NATIONAL HEALTH CARE for the HOMELESS COUNCIL

Primary Care Providers and Psychiatric Care: The Next Level

Tuesday, May 31, 2016

Welcome

This workshop is brought to you by

HEALTH CARE *for the* HOMELESS

CLINICIANS' NETWORK

Health Care & Housing Are Human Rights

NATIONAL HEALTH CARE *for the* HOMELESS COUNCIL

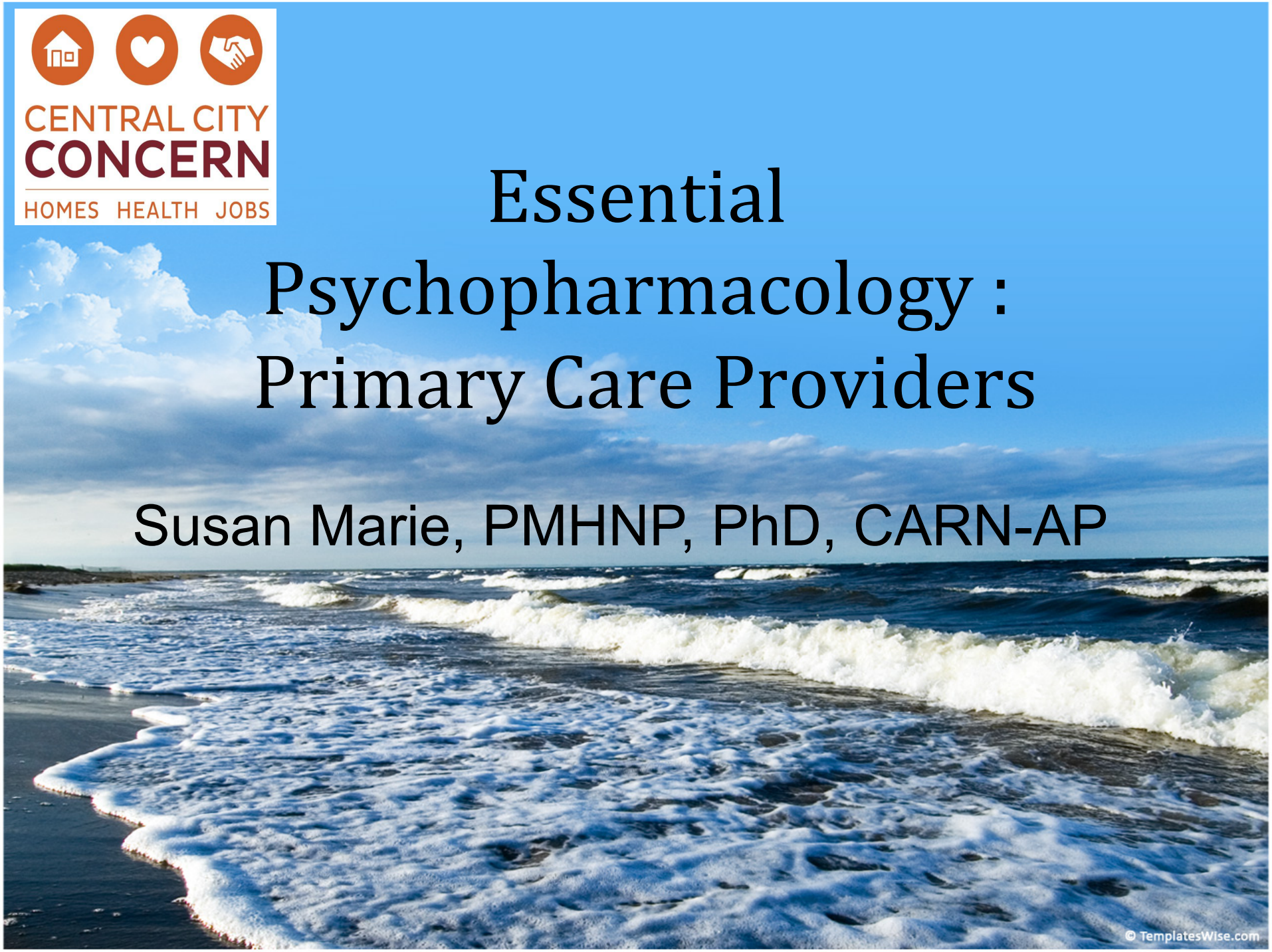
Housekeeping

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

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.


CENTRAL CITY
CONCERN
HOMES HEALTH JOBS
Essential
Psychopharmacology :
Primary Care Providers
Susan Marie, PMHNP, PhD, CARN-AP
© TemplatesWise.com

Disclosure Statement

- Susan Marie, PMHNP, PhD, BC is not employed by or financially affiliated 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.

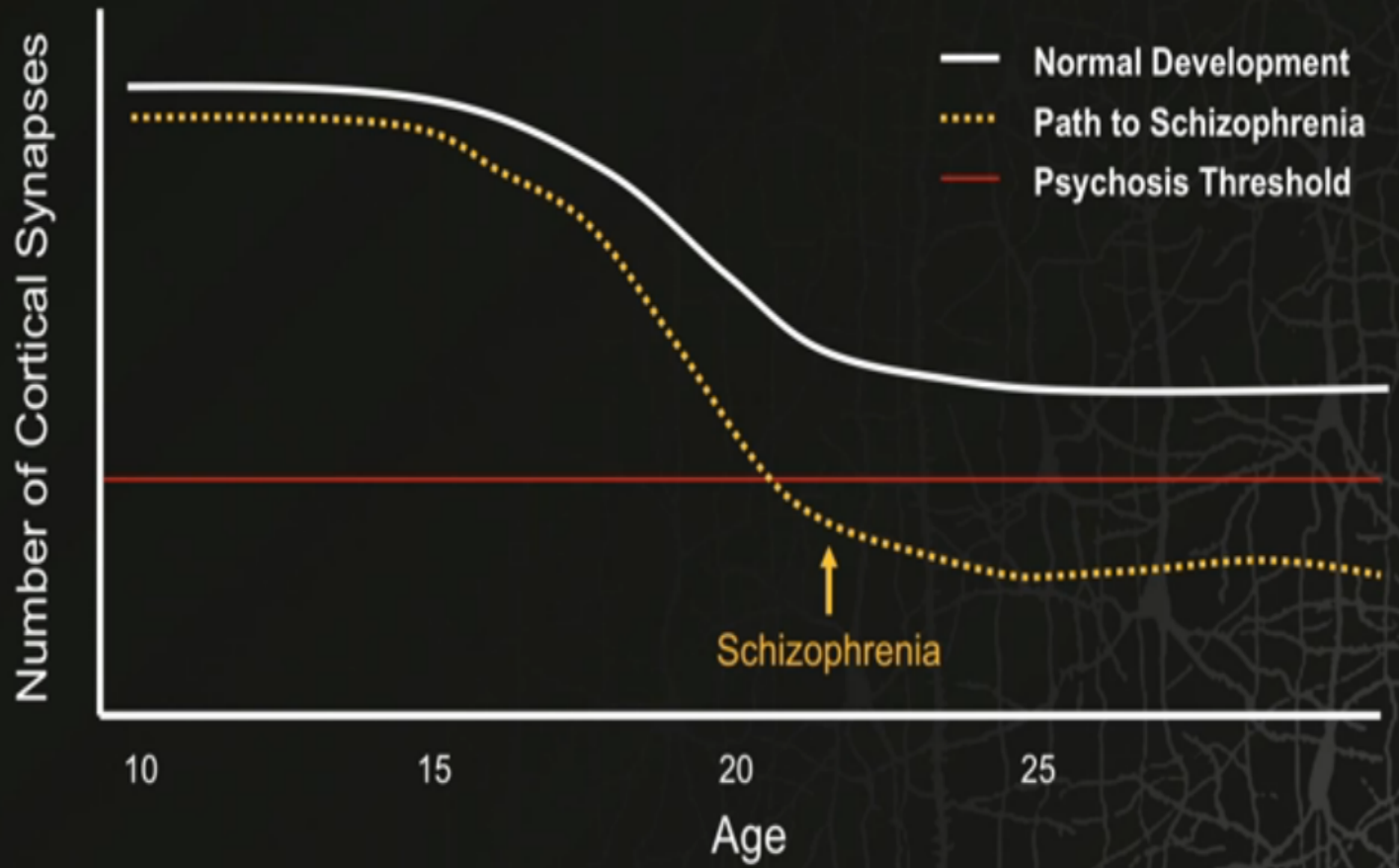
Goals:

- 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



Hoffman and McGlashan, 2001

Psychiatric Medications

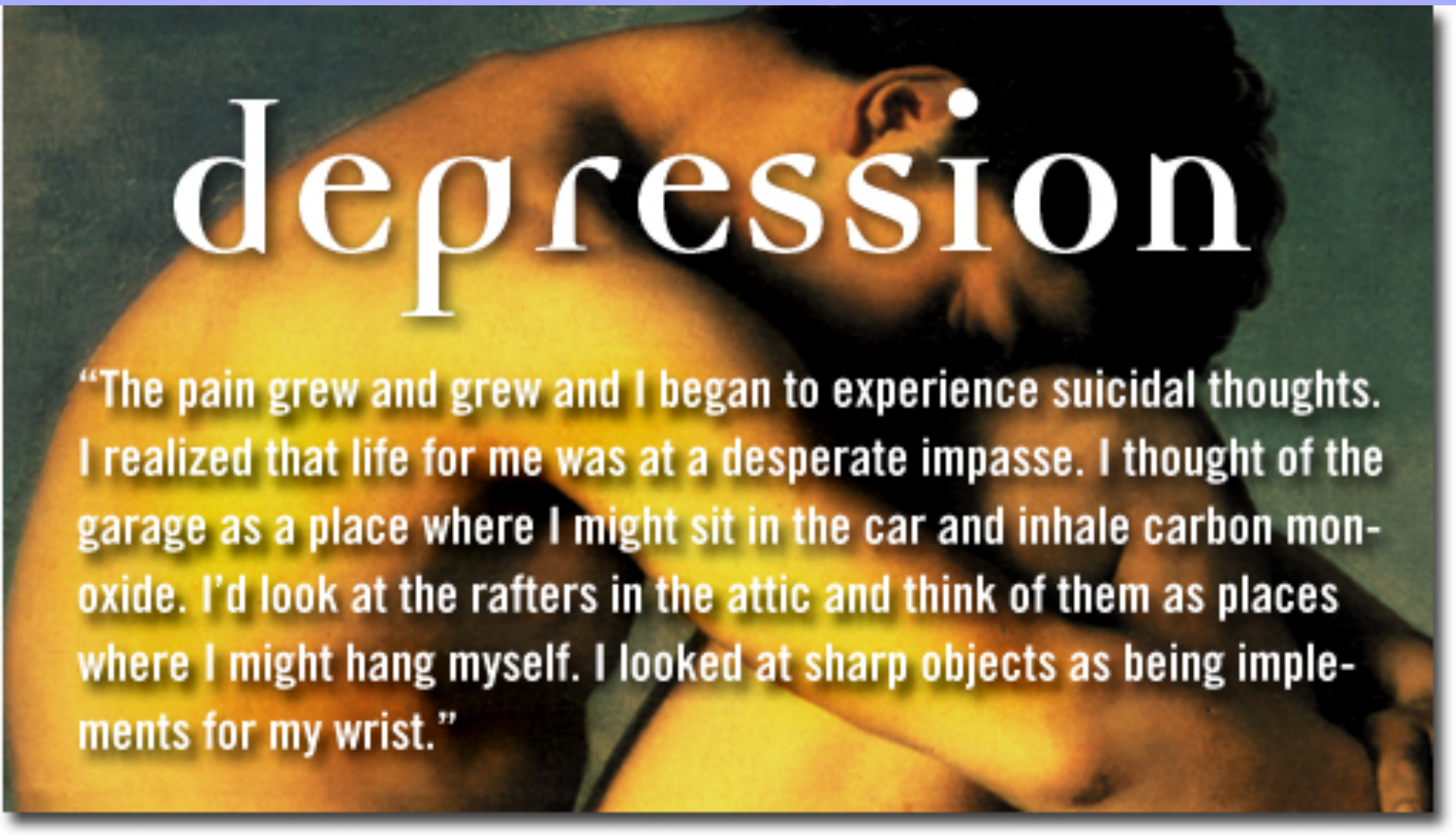
Antidepressants

Antipsychotics

Mood stabilizers

Anxiolytics

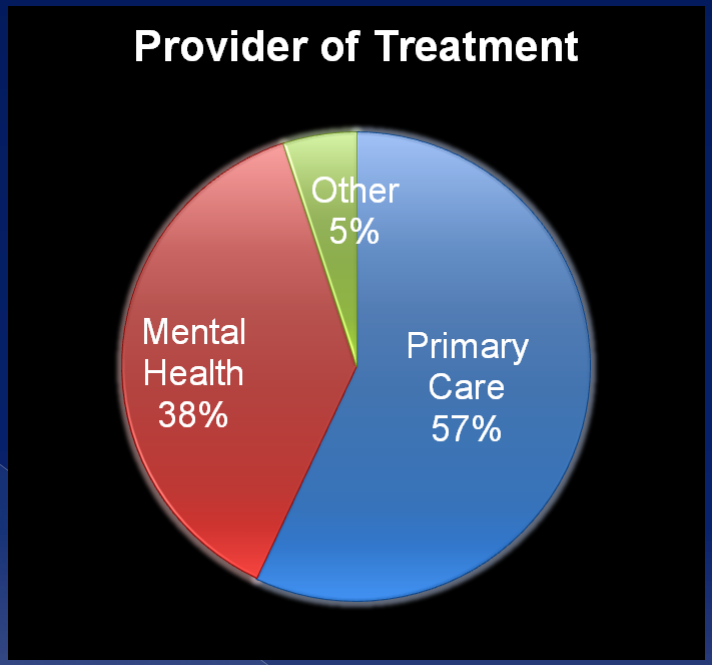
Meds for adverse effects


depression
"The pain grew and 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."

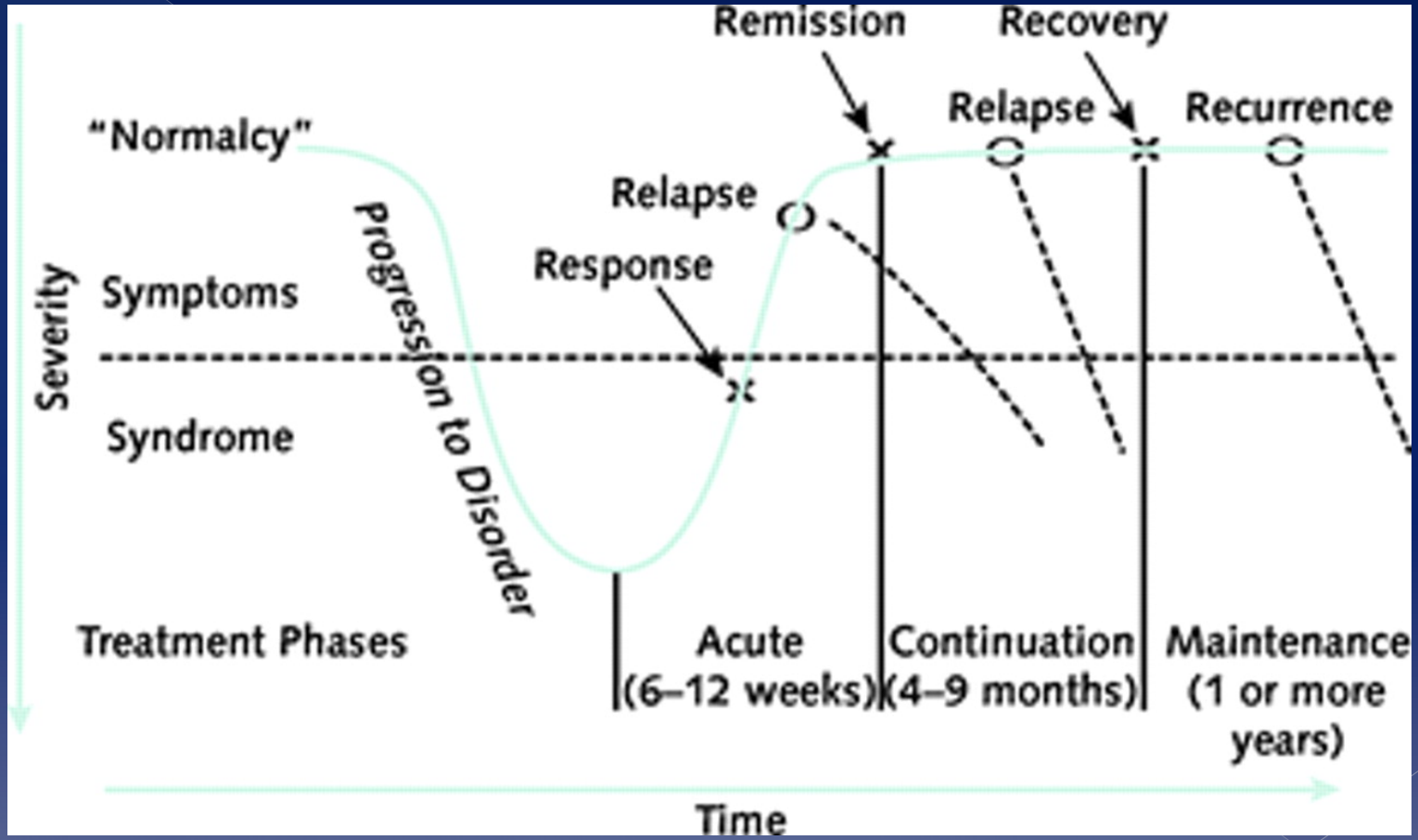
Depression 2016

- Stigma continues
- Early onset the norm
  1/3 < age 18; 2/3 < age 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



Phases of treatment of major depressive disorder



“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 "✔" to indicate your answer)*	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
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	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

FOR OFFICE CODING 0 + _____ + _____ + _____

=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?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
☐	☐	☐	☐

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

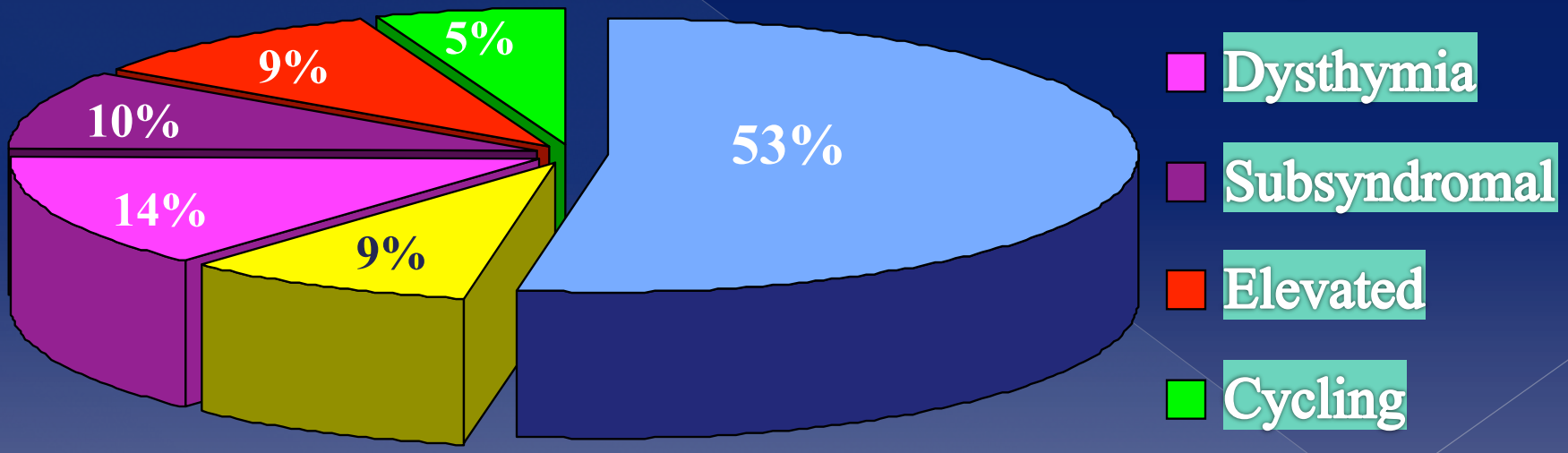
PMDD

- Can be confused with Premenstrual Dysphoric Disorder
  - Daily Rating of Severity for Premenstrual Mood Symptoms – 2 months
- PMDD - ? hypersenstivity to drop in progesterone and consequent drop in allopregnalone (GABA A receptor)
- SSRIs accelerate the conversion of progesterone to allopregnalone
- 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



Judd LL, et al. *Arch Gen Psychiatry.* 2002;59:530-537.

THE MOOD DISORDER QUESTIONNAIRE

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

	YES	NO
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?	○	○

Interventions

- Cognitive behavioral treatment
  - Recovery, International www.recoveryinternational.org
- Other resources
  - www.dbsalliance.org Wellness Tracker
  - www.mengetdepression.com

RESOURCES | FOR THE MEDIA | ABOUT THE CAMPAIGN | WHERE TO WATCH | SIGNS & SYMPTOMS | VIDEO CLIPS | GETTING HELP

impact-uw.org

IMPACT

Evidence-based depression care

home | about | implementation | tools | training | stories | news | contact us | register

Quick Links

Get to the information you need by using the quick links below to some of the most popular pages.

- Evidence base for IMPACT
- IMPACT key components
- Tools (manuals, videos, etc.)
- Online training
- IMPACT in the media
- IMPACT patients' stories featured in The John A. Hartford Foundation's annual report

Success Stories from Across the Country

Read about how organizations across the US are having success with the IMPACT program. Click on the map to learn more.

Thank You

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
  - Buproprion (Wellbutrin),Nefazodone (was Serzone),
  - Trazodone (desyrel), Vilazidone (Viibryd), Mirtazipine (Remeron); vortioxitine (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

- Buproprion- 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 arrythmias

Newer antidepressants

- Vilazodone (Viibryd) Serotonin X2
  - Nausea, dosing challenges
- Levomilnacipran (Fetzima) SNRI
  - Relative of Savella- tx fibromyalgia
- Vortioxetine (Trintellix) Serotonin X2

Antidepressants

Generic	BRAND	Class	Indications	Dosage	
fluoxetine	Prozac	SSRI	Depression, OCD	20-80 mg	
sertraline	Zoloft	SSRI	Depression, panic disorder, OCD	50-200 mg	
paroxetine	Paxil CR	SSRI	Depression, panic disorder	20-50 mg	
citalopram/ escitalopram	Celexa/ Lexapro	SSRI	Depression, anxiety disorder	20-40 mg 10-20 mg	
venlafaxine/ desvenlafaxine	Effexor / Pristiq	SNRI	Depression, panic disorder	75-350 mg 50 mg	
nefazadone	Serzone	SARI	Depression, panic disorder	100-500 mg	
fluvoxamine	Luvox	SSRI	panic disorder, OCD	50-300 mg	
buproprion	Wellbutrin	NDRI	Depression Smoking cessation	150-400 mg	
mirtazapine	Remeron	NaSSA	Depression, panic disorder	15-45mg+	
duloxetine	Cymbalta	SNRI	Depression, pain, GAD	30-120 mg	
vilazodone	Viibryd	SSRI/SA	Depression	10-40 mg	
levomilnacipran	Fetzima	SNRI	Depression	40-120 mg	
vortioxetine	Trintellix	SSRI/SA	Depression	5-20 mg	

Dosing Older Antidepressants

Generic	Brand	Class	Indications	Dosage	Half-Life
amitriptyline	Elavil	TCA	Depression, anxiety, migraines, insomnia, (ADHD)	50-300mg	10-50 hrs
clomipramine	Anafranil	TCA	Depression, anxiety, panic disorder OCD	150-250 mg	35-50 hrs
desipramine	Norpramin	TCA		150-300 mg	16-90 hrs
Doxepin	Sinequan	TCA	Depression, anxiety, insomnia	150-300 mg	17 hrs
imipramine	Tofranil	TCA	Depression, agitation, anxiety	150-300 mg	11-25 hrs
Nortriptiline	Pamelor	TCA	Depression, anxiety	75-150 mg	16-90 hrs
Protriptyline	Vivactil	TCA	Depression, anxiety, OCD, eating disorders	15-60 mg	54-92 hrs
phenelzine	Nardil	MAOI	Depression (refractory)	45-60 mg	11.6 hrs
tranylcypromine	Parnate	MAOI	Depression (refractory)	20-60 mg	2.5 hrs

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, mirtazipine
- 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 arrythmias

- 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
- Buproprion 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 & mirtazipine 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

Yesterday	Today
It's inevitable	It's preventable
Determining risk	Creating safety plan
Focus of MH	Focus of all health care
Protect- Containment	Work WITH- strategies

Suicidality

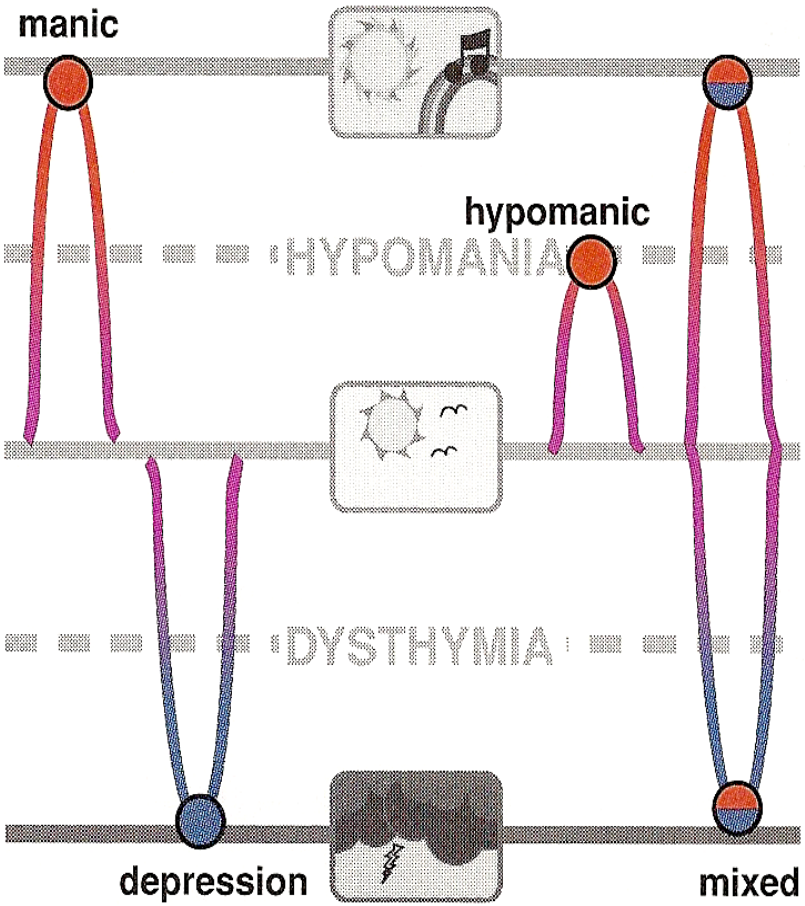
- USE PHQ- Written format

- 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

BD Upstream: Inflammation

- Cytokine pro-inflammatory proteins

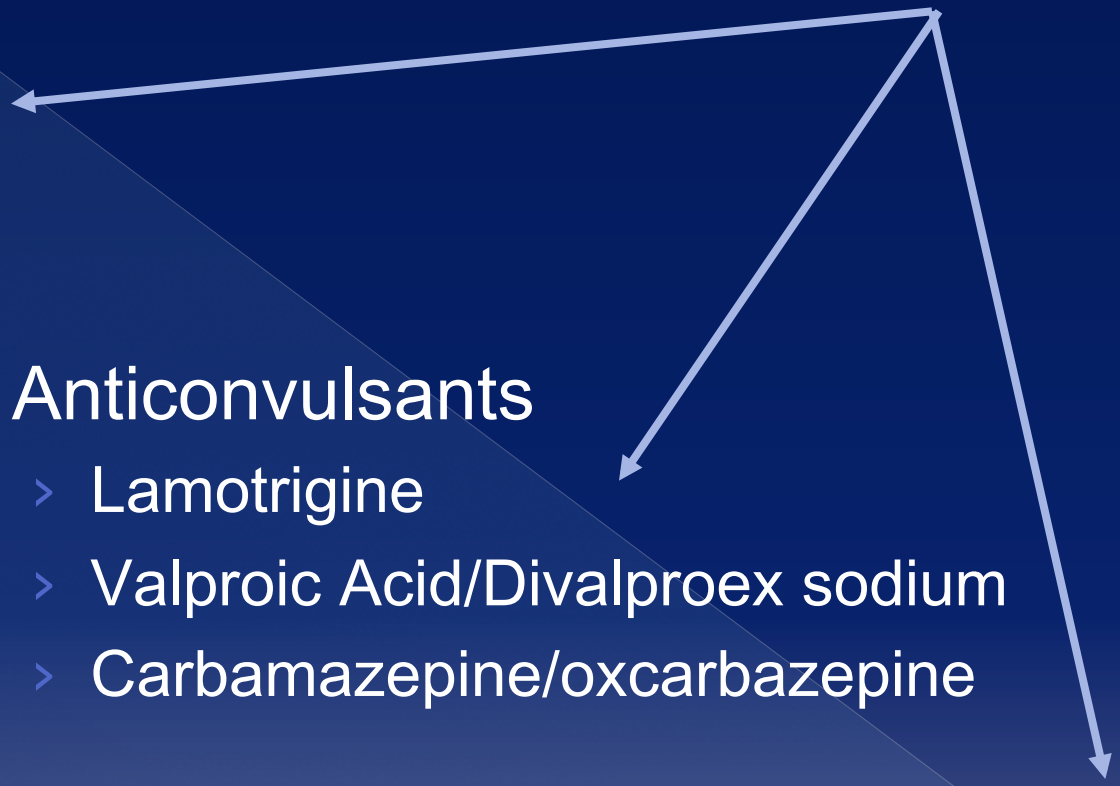
1. Involved in both regulation and orchestration of immune response
2. ALSO directly affect neuronal excitability
3. And divert tryptophan from use as precursor for serotonin
4. And interfere with metabolism of neurotransmitters
5. And influence HPA via feedback mechanism

What we know now…

- 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 6months 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

Lamotrigine

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

Contraindicated with women of childbearing capacity

Different usage for bipolar v. seizure disorders….

Teratogenicity:
Cat X Migraines
Cat D Bipolar, Seizures

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 supression/platelets
  - No labs needed with oxcarbazepine

- CLONAZEPAM
- Augmentation role for mood stability

Special Treatment Issues for Women

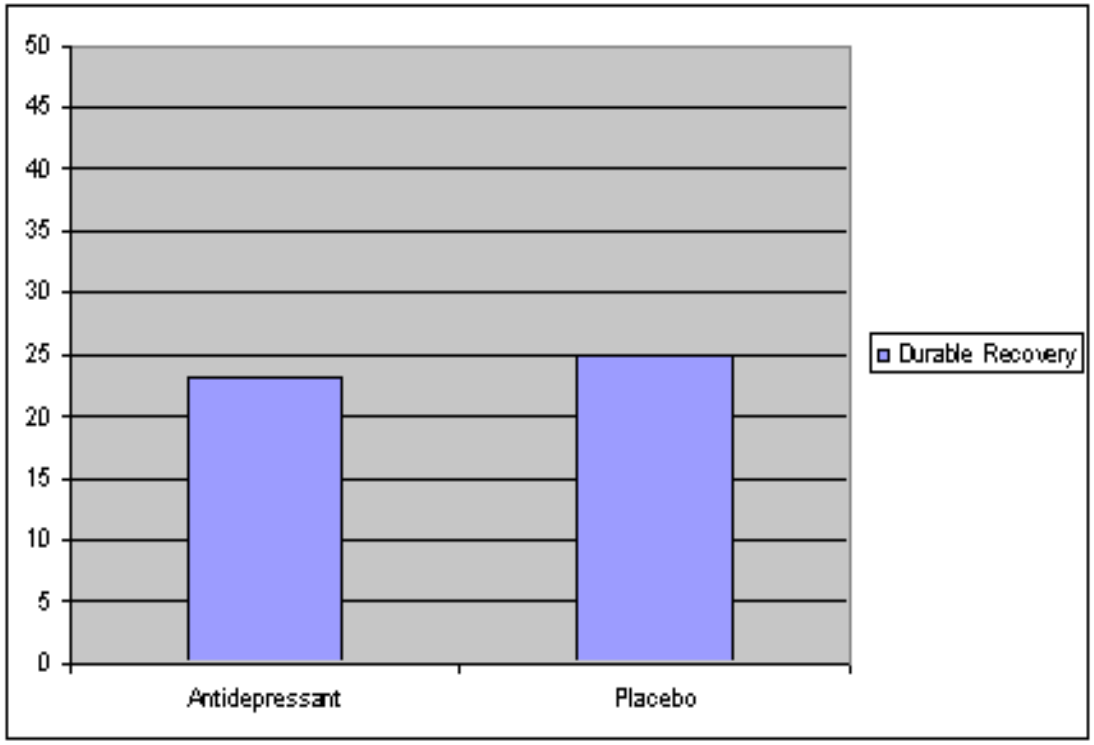
- Menstrual dysfunction higher with women with bipolar disorder
- Polycystic Ovary Syndrome
  - 10%; 1st year of VPA use
  - 6X risk for DMII
- Carbamazepine/ox decrease efficacy of estrogens (OCP)
- Estrogens (OCP) decrease blood level of lamotrigine

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??

Bipolar patients, on mood stabilizers, now depressed: antidepressants versus placebo



Sachs G et al, **New England Journal of Medicine**, April 2007

10th International BD Congress

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

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

"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

Generic	BRAND	Class	Indications	Dosage	Half-life
trifluoperazine	Stelazine	phenothiazine	Thought disorder, schizophrenia	10-40mg	125 hr
fluphenazine	Prolixin (Depo)	Antipsychotic	Thought disorder, schizophrenia	3-45 mg	15 hr Depo 3 wks
Halperidol	Haldol (Depo)	Phenothiazine	Thought disorder, schizophrenia	1-40 mg	12-38 hr Depo 3 wks
Lozapine	Loxitane	antipsychotic	Thought disorder, schizophrenia	50-100 mg	4 hr
chlorpromazine	**Thorazine**	phenothiazine	Thought disorder, schizophrenia	**60-800 mg**	**10-20 hr**
perphenazine	**Trilafon**	phenothiazine	Thought disorder, schizophrenia	**4-40 mg**	**10-20 hr**
thioridazine	**Mellaril**	phenothiazine	Thought disorder, schizophrenia	**200-800 mg**	**10-20 hr**
thiothixene	**Navane**	Antipsychotic	Thought disorder, schizophrenia	**2-60 mg**	**19=20 hr**

What makes a drug "atypical"?

- Degree of dopamine binding
  - Typicals- over 80 % binding - EPS
  - Atypicals- 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

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

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
  - Sublinqual
- 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

None?	Low	Moderate	High
Asenapine (Saphris)	Ziprasidone (Geodon)	Risperidone (Risperdal)	Olanzapine (Zyprexa)
Lurasidone (Latuda)	Aripiprazole (Abilify)	Quetiapine (Seroquel)	Clozapine (Clozaril)

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 1pm.

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

The "good" edge

- 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

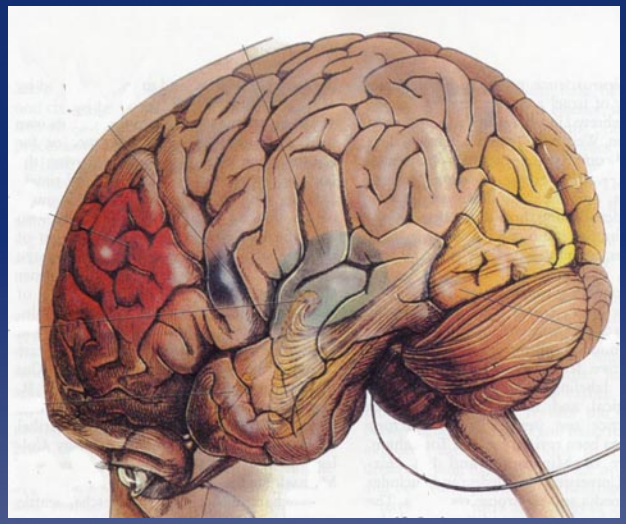
The "bad edge"

- 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

24 hour dosages by agent

	Green Light	Yellow Light	Red Light
Lorazepam	**<6 mg**	**6-10 mg**	**>10 mg**
Clonazepam	**<2 mg**	**2-4 mg**	**>4 mg**
Diazepam	**<20 mg**	**20-40 mg**	**>40 mg**
Alprazolam	**<2 mg**	**2—4 mg**	**>4 mg**
Alprazolam XR	**<3mg**	**3-6 mg**	**>6 mg**

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.

Taper Protocol

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, buproprion
- 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/breathalizer
- “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-actyl cysteine 600 mg bid to 3600 mg daily
  - Trichtillomania, 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.

THANK YOU

Susan Marie PMHNP, PhD
Medical Director for Behavioral Health, Primary Care

Central City Concern
Portland, Oregon

susan.marie@ccconcern.org

CENTRAL CITY CONCERN

HOMES HEALTH JOBS

SBIRT

Marianne Savarese, RN,BSN
Program Director/COO
HCH program of Manchester, NH

SBIRT defined (SAMHSA - HRSA)

- **S**creening, **B**rief **I**ntervention & **R**eferral to **T**reatment (**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**

- **<u>Tri-Morbid</u>** 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

http://ireta.org/improve-practice/health-and-human-service-professionals/screening-brief-intervention-and-referral-to-treatment/

SBIRT - evidenced based best practice

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

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

- **RT - <u>Referral to Treatment:</u>** recommended and negotiated plan of care based upon patient's level of risk and readiness for change 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

DSM-5 (continued)

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

In the past year, how many times have you used the following?	Never				
Alcohol • **Men > 5 drinks** • **Women > 4 drinks**					
Tobacco Products					
Prescription Drugs for Non-Medical Reasons					
Illegal Drugs					

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

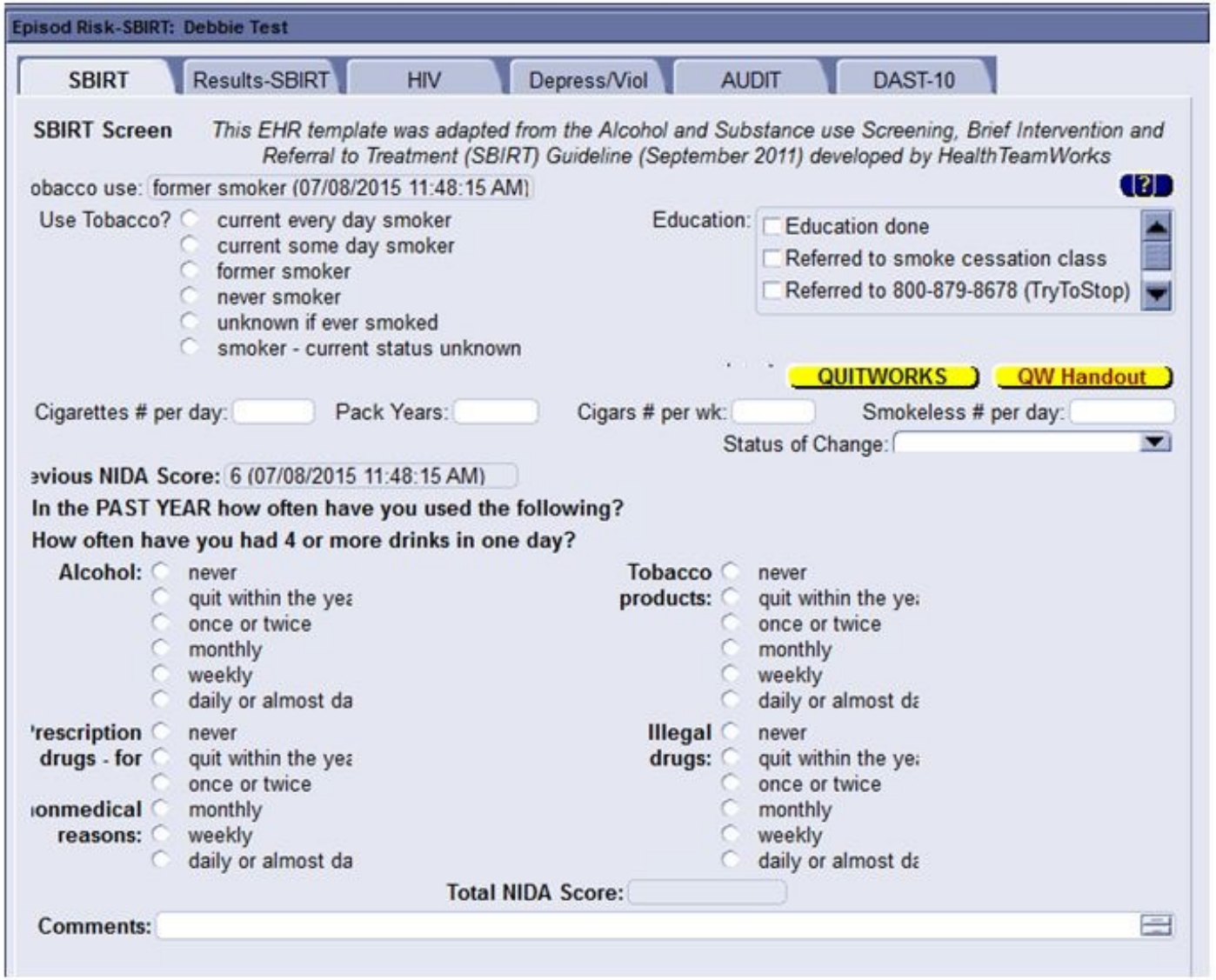
AUDIT/DAST - Billable by licensed BH or Med when > 15 min

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.

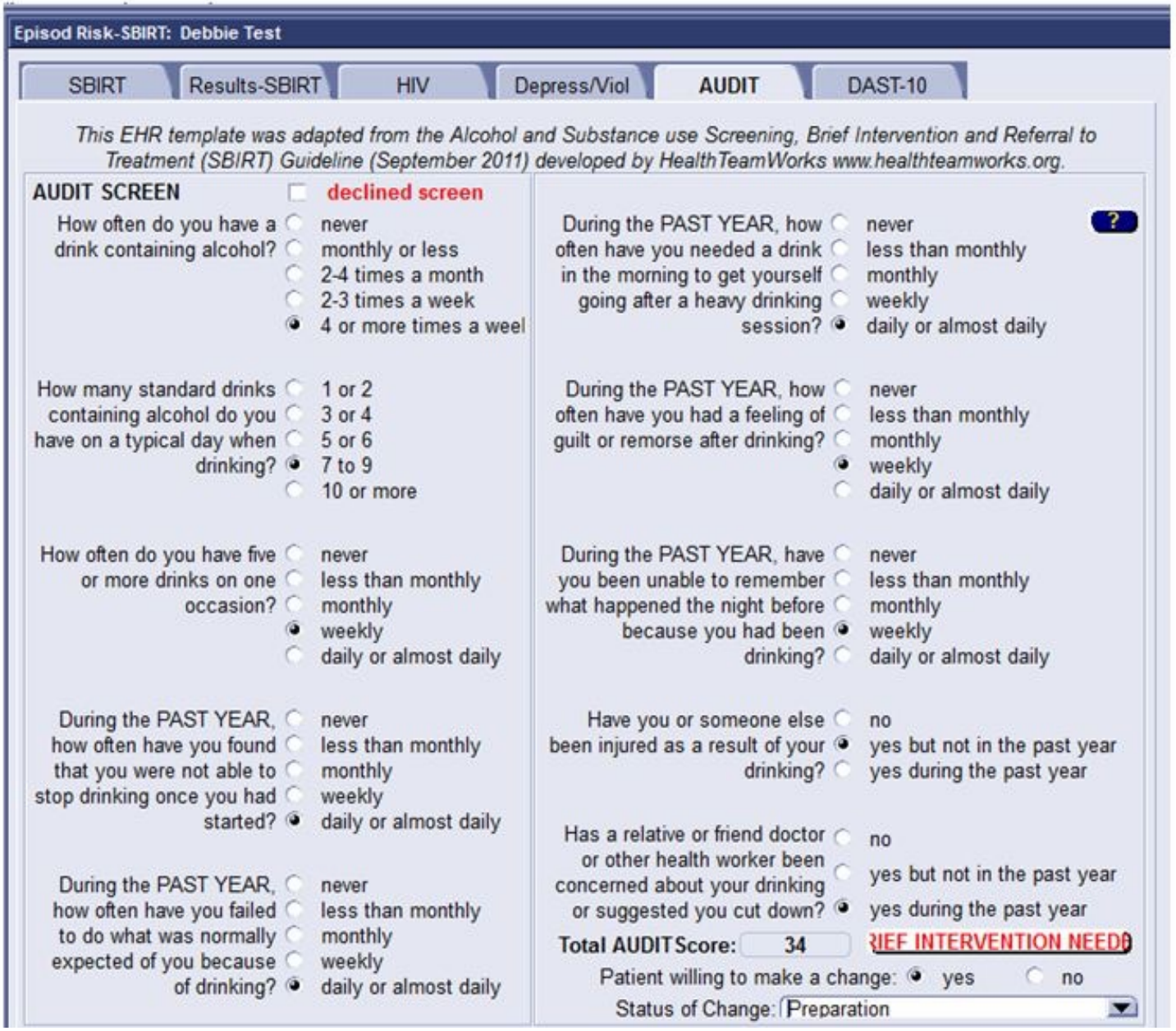
In the past year, how many times did you use/drink/take the following?	NEVER	Once or Twice	Every Month	Every Week	Daily ~ Almost Every Day	Quit within the PAST YEAR
Alcohol / Wine / Beer (men) more than 5 Drinks (women) more than 4 Drinks						
Tobacco						
Drugs						
Prescription Drugs for Non-Medical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

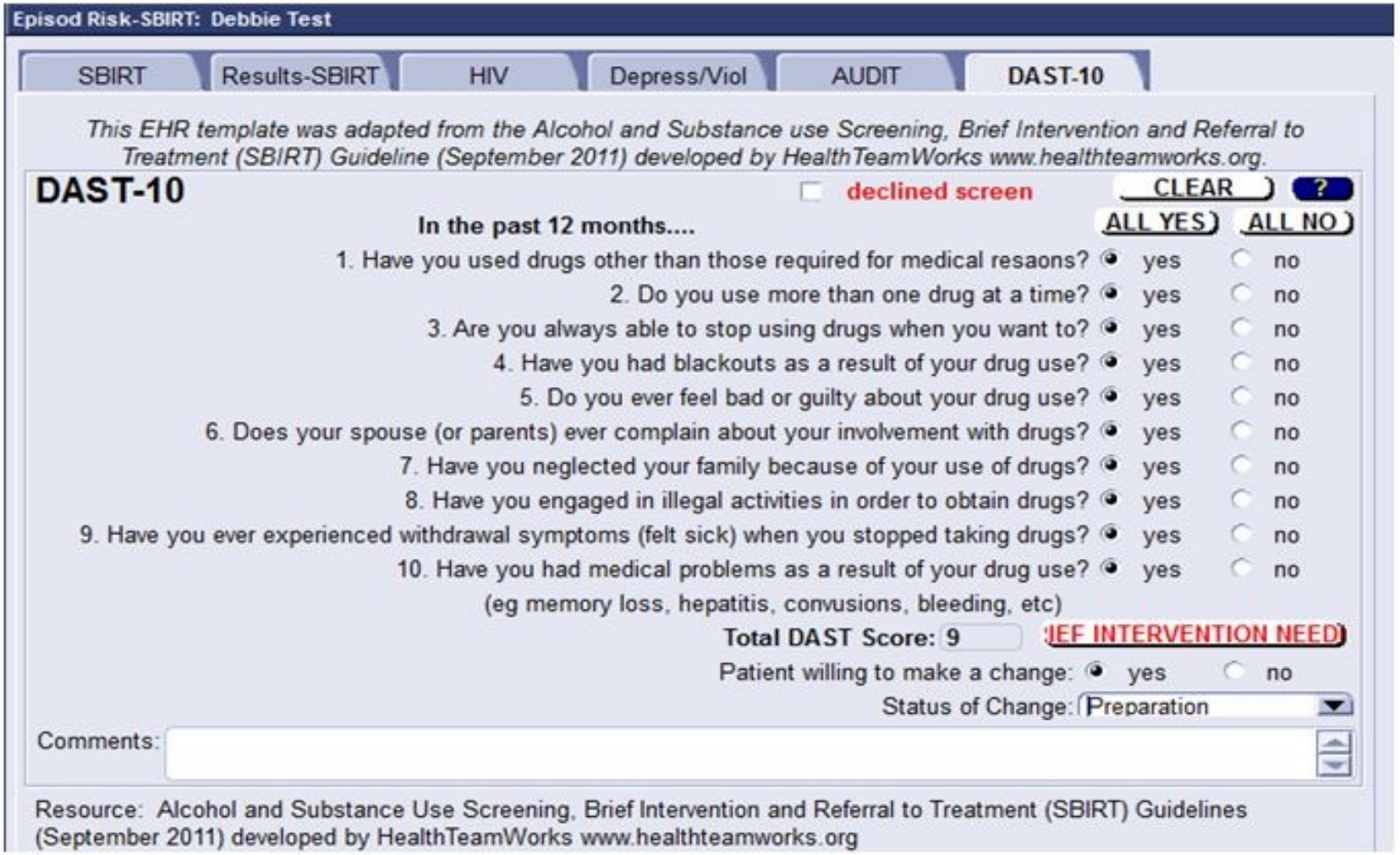
SBIRT screenshots



Screening Tools

		# Questions	Focus
ASSIST	Adults	8	Alcohol & Drugs
AUDIT -10	Adults	10	Alcohol only
DAST -10	Adults	10	Drug Use only
CRAFFT	Adol	6	Alcohol & Drugs
CAGE	Adults / Youth > 16yr	4	Alcohol only Signs of Dependence
TWEAK	Pregnant Women	5	Risky Drinking based on CAGE


Episod Risk-SBIRT: Debbie Test
SBIRT
Results-SBIRT
HIV
Depress/Viol
AUDIT
DAST-10
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 www.healthteamworks.org.
AUDIT SCREEN
declined screen
How often do you have a drink containing alcohol?
never
monthly or less
2-4 times a month
2-3 times a week
4 or more times a weel
How many standard drinks containing alcohol do you have on a typical day when drinking?
1 or 2
3 or 4
5 or 6
7 to 9
10 or more
How often do you have five or more drinks on one occasion?
never
less than monthly
monthly
weekly
daily or almost daily
During the PAST YEAR, how often have you found that you were not able to stop drinking once you had started?
never
less than monthly
monthly
weekly
daily or almost daily
During the PAST YEAR, how often have you failed to do what was normally expected of you because of drinking?
never
less than monthly
monthly
weekly
daily or almost daily
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?
no
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
RIEF INTERVENTION NEEDE
Patient willing to make a change: yes no
Status of Change: Preparation


Episod Risk-SBIRT: Debbie Test
SBIRT
Results-SBIRT
HIV
Depress/Viol
AUDIT
DAST-10
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 www.healthteamworks.org.
DAST-10
declined screen
CLEAR
?
In the past 12 months....
ALL YES
ALL NO
1. Have you used drugs other than those required for medical resaons? 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, convusions, bleeding, etc)
Total DAST Score: 9
JEF INTERVENTION NEED
Patient willing to make a change: yes no
Status of Change: Preparation
Comments:
Resource: Alcohol and Substance Use Screening, Brief Intervention and Referral to Treatment (SBIRT) Guidelines (September 2011) developed by HealthTeamWorks www.healthteamworks.org

Score & Level of Risk - Suggests Approach

Risk Level	I Low Risk Abstention	II Risky	III Abuse	IV Dependent
Gen Pop	**78%**	**9%**	**8%**	**5%**
AUDIT:	0-7	8-15	16-19	> 20
DAST:	0	1-2	3-5	> 6
SBIRT Action	Safety Education & Monitor	BI Consequences Change Talk Readiness	BI Change Talk Readiness Referral	RT Refer to Specialized Treatment
***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 **F**eedback
  - **L**isten for Change Talk & Readiness
  - Explore **O**ptions & 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

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

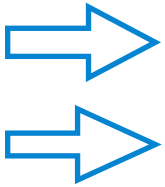
- **L**istening - Reflection / Empathy / Motivational Interviewing / Readiness Ruler / Decision Balance

- **O**ptions - 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.

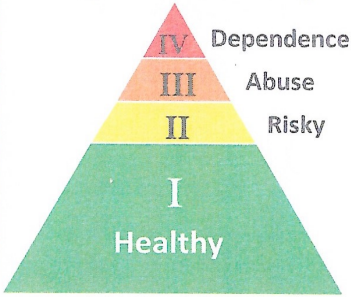
Thanks for taking this survey !!

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

	Drinks/week	Drinks/day
♂	14	4
♀	7	3
ALL > 65	7	3
ALL < 21	0	0

Categories of drinking



I Healthy	II Risky	III Abuse	IV Dependence
AUDIT: 0–7 DAST: 0	AUDIT: 8–15 DAST: 1-2	AUDIT: 16-19 DAST: 3-5	AUDIT: 20+ DAST: 6+

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 **I**ntervention

- 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?*

Referral to **T**reatment

- 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

www.bcm.edu/education/sbirt/

SBIRT

SBIRT Ap (J.H. Bray et al @ Baylor College of Medicine / SAMHSA)

- iPhone Ap - Ap store
- Galaxy Ap - Lollipops

DARN

- **D**esire: “ I want to … would like to …”
- **A**bility: “ I can … I did …“
- **R**eason: “ I should, because … “
- **N**eed: “ 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 **<u>Harm Reduction</u>**
- 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

Risk Level	I Low Risk Abstention	II Risky	III Abuse	IV Dependent
Gen Pop	**78%**	**9%**	**8%**	**5%**
AUDIT:	0-7	8-15	16-19	> 20
DAST:	0	1-2	3-5	> 6
SBIRT Action	Safety Education & Monitor	BI Consequences Change Talk Readiness	BI Change Talk Readiness Referral	RT Refer to Specialized Treatment
***DRUGS = NO Low Risk or SAFE USE * Intervene w/ BI & RT**				

ASAM Assessment in Multiple Dimensions

1.) Acute Intox / Withdrawal	Assess & Manage Withdrawal
2.) Med Conditions/Complications	Assess & Treat Co-Occurring Medical
3.) Emotional/BH & Cog Conditions	Assess & Treat Co-Occurring MH -BH
4.) Readiness to Change	Use Motivational Interviewing
5.) Relapse / Continued Use Potential	Identify what worked in past Strategies that help motivation Discuss Consequences
6.) Recovery Environment	Socioeconomic Needs & Supports: Family/Housing/Jobs/Finances Entitlements/Childcare /Transportation / Health Ins

ASAM PPC-2 Worksheet

- PPC = Patient Placement Criteria

	(0) No Problem	(1) Minimal	(2) Moderate	(3) Significant	(4) Severe
1.) Acute Intox / Withdrawal					
2.) Bio - Med Conditions					
3.) Emotional / BH/ Cognitive					
4.) Readiness to Change					
5.) Relapse / Continued Use					
6.) Recovery Environment					

ASAM Levels of Care

- Multiple Grades within each level

Level 0.5:	Early Intervention
Level I:	Outpatient Services = < 9 hrs per wk
Level 2:	Intensive Outpatient / Partial Hospital
2.1	> 9 hrs - structured program
2.5	> 20 hrs - structured
Level 3:	Residential / Inpatient
3.1	Halfway House - low intensity
3.5	Residential Treatment - high intensity
3.7	Medically Monitored Inpatient
Level 4:	Medically Managed Intensive Inpatient

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

Billing SBIRT -

- Medicaid SBIRT codes & rules by State *

http://www.integration.samhsa.gov/financing/billing-tools#billing worksheets

Commercial Insurance CPT codes	99408 99409	$33 $66	15-30 min > 30 min	Alcohol and /or SA structured Screening and Brief Intervention
Medicare	G0396 G0397	$29 $58	15-30 min > 30 min	Alcohol and /or SA structured Screening and Brief Intervention
Medicaid *	H0049	$24	Screening Only no time limit	Alcohol and/or Drug Screening Only
Medicaid *	H0050	$48	per 15 min	Alcohol and /or Drug Service, Brief Intervention

SBIRT Resources

- ATTC - Addiction Technology Transfer Center –SBIRT http://www.attcnetwork.org/national-focus-areas/?rc=sbirt
- SAMHSA: www.integration.samhsa.gov/clinical-practice/sbirt
- NIAAA: www.niaaa.nih.gov
- NIDA: www.nida.nih.gov/nidamed/resguide
- Wisconsin: www.wiphl.com/uploads/media/SBIRT_Manual.pdf
- Oregon: www.sbirtoregon.org
- Yale: www.yale.edu/sbirt/resources/docs/SBIRTtrainingmanual/pdf
- Baylor: www.bcm.edu/education/sbirt

Thank You

Substance Use: Intoxication, Withdrawal, Treatment

Lynda Bascelli, MD
31 May 2016

Overview

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

- Developmental Factors (i.e. one causes the other):
  - Substance abuse usually starts in adolescents when the brain is undergoing significant developmental changes.
  - 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
- Shared Risk Factors: shared genetic vulnerability or environmental stressors--stressful life events, trauma
- Indirect risk factor: 'Self medicating' one psychiatric disorder transitions into a substance use disorder

Clinical relevance: why does this matter?

- 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
- Those with co-occurring disorders have poorer quality of life
- There is a high risk of suicide in those with co-

Diagnostic and treatment implications

- The DSM-5 distinguishes between independent psychiatric illness and one that is substance-induced (i.e. secondary)
- Evidence of an independent disorder could include:
  - symptoms that preceded the onset of the substance use
  - symptoms that persist for a substantial period of time (e.g. about 1 month) after the cessation of acute withdrawal or severe intoxication
  - a history of recurrent non-substance/medication-

Diagnostic and treatment implications

- When evaluating someone with both substance abuse and psychiatric symptoms, careful diagnosis, evaluating for substance-induced disorders is important
- A different clinical course may be expected if psychiatric symptoms are substance induced
  - 85% or more of substance-induced symptoms improve rapidly with abstinence
  - But both primary and substance-induced depression predict future depression; substance-induced symptoms, therefore, may warrant consideration for specific treatment

Example: Marijuana

- 35 year-old man being treated for opioid dependence with buprenorphine
- Taking sertraline, seroquel for bipolar disorder – moderately effective
- Heavy marijuana use – 'only thing that helps me with my anxiety'

What is intoxication?

- The result of being under the influence of, and responding to, the acute effects of alcohol or another drug of abuse
- Identified by:
  - Collection of patient data
    - History
    - Physical
    - Lab testing
- Qualified by:
  - Patient's level of consciousness
  - Substances involved
  - Complicating medical disorders

Marijuana intoxication

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

- Management of intoxication
  - Wait it out! Adverse effects tend to be self-limited
  - 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

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

- Can you help us out doc? Can you give us some medicine to help us to stop drinking?...

Alcohol withdrawal

- **Early signs/symptoms**
  - Anxiety
  - Sleep disturbance
  - Vivid dreams
  - Anorexia
  - Nausea
  - Headache
- **Physical signs**
  - Tachycardia
  - Hypertension
  - Sweating
  - Hyperactive reflexes
  - Hyperthermia
  - 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.
- VISUAL DISTURBANCES — Ask "Does the light appear to be too bright? Is its colour 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:** _____ (24 hour clock, midnight = 00:00)

Pulse or heart rate, taken for one minute:_____ **Blood pressure:**_____

NAUSEA AND VOMITING -- Ask "Do you feel sick to your stomach? Have you vomited?" Observation.
0 no nausea and no vomiting
1 mild nausea with no vomiting
2
3
4 intermittent nausea with dry heaves
5
6
7 constant nausea, frequent dry heaves and vomiting

TACTILE DISTURBANCES -- Ask "Have you any itching, pins and needles sensations, any burning, any numbness, or do you feel bugs crawling on or under your skin?" Observation.
0 none
1 very mild itching, pins and needles, burning or numbness
2 mild itching, pins and needles, burning or numbness
3 moderate itching, pins and needles, burning or numbness
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

TREMOR -- Arms extended and fingers spread apart. Observation.
0 no tremor
1 not visible, but can be felt fingertip to fingertip
2
3
4 moderate, with patient's arms extended
5
6
7 severe, even with arms not extended

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.
0 not present
1 very mild harshness or ability to frighten
2 mild harshness or ability to frighten
3 moderate harshness or ability to frighten
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

PAROXYSMAL SWEATS -- Observation.
0 no sweat visible
1 barely perceptible sweating, palms moist
2
3
4 beads of sweat obvious on forehead
5
6
7 drenching sweats

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.
0 not present
1 very mild sensitivity
2 mild sensitivity
3 moderate sensitivity
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

ANXIETY -- Ask "Do you feel nervous?" Observation.
0 no anxiety, at ease
1 mild anxious
2
3
4 moderately anxious, or guarded, so anxiety is inferred
5
6
7 equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions

HEADACHE, FULLNESS IN HEAD -- Ask "Does your head feel different? Does it feel like there is a band around your head?" Do not rate for dizziness or lightheadedness. Otherwise, rate severity.
0 not present
1 very mild
2 mild
3 moderate
4 moderately severe
5 severe
6 very severe
7 extremely severe

AGITATION -- Observation.
0 normal activity
1 somewhat more than normal activity
2
3
4 moderately fidgety and restless
5
6
7 paces back and forth during most of the interview, or constantly thrashes about

ORIENTATION AND CLOUDING OF SENSORIUM -- Ask "What day is this? Where are you? Who am I?"
0 oriented and can do serial additions
1 cannot do serial additions or is uncertain about date
2 disoriented for date by no more than 2 calendar days
3 disoriented for date by more than 2 calendar days
4 disoriented for place/or person

Total **CIWA-Ar** Score _____
Rater's Initials _____
Maximum Possible Score 67

 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.

Sullivan, J.T.; Sykora, K.; Schneiderman, J.; Naranjo, C.A.; and Sellers, E.M. Assessment of alcohol withdrawal: The revised Clinical Institute Withdrawal Assessment for Alcohol scale (**CIWA-Ar**). *British Journal of Addiction* 84:1353–1357, 1989.

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:
  - short anxiety attacks, events – alprazolam (3 hours)
  - sleep, intermediate coverage – lorazepam (6-8 hour)
  - longer term coverage – clonazepam (18 hours)

Benzodiazepines

- These are some of the most challenging patients
- Often the history is notable for poly-substance use, which complicates the picture
  - 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

- Very frequent
  - Anxiety
  - Insomnia
  - Restlessness
  - Agitation
  - Irritability muscle tension
- Physical
  - Tachycardia
  - Hypertension
  - Fever
- Severe high-dose withdrawal
  - Seizures
  - Delirium
  - death

Treatment – benzodiazepine withdrawal

- Not looking to stop
- Looking for a prescribed source
- If we do not do a thorough evaluation of these patients we are doing them a disservice
- 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?

- Recommend a medically-supervised detox
- Select cases, depending on the ability to obtain a reliable history and develop a therapeutic relationship, can consider transitioning to a long-acting benzodiazepine
- What about the patient seeking treatment for OUD?

Opioid intoxication

- Where does intoxication end and overdose begin?
  - Can occur in a variety of clinical settings
  - Mild-moderate intoxication – usually not life-threatening
  - Severe or overdose – medical emergency/preventable deaths
  - True prevalence of nonfatal overdose is not known but is associated with significant morbidity
  - Tolerance to respiratory depression may be slower than tolerance to euphoric effects

The ‘high’ patient

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

Naloxone

- Short-acting, parenterally administered full opioid antagonist
- Counters life-threatening depression of central nervous and respiratory systems caused by opioid overdose
- Causes rapid onset of withdrawal symptoms

Opioid overdose -- naloxone

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

- 11-item scale designed to be administered by a clinician
- Can be used in both inpatient and outpatient settings
  - reproducibly rate signs and symptoms of opiate withdrawal
  - monitor these symptoms over time
- 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
- Symptoms of opioid withdrawal (e.g., nausea, vomiting, sweating, joint aches, agitation, tremor) are objectively measured

COWS: Clinical Opiate Withdrawal Scale

Wesson & Ling. J Psychoactive Drugs. 2003 Apr-Jun;35(2):253-9.

COWS Clinical Opiate Withdrawal Scale

Scores: 5-12 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

- Clonidine: alpha-adrenergic agent
- Approach is based on the discovery that one important mechanism underlying opioid withdrawal is noradrenergic hyperactivity
- 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
- Less effective for subjective withdrawal symptoms
- Requires careful BP monitoring

I am not going to talk about detoxification

- We don't do it as an outpatient
- Huge overdose risk coming out of a detox
- 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

- Buprenorphine (Subutex)
- Buprenorphine/naloxone (Suboxone)
- 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

- Full mu opioid receptor agonists (e.g. morphine):
  - Activate more mu receptors with increasing dose
  - Can result in opioid toxicities at high doses
- 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
  - buprenorphine can precipitate opiate withdrawal if it displaces a full agonist from mu receptors

Buprenorphine

- Abuse potential of buprenorphine varies as function of:
  - Level of physical dependence
    - Lower opioid physical dependence less likely to precipitate withdrawal; more likely to produce an agonist effect
  - Time interval between last dose of opioid agonist and buprenorphine ingestion
    - Longer it has been since last use of opioid, more likely buprenorphine will give opioid effects
  - Two types of treatment: medical withdrawal and maintenance; > 80% undergoing medical withdrawal

Buprenorphine – best practices

- Confirm that the patient requesting buprenorphine treatment is opioid-dependent
  - History/previous treatment records if available
  - Look for physical signs: withdrawal, track marks
  - Urine drug screen positive for opioids (at least one positive screen)
    - 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-naïve, start low and

Buprenorphine -- best practices

- Urine Drug Screening:
  - Point-of-Care Testing: 'Dipsticks':
    - Need to order separate dipsticks to detect synthetic opioids
    - Standard "opiates" screen: detects only codeine, morphine, heroin
    - Separate tests needed for: * Methadone * Buprenorphine * Oxycodone * Hydrocodone
    - Norbuprenorphine = metabolite

Buprenorphine -- best practices

- Document all aspects of substance abuse treatment
- Prescribe only FDA-approved medications for office-based treatment of opioid dependence (buprenorphine/naloxone sublingual film, buprenorphine s.l. tablets, or monoproduct s.l. tablet — no other drugs and no other buprenorphine formulations are approved for this use!)
- Advisable not to give large prescriptions for buprenorphine/naloxone early in treatment
  - 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

- Prescribe monthly or more frequently
- Regarding medical record keeping: Remember: if it is not documented in the medical record: it didn't happen!
- Make sure patient signs a 42 CFR compliant release of information before any treatment details are released/discussed with another provider

Buprenorphine

- Sublingual administration
- Medication is held under tongue until fully dissolved which can take several minutes
  - Taste is generally well tolerated; films reported to have better flavor; menthol tablets well tolerated
  - Two films/tablets at once is limit to assure adequate absorption
  - One film or tablet is placed under tongue on each side
  - Dental issues?
  - Therapeutic dose is generally in 12/3-16/4 mg/d but range is

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

- Nausea/vomiting (consider precipitated withdrawal especially in first 15-20 minutes after dosing)
- Constipation, headache, diaphoresis, vasodilation
- 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)
- Screen for Hep C and monitor for elevations in liver transaminases (as Hep C marker); bup is not hepatotoxic, though
- Precipitated withdrawal can occur in opioid-dependent patient who has recently

Naltrexone

- Competitive opioid antagonist – blocks the effects of opioids
- Will precipitate withdrawal symptoms in patients with opioid dependence
- 50mg of oral naltrexone will block pharmacologic effects of opioids for as long as 24 hours
- 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

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

- Sleep hygiene (non-pharmacologic approach) first!

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

Resources

- PCSS-MAT: http://pcssmat.org/
- ASAM National Practice Guideline: http://www.asam.org/quality-practice/guidelines-and-consensus-documents/npg/complete-guideline
- www.buppractice.org
- TIP 40: http://store.samhsa.gov/product/TIP-40-Clinical-Guidelines-for-the-Use-of-Buprenorphine-in-the-Treatment-of-Opioid-Addiction/SMA07-3939

Wrap-up

- Lingering questions
- Thank you to our presenters and attendees!
- Raffle
- PAPER evaluations