connect **Risky Use** to **Health/Disease Burden**
● Connect **Risky Use** to **Personal Burden**

● Be Specific / Personal / Serious / Earnest
● Gauge patient's tolerance ... When to Stop ... Less is More
Disease Burden

- **Psych:** Depression/Anxiety/Insomnia / Violence
- **Cardiac:** HTN / Stroke / Heart Failure
- **Resp:** Pneumonia / Colds / Flu / Infections
- **Cancer:** Esophagus / Throat / Mouth / Breast
- **Diabetes / Liver Disease / Cirrhosis**
- **GI:** Gastritis / Pancreatitis / Malnutrition
- **Neuro:** Neuritis/Cog Impairment / Organic Brain
- **Erectile Dysfunction / Teen Pregnancy / STD**
- **Fetal Alcohol Syndrome & Spectrum Disorder**
- **Overdose / Death**
Personal Burden

- Overdose / Homicide / Suicide
- Fires / Accidents / Falls / Drowning
- Motor Vehicle Accidents / DWI
- Legal Problems / Criminal Justice
- Prison / Jail / Incarceration / Fines
- Family Trouble / Relationship Trouble / Estrangement
- Domestic Violence / DCYF / Child Protection Services
- Trouble at School / Work / Unemployment
- Eviction / Loss of Home / Loss of Material Resources
- Homelessness
L = Listen for Change Talk

- Readiness Rulers: vehicle to elicit *Change Talk*
- Importance / Confidence / Readiness to Quit
  - from patient’s perspective
- Brief Motivation Interviewing
- Sit with Ambivalence / Explore Pro’s & Con’s
- Applaud Progress / Exude Optimism
- Re-state/ Reinforce Commitment Language

- “DARN - CAT” Change Talk
- Desire / Ability / Reasons / Need
- Commitment / Activation / Taking steps
Readiness Rulers:

1.) Importance:

How important it is to cut back? Why did you choose _____ and not a lower number? Are you concerned about your use? Do you think you should cut down or quit?

2.) Confidence:

If you decided to cut back now, how confident are you that you could succeed? Why did you choose _____ and not a lower number? How can we help you to reach a higher level of confidence?

3.) Readiness to Quit:

How ready are you to quit right now?

*Please feel free to share your answers and concerns with staff at HCH clinic. Thanks for taking this survey!!
Referral Numbers for Houston
Council on Alcohol & Drugs Houston: 713 - 942 - 4100
AA: 713 - 686 - 6300
Veterans Admin: 713 - 794 - 8700

Low-risk drinking limits
<table>
<thead>
<tr>
<th></th>
<th>Drinks/week</th>
<th>Drinks/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>ALL &gt; 65</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>ALL &lt; 21</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Categories of drinking
- I Healthy
- II Risky
- III Abuse
- IV Dependence

Screening
- Do you smoke cigarettes or use other tobacco products?
- When was the last time you had more than 4 drinks in one day?
- How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?

Brief
- Decisional Balance: What do you like about drinking (drug use)? What do you not like about drinking (drug use)? Summarize patient responses.
- On a scale of 0 to 10, how ready are you to cut back your use?
  - If >3: Why that number and not a ___ (lower number)?
  - Why that number and not a ___ (higher number)?
  - If 0-2: Have you ever done anything while drinking (using drugs) that you later regretted?
- As your doctor I can tell you that drinking (drug use) at this level can be harmful to your health and possibly responsible for the health problem you came in for today.
- What steps can you take to cut back your use?

Intervention
- Assess readiness for referral using the readiness ruler
- Collaboratively set specific, achievable goals with patient and document
- Refer patients to specialty treatment services as needed
- Verify that patient understands referral process

Referral to Treatment

AUDIT: 0–7 DAST: 0
AUDIT: 8–15 DAST: 1–2
AUDIT: 16–19 DAST: 3–5
AUDIT: 20+ DAST: 6+
DARN

- **Desire:** “I want to ... would like to ...”
- **Ability:** “I can ... I did ...“
- **Reason:** “I should, because ... “
- **Need:** “I must, because ... “

- Reinforce positive *Change talk*
- Remain Silent for *Continued Use talk*
**CAT**

- **Commitment** - “I’m going to... I will...“
- **Activation** - “I’m ready to...I plan to...“
- **Taking Steps** - “I tried to...I did try...“

- Reinforce positive *Change talk*
- Remain Silent for *Continued Use talk*
SBIRT Oregon - visits/role play

You Tube

https://www.youtube.com/watch?v=b-ilxvHZJDc

https://www.youtube.com/watch?v=XP-O2IP8420
O = Options - to Explore

- Discuss **Readiness Ruler** Scores / Decision Balance
- Remain **Positive** ... *even if unwilling to change*
- Restate **Ambivalence** ... to Stimulate Change Talk
- **Negotiate** Possible Treatment Plans
  - Integrate Patient Goals & Provider Advice

- Acknowledge any **Set-backs** & Relapse Triggers
- Applaud *any* Progress / Small measures of Success
- Aim for **Harm Reduction**
- Options discussion leads to **RT phase of SBIRT**
RT - Referral To Treatment - Considerations

• Bio-Med *Emergencies* / Withdrawal potential

• **Scores** / Level of Risk / Readiness for Change

• **Capacity** for BH warm hand off on team
• **Linkages** to SUD Treatment Community
• Capacity to coordinate Referrals / Follow up care

• **ASAM Placement Criteria:** (required in some states)
  • Assessment Dimensions (address simultaneously)
  • Levels of Care - Match Services to patient need

• Federal (42 - CFR part 2) & State *Privacy* Law / Consent
## Score & Level of Risk - Suggests Approach

<table>
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*DRUGS = NO Low Risk or SAFE USE * Intervene w/ BI & RT
# ASAM Assessment in Multiple Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Focus/Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.) Acute Intox / Withdrawal</td>
<td>Assess &amp; Manage Withdrawal</td>
</tr>
<tr>
<td>2.) Med Conditions/Complications</td>
<td>Assess &amp; Treat Co-Occurring Medical</td>
</tr>
<tr>
<td>3.) Emotional/BH &amp; Cog Conditions</td>
<td>Assess &amp; Treat Co-Occurring MH -BH</td>
</tr>
<tr>
<td>4.) Readiness to Change</td>
<td>Use Motivational Interviewing</td>
</tr>
<tr>
<td>5.) Relapse / Continued Use Potential</td>
<td>Identify what worked in past Strategies that help motivation Discuss Consequences</td>
</tr>
<tr>
<td>6.) Recovery Environment</td>
<td>Socioeconomic Needs &amp; Supports: Family/Housing/Jobs/Finances Entitlements/Childcare /Transportation /Health Ins</td>
</tr>
<tr>
<td></td>
<td>(0) No Problem</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>1.) Acute Intox / Withdrawal</td>
<td></td>
</tr>
<tr>
<td>2.) Bio - Med Conditions</td>
<td></td>
</tr>
<tr>
<td>3.) Emotional / BH / Cognitive</td>
<td></td>
</tr>
<tr>
<td>4.) Readiness to Change</td>
<td></td>
</tr>
<tr>
<td>5.) Relapse / Continued Use</td>
<td></td>
</tr>
<tr>
<td>6.) Recovery Environment</td>
<td></td>
</tr>
</tbody>
</table>
## ASAM Levels of Care

- **Multiple Grades within each level**

<table>
<thead>
<tr>
<th>Level 0.5:</th>
<th>Early Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1:</td>
<td>Outpatient Services</td>
</tr>
<tr>
<td></td>
<td>= &lt; 9 hrs per wk</td>
</tr>
<tr>
<td>Level 2:</td>
<td>Intensive Outpatient / Partial Hospital</td>
</tr>
<tr>
<td>2.1</td>
<td>&gt; 9 hrs - structured program</td>
</tr>
<tr>
<td>2.5</td>
<td>&gt; 20 hrs - structured</td>
</tr>
<tr>
<td>Level 3:</td>
<td>Residential / Inpatient</td>
</tr>
<tr>
<td>3.1</td>
<td>Halfway House - low intensity</td>
</tr>
<tr>
<td>3.5</td>
<td>Residential Treatment - high intensity</td>
</tr>
<tr>
<td>3.7</td>
<td>Medically Monitored Inpatient</td>
</tr>
<tr>
<td>Level 4:</td>
<td>Medically Managed Intensive Inpatient</td>
</tr>
</tbody>
</table>
Referrals - within Team / out to Community Tx

- Match Comprehensive Services to Patient Need
- **Counseling** - One - on - One or Group
- MAT - Medication Assisted Treatment
- **ASAM Levels** of Care - IOP/ Residential / Medical
- **Self Help** 12 Step Groups / AA - NA / Al-anon
- **Mindfulness Based Relapse Prevention** - MBRP

- Cultivate and Maintain Linkages to Tx Centers
- Provide Transportation / Escort / Medication Assistance
- Support & Track (w/Consent) Referrals - Success & Outcomes
- Manage SUD as a **Chronic Disease**
- Remain as **Primary Care/Health Home** for each patient
Referrals & Orders Module

<table>
<thead>
<tr>
<th>AUDIT</th>
<th>DAST-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total AUDIT Score: 34</td>
<td>Total DAST-10 Score: 9</td>
</tr>
<tr>
<td>Patient willing to make a change: 🌐 yes ☐ no</td>
<td>Patient willing to make a change: 🌐 yes ☐ no</td>
</tr>
<tr>
<td>Status of Change: Preparation</td>
<td>Status of Change: Preparation</td>
</tr>
<tr>
<td>A score of 7 or more is associated with harmful or hazardous drinking.</td>
<td>A score of 9 or greater indicates possible dependence.</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
</tr>
</tbody>
</table>

Possible Dependence

- Provided clear supportive feedback of results and comparison to norms.
- Recommended: "From my assessment I believe you have an alcohol and/or drug use disorder. I strongly recommend that you quit your drinking and/or drug use and I am willing to assist you in doing so."
- Discussed health risks of consumption of alcohol and emphasized health problems related to use, possible interactions with medications, hazards from use during pregnancy with women who are pregnant or of childbearing age.
- Recommended abstinence.
- Assisted patient with goal setting through motivation techniques, including how they will quit, potential barriers and plan for overcoming these and use of supports.

Recommend: What are some steps you could take to change your drinking/drug use?
- Referred to agency BH provider for brief therapy.
- Implemented pharmacotherapy.
# Billing SBIRT -

*Medicaid SBIRT codes & rules by State*  
http://www.integration.samhsa.gov/financing/billing-tools#billing worksheets

<table>
<thead>
<tr>
<th>Insurance</th>
<th>CPT codes</th>
<th>Rate</th>
<th>Time Limit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Insurance</td>
<td>99408</td>
<td>$33</td>
<td>15-30 min</td>
<td>Alcohol and /or SA structured Screening and Brief Intervention</td>
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<tr>
<td></td>
<td>99409</td>
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<tr>
<td>Medicare</td>
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<td>H0049</td>
<td>$24</td>
<td>Screening Only</td>
<td>Alcohol and/or Drug Screening Only</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>no time limit</td>
<td></td>
</tr>
<tr>
<td>Medicaid *</td>
<td>H0050</td>
<td>$48</td>
<td>per 15 min</td>
<td>Alcohol and /or Drug Service, Brief Intervention</td>
</tr>
</tbody>
</table>
SBIRT Resources

- ATTC - Addiction Technology Transfer Center _SBIRT_ 
  [http://www.attcnetwork.org/national-focus-areas/?rc=sbirt](http://www.attcnetwork.org/national-focus-areas/?rc=sbirt)
- Oregon: [www.sbirtoregon.org](http://www.sbirtoregon.org)
- Yale: [www.yale.edu/sbirt/resources/docs/SBIRTtrainingmanual/pdf](http://www.yale.edu/sbirt/resources/docs/SBIRTtrainingmanual/pdf)
- Baylor: [www bcm edu/education/sbirt](http://www.bcm.edu/education/sbirt)
Thank You
Substance Use: Intoxication, Withdrawal, Treatment

Lynda Bascelli, MD
31 May 2016
Overview

0 Co-existing psychiatric conditions and substance use disorder
0 Recognizing and assessing withdrawal syndromes
  0 Marijuana
  0 Alcohol
  0 Benzodiazepine
  0 Opioid
0 Management of opioid dependence with medication
  0 naltrexone
  0 buprenorphine
Co-morbid psychiatric and substance use disorder

Psychiatric illnesses and substance use disorders commonly co-occur

How to screen for and identify comorbid psychiatric diagnoses in the patient with substance use disorder?

Distinction between independent psychiatric illness and substance-induced disorders – is this clinically relevant?
Epidemiology

Substance use disorders (SUD) and psychiatric illnesses frequently co-occur.

Data from the National Survey on Drug Use and Health (NSDUH) revealed that among the 20.7 million adults with a past year substance use disorder, 40.7% (8.4 million adults) had co-occurring mental illness in 2012 (NSDUH 2013).

In comparison, among adults without a substance use disorder, 16.5% had mental illness. (NSDUH 2013)
Why so much overlap?

0 Developmental Factors (i.e. one causes the other):
  0 Substance abuse usually starts in adolescents when the brain is undergoing significant developmental changes.
  0 Early exposure to drugs of abuse can change the brain in ways that increase the risk for mental illness, and early symptoms of a mental disorder may increase vulnerability to drug abuse

0 Shared Risk Factors: shared genetic vulnerability or environmental stressors--stressful life events, trauma

0 Indirect risk factor: ‘Self medicating’ one psychiatric disorder transitions into a substance use disorder
Clinical relevance: why does this matter?

0 Those with comorbid psychiatric illness and SUD have poorer prognosis, worse treatment outcomes, higher relapse rates and shorter time to relapse of substance use, and more hospitalizations.

0 Those with co-occurring disorders have poorer quality of life.

0 There is a high risk of suicide in those with co-occurring mental health and SUDs, particularly in those with bipolar disorder.
Diagnostic and treatment implications

0 The DSM-5 distinguishes between independent psychiatric illness and one that is substance-induced (i.e. secondary)

0 Evidence of an independent disorder could include:
  0 symptoms that preceded the onset of the substance use
  0 symptoms that persist for a substantial period of time (e.g. about 1 month) after the cessation of acute withdrawal or severe intoxication
  0 a history of recurrent non-substance/medication-
Diagnostic and treatment implications

0 When evaluating someone with both substance abuse and psychiatric symptoms, careful diagnosis, evaluating for substance-induced disorders is important

0 A different clinical course may be expected if psychiatric symptoms are substance induced
  0 85% or more of substance-induced symptoms improve rapidly with abstinence
  0 But both primary and substance-induced depression predict future depression; substance-induced symptoms, therefore, may warrant consideration for specific treatment
Example: Marijuana

0 35 year-old man being treated for opioid dependence with buprenorphine

0 Taking sertraline, seroquel for bipolar disorder – moderately effective

0 Heavy marijuana use – ‘only thing that helps me with my anxiety’
What is intoxication?

0 The result of being under the influence of, and responding to, the acute effects of alcohol or another drug of abuse

0 Identified by:
   0 Collection of patient data
      0 History
      0 Physical
      0 Lab testing

0 Qualified by:
   0 Patient’s level of consciousness
   0 Substances involved
   0 Complicating medical disorders
Marijuana intoxication

0 Psychological/behavioral effects – social setting/prior experience influence
  0 Relaxation
  0 Euphoria
  0 Slowed time perception
  0 Altered (intensified) sensory perception
  0 Increased awareness of the environment
  0 Increased appetite
  0 Impaired concentration
  0 Anterograde amnesia
  0 Motor incoordination
Marijuana intoxication

Medical effects
- Conjunctival injection
- Tachycardia (a-fib – rare)
- Orthostatic hypotension
- Dry mouth
- Poor motor coordination
- Head jerks
- Impairment of smooth pursuit eye movements
Marijuana intoxication

0 Management of intoxication

0 Wait it out! Adverse effects tend to be self-limited

0 For psychosis – can use low dose second generation antipsychotics
Marijuana withdrawal

- Enough marijuana use chronically can produce a withdrawal syndrome that looks an awful lot like a psychiatric illness!
- Reported by up to 1/3 of heavy marijuana users in the community
- Seen in more than ½ of those seeking treatment
- Mostly psychologic symptoms
  - Irritability
  - Anxiety
  - Depression
  - Restlessness
  - Anorexia
  - Insomnia
  - Vivid disturbing dreams
- Rarely requires treatment for intrinsic medical or psychiatric reasons
Diagnostic and treatment implications

0 It is important to note that sometimes even with the most prudent evaluation it can be very difficult to differentiate independent from secondary disorders without reduction/abstinence period

0 For some, reduction/abstinence can be difficult and delaying treatment for psychiatric symptoms can have serious consequences

0 Antidepressant treatment is effective for depressive syndromes in those with comorbid depressive disorder and substance use disorders, but not found to significantly impact drug/alcohol use
Intoxication and withdrawal: alcohol

- Clinical effects (correlating with blood alcohol level):
  - Loss of muscular coordination
  - Changes in mood, personality, behavior
  - Neurologic impairment: prolonged reaction time, ataxia, incoordination
  - Nausea, vomiting
  - Hypothermia, severe dysarthria
  - Coma, obtundation
  - Urinary incontinence, absent reflexes
  - Respiratory arrest
Example: Alcohol withdrawal

0 Can you help us out doc? Can you give us some medicine to help us to stop drinking?...
Alcohol withdrawal

0 Early signs/symptoms

0 Anxiety
0 Sleep disturbance
0 Vivid dreams
0 Anorexia
0 Nausea
0 Headache

0 Physical signs

0 Tachycardia
0 Hypertension
0 Sweating
0 Hyperactive reflexes
0 Hyperthermia
0 Tremors
Alcohol withdrawal: what we are so scared about

- Withdrawal seizures
- Alcohol withdrawal delirium
- Predictors of severe withdrawal
  - Hx of DTs
  - Marked autonomic hyperactivity
  - Electrolyte abnormalities
  - Medical co-morbidities
CIWA-Ar

- **NAUSEA AND VOMITING** — Ask "Do you feel sick to your stomach? Have you vomited?" Observation.

- **TREMOR** — Arms extended and fingers spread apart. Observation.

- **PAROXYSMAL SWEATS** — Observation.

- **ANXIETY** — Ask "Do you feel nervous?" Observation.

- **AGITATION** — Observation.

- **TACTILE DISTURBANCES** — Ask "Have you any itching, pins and needles sensations, burning sensations, numbness or do you feel bugs crawling on or under your skin?" Observation.

- **AUDITORY DISTURBANCES** — Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?" Observation.

- **PAROXYSMAL SWEATS** — Observation.

- **VISUAL DISTURBANCES** — Ask "Does the light appear to be too bright? Is its color different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?" Observation.

- **HEADACHE, FULLNESS IN HEAD** — Ask "Does your head feel different? Does it feel as if there is a band around your head?" Do not rate for dizziness or lightheadedness. Otherwise, rate severity.

- **ORIENTATION AND CLOUDING OF SENSORIUM** — Ask "What day is this? Where are you? Who am I?"

---

**Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (CIWA-Ar)**

**Patient:** __________  **Date:** __________  **Time:** __________

**Pulse or heart rate, taken for one minute:**

<table>
<thead>
<tr>
<th>NAUSEA AND VOMITING</th>
<th>TACTILE DISTURBANCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask &quot;Do you feel sick to your stomach? Have you vomited?&quot; Observation.</td>
<td>Ask &quot;Have you any itching, pins and needles sensations, any burning, any numbness, or do you feel bugs crawling on or under your skin?&quot; Observation.</td>
</tr>
<tr>
<td>0 none</td>
<td>0 none</td>
</tr>
<tr>
<td>1 mild nausea with no vomiting</td>
<td>1 very mild itching, pins and needles, burning or numbness</td>
</tr>
<tr>
<td>2</td>
<td>2 mild itching, pins and needles, burning or numbness</td>
</tr>
<tr>
<td>3</td>
<td>3 moderate itching, pins and needles, burning or numbness</td>
</tr>
<tr>
<td>4 intermittent nausea with dry heaves</td>
<td>4 moderately severe hallucinations</td>
</tr>
<tr>
<td>5</td>
<td>5 severe hallucinations</td>
</tr>
<tr>
<td>6</td>
<td>6 extremely severe hallucinations</td>
</tr>
<tr>
<td>7 constant nausea, frequent dry heaves and vomiting</td>
<td>7 continuous hallucinations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TREMOR</th>
<th>AUDITORY DISTURBANCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arms extended and fingers spread apart. Observation.</td>
<td>Ask &quot;Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?&quot; Observation.</td>
</tr>
<tr>
<td>0 no tremor</td>
<td>0 not present</td>
</tr>
<tr>
<td>1 not visible, but can be felt fingertip to fingertip</td>
<td>1 very mild harshness or ability to frighten</td>
</tr>
<tr>
<td>2</td>
<td>2 mild harshness or ability to frighten</td>
</tr>
<tr>
<td>3</td>
<td>3 moderate harshness or ability to frighten</td>
</tr>
<tr>
<td>4 moderate, with patient's arms extended</td>
<td>4 moderately severe hallucinations</td>
</tr>
<tr>
<td>5</td>
<td>5 severe hallucinations</td>
</tr>
<tr>
<td>6</td>
<td>6 extremely severe hallucinations</td>
</tr>
<tr>
<td>7 severe, even with arms not extended</td>
<td>7 continuous hallucinations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAROXYSMAL SWEATS</th>
<th>VISUAL DISTURBANCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation.</td>
<td>Ask &quot;Does the light appear to be too bright? Is its color different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?&quot; Observation.</td>
</tr>
<tr>
<td>0 no sweat visible</td>
<td>0 not present</td>
</tr>
<tr>
<td>1 barely perceptible sweating, palms moist</td>
<td>1 very mild sensitivity</td>
</tr>
<tr>
<td>2</td>
<td>2 mild sensitivity</td>
</tr>
<tr>
<td>3</td>
<td>3 moderate sensitivity</td>
</tr>
<tr>
<td>4 heads of sweat obvious on forehead</td>
<td>4 moderately severe hallucinations</td>
</tr>
<tr>
<td>5</td>
<td>5 severe hallucinations</td>
</tr>
<tr>
<td>6</td>
<td>6 extremely severe hallucinations</td>
</tr>
<tr>
<td>7 drenching sweat</td>
<td>7 continuous hallucinations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANXIETY</th>
<th>HEADACHE, FULLNESS IN HEAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask &quot;Do you feel nervous?&quot; Observation.</td>
<td>Ask &quot;Does your head feel different? Does it feel like there is a band around your head?&quot; Do not rate for dizziness or lightheadedness. Otherwise, rate severity.</td>
</tr>
<tr>
<td>0 no anxiety, at ease</td>
<td>0 not present</td>
</tr>
<tr>
<td>1 mild anxious</td>
<td>1 very mild</td>
</tr>
<tr>
<td>2</td>
<td>2 mild</td>
</tr>
<tr>
<td>3</td>
<td>3 moderate</td>
</tr>
<tr>
<td>4 moderately anxious, or guarded, so anxiety is inferred</td>
<td>4 moderately severe</td>
</tr>
<tr>
<td>5</td>
<td>5 severe</td>
</tr>
<tr>
<td>6</td>
<td>6 very severe</td>
</tr>
<tr>
<td>7 equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions</td>
<td>7 extremely severe</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGITATION</th>
<th>ORIENTATION AND CLOUDING OF SENSORIUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation.</td>
<td>Ask &quot;What day is this? Where are you? Who am I?&quot;</td>
</tr>
<tr>
<td>0 normal activity</td>
<td>0 oriented and can do serial additions</td>
</tr>
<tr>
<td>1 somewhat more than normal activity</td>
<td>1 cannot do serial additions or is uncertain about date</td>
</tr>
<tr>
<td>2</td>
<td>2 discontinued for date by no more than 2 calendar days</td>
</tr>
<tr>
<td>3</td>
<td>3 discontinued for date by more than 2 calendar days</td>
</tr>
<tr>
<td>4 moderately fidgety and restless</td>
<td>4 discontinued for place or person</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7 paces back and forth during most of the interview, or constantly thrashes about</td>
<td></td>
</tr>
</tbody>
</table>

**Total CIWA-Ar Score** __________  **Batt's Initials** __________

**Maximum Possible Score 67**

---

*The CIWA-Ar is not copyrighted and may be reproduced freely. This assessment for monitoring withdrawal symptoms requires approximately 5 minutes to administer. The maximum score is 67 (see instrument). Patients scoring less than 10 do not usually need additional medication for withdrawal.*

Alcohol withdrawal treatment

- Benzodiazepines are the mainstay of treatment
  - For patients with mild symptoms, no hx of seizures or DTs, and no concurrent medical or psychiatric diagnosis
    → can consider outpatient
  - but...need daily visits, someone to watch the patient, access to EMS
- Chlordiazepoxide
- Oxazepam
- Diazepam
- Lorazepam

Symptom-triggered treatment is preferred, using CIWA-Ar
- Fixed doses may under-dose
- Balance with excess sedation
Let’s talk about benzodiazepines

But doc I have been taking xanax for years for my seizure disorder... so you are not going to help me?
Rational use of benzodiazepines

• Efficacy, rapid onset make them desirable
• Acute stress, fluctuating anxiety, severe panic are indications
• Limit use to acute episode if possible (4 weeks max) – can become difficult to stop this though
• Use in conjunction with other strategies – SSRI, therapy
• Side effects include sedation, tolerance, cognitive impairment, concern with increased risk of dementia, early mortality
• Base choice by half-life:
  0 short anxiety attacks, events – alprazolam (3 hours)
  0 sleep, intermediate coverage – lorazepam (6-8 hour)
  0 longer term coverage – clonazepam (18 hours)
Benzodiazepines

0 These are some of the most challenging patients
0 Often the history is notable for poly-substance use, which complicates the picture
  0 patients die when they combine alcohol and opioids with benzos, not when they use benzos alone
Benzodiazepine intoxication

- Slurred speech
- Ataxia
- Incoordination (similar to alcohol intoxication)
- Agitation
- Confusion
- Delirium
- Stupor
- Coma
Benzodiazepine abstinence and withdrawal

Clinically significant withdrawal syndrome most likely to occur after d/c of a daily therapeutic dose (low dose) of 4-6 months duration, or a high dose (misused, 2-3X normal) for more than 2-3 months.

History is important but can be difficult to obtain.
Benzodiazepine withdrawal

0 Very frequent
  0 Anxiety
  0 Insomnia
  0 Restlessness
  0 Agitation
  0 Irritability muscle tension

0 Physical
  0 Tachycardia
  0 Hypertension
  0 Fever

0 Severe high-dose withdrawal
  0 Seizures
  0 Delirium
  0 death
Treatment – benzodiazepine withdrawal

0 Not looking to stop

0 Looking for a prescribed source

0 If we do not do a thorough evaluation of these patients we are doing them a disservice

0 High prevalence (40-100%!) of concurrent psychiatric disorders in benzodiazepine discontinuation studies – most show a correlation between the degree of the patient’s psychiatric illness and withdrawal symptoms and severity and difficulty with discontinuing use
So what do we actually do with the patient looking to prevent or relieve withdrawal?

0 Recommend a medically-supervised detox

0 Select cases, depending on the ability to obtain a reliable history and develop a therapeutic relationship, can consider transitioning to a long-acting benzodiazepine

0 What about the patient seeking treatment for OUD?
Opioid intoxication

Where does intoxication end and overdose begin?

1. Can occur in a variety of clinical settings
2. Mild-moderate intoxication – usually not life-threatening
3. Severe or overdose – medical emergency/preventable deaths
4. True prevalence of nonfatal overdose is not known but is associated with significant morbidity
5. Tolerance to respiratory depression may be slower than tolerance to euphoric effects
The ‘high’ patient

0 Detailed history
   0 Other drugs or alcohol
0 Physical
   0 Nodding
   0 CNS/respiratory depression
   0 Miosis
   0 Needle tracks/soft-tissue infection
0 Abnormal mental status, depressed respiration, and miotic pupils = sensitivity of 92%, specificity 76% for heroin overdose
0 Rule out hypoglycemia, acidemia, fluid and electrolyte abnormalities
Naloxone

0 Short-acting, parenterally administered full opioid antagonist

0 Counters life-threatening depression of central nervous and respiratory systems caused by opioid overdose

0 Causes rapid onset of withdrawal symptoms
Opioid overdose -- naloxone

0 BLS/ACLS

0 Initial naloxone dose 0.4-0.8 mg SC/IM/IV q2-3 minutes prn, or intranasal 1mg in each nostril q3-5 minutes prn (used with mucosal atomization device)

0 More potent opioids (fentanyl) or longer-acting opioids (methadone) may require higher doses over a longer period of time

0 Best practice: prescribing naloxone
Opioid withdrawal

*Early-Moderate*
- Anxiety
- Craving
- Dysphoria
- Mydriasis
- Perspiration
- Piloerection
- Restlessness
- Rhinorrhea
- Yawning

*Moderate-Advanced*
- Abdominal cramps
- Hot or cold flashes
- Increased pulse and BP
- Insomnia
- Low-grade fever
- Muscle and bone pain
- Muscle spasms
- Mydriasis
- Nausea and vomiting
COWS: Clinical Opiate Withdrawal Scale

0 11-item scale designed to be administered by a clinician

0 Can be used in both inpatient and outpatient settings
   0 reproducibly rate signs and symptoms of opiate withdrawal
   0 monitor these symptoms over time

0 The summed score for the complete scale can be used to help clinicians determine the stage or severity of opiate withdrawal and assess the level of physical dependence on opioids

0 Symptoms of opioid withdrawal (e.g., nausea, vomiting, sweating, joint aches, agitation, tremor) are objectively measured
COWS: Clinical Opiate Withdrawal Scale

<table>
<thead>
<tr>
<th>COWS</th>
<th>Clinical Opiate Withdrawal Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>Inattention or difficulty concentrating</td>
</tr>
<tr>
<td>Item 2</td>
<td>Changes in sleep patterns</td>
</tr>
<tr>
<td>Item 3</td>
<td>Changes in appetite</td>
</tr>
<tr>
<td>Item 4</td>
<td>Changes in affect</td>
</tr>
<tr>
<td>Item 5</td>
<td>Changes in respiration</td>
</tr>
</tbody>
</table>

Score: 0-12 mild; 13-24 moderate; 25-36 moderately severe; more than 36 = severe withdrawal
Non-opioid medications to treat withdrawal

- Alpha-2 agonists (clonidine)
  - Reduce sympathetic hyperactivity by feedback inhibition of presynaptic neurons
- Benzodiazepines (clonazepam)
  - For insomnia, anxiety, muscle spasm
- NSAIDs (ibuprofen)
  - For muscle and bone pain
- Anti-emetics (ondansetron, prochlorperazine)
- Anti-diarrheal agents (e.g. loperamide)
- Hypnotic agents (zolpidem, trazodone)
Non-opioid medication treatment

0 Clonidine: alpha-adrenergic agent
0 Approach is based on the discovery that one important mechanism underlying opioid withdrawal is noradrenergic hyperactivity
0 Clonidine acts at the locus coeruleus via pre-synaptic receptors to moderate the noradrenergic hyperactivity of opioid withdrawal – ameliorates some signs and symptoms of withdrawal in a medically-supervised setting
0 Less effective for subjective withdrawal symptoms
0 Requires careful BP monitoring
I am not going to talk about detoxification

0 We don’t do it as an outpatient

0 Huge overdose risk coming out of a detox

0 80-90% of people relapse immediately without maintenance therapy
But I do want to talk about some of the work we do with MAT for Opioid dependence

- Project H.O.P.E.
- 330(h) grantee
- 2 physicians, PA
- 2 LCSWs, CADC
- Psychiatric NP and psychiatrist
- Integrated

About 15% of our 3000 patients are opioid dependent
MAT for opioid dependence

0 Buprenorphine (Subutex)
0 Buprenorphine/naloxone (Suboxone)
0 Naltrexone (Vivitrol/ReVia)
Buprenorphine

- Mu opioid receptor partial agonist
- Exhibits ceiling effect on respiratory depression with increasing doses in opioid-experienced individuals
  - Not true for opioid-naive persons; buprenorphine can cause adverse events or deaths if ingested by those without opioid tolerance
- Buprenorphine is safer in overdose than other opioids
- Buprenorphine/naloxone formulation is advised to be used for treatment of opioid dependence (naloxone diminishes risk of diversion to injection; precipitates
Buprenorphine

0 Full mu opioid receptor agonists (e.g. morphine):
  0 Activate more mu receptors with increasing dose
  0 Can result in opioid toxicities at high doses

0 When buprenorphine binds to mu receptors in an opioid dependent person who has full agonist on board, net decrease in activation occurs and opiate withdrawal develops

  0 buprenorphine can precipitate opiate withdrawal if it displaces a full agonist from mu receptors
Buprenorphine

0 Abuse potential of buprenorphine varies as function of:

0 Level of physical dependence
   0 Lower opioid physical dependence less likely to precipitate withdrawal; more likely to produce an agonist effect

0 Time interval between last dose of opioid agonist and buprenorphine ingestion
   0 Longer it has been since last use of opioid, more likely buprenorphine will give opioid effects

0 Two types of treatment: medical withdrawal and maintenance; > 80% undergoing medical withdrawal
Buprenorphine – best practices

0 Confirm that the patient requesting buprenorphine treatment is opioid-dependent

0 History/previous treatment records if available

0 Look for physical signs: withdrawal, track marks

0 Urine drug screen positive for opioids (at least one positive screen)

0 Exception: need not be opioid-positive if documented history of use, currently at high risk after discharge from detox., residential treatment, or jail. If opioid-naive, start low and
Buprenorphine -- best practices

0 Urine Drug Screening:

0 Point-of-Care Testing: ‘Dipsticks’:

0 Need to order separate dipsticks to detect synthetic opioids

0 Standard “opiates” screen: detects only codeine, morphine, heroin

0 Separate tests needed for: * Methadone * Buprenorphine *

Oxycodone * Hydrocodone

0 Norbuprenorphine = metabolite
Buprenorphine -- best practices

0 Document all aspects of substance abuse treatment

0 Prescribe only FDA-approved medications for office-based treatment of opioid dependence (buprenorphine/naloxone sublingual film, buprenorphine s.l. tablets, or monopropduct s.l. tablet — no other drugs and no other buprenorphine formulations are approved for this use!)

0 Advisable not to give large prescriptions for buprenorphine/naloxone early in treatment

0 E.g.: No more than a week at a time in first months until patient stabilizes and stops opioid use/other drug use, shows...
Buprenorphine -- best practices

0 Prescribe monthly or more frequently

0 Regarding medical record keeping: Remember: if it is not documented in the medical record: it didn’t happen!

0 Make sure patient signs a 42 CFR compliant release of information before any treatment details are released/discussed with another provider
Buprenorphine

0 Sublingual administration

0 Medication is held under tongue until fully dissolved which can take several minutes

0 Taste is generally well tolerated; films reported to have better flavor; menthol tablets well tolerated

0 Two films/tablets at once is limit to assure adequate absorption

0 One film or tablet is placed under tongue on each side

0 Dental issues?

0 Therapeutic dose is generally in 12/3-16/4 mg/d but range is 4/1-24/6 mg/d approved by FDA in 24/6 mg
Buprenorphine

- No short-acting opioids for at least 12-18 hours before induction; must wait 24-72 hours after long-acting opioids.
- Conversion from methadone: SLOW taper to 30mg daily for a week (objective signs +/- subjective aspects of withdrawal).
- Ask pt. to wait at office to reach score of 10.
  - If patient appears not to be in withdrawal remind him/her of risk of precipitated withdrawal if recently used opioids.
- Usual Day 1 dose is 4 mg to avoid precipitating w/d.
- Important to proceed slowly, using objective signs.
- We don’t actually do this in practice, though...
Buprenorphine

0 Nausea/vomiting (consider precipitated withdrawal especially in first 15-20 minutes after dosing)

0 Constipation, headache, diaphoresis, vasodilation

0 Sedation (generally mild with bup alone, but use of other sedating drugs or use in those not currently dependent, but eligible for buprenorphine treatment by history may have greater sedation)

0 Screen for Hep C and monitor for elevations in liver transaminases (as Hep C marker); bup is not hepatotoxic, though

0 Precipitated withdrawal can occur in opioid-dependent patient who has recently
Naltrexone

0 Competitive opioid antagonist – blocks the effects of opioids

0 Will precipitate withdrawal symptoms in patients with opioid dependence

0 50mg of oral naltrexone will block pharmacologic effects of opioids for as long as 24 hours

0 Longer duration than naloxone
**Naltrexone maintenance**

- Mu-opioid antagonist
- Total oral weekly dose of 350mg
- Completely blocks the reinforcing properties of opioids – considered ‘ideal’ maintenance agent
- But patients need to successfully complete withdrawal and maintain abstinence before they can start the medication
- Treatment retention is 20-30% over 6 months
- No opioid effect, so when naltrexone is stopped, there is no immediate reminder (withdrawal)
Naltrexone

0 Cravings may still continue
0 External incentive to adhere to naltrexone regimen – health care professionals, business executives, probation referrals/drug court
0 Oral naltrexone is initiated after acute withdrawal from opioids – at least 7 days from last use
0 Consider naloxone challenge before naltrexone
0 GI side effects – nausea and vomiting when getting started – reduce risk by using a small dose in the beginning
0 Liver toxicity
Naltrexone

- 50mg daily safe for liver – liver toxicity resolves with discontinuation and does not progress to liver failure
- To address problems with adherence – long-acting injectable (380mg)
- Minimal and generally mild adverse events: nausea, vomiting, headache, dizziness
- Increase the sensitivity of opioid receptors – caution for overdose with relapse
- Blocks the reinforcing, subjective, and physiologic effects of heroin in studies
Sleep

0 Sleep hygiene (non-pharmacologic approach) first!

0 Naps common due to medication side effects and interfere with normal sleep patterns

- Trazodone 25 – 200 mg
- Gabapentin 300 – 900 mg
- Mirtazapine 15 mg
- SGAs – especially quetiapine
- Benzodiazepines – with caution
- Zolpidem – 5-10 mg
Alcohol treatment -- medication

• Naltrexone - 50 – 100 mg per day
  0  (watch liver function)
• Vivitrol – injectable version of Naltrexone
• Campral - 333 mg, 2 TID
  0  (avoid in renal impairment)
• Antabuse - 250 mg per day
Resources

0 PCSS-MAT: http://pcssmat.org/
0 ASAM National Practice Guideline:
0 www.buppractice.org
0 TIP 40:
Wrap-up

- Lingering questions

- Thank you to our presenters and attendees!

- Raffle

- PAPER evaluations